

The NIH Record

U.S. Department
of Health,
Education, and
Welfare

June 26
1979
Vol. XXXI
No. 13

National
Institutes
of
Health

Juvenile Diabetes Award Presented to Dr. Salans

The Juvenile Diabetes Foundation recently presented its first annual Public Service Award to Dr. Lester B. Salans, associate director of the Diabetes, Endocrine, and Metabolic Diseases Program, National Institute of Arthritis, Metabolism, and Digestive Diseases.



Dr. Salans
Washington, D.C.

Dr. Salans chairs the NIH and Interagency Diabetes Mellitus Coordinating Committees and serves on the National Diabetes Advisory Board. He also serves as chief liaison between private, voluntary organizations concerned with diabetes research and relevant Federal agencies.

Dr. Salans was honored for his work in implementing throughout the Federal Government a Long-Range Plan to Combat Diabetes. The award was conferred at the Foundation's annual meeting in

Hormone Control May Be Link To Depression

By Joyce F. McCarthy

Depression may be caused by a specific metabolic deficiency, according to a recent report by researchers at the University of Iowa Psychiatric Hospital and Clinic. Their studies show that depressed patients have uncontrolled development of serum-cortisol, a hormone which increases the ability of cells to make new sugars out of fats and proteins.

Eighty-six patients, ages 18-35, were tested at the University's General Clinical Research Center, which is supported by the Division of Research Resources.

The patients were diagnosed as having unipolar primary depression, a mental illness characterized by severe withdrawal and uncommunicative behavior, or some form of agitated activity such as hand-wringing, floor-pacing, or talking rapidly about feelings or fears. The controls in the experiment were 80 patients diagnosed as nondepressed, 45 with mania, and 35 with schizophrenia.

Family Histories Obtained

Before the experiment began, psychiatric and family histories were obtained from each patient. Immediate family members were also interviewed and diagnosed. Many depressed and control patients were receiving medication for their mental conditions.

Blood samples were taken from each patient to test their serum-cortisol content. The baseline levels of serum-cortisol were found to be slightly higher in the depressed patients.

An overnight dexamethasone suppression test was conducted. Dexamethasone is an anti-inflammatory steroid known to accurately

(See DEPRESSION, Page 7)

July 3 Deadline for Opting Into Senior Exec. Service

The deadline for staff members to opt into the Senior Executive Service is July 3, 1979.

All eligible employees, Grade GS-15 and above, who choose to enter this service must submit their election form to their personnel officer prior to the close of business on July 3.

High Blood Pressure In Black Community Symposium Subject

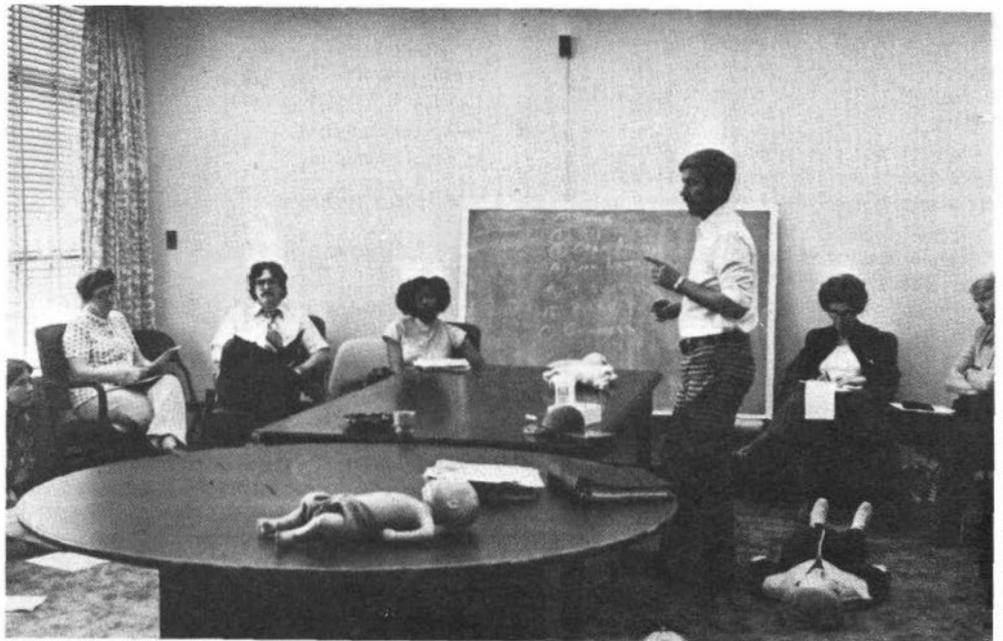
Final recommendations for a 20-year effort to deal with the problem of uncontrolled high blood pressure affecting the black community are being presented at a White House Symposium on June 25-26.

Complications May Occur

The disease and such disabling or lethal complications as stroke, heart failure, and kidney failure are more than half again as common among Blacks as whites in the U.S.

The recommendations for attacking this problem are the result of 18 months' work by the Black Health Care Providers Task Force on High Blood Pressure Education and Control. Established by NHLBI as part of its National High Blood Pressure Education Program, the task force consists of representatives from professional associations of black health care

(See PRESSURE, Page 8)



James Pike, NHLBI, instructs a group of NIA employees in correct CPR procedure. Mr. Pike has taught the lifesaving technique to 25 people in the Aging Institute.
(See story on Page 3.)

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, Education, and Welfare, and circulated by request to writers and to researchers in biomedical and related fields. The content is reprintable without permission. Pictures are available on request.

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'Lock It or Lose It' Warns Security Staff



All bikers are again cautioned to secure their bikes with the case-hardened chains provided and a **QUALITY** lock to prevent thefts.

NIH statistics show that 100 percent of bike thefts result from inferior locking devices: lightweight chains, cables, and locks.

Protection and Security Management asks, "Does it make good sense to lock up a \$200 bike with a \$2 lock?"

NIH Bikeway Half Completed

The NIH Bikeway is 50 percent completed, according to Montgomery County's Department of Transportation. Curb ramps have been constructed along a portion of Old Georgetown Road and along sections of sidewalks that have been built along Jones Bridge Road.

Paths also have been built along North Bethesda Junior High and Garfield Street. This summer, work will be completed on these routes as well as on a route which crosses

Dr. Lipsett Appointed President of Endocrine Society

Dr. Mortimer B. Lipsett, Director of the Clinical Center and NIH Associate Director for Clinical Care, was appointed the 63rd president of the Endocrine Society on June 14. He formally accepted this position recently at the Endocrine Society's annual meeting in Anaheim, Calif.

There are over 3,000 members in this society, and, as president, Dr. Lipsett will be responsible for the society's two publications, the *Journal of Clinical Endocrinology* and *Endocrinology*, and the postgraduate training

courses in endocrinology. In addition, he will plan the society's annual meeting.

Dr. Lipsett, who is also secretary-general of the International Society of Endocrinology, has made significant contributions to the endocrinology of cancer and to reproductive biology.

Former presidents of the Endocrine Society include Dr. Griff T. Ross, deputy director of the Clinical Center, and Dr. Rosalyn S. Yalow, 1977 winner of the Nobel prize for physiology or medicine.

Film Gives Basic Information On Skin Cancer and Causes

A 14-minute color film of basic information about skin cancer and its causes, "Sense in the Sun," will be presented by the Occupational Medical Service for NIH employees July 9-12 at 11:30 a.m. and 12:15 p.m. at the following places:

July 9—Bldg. 1, Wilson Hall
July 10—Bldg. 10, Masur Auditorium
July 11—Westwood Bldg., Conf. Rm. D
July 12—Federal Bldg., Rm. B-119

CC Appeals for Blood Donations

For most people, a blood transfusion is one of many treatments used by doctors to help other people in the Clinical Center. Rarely are you aware that the patient may be a family member, a friend, or even yourself.

If you do think about it, you figure that blood will always be there if you need it. But will it?

Blood is a living tissue and cannot be manufactured. The Clinical Center can buy medicine, the hospital can provide skilled doctors and staff, but if blood is available, it is because people care enough to donate it.

There are a thousand different excuses for not giving blood, but only one good reason to donate—to help save a life.

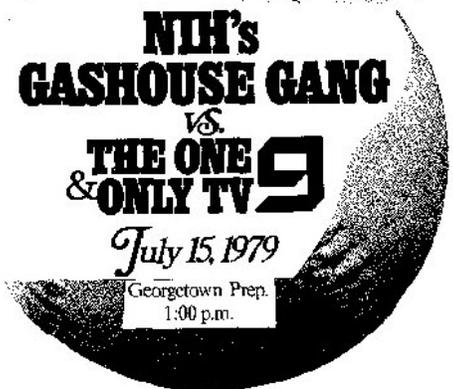
The decision is yours. Make an appointment; call 496-1048 today or come to the Clinical Center Blood Bank, Bldg. 10A, Rm. 1C33.

**Are you the lowest item on your priority list?
Call Employee Assistance Program
496-3164**

Rock Creek at Forest Glen and a path along the Alta Vista Road right-of-way.

To acquaint the public with the location of bikeways and bicycling routes, Montgomery County has published a map entitled *Bicycling Routes in Lower Montgomery County*. This map should interest NIH employees who are considering bicycling to work.

Copies of the map may be obtained by writing the Montgomery County Department of Transportation, Office of Transportation Planning, 6110 Executive Blvd., Rockville, Md. 20852, or by telephoning 468-4065.



The Fourth Annual Softball Game for the benefit of the Patient Emergency Fund will be played Sunday, July 15, at 1 p.m. at the Georgetown Prep School ballpark, 10900 Rockville Pike. Admission is free.

As in past years, the NIH R&W Association has arranged for many door prizes—an autographed football, basketball, and hockey stick; tickets to sports events and King's Dominion; a portable radio; meals at a restaurant; and more. Also, there will be free balloons for the youngsters.

T-shirts, hot dogs, sodas, cookies, and brownies will be on sale.

Those who would like to make cookies or brownies should call the R&W office, 496-6061, the Clinical Center Social Work Department, 496-2381, or the CC Information Office, 496-2563.

Volunteer Tutors Needed For Summer Students

The Training Assistance Branch is looking for people interested in donating time to tutor NIH summer employees who need assistance in a variety of academic subjects.

The employees are high school and college students who request assistance in geometry, chemistry, physics, trigonometry, algebra, basic reading skills, and other academic subjects.

If you can assist the students, please contact Doris E. Dorin, Training Assistance Branch, 496-2146, as soon as possible.

CPR Classes Prepare NIH'ers To Assist Victims of Cardiac Arrest

On a "60 Minutes" television program a few years ago, the host suggested that if you're going to have a heart attack, have it in Seattle, Wash. The reason is that 20 percent of Seattle's adult population is certified in cardiopulmonary resuscitation.

On the NIH campus, if you're going to have a heart attack, have it in the offices of the National Institute on Aging or in the Clinical Center.

With the encouragement of NIA Director Dr. Robert N. Butler, 25 of the 90 employees in NIA's Bethesda offices, including Dr. Butler, have taken CPR instruction within the past few months. As a result, "if someone has a heart attack in the Aging Institute, they have a better chance of getting resuscitated than if they were someplace else on campus," said NIA executive officer David Chicchirichi.

Approximately 700 people who work in the Clinical Center have taken CPR at the CC in the last 2 years, according to Anne Proctor, educational services officer for the CC. Interest in the course is so high, she said, that scheduled classes are filled through October.

Mary McKnight, chief nurse at the Occupational Medical Service and CPR coordinator



CPR is practiced on Resusci Anne by Vergie Mangum (l), National Institute of Environmental Health Sciences; Red Cross volunteer instructor Lu Little (c); and Harriet Burgess, NIEHS. Representatives from NIEHS labs and branches are learning CPR so they can assist in emergency situations.

Chandler, and Pvt. William Boswell performed CPR for 1½ hours. "He was resting comfortably in the hospital when we were moving out our equipment," recalled Mr. Benson.

At an awards ceremony June 14 featuring guest speaker Dr. Robert I. Levy, Director of the National Heart, Lung, and Blood Institute, Mr. Benson was honored by the Montgomery County Chapter of the American Heart Association for his outstanding service as a volunteer CPR instructor.

Mr. Graham said he began teaching CPR because he realized that it's the layman who has the best opportunity to save lives with CPR. "They're there when the cardiac arrest occurs," he explained. "They're the ones who can make the save."



Private Graham

In cardiac arrest, the heart stops pumping blood and breathing ceases. After 4 to 6 minutes, the victim will suffer irreversible brain damage. CPR artificially restores respiration and circulation to the victim's body in the first crucial minutes

after cardiac arrest until he or she can be transferred to an advanced life support system. The technique consists of mouth-to-mouth resuscitation and chest compression.

The biggest danger in performing CPR is incorrect hand position on the victim's chest when compressing the heart between the breastbone and the spine, said Mr. Graham. "If you push too far to the right, you can

fracture the ribs and puncture a lung. If you push too far to the left, you can puncture a lung or the heart." Other possible complications are a lacerated spleen, kidney, or liver.

To make sure students learn correct CPR procedure, they are taught on a manikin known as Resusci Anne, Mr. Graham said. The fire department's newest Anne wears a blue jogging suit, has three lights that indicate whether the student is performing CPR correctly, and presents the instructor with a tracing showing exactly what the student did.

Clinical Center employees interested in signing up for a CPR course can call Anne Proctor, 496-1618. Other NIH employees should call Mary McKnight at the Occupational Medical Service, 496-4411.



NIH firemen (l to r) A. W. Benson, Michael Chandler, and William Boswell recently used CPR to revive a cardiac arrest victim on the NIH campus.

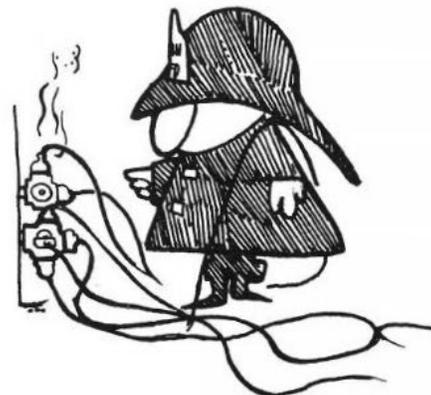
for NIH (except the CC), would like to see at least one or two people in each work area certified in CPR. One limiting factor in accomplishing this goal, she said, is a lack of qualified instructors. This summer, Mrs. McKnight plans to introduce a program for training NIH'ers as CPR instructors and using them to teach other employees the lifesaving technique.

Instruction for many CPR classes at NIH is provided by three NIH firemen, Insp. A. W. Benson, Pvt. Russ Graham, and Pvt. Michael Chandler. The firemen have taught CPR to 700 employees, estimated Mr. Benson.

But the firemen do more than teach CPR. About 3 to 5 times a year, according to Mr. Benson, they perform CPR on cardiac arrest victims.

The most recent victim, a subcontractor in Bldg. 37 whose heart stopped beating on Mar. 23, recovered after Mr. Benson, Mr.

Overloading Plugs Causes Fires





Members of the Federal Women's Subcommittee of the NIAID/EEO Advisory Committee are shown with Dr. Luz Froehlich, the Institute's delegate to the Advisory Committee. They are (back row, l to r): Martha Mattheis; Barbara Johnson; Weltha Logan, Federal Women's Program coordinator; and Harry Levine. Seated are (l to r): Dr. Kyung Jin Kim; Dr. Froehlich; Gwen Northcutt; and Carol Uhlendorf. Members not shown are Renee Gibbs, JoAnn Holmes, and Alba Colon-Whitt.

NCI Tests Prove 4 Chemicals Cause Cancer, 3 Do Not

In recent tests conducted by the National Cancer Institute, four chemicals were found to be carcinogenic, while three others did not cause cancer.

The tests were performed on laboratory rats and mice during a period of 78 to 107 weeks as part of NCI's Carcinogenesis Testing Program. Chemicals found to be carcinogenic in these animal tests are generally considered capable of causing cancer in humans.

Nitrofen, an agricultural herbicide, was found to cause liver cancer in male and female mice, but was not carcinogenic in rats.

Another chemical, 4-chloro-*o*-toluidine hydrochloride, caused cancer in the blood vessels of male and female mice, but did not cause cancer in rats. This chemical is an intermediate used in the manufacture of dyes.

Nithiazide, a veterinary antiprotozoal drug, caused liver cancer in male, and possibly female, mice, and caused breast cancer in female rats; the chemical was noncarcinogenic in male rats.

A fourth chemical, *p*-cresidine, caused cancers in both rats and mice: bladder cancer in rats and mice of both sexes, nasal cancer in rats of both sexes, and liver cancer in male rats and female mice. *P*-cresidine is used in the preparation of azo dyes.

The three chemicals that did not produce cancer in any of the test animals were: *p*-chloroaniline, an intermediate in the manufacture of dyes and other chemicals; 2-(chloromethyl)pyridine hydrochloride, an intermediate proposed for use in the manufacture of agricultural, pharmaceutical, and veterinary chemicals; and methyl parathion, an organophosphate insecticide.

Reports on the animal tests performed, listed as T.R. 184, 165, 146, 142, 189, 178, and 157, are available from the Office of Cancer Communications, NCI, Bethesda, Md. 20205.

Vivian J. Heston Dies; Former Editor of NCI Journal

Vivian Janney Heston, 71, former managing editor of the *Journal of the National Cancer Institute*, died of cancer June 2 at her Bethesda home.

Mrs. Heston joined NIH as a secretary in 1957. A year later she became an editorial clerk of the *Journal of the National Cancer Institute*. In 1962, she was named assistant managing editor and held that position until 1974, when she was named managing editor.

During her career at the *Journal*, which publishes technical papers on cancer research, Mrs. Heston received NIH Merit Awards in 1968 and in 1973. She retired in 1975.

Mrs. Heston was born in Styker, Ohio. She

graduated from Michigan State University and then taught English in high schools in Michigan.

Mrs. Heston was a member of the Bethesda Presbyterian Church. She was a Bible teacher there, a former president of the Women of the Church, and a member of the church's session.

Survivors include three sons, a sister, and seven grandchildren.

The family suggests that expressions of sympathy be in the form of contributions in Mrs. Heston's name to the Memorial Fund of Bethesda Presbyterian Church.

Conferees Consider Demographic, Health Data For Research on Aging

To determine the availability of statistical data on the health, socioeconomic, and other needs of an aging U.S. population, the National Institute on Aging is sponsoring a Conference on Demographic and Health Information for Aging Research: Resources and Needs, June 25-27.

Users of Federal data on the elderly are meeting in Bldg. 31, Conf. Rm. 6, to discuss existing data and to suggest additional information needed.

Epidemiological and demographic studies represent an expanded research approach the NIA is taking toward understanding the diseases of aging and the aging process in general. Epidemiology examines the distribution and causes of disease in various groups of the population, while demography is concerned with who survives and the impact of increased survival on the economy.

One purpose of the conference will be to

determine what kind of questions can be answered using available data. Other objectives are to make data collection agencies aware of research uses made of their data, and to suggest ways to coordinate and increase the value of that information for research and policy needs without jeopardizing the basic reasons for collecting it.

On the first day of the conference yesterday (June 25), speakers discussed types of data available for optimum decision making, emphasizing the importance of appropriate and timely information on aging and the elderly.

Today (June 26), the program is focusing on economic and demographic information needed for aging research. Tomorrow's program will feature epidemiologic data, with emphasis on data available from the National Center for Health Statistics. The meeting will end with discussions of research resources, especially archival systems.



Jeanne Heffernan, EEO coordinator for the National Institute of General Medical Sciences, retired May 4 after 22 years of Government service.

Upward Mobility College Grads Recognized for Achievement



Richard O. Jackson (l) and George Slate present NIH's Outstanding Graduate Award to Loraine McDonnell (r) for her academic accomplishments. Seated is Delores Handy, news anchor for WTTG-TV, who spoke at the convocation.

Combining forces for the first time, 48 graduates and 110 honor roll students from NIH, Parklawn, and Southwest Centers of the Upward Mobility College of the University of the District of Columbia were honored in a special convocation held on June 8 in the Masur Auditorium.

Twenty-one NIH employees were recognized for receiving baccalaureate or associate degrees and 54 were honored for their high academic average. During the ceremonies, Loraine McDonnell, NIAMDD, who graduated summa cum laude, received an engraved plaque as NIH's graduate who attained the highest academic average among this year's graduates.

Delores Handy, news anchor of WTTG-TV, urged the graduates "to strive to achieve the most, and the greatest in their power, and not to settle for mediocrity," during her keynote speech.

In introducing Ms. Handy, Richard O. Jackson, UMC project officer, stressed the precedents in history for the pursuit of excellence and encouraged the students to "walk proudly with the masters of the past."

Dr. Thomas E. Malone, NIH Deputy Director, extended his congratulations and those of Dr. Fredrickson to the graduates for their hard work in obtaining their degrees. Both Dr. William Moore, vice president for Academic Affairs of the University of the District of Columbia, and Randolph Scott, associate dean for Continuing Education, delivered messages of commendation at the convocation.

George Slate, supervisor of the NIH and Parklawn UMC centers, along with other supervisors presented certificates of achievement to their former students. After the presentation, he praised the high calibre of achievement of UMC graduates. Mr. Slate

noted that of the entire University of the District of Columbia graduating class this year, UMC graduates received 19 percent of the cum laude honors, 29 percent of the magna cum laude honors, and 22 percent of the summa cum laude honors.

This year's honors convocation was planned and implemented by the student government council, under the leadership of Calvin A. Bussey, CC. Speaking for the NIH seniors, Maggie Johnson, DRG, said how fortunate she thought "employees of today are to have such an opportunity (as UMC)."

NIH Upward Mobility College is open to all

Rep. Barnes Visits Westwood, Discusses Parking Problems

Following a recent tour of the Westwood Bldg., Congressman Michael D. Barnes from Maryland's Eighth District had lunch with members of the WECOPS (Westwood Employees Committee on Problem Solving) and told them that he plans to "submit comments urging OMB (Office of Management and Budget) not to charge parking fees to those who work at locations not serviced by public transportation."

Furthermore, he said that he will introduce legislation to target revenues generated by parking fees to the Metro System.

In subsequent correspondence, Mr. Barnes indicated that he feels the WECOPS "underestimated" the problems in the Westwood Bldg., and he wrote that he will work with WECOPS to rectify their continuing maintenance problems.

employees who have either graduated from high school or hold a GED certificate, without cost to them or their B/I/D. Over 70 courses will be offered in Bldg. 31 for the fall semester, which begins on Aug. 27. Registration of new students will begin July 23. Anyone wishing more information can call 496-5025.

Graduates Listed

Among the graduates who were honored were: Walter Baliles, DES; Dorothy F. Boykin, OPPE, OD, cum laude; Calvin A. Bussey, CC; Sarah S. Caplan, NIAID, magna cum laude; Johnny E. Carter, CC; Julia Chandler, NIAID, LVD; Joan M. Crist, formerly with Administrative Services; Rita B. Fleisher, DFM, magna cum laude; Allen C. Graham, NIAMDD; Ellen E. P. Gross, CC; Dorothy Hackett, NCI, DCCR; Jeffrey A. Heath, NCI, LTCB; Roosevelt Ingram, NCI, LP; Wilma J. Johnson, formerly with OGM; William E. Jones, NLM; Mary Nichols, NLM, EM, summa cum laude; Margaret S. Owen, NINCDS, magna cum laude; Elaine H. Rowe, DRG, cum laude; Barbara L. Shepler, NHLBI; and Linda Y. Walsh, NHLBI, magna cum laude.



Upward Mobility College graduates gather together and congratulate each other after receiving their certificates of recognition.

Naughton Named ADP 'Person of the Year'

Joseph D. Naughton, chief of the Computer Center Branch, Division of Computer Research and Technology, was named Person of the Year by the Interagency Committee on Automated Data Processing at a luncheon June 12 attended by over 200 Government officials.

Two weeks earlier, Mr. Naughton participated in a ceremony at DCRT in which the NIH Computer Utility was designated a Federal Data Processing Center.

The award, presented by Walter W. Haase, Office of Management and Budget, was given for long-term leadership and distinguished service to the Federal ADP community in helping to establish the NIH Computer Utility as one of the finest general purpose facilities in the country.

Under Mr. Naughton's leadership, which began at DCRT in 1967, the NIH computing services and facilities have improved and expanded. The rates charged users have been reduced 10 times in 11 years.

Many technical innovations developed first at the NIH Center are now used by other computing installations. Several changes have been adopted by manufacturers as standard facilities in computer operating systems.

The Interagency Committee on Automatic Data Processing is a government-wide organization established to provide a forum for ADP professionals within the Federal Government to assist in the process of developing Federal ADP management policies.



Mr. Haase presents the Interagency Committee on Automatic Data Processing Person-of-the-Year award to Mr. Naughton as Mrs. Naughton watches.

NINCDS Names Three to Advisory Council

Three new members have been appointed to the National Advisory Neurological and Communicative Disorders and Stroke Council: Dr. Theodore Bullock, professor in the department of neurosciences, University of California, San Diego; Dr. Marjorie Lees, a neurochemist with the E. K. Shriver Center for Mental Retardation in Waltham, Mass.; and Dr. Sidney Peerless, an otolaryngologist in private practice in Cincinnati.

Dr. Bullock is an expert in comparative neurophysiology and in the development and interpretation of electrophysiological measures of the animal and human brain. He served as a member of Physiology Study Section, DRG, from 1951 to 1961, and on the NIGMS Advisory Council from 1964 to 1965.

Dr. Lees is an authority in the laboratory investigation of myelin and myelin development. Especially interested in brain chemistry, her research in this area has contributed significantly to the understanding of proteolipids. In addition to her work at the Shriver Center, she teaches at Harvard Medical School. Dr. Lees served on the Neurological Disorders Program-Project Review Committee "B" from 1973 to 1976.

Dr. Peerless, an expert in maxillofacial reconstruction and plastic surgery, is a pioneer in reconstructive surgery of damaged vocal cords. He currently is studying the effects of various therapeutic procedures for the treatment of otitis media.

He heads the department of otolaryngology and maxillofacial surgery at the Jewish, Providence, and Mercy South Hospitals in Cincinnati.



Three new members confer with Dr. Donald F. Tower, NINCDS Director, before the advisory council meets. L to r are: Drs. Peerless, Lees, and Bullock.

Need for Research on Aging Outlined in Book, Four Reports

Our Future Selves, a research plan on aging, and four accompanying panel reports—prepared by the National Advisory Council on Aging—have been issued by the National Institute on Aging.

The percentage of people 65 and over in this country has increased from 4 percent in 1900 to nearly 11 percent today, and is estimated to reach 17-23 percent by the year 2030. This increase will affect the institutions and life-styles of all Americans.

Our Future Selves outlines the need for research on aging in three major areas: biomedical sciences, which details the basic biological aspects of aging, the interaction of aging and disease, the effects of external influences on aging, studies of human populations, and resource and training needs; be-

NCI Finds Three Industrial Chemicals Carcinogenic

Three commonly found industrial chemicals were tested recently on laboratory rats and mice for a period of time from 101 to 106 weeks to determine if these chemicals were cancer causing. The results of these NCI tests were listed in the May 4th issue of the *Federal Register*.

The three chemicals were found to be cancerous in the animals tested. Chemical 2,4,5-Trimethylaniline, used in the manufacture of the red dye Ponceau 3R, was found to cause liver cancers in rats of both sexes and also in female mice. It was also found to have caused lung cancers in female rats. A report summary also said that there was an increase in the number of incidents of liver cancers in male mice, but not in sufficient numbers to establish carcinogenicity.

The second chemical tested was 2,4-Diaminotoluene, an intermediate chemical used in the manufacture of polyurethanes. It is also used in a variety of varnishes, wood stains, and pigments. Chemical 2,4-Diaminotoluene also has been used in hair dyes.

The compound's report summary said that 2,4-Diaminotoluene caused liver cancer in rats of both sexes and in female mice, as well as breast cancer in female rats. However, it was not carcinogenic in male mice under tests conditions, said researchers.

The third compound tested was Azobenzene, a by-product used in the manufacture of benzidine, a known human carcinogen. According to the report summary it was found to have caused spleen cancers and other abnormal organs in male and female rats, but was not carcinogenic for mice of either sex under test conditions.

These three chemicals were tested as part of NCI's Carcinogenesis Testing Program. Compounds found to be carcinogenic in these animal tests are generally considered capable of causing cancer in humans. The tests do not provide information, however, that could be used to predict the frequency at which cancers might be produced in human populations under actual conditions of exposure.

Copies of these reports, listed as T.R. 160, 161, and 154, are available from the Office of Cancer Communications, NCI, Bethesda, Md. 20205.

**Do You Feel Trapped?
Call Employee Assistance Program
496-3164**

Breast Cancer Treatment Panel Concludes Conservative Surgery 'Satisfactory Alternative'

The NIH Consensus Development Panel on Breast Cancer Treatment has concluded that more conservative surgery can be a satisfactory alternative to radical mastectomy for women in early stages (stages I and II) of breast cancer.

The panel, which met at NIH on June 5, said total mastectomy with axillary dissection—a procedure in which the pectoral muscles are preserved and lymph nodes under the arm are removed—is equally beneficial to women who have stage I and selected stage II breast cancer. "Total mastectomy with axillary dissection should be recognized as the current treatment standard," according to the panel.

Another key point of consensus was that a certain procedure should be followed in most breast cancer cases. A diagnostic biopsy should be studied in detail before definitive therapeutic alternatives are discussed with the patient.

Previously, many physicians outlined alternatives to patients prior to a biopsy, and the patient agreed to have a mastectomy performed if the biopsy revealed a malignancy. The patient was anesthetized for the biopsy and, if a malignancy were found, she immediately had a mastectomy or whichever procedure was indicated.

The consensus panel agreed that a biopsy immediately followed by surgery should be undertaken only when the physician and the patient agree to this approach beforehand.

Also supported by the panel was further

investigation into the roles of more conservative approaches to breast cancer such as segmental mastectomy (the breast is left intact) and primary radiotherapy.

Ongoing clinical trials being conducted by the National Surgical Adjuvant Breast Project "because of their exciting preliminary results" should be backed by patients and physicians, the panel agreed. These trials are exploring lesser surgical procedures for women in the early stages of breast cancer.

Prior to the development of more conservative surgical procedures, the Halsted radical mastectomy had been the traditional treatment for locally advanced breast cancer for some 80 years. But, the panel maintained, choice of this method by physicians "appears to have been based on this tradition rather than tailored to a patient's stage of disease or histologic (cell development) type."

The consensus development panel was composed of a wide range of nationally and internationally known representatives of the medical and lay communities who have been involved with breast cancer treatment and research.

At NIH, the consensus development program brings together practicing physicians, biomedical research scientists, and others as appropriate in an effort to reach general agreement on the safety and efficacy of a medical technology, whether it be a drug, device, or medical or surgical procedure.

further distinguished by age of onset and by the number of previous depressive episodes. The findings suggest that unipolar primary depressive illness is three or more illnesses, each with a potentially distinctive mode of inheritance, pathophysiology, neurochemistry, clinical course, and treatment response.

These differences were highly significant even though the three subtypes have been found to be symptomatically indistinguishable. Studies done on families and twins suggest that unipolar primary depression is genetic.

Neuropharmacological studies have shown that noradrenaline exerts an inhibiting reaction on the H.P.A.-axis. Theories suggest that a deficiency of noradrenaline in the limbic system may cause depression. This deficiency may concurrently affect the H.P.A.-axis by noninhibiting it. This results in the H.P.A.-axis left uncontrolled and overactive, which in turn causes the resistance to serum-cortisol suppression by dexamethasone.

In any event, there is some common neurophysiological disturbance which may cause both depression and the observed H.P.A.-axis overactivity in the depressive patients. This pathophysiology could be specific to a distinct subtype of depressive illness.

This research was done by Drs. Michael A. Schlessler, George Winokur, and Barry M. Sherman from the department of psychiatry and internal medicine, University of Iowa College of Medicine, and appeared in the April 7, 1979, issue of the *Lancet*.

Dr. Brinley Named Director Of Neurological Disorders Program

Dr. F. J. Brinley, Jr., has been appointed director of the Neurological Disorders Program, National Institute of Neurological and Communicative Disorders and Stroke.

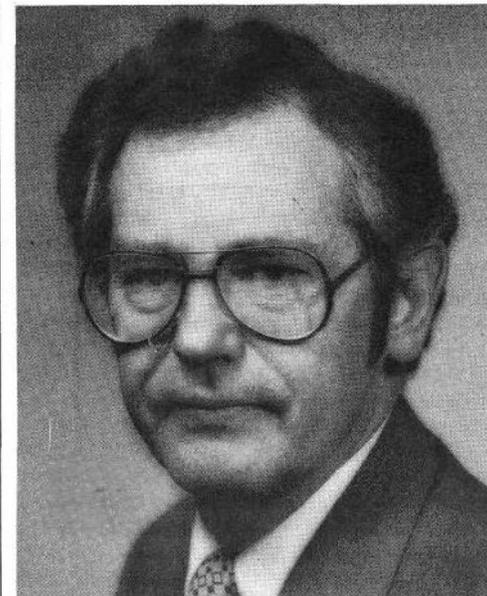
Dr. Brinley will direct a program of extramural grants and contracts in support of basic and clinical research and research training in epilepsy, multiple sclerosis, developmental disorders, and disorders of aging.

A PHS commissioned officer, Dr. Brinley comes to NINCDS from the University of Maryland School of Medicine, where he has been professor of physiology and director of an NINCDS-supported program project in neuromuscular research.

Dr. Brinley was an NIH research associate from 1957 to 1959 in a joint laboratory of National Institute of Neurological Diseases and Blindness and the NIMH. He was also a member of the Physiology Study Section from 1969 to 1973.

A frequent contributor to scientific literature, Dr. Brinley serves on the editorial boards of several journals, including the *Journal of Neurophysiology*, the *Biophysical Journal*, and the *Cell Calcium Journal*.

Dr. Brinley obtained his M.D. from the University of Michigan in 1955, and his Ph.D. in biophysics from Johns Hopkins in 1961.



Dr. Brinley was a member of Johns Hopkins department of physiology and directed its graduate program.

'Early Bird' Bowlers Announce New Season

The Early Bird Tuesday Night Mixed Tenpin Bowling League will begin its new season on Sept. 11. For the next 35 Tuesdays at 5:30 p.m., bowlers will meet at the Brunswick River Bowl.

League organizers say that there is no average requirement and that the purpose of the league "is for fun." If interested, call Dana Chambers, league secretary, 496-7065 or 363-4330.

DEPRESSION

(Continued from Page 1)

gauge endocrine system (hypothalamic-pituitary-adrenal) axis activity. This steroid usually inhibits cortisol production, but it has no effect on depressives. Depressed patients have shown increased frequency and magnitude of cortisol secretory episodes and increased amounts of cortisol secretions.

Increased activity of the H.P.A.-axis has been found in a substantial proportion of patients with primary depression. Studies have also found uneven daily secretions of cortisol in depressives.

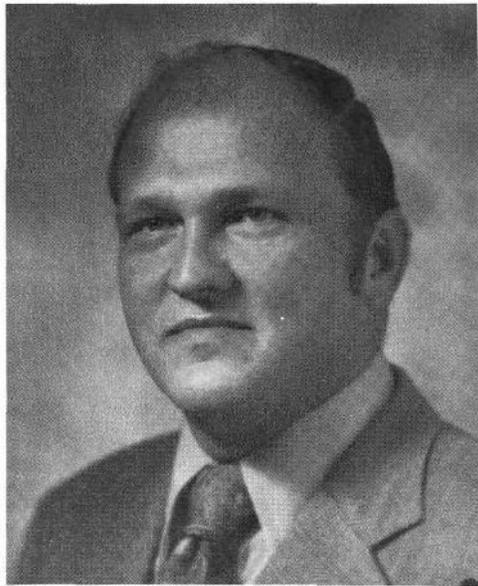
While the patients were administered 1 mg of dexamethasone, some were also receiving 30 mg of flurazepam, a short-acting hypnotic. All patients fasted until early the next morning, when a third blood sample was taken to determine the serum-cortisol content.

The results showed that 43 percent (37 out of 86) of the patients diagnosed with unipolar primary depression did not suppress serum-cortisol by dexamethasone. This was not found in any of the 80 controls.

The nonsuppression of serum-cortisol by the depressed patients did not correlate with sex, age, duration of symptoms, precipitating events, suicide attempt, weight loss, depression test scores, or length of hospital stay.

Nonsuppression of serum-cortisol distinguished three homogenous genetically defined subtypes of patients with unipolar primary depression. The three subtypes were

Dr. J. Kiffin Penry, Renowned Epilepsy Expert, To Retire From NINCDS June 30



For the last 4 years, Dr. Penry has been in charge of the Neurological Disorders Program, the largest NINCDS extramural program.

Dr. J. Kiffin Penry, director of the Neurological Disorders Program and chief of the Epilepsy Branch, National Institute of Neurological and Communicative Disorders and Stroke, will retire from the PHS on June 30. He has served 24 years as physician in the uniformed services, 13 with NINCDS.

Dr. Penry has accepted a position as professor of neurology and associate dean for neurosciences development at the Bowman Gray School of Medicine, Wake Forest University, in Winston-Salem, N.C.

Dr. Penry's work "has led the way to a new era in the management and treatment of epilepsy. Few people have had greater impact on the problem of epilepsy than Dr. Penry," said Dr. Donald B. Tower, NINCDS Director.

Dr. Penry and his staff have set up new methods for classifying and monitoring seizures and have devised new techniques to determine blood levels of anticonvulsants. He also organized and put into operation a successful drug screening program with the potential to identify and bring to clinical usefulness many anticonvulsant and anti-epileptic drugs.

Controlled clinical trials of antiepileptic drugs sponsored by NINCDS have led to the marketing of three new anticonvulsants—carbamazepine (Tegretol), clonazepam (Clonopin), and valproic acid (Depakene).

Establishes 5 Model Programs

Under Dr. Penry's leadership, five comprehensive epilepsy programs have been established. These programs combine research with patient care and are considered models for the multidisciplinary approach to the treatment of epilepsy.

While at NINCDS, Dr. Penry received the PHS Meritorious Service Medal, the Epilepsy Foundation of American Distinguished Service Award, and the Pearce Bailey Award, given

for exceptional service in the neurosciences. He helped develop the Plan for Nationwide Action on Epilepsy by the Commission for the Control of Epilepsy and Its Consequences.

Elected president of the International League Against Epilepsy in 1977, Dr. Penry has been active in developing programs against epilepsy abroad as well as in the U.S., and has served as a consultant to both the Pan American Health and World Health Organizations.

Before joining NINCDS, Dr. Penry served in the U.S. Air Force as chief of the neurology service in hospitals in the U.S. and abroad. In 1966, he received an Air Force Commendation Medal.

Dr. Penry received his B.S. from Wake Forest and his M.D. in 1955 from that University's Bowman Gray School of Medicine. He was certified in neurology in 1964 and in child neurology in 1969.

Dr. Penry has built a darkroom in his new house in Winston-Salem, and hopes to devote more time to his hobby of photography while continuing his career in neurology and the neurosciences.



Dr. Giovanni Di Chiro, chief of the Neuroradiology and Computed Tomography Section, Surgical Neurology Branch, NINCDS, delivered the biennial Dyke-Wood Memorial Lecture of the Neurological Institute of New York at Columbia University on May 2. Dr. Di Chiro spoke on Neuroradiology as a Discipline. The lecture honors the late Drs. Cornelius G. Dyke and Ernst H. Wood, former directors of the Neuroradiology Division of the Neurological Institute of New York.



Discussing biomedical research career opportunities during the recent Minority Biomedical Support Symposium in Atlanta are (from l to r) Franklin Wills, Pan American University; Cinda Bradley, Haskell Indian Junior College; Dr. Ciriaco Gonzales, director of the Division of Research Resources MBS program; Xavier Adame, Pan American University; Joisanne Brown, Spelman College; and Phillip Porter, Northeastern Oklahoma State U. MBS provides financial resources to upgrade science curricula and biomedical research programs at 75 universities, colleges, and junior colleges with high minority student enrollments.

PRESSURE

(Continued from Page 1)

providers, Congress, and the legal community.

During the 2-day meeting, these recommendations are being presented to national leaders and policymakers in the fields of health, government, business, labor, education, and private philanthropy.

The task force recommends that a 15-step model high blood pressure control process be adopted and modified.

Other task force recommendations set forth

in some detail the roles to be played in the overall program by each health care organization represented and also identify some of the problems to be overcome in carrying out these roles. To achieve program goals, the task force has also established collaborative relationships with health care professionals, national organizations, and black community leaders throughout the country.

Dr. Arthur H. Coleman, San Francisco, is chairman; Dr. Donald R. Ware, Washington, D.C., is co-chairman; and Ophelia Long, Los Angeles, vice chairman.

Drs. Laties and Ryan Named to Eye Council

Dr. Alan M. Laties of Philadelphia and Dr. Ralph W. Ryan of Morgantown, W.Va., have been appointed to the National Advisory Eye Council.

As Council members, they will advise the NEI Director and staff on the awarding of grants for research and research training related to the eye and visual disorders, and also help provide guidance on program policy, planning, and development.

Dr. Laties is both director of research of the Scheie Eye Institute and the Irene Heinz Given and John LaPorte Given professor of ophthalmology at the University of Pennsylvania School of Medicine.

He was an NIH postdoctoral trainee at the University's Institute of Neurological Science; then appointed an NIH special fellow in neuroanatomy at INS for 1963-64; and has been a member of INS since 1967.

A highly regarded scientist, clinician, and educator, Dr. Laties has a special interest in the neurochemistry of the visual system and its relationship to degenerative diseases of the retina.

He was chairman of the Retinal and Choroidal Diseases Panel for the NAEC report, *Vision Research—A National Plan: 1978-1982*, and now serves as chairman of the scientific advisory board of the National Retinitis Pigmentosa Foundation, Inc.

Dr. Ryan, director of the Morgantown Eye Clinic, played a key role in the creation of NEI, testifying before Congress in 1967 on behalf of its establishment. His special interests include industrial ophthalmology and the social and economic consequences of visual impairment.

Served With NINDB

In 1954 Dr. Ryan became chief of the Ophthalmology Branch of the National Institute of Neurological Diseases and Blindness (now divided into the National Institute of Neurological and Communicative Disorders and Stroke and the National Eye Institute).

He helped to develop the branch's vision research program and reported the results of this research, conducted by the branch and other institutions, on toxoplasmosis as a cause of uveitis, viral epidemic conjunctivitis or pink eye, and histoplasmosis as an ocular infection.

He returned to Morgantown in 1955 to enter private practice but continued to serve as a consultant to NIH until 1960.

Numbers for Federal Hotlines

How can you find out if your car has been recalled? What do you do if you have a complaint about a moving company?

Call a toll-free Federal hotline. For cars, the National Highway Traffic Safety Administration's hotline number is (800) 424-9393 (in the Washington, D.C. area, call 426-0123). And the Interstate Commerce Commission's moving hotline is (800) 424-9312 (in the Washington, D.C. area, call 275-7852).

To find out the numbers for more Federal hotlines and the Washington, D.C. addresses

NIH Associate Director Leon Schwartz Leaves For California Post

Leon M. Schwartz, NIH Associate Director for Administration, will be leaving his post by the end of June to become Vice Chancellor for Administration and Business Services at the University of California at Irvine.

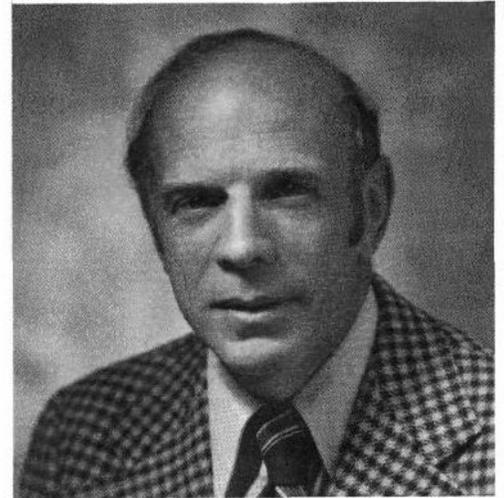
Since February 1972, Mr. Schwartz has served in his position and provided advice to NIH Director Dr. Donald S. Fredrickson on general management perspectives, and has been directly responsible for financial management, personnel, management policies, contract and grant business management, and internal audit, as well as engineering and administrative services.

"NIH has made first-rate contributions to science and to the art of management and I have been pleased to have been part of it," said Mr. Schwartz prior to his leaving.

While at NIH, Mr. Schwartz said that he saw his role, at least in part, as acting as a "buffer" for researchers by dealing with the complexities of a highly organized bureaucracy, while they maintained the necessary freedom to express "their creativity and individual initiative."

The role of management in government holds significance for Mr. Schwartz. He said that, after attending a Senior Managers in Government Seminar at Harvard University last year, he realized "how much first-rate managerial talent there is in the Federal Government."

Mr. Schwartz, who is married and has two children, is a graduate of Johns Hopkins

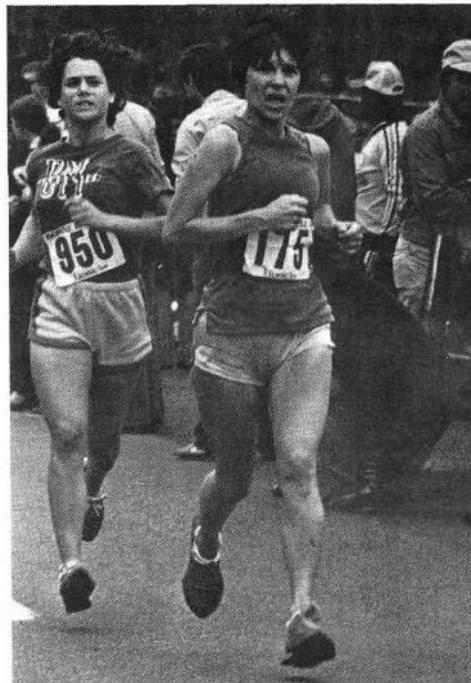


Mr. Schwartz has been the recipient of the HEW and PHS Superior Performance Awards.

University and a CPA. He said he is looking forward to being involved in an academic setting with a medical center and feels that a great deal of his NIH experience will be relevant to his new position.

He brings to his new position practical managerial experience after having served as Deputy Assistant Director for Program Management, Research Applications Directorate, at the National Science Foundation and as Assistant Commissioner for Administration with the U.S. Office of Education.

Weekend Joggers Keep Pace



Weekend jogging activities have recently kept NIH joggers busy. Twelve NIH Health's Angels joined over 2,300 other runners in the Hecht Company 10-mile road race on Saturday, June 2. Each year the race is sponsored by Hecht's for the benefit of the Washington area Big Brothers Association.

Despite extremely muggy weather and a hilly Rock Creek Park course, several NIH runners turned in sparkling performances.

Jerry Moore and James Sylvester, who as a team recently finished second in the Potomac Valley Seniors' 16-mile relay, turned in the fastest NIH times. Moore led with a time of 58:10. Sylvester finished second with a time of 63:08, edging out Dr. Marc Lippman, who finished with a time of 63:09.

Anne Ballard was the first NIH female finisher. She was followed by Linda Carter and Cindy Stifter. On May 20, Anne Ballard turned in the best time of 48:21 in the Bonnie Bell 10-kilometer marathon.

Other finishers in the June 2 race were Al Lewis, Steve Targum, Rick Davey, John Davis, Jeff Schriver, and Robert Berry.

NIH's Anne Ballard races to the finish line in the D.C. Bonnie Bell Marathon. (Photo by Rita Lohse)

and telephone numbers for many other government consumer services, get a copy of the new *Directory of Federal Consumer Offices*.

Put together by the U.S. Office of Consumer

Affairs and the Consumer Information Center, the *Directory* is free when requestors send a postcard with their name and address to the Consumer Information Center, Dept. 532G, Pueblo, Colo. 81009.

Yvonne Scott Named Head Of MEDLARS Section



Ms. Scott received her B.S. degree in pharmacy from Howard University in 1952.

Yvonne B. Scott has been named head of the National Library of Medicine's MEDLARS Management Section.

The MMS, a component of the Bibliographic Services Division, serves as the contact point between NLM and over 1,100 U.S. and foreign institutional users of the Library's online data bases. It also produces NLM's recurring bibliographies.

Other section duties include the preparation of bills for users, maintenance of statistics, the distribution of off-line prints, coordination of computer requirements, and processing applications from potential users.

Ms. Scott joined the NLM staff as a medical literature analyst in BSD's Index Section in 1956. She also worked closely with the contractors and other NLM staff in the design and implementation of MEDLARS II.

After 1 year at the NIH Library, she returned to the MEDLARS Management Section and assumed full responsibility for the production of NLM's recurring bibliographies.

1978 Edition Of Toxic Substances Registry Available From NLM

The 1978 edition of the *Registry of Toxic Effects of Chemical Substances* (RTECS), with its quarterly update, is now available online at the National Library of Medicine.

This computer-based file contains toxicity data for 36,000 substances known by 125,000 names. The published version of the data base, which is compiled by the National Institute for Occupational Safety and Health, will be available later this year (price and GPO order number to be announced by NIOSH).

For further information on RTECS, contact the NLM Toxicology Information Program, Bethesda, Md. 20209, or call 496-1131.

Dr. Eldon L. Eagles to Retire July 28

Dr. Eldon L. Eagles, the National Institute of Neurological and Communicative Disorders and Stroke's deputy director for communicative sciences and disorders, will retire July 28. During his 15 years with NINCDS, he was deputy to three Institute Directors.

The present NINCDS Director, Dr. Donald B. Tower, praised Dr. Eagles as a "problem-solver" who worked quietly but effectively to carry out Institute responsibilities. "He brought a quiet but intense concern for the Institute and its mission," Dr. Tower said, "and especially for its people—the staff, the grantees, and the contractors."

An expert in communicative disorders, with an extensive background in public health, Dr. Eagles is known for his contribution to the study of hearing loss in school children in Pittsburgh, which set national standards for hearing sensitivity and resulted in improved hearing tests.

He joined NINCDS in 1964, and later served as acting associate director for Collaborative and Field Research. When the Institute was reorganized along program lines in 1976, Dr. Eagles set up the Communicative Disorders Program, serving for a short time as its acting director.

He began his career in 1936 as a general practitioner in Port Maitland, at the tip of Nova Scotia between the Atlantic Ocean and the Bay of Fundy. In those years, Dr. Eagles drove many miles each day to care for his patients. "A 24-hour day," he remembers, "was often not long enough to make the rounds. Late night calls were routine, and the pay was small—\$25 to deliver a baby, and that included pre- and postnatal care."

He served in the Nova Scotia Department of Public Health from 1940 to 1956.

In 1956, he moved to Baltimore to become



Dr. Eagles received the HEW Superior Service Award for special service to the Department over a long period of time.

director of studies for the subcommittee on medical care for handicapped children, Maryland State Planning Commission, and from 1957 to 1960 served on the faculty of the Graduate School of Public Health at the University of Pittsburgh.

Dr. Eagles received his M.D. and master of surgery degrees from Dalhousie University, and his diploma in public health from the University of Toronto School of Hygiene. He also holds a doctorate in public health from Johns Hopkins University.

He plans a postretirement career as a consultant, and also looks forward to gardening, traveling, and fishing for trout and salmon.

VISITING SCIENTIST PROGRAM PARTICIPANTS

5/14—**Dr. Dilip Ahuja**, India, Laboratory of Brain Evolution and Behavior. Sponsor: Dr. John Calhoun, NIMH, NIHAC, Bg. 110, Poolesville, Md.

5/31—**Dr. Yoshikazu Shinoda**, Japan, Laboratory of Neurophysiology. Sponsor: Dr. E. V. Everts, NIMH, Bg. 36, Rm. 2D12.

6/1—**Dr. Sukumar Gupta**, India, Pediatric Oncology Branch. Sponsor: Dr. S. Chattopadhyay, NCI, Bg. 10, Rm. 2B50.

6/1—**Dr. Wilfried Mayer**, Germany, Laboratory of Clinical Science. Sponsor: Dr. Irwin J. Kopin, NIMH, Bg. 10, Rm. 3N325.

6/1—**Dr. Kenji Shiromizu**, Japan, Pregnancy Research Branch. Sponsor: Dr. Donald Mattison, NICHD, Bg. 10, Rm. 13N266.

6/3—**Dr. Giora Feuerstein**, Israel, Laboratory of Clinical Science. Sponsor: Dr. Irwin J. Kopin, NIMH, Bg. 10, Rm. 3N325.

6/3—**Professor Uriel Littauer**, Israel, Laboratory of Biochemical Genetics. Sponsor: Dr. Marshall Nirenberg, NHLBI, Bg. 36, Rm. 1C27.

6/3—**Dr. Maria Rozwadowska**, Poland, Laboratory of Chemistry. Sponsor: Dr. Arnold Brossi, NIAMDD, Bg. 4, Rm. 135.

6/3—**Dr. R. James Turner**, Canada, Laboratory of Kidney and Electrolyte Metabolism. Sponsor: Dr. Maurice Burg, NHLBI, Bg. 10,

Rm. 6N307.

6/5—**Dr. Beat Schmid**, Switzerland, Laboratory of Environmental Toxicology. Sponsor: Dr. Robert Dixon, NIEHS, Research Triangle Park, N.C.

6/6—**Dr. Jean-Louis Carpentier**, Belgium, Clinical and Cellular Biology Section. Sponsor: Dr. Phillip Gorden, NIAMDD, Bg. 10, Rm. 8S243.

6/7—**Dr. Saburo Matsubara**, Japan, Laboratory of Physical Biology. Sponsor: Dr. Richard Podolsky, NIAMDD, Bg. 6, Rm. 110.

6/11—**Dr. Leonid Kelner**, Israel, Biomedical Engineering and Instrumentation Branch. Sponsor: Dr. Murray Eden, DRS, Bg. 13, Rm. 3W13.

6/11—**Dr. Mariko Okada**, Japan, Laboratory of Immunobiology. Sponsor: Dr. Tibor Borsos, NCI, Bg. 37, Rm. 2B15.

6/11—**Dr. Shuzo Sato**, Japan, Developmental and Metabolic Neurology Branch. Sponsor: Dr. Richard Quarles, NINCDS, Park Bg., Rm. 425.

6/12—**Dr. Roger J. Watson**, United Kingdom, Laboratory of Molecular Virology. Sponsor: Dr. George Vande Woude, NCI, Bg. 41, Rm. 100.

Primate Research Sheds New Light on Aging

Why do healthy cells age and die? The cells of man and other mammals when cultured in the test tube usually die out before the 50th generation. Cancer cells, on the other hand, apparently can be cultivated indefinitely. Do normal cells simply age and die because of the wear and tear of life? Or are the cells of different species programmed genetically for a certain life span with predetermined periods of growth and development, maturity, senescence, and death?

Various theories of aging have been advanced, but none as yet has explained all the facts.

Recent research by Dr. Kenneth Brizzee of the Delta Primate Research Center and Tulane University School of Medicine sheds new light on the possible role of a mysterious cellular pigment in the aging process. The Delta Center is supported by the Division of Research Resources' Animal Resources Program.

Often referred to as the "age" or "wear and tear" pigment, lipofuscin has become one of Dr. Brizzee's major research topics. It was first discovered in the mammalian nervous system many years ago.

In a study with monkeys at the center, Dr. Brizzee made several observations that seem to support the theory that lipofuscin may play an active role in cellular aging in the primate brain.

In 4-year-old rhesus monkeys, the pigment granules were few in number, highly dispersed, and exhibited a pale yellow fluorescence. With increasingly older animals, however, the number of granules increased, changed to a bright yellow-orange fluorescence, and appeared to coalesce into congregated pigment masses in the oldest animals.

The ratio of neurons exhibiting the congregated yellow-orange fluorescing pigment also increased dramatically and progressively from about 8 percent at 4 years to 27 percent at



Dr. Brizzee explains a laboratory procedure to premedical students. He was awarded the 1978 Research Award of the American Aging Association for his work on the biological aspects of aging.

9½ years and 47 percent by 19½ years. A 19½-year-old rhesus monkey has an age equivalent to about 59 human years.

Since the pigment may displace as much as 40 percent or more of the cell plasma, Dr. Brizzee believes that this "could adversely affect the functional integrity of the cell, or ultimately even result in cell loss."

The progressive accumulation of lipofuscin pigment was also found to be highly differential, or selective, rather than a uniform process throughout the brain.

Dr. Brizzee points out that cellular and regional differences have also been reported in the accumulation of lipofuscin in the brain of man. "These findings have suggested that the deterioration of some sensory, associative, and motor functions in senescence may be a consequence of selective alterations in discrete regions of the brain, rather than uni-

form cellular aging throughout the nervous system," he says.

A significant loss of cerebral cortex neurons also was found to occur during aging in rhesus monkeys. The concentration of supporting cells, on the other hand, was significantly higher in the brains of older monkeys.

Research has established that in humans there is a marked and similar progressive decrease with age in the number of neurons in the brain, especially in the centers of higher mental activity.

Since many recent studies have indicated that an area of the brain called the hippocampus may play a major role in learning and memory, Dr. Brizzee, in collaboration with Dr. Mark Ordy, studied the relationship of these functions in rats to neuronal loss and lipofuscin accumulation with age in this part of the brain.

Passive-Avoidance Test Used

The investigators used a passive-avoidance test in which rats were first taught to obtain food from a goal box and then subjected to a mild electric shock. The animals were tested for retention of the shock experience 2 and 6 hours later, by releasing them to return to the food reward.

Despite the electric shock experience, the old rats approached the food cup faster after 2 hours than did the middle-age group, and also sought food to a greater extent than the younger animals after 6 hours.

This decline in short-term memory was also correlated significantly with loss of neurons and very significantly with an increase with age in intra-neuronal lipofuscin in the hippocampus, according to Dr. Brizzee.

Presently, Dr. Brizzee and co-workers have quantitative studies under way with centrophoxine, a central nervous system stimulant, which has shown some therapeutic promise with respect to lipofuscin accumulation and learning and memory deficits during aging in rodents.

Clinical Neurosciences Chief Dr. Cosimo Ajmone Marsan Retires

Dr. Cosimo Ajmone Marsan, chief of the Clinical Neurosciences Branch, National Institute of Neurological and Communicative Disorders and Stroke, retired recently after 25 years with the Institute. He has accepted a position as professor of neurology at the University of Miami Medical School.

Dr. Ajmone Marsan joined NINCDS in 1954 as chief of its Electroencephalography and Clinical Neurophysiology Branch. Redesignated the Clinical Neurosciences Branch in 1975, its research efforts have centered on the pathophysiology of epilepsy, particularly of

neuronal mechanisms which are at the base of epileptiform activity. The branch annually obtains and interprets more than 1,100 electroencephalograms from NIH patients.

He also was on the faculty of G.W.U. School of Medicine and Health Sciences.

Before joining NINCDS, Dr. Ajmone Marsan taught neurophysiology at McGill University and directed a laboratory of neurophysiology at the Montreal Neurological Institute, where he had previously been a Rockefeller Fellow.

A graduate of the University of Turin Medical School and later certified by the

American Board of Electroencephalographers, he has written more than 100 publications, including 2 monographs.

Throughout his career, Dr. Ajmone Marsan has been active in a number of professional organizations, several of which he served as president. Currently he is director of symposia of the UNESCO International Brain Research Organization.

Before taking up his new position, Dr. Ajmone Marsan plans a trip to Britain to visit his son, who is conductor of the Welsh Opera Orchestra.

NIH Women's Golf Association Opens Season at Falls Road Golf Course

The 1979 season of the NIH R&W Women's Golf Association, which opened on Apr. 17 with the annual Betty Sanders outing at the Falls Road Golf Course, will include weekday matches through mid-September.

An innovation is the scheduling of one or two "Opens" per month. These are Mixed Flights Medal Play with foursomes made up in order of members' appearance without con-

sideration of flights or teams.

In addition to an April meeting, 15 members participated in a spring outing in Williamsburg in May.

The Association's first open outing was held at the Falls Road Golf Course on May 31. Low net prize winners were Mary Dean Aber and Anne Proctor, tied at 32, and Susa Hamilton with a net 35.

The two prizes for Blind Bogeys on the 6th hole were won by Constance Percy and Nora Harrison.

The members are looking forward to the June Open, scheduled tomorrow (Wednesday, June 27).

For further information about Golf Association activities, contact Constance Percy, Association president, 496-5251.

Exhibit Commemorates 100th Anniversary Of NLM's 'Index Medicus'



The Index Medicus celebration brought together three medical library directors. L to r are: Drs. Frank B. Rogers (1949-63), Martin M. Cummings (1964-current), and Joseph H. McNinch (1946-49).

This year marks the 100th anniversary of the first publication of *Index Medicus*—the monthly list of references to biomedical journal articles published throughout the world. An exhibit to commemorate this occasion is being displayed at the National Library of Medicine through the end of the year.

The exhibit traces the development of *Index Medicus* from its first issuance in 1879 to the present time. The 1879 issue was produced under the guidance of the Library's first director, Dr. John Shaw Billings, and was dated January 31, 1879. It carried the subtitle "A Monthly Classified Record of the Current Medical Literature of the World."

Recently Dr. Clifford A. Bachrach was named editor of *Index Medicus*. He will retain his present position as chief of NLM's Medical Subject Headings Section, where he is responsible for the development of the vocabulary used in indexing and cataloging. He will also oversee the selection of published journals. All aspects of the publication's format will be his responsibility.

Dr. Bachrach has served on the Library's staff since 1966, and prior to coming to NLM was with the National Heart Institute as a research epidemiologist. He received his medical degree from Cornell University and also holds a master of public health degree from Johns Hopkins University.

Unpublished Letters Displayed

The exhibit explores the roles of the American Medical Association and the Carnegie Foundation of Washington in sustaining and publishing *Index Medicus*, and the challenge posed by the ever-increasing quantity of medical periodical literature.

Among the items on display are unpublished letters of Dr. Billings, William S. Halsted, and Fielding H. Garrison; photographs and printed materials, including a number of issues of *Index Medicus* considered important in its evolution; and several significant medical

bibliographies which preceded *Index Medicus*.

Although the mechanism for producing *Index Medicus* has changed radically over the years—today it is produced using NLM's computerized Medical Literature Analysis and Retrieval System (MEDLARS) and high-speed photocomposition equipment—its basic purpose has remained the same.

As the Library's present director, Dr. Martin M. Cummings, expressed recently, "The Na-



The first director of what is now the National Library of Medicine, John Shaw Billings, was a distinguished surgeon, architect, public health authority, administrator, and librarian. This photograph was taken about 100 years ago when the first issue of *Index Medicus* was published under his editorship.

tional Library of Medicine is proud of the bibliographic tradition represented by *Index Medicus*. Over the decades many people have carried on the work begun by Billings.

"Although computers now assist in its production, *Index Medicus* is still first and foremost a product of human intellect—from the biomedical research it references to the

Clinical Course of Sickle Cell Disease Subject of New Study

A 5-year study on the clinical course of sickle cell disease was initiated recently by the Sickle Cell Disease Branch, Division of Blood Diseases and Resources, National Heart, Lung, and Blood Institute.

The purpose of the study is to determine the natural history of sickle cell disease by evaluating patients who have the illness. Although sickle cell anemia and related hemoglobinopathies involving sickle hemoglobin have been recognized and described for many years, the clinical course of sickle cell disease is poorly documented.

Twenty-three hospitals across the U.S., including three in Washington, D.C., are participating in the study. Investigators at the hospitals will recruit a total of 3,500 participants of all ages with sickle cell disease.

The D.C. hospitals participating in the study are: Children's Hospital Medical Center, George Washington University Medical Center, and the Howard University Center for Sickle Cell Disease.

indexing that makes it a most useful tool for science."

Exhibit hours are from 8:30 a.m. to 5 p.m., Monday through Saturday (closed Sundays). Beginning Sept. 4, the Library's hours are 8:30 a.m. to 9 p.m., Monday through Friday, and 8:30 a.m. to 5 p.m. on Saturday.

For further information, contact the National Library of Medicine's Office of Inquiries, 496-6308.



Dr. Bachrach will continue the 100-year tradition of quality scientific editing.

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