

# The NIH Record

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## New Employee Appraisal System Starts in October

The Employee Performance Management System, adopted by the Department of Health and Human Services for appraising employee job performance, will go into effect on Oct. 1, 1981, replacing the current system.

The new system applies to all NIH employees, including general schedule and wage-grade employees, EXCEPT: supervisors and management officials GS-13 through GS-15 who are covered by merit pay; employees in the Senior Executive Service, the Senior Scientific Service; GS-16 through GS-18 or equivalent; and experts, fellows, and certain time-limited appointments. Unionized employees will be included in this system according to negotiated agreements.

Normally the performance appraisal period will be 12 months long, from Jan. 1, to Dec. 31. This year, however, the process will cover 15 months, beginning with performance planning in the fall of 1981 and leading to the first annual performance assessments which will be completed in December of 1982. This extra time will be used for adjustment to the new system.

Each Institute or Division will train and orient all supervisors and employees on the essentials of the system. Employees will be notified later this summer regarding specific training and orientation sessions, which  
(See *PERFORMANCE*, Page 8)

## Five NIH Staff Members Honored With Department Awards

Five NIH staff members were honored by Secretary Richard S. Schweiker at the Department Honor Awards Ceremony held Wednesday, July 22, in the Hubert H. Humphrey Building Great Hall. Dr. Thomas E. Malone, Acting NIH Director, assisted with the presentations.

### Distinguished Service Award

The highest Department honorary recognition conferred on civilian employees was presented to Dr. Mortimer B. Lipsett, Director, Clinical Center, and to Rose Lieberman, research microbiologist, Laboratory of Immunology, NIAID.

### Secretary's Special Citation

The Secretary's Special Citation for Ten Outstanding Employees of the Year was presented to Viola L Beverly, laboratory

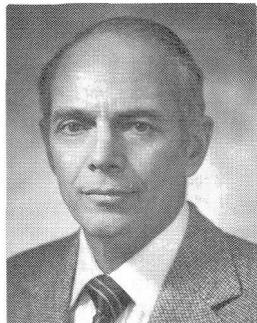
worker, Laboratory of Cellular and Molecular Biology, NIA.

### Flemming Award Recipients

Dr. Anthony Fauci, head, Laboratory of Immunoregulation, NIAID, was recognized by Secretary Schweiker as a 1979 recipient of the Arthur S. Flemming Award (see *The NIH Record*, Apr. 15, 1980). Dr. George Khoury, acting chief, Laboratory of Molecular Virology, Division of Cancer Cause and Prevention, NCI, accepted congratulations from the Secretary as a 1980 recipient of the Flemming Award (see *The NIH Record*, May 12, 1981).

A reception of HHS, PHS, NIH officials, award recipients and their guests followed the ceremony.

(Continued on Page 4)



Dr. Lipsett was cited "for his outstanding leadership and management of the Clinical Center and his important scientific and management contributions to the NIH intramural research program."



Ms. Lieberman was recognized "for the identification of allotypic forms of murine immunoglobulins and the delineation of the gene complex encoding immunoglobulin heavy chain constant and variable regions."

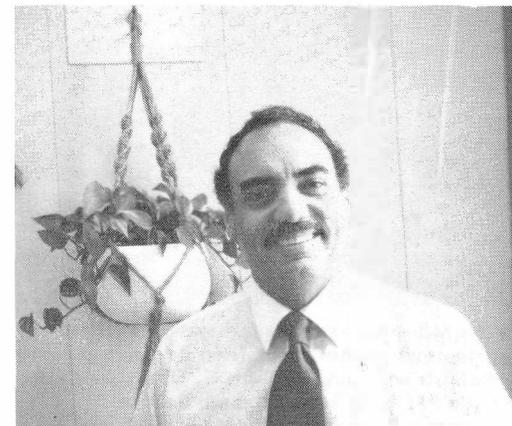
## Jogger's Alertness Saves Woman's Life

The cries for help by a woman who had been clinging to a rock most of the night of July 20 in the chilly, dangerous waters of the Potomac River near Harper's Ferry, W. Va., interrupted the early morning jog of a National Cancer Institute official who was attending an NCI budget and planning conference.

"I thought it was kids on the side of the river; sometimes they tease joggers," said James E. Prather, administrative officer for the NCI Office of the Director.

At about 6 a.m., as he was jogging on the Potomac River bridge along Route 340, he heard the screams of Helen A. Albert, 52, who had spent the previous 6½ hours clinging to a rock in the middle of the river. She and her husband, John H., 62, of Keyser, W. Va., had fallen into the river

(See *RESCUE*, Page 9)



"I guess I was in the right place at the right time," says early morning jogger James Prather. He effected a quick rescue at Harper's Ferry before the NCI conference started.



NIH policemen join NIH firemen in their quarterly firefighting and rescue training session.  
(See Page 3)

# The NIH Record

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## Mid-Life Crisis Subject of Seminar

A three-part series on the Female Mid-Life Crisis will be presented by the Occupational Medical Service. The program will focus on how to cope with the physiological changes and psychological stresses created during this period. Both men and women are invited to attend.

### Sessions Schedule

Sessions will be held from noon to 1 p.m. on the following days:

Monday, Aug. 10, Rm. B2C-06

Monday, Aug. 17, Rm. B2C-07

Monday, Aug. 24, Rm. B2C-06

Morris Schapiro, OMS mental health counselor, will lead the lecture discussion with medical advice from Dr. Angela Hill, OMS staff psychiatrist. For further information, call 496-3164. □

## Toxicology Information Symposium To Be Held at Lister Hill

The Symposium on Information Transfer in Toxicology will be held in the National Library of Medicine's Lister Hill Center Auditorium, Sept. 16-17. The symposium will examine the state-of-the-art, as well as the technical, social, economic, and behavioral aspects in the transfer of toxicological information.

It is jointly sponsored by the HHS committee to coordinate environmental and related programs, and the interagency toxic substances data committee.

To obtain a registration form and further information, contact the program chairman, Dr. George J. Cosmides, Bldg. 38A, Rm. 3S-320, or call 496-3147. □

## Fight Postage Inflation Before Prices Increase

According to NIH mail manager Bill Arnwine, first-class stamps are not the only increase in mail prices. With a few exceptions, most other USPS services are also up in price and are likely to increase again before the year is out.

To help cut mailing costs at NIH, Mr. Arnwine recommends some money-saving tips extracted from a *Washington Post* article:

- Use Postal Service post cards. They're a bargain at 12 cents apiece. One can get a lot of information on a card. The card is free; all you pay for is the stamp.
- Watch out for oversized envelopes. If you only put in one or two pages, you have to pay a surcharge. Save 7 cents by folding the pages and mailing them in a regular size 10 business envelope.
- Don't use special delivery. It costs at least \$2.10 and is usually no faster than ordinary first class.
- Use express mail if speed is important. The minimum cost of a letter is \$5.30. The

mail is delivered the next day, but it could cost up to \$93 depending upon actual weight.

- Important papers don't have to be sent by registered mail. Certified mail will often do. A registered letter costs \$3.25, while a certified letter requires only 75 cents added to normal postage. A receipt showing when and to whom the certified letter was delivered is 60 cents extra.

- To save time, mail letters before 1 p.m. This beats the big postal rush hour later in the day, and can cut delivery time 1 to 2 days.

- Use heavy-duty tape instead of string with packages. Along the mail route, people tend to use the string as a handle, and it could loosen. String also might get caught in the sorting machinery.

- Check your postal scales. Too often, extra postage is added because scales read too heavy. To check your scales, weigh five quarters. It should read 1 ounce. □

## Nuclear Weapons Topic of Hiroshima Observance

In observance of the 36th anniversary of the dropping of the A-bomb on Hiroshima, a day-long program of films and panel discussions on the use and effects of nuclear weapons will be held Friday, Aug. 7, in the Masur Auditorium.

Among the speakers will be Morton Halperin, director, Center for National Security Studies and former U.S. State Department official. He will speak on the issue of nuclear proliferation and how it might be contained, and the citizen's role.

The program will begin at 9:30 a.m. and will continue into the afternoon.

Dr. Jerome Stone, noted author on the uses of nuclear weapons and energy and currently with the Federation of American Scientists, will participate on the panels. Nancy Ramsey, of the Committee for National Security, will also speak.

The event is being sponsored by the Solar Transition Committee and the Physicians and Scientists for Social Responsibility. □



TV 9's Mike Buchanan (rear) watches fellow sports news anchorman Glenn Brenner get into a rhubarb with umpire John C. Slovikosky during the PEF fund softball game held at Georgetown Prep, July 19. Mr. Slovikosky, a professional softball umpire who works at the CC, offered his services for the day.

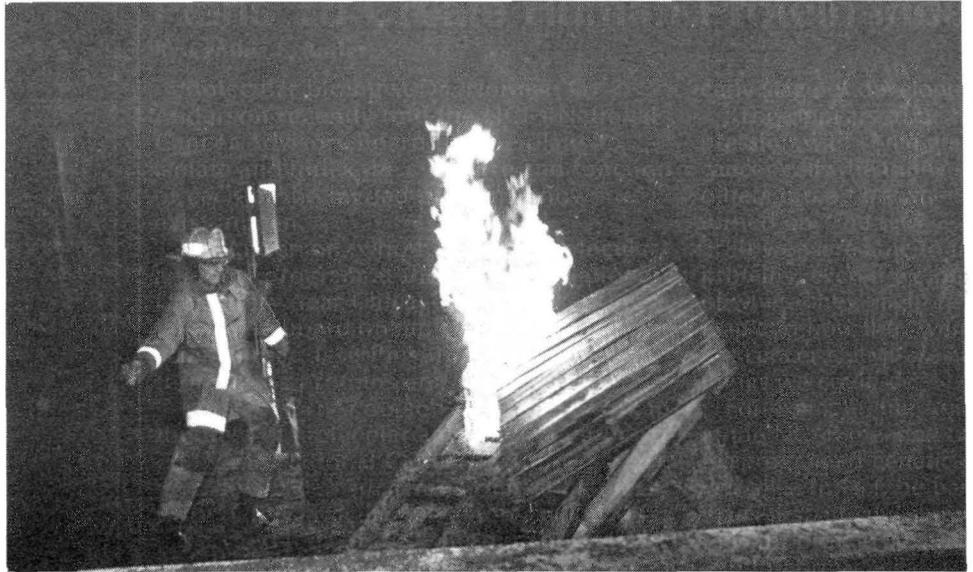


Over 250 fans attended the game. Dr. Norman Braveman (c) and Erwin L. Dubose (rear), both NIH players, congratulate "One and Only TV-9" team members. After a five-inning scoreless duel, NIH lost to the newsmen 8 to 7. The event raised \$250 for the CC patients.

# NIH Police and Firemen Practice Rescues at Fire Academy



Firefighter Paul E. Davis (l) finishes explaining how his 30-minute air supply bottle is regulated as NIH police officers (c-r) Rice, Harris, and Koerber prepare to don their airmasks.



NIH Fire Department Lt. Guy A. Burleson hurriedly closes the blast door to the high temperature room, where the fire he ignited will reach 1,100° F. Both departments, as part of their training, entered the room to extinguish the fire.



Carrying 60 extra pounds of equipment, NIH Police crouch to enter a room filled with black smoke to search for a "victim."



The NIH Police begin their search under simulated fire conditions.



Charles C. Barrett, NIH deputy fire chief, played "victim" as NIH Police begin CPR.

In mid-July, two groups of NIH Police Department officers spent a day each with the NIH Fire Department at the Montgomery County's Fire and Rescue Academy to learn more about what goes into fighting a fire, and how they might better assist in rescue operations.

The main purpose of the unusual training session was to allow the police to become more familiar, under actual conditions, with the breathing apparatus they carry in their patrol vehicles.

The equipment is carried in case a life-threatening emergency should occur at NIH, where a policeman might be required to enter a smoked-filled room, or where a fire has broken out and victims are caught inside.

Most of the policemen had never had any previous fire training, and all were volunteers for a full day of exhausting training. Even though the NIH Police would probably never be called to actually put out a fire at NIH, the training was being done to give the lawmen a better idea as to how fire and

rescue operations are conducted.

Throughout the day, NIH firefighters and police pulled and tugged on water hoses together, crawled through smoke-filled areas, and learned how not to panic, and to orientate themselves in complete darkness.

Their skills were tested in a labyrinth known as "The Maze," a third-floor complex that simulates what a fireman would find in a structural fire.

On the first day of training, Platoon #2 firefighters brought their truck with them to the fire academy for their regularly scheduled quarterly training session.

While the NIH police practiced the proper procedure for putting on and taking off their breathing apparatus and getting used to working in their newly issued fire turnout coats, pants, and boots, the firefighters conducted different approaches to putting out raging fires inside the academy's "high temperature room."

Platoon #2 was the unit on duty at the time of the Clinical Center fire in April 1979.

Last year at NIH, the 17 members of the

NIH Fire Dept. responded to 1,092 emergency calls, although there were only 17 actual fires. Besides these emergency runs, the department also maintains a 24-hour ambulance service.

"It's important that the police know how we operate," said A. William Benson, assistant fire chief. Mr. Benson, the department's primary training instructor, is the person responsible for conducting the police through their indoctrination.

"I feel more comfortable with my equipment now, and with working in a fire-type situation," observed NIH policeman James H. Koerber about his fire and rescue training. His sentiments were echoed by fellow officers Jerry B. Harris, and Robert J. Rice who also were involved in one session.

Although by the end of the day's training some of the police recruits complained about hurting knees and exhaustion due to the extra weight, their instructor, Mr. Benson, said "they did well for the first time. They were cooperative, willing, and we gave them the guidance." □

## NIH'ERS HONORED WITH DEPARTMENTAL AWARDS

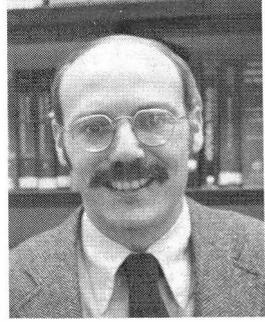
(Continued from Page 1)



Ms. Beverly was honored "for her outstanding service in running the utility room and dishwashing service for the Gerontology Research Center of the National Institute on Aging."



Dr. Fauci received the 1979 Arthur S. Fleming Award "for his significant advances in the understanding of the human immune system and in the clinical management of disease due to malfunctions of the immune system."



Dr. Khoury received the 1980 Fleming Award "for his scientific insight, originality, and excellence in research on the molecular mechanisms which underlie the induction of cancer by DNA tumor viruses; for pioneering discoveries of the ways in which cells copy and process genetic information; for studies on the use of viruses to package biologically important cellular genes and to transfer them to eukaryotic cells; and for achievements in helping to attain the goals of the National Cancer Program."

### Hispanic Advisory Committee Meets With Visiting Scientists

Members of the NIH Hispanic Advisory Committee met recently to acquaint the Hispanic visiting scientists from Argentina, Spain, Brazil, Guatemala, and Uruguay with the various opportunities and intramural programs available here, particularly those through the Fogarty International Center.

The group discussed ways of attracting more Hispanic scientists to NIH through university programs, embassies, and establishing more friendships between countries through scientists. Currently, there are 58 Hispanic scientists, fellows, associates or special guests visiting and working on campus.



The HAAC members at the conference were from l to r: Dr. Victor E. Marquez, NCI visiting scientist and former director of the research department of COSMOS Laboratories, Venezuela; Dr. Thomas E. Malone, currently Acting NIH Director; Ena Camargo, HAAC chairperson, NIAID Laboratory of Infectious Diseases; Dr. Philip Chen, NIH Assistant Director for Intramural Affairs; and Wanda Pifer, chief, International Visitors Center, FIC. Also attending but not shown was Dr. Mario Barragan, dean, School of Medicine, University of Bolivia, an NCI visiting scientist.

### New Race, Origin Definitions Adopted by Department

Previous categories designating race and national origin of Federal employees were changed in 1978 by the U.S. Department of Commerce to a common set of definitions that are required to be collected and maintained by all Federal agencies.

Designated through visual observation by personnel officers, equal employment opportunity officers, supervisors, or other responsible officials, the data are reported to the U.S. Office of Personnel Management.

They, in turn, report it to the Central Personnel Data File where the status of minorities in the Federal civilian work force is then surveyed. Special surveys are also conducted to measure the effectiveness of various EEO programs.

#### New Designations

The following are the new designations adopted by HHS:

Previous Minority Category	New Race and National Origin Category
Employees in Guam and Hawaii	Employees in Guam and Hawaii
Negro	Black, not of Hispanic origin
Spanish surnamed	Hispanic
American Indian	American Indian or Alaskan Native
Aleut (in Alaska only)	American Indian or Alaskan Native
Eskimo (in Alaska only)	American Indian or Alaskan Native
Oriental	Asian or Pacific Islander
None of these	White, not of Hispanic origin
Not Hispanic in Puerto Rico	Not Hispanic in Puerto Rico

As a Federal employee, you have the right to know the race or national origin category under which you are coded. If you have any questions or are concerned that the above conversion process does not properly represent your correct racial and national origin designation, please notify your personnel office in writing of your desire to verify your racial and national origin code. □

## SLE Patients Find Little Benefit From Plasmapheresis

Plasmapheresis appears to be of little clinical benefit in the treatment of non-life-threatening systemic lupus erythematosus, according to intramural scientists from the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases.

Dr. Nathan Wei of the Arthritis and Rheumatism Branch presented the results of a double-blind study involving 20 SLE patients at the American Rheumatism Association meeting in Boston, June 5.

"Using plasmapheresis, we were able to decrease the serum levels of immunological factors that most people feel are associated with SLE. We observed no complications of therapy," Dr. Wei said, "but were unable to demonstrate a clear-cut clinical benefit attributable to plasmapheresis when compared with a control group."

SLE is a chronic inflammatory disease of unknown cause. Previous research has indicated that levels of immune complexes are increased in the circulation of SLE patients probably from inadequate clearance from the blood.

Deposition of complexes in the kidneys, heart, and other sites may be related to subsequent organ dysfunction and failure. The working rationale for plasmapheresis is to remove these disease-causing substances and replace them with normal serum proteins.

Twenty patients with non-life-threatening SLE were plasmapheresed three times a week for 2 weeks and examined for an additional 4 weeks. Half of the group had their plasma exchanged and the other half did not.

#### Process Takes 2 Hours

Plasmapheresis takes approximately 2 hours. Each patient's blood is pumped through a centrifuge, which works like a dairy cream separator. While removing the plasma, the cell separator allows scientists selectively to remove and replace blood components.

Plasmapheresis is now being used experimentally in the treatment of a wide variety of autoimmune conditions, including Graves' disease, multiple sclerosis, and myasthenia gravis.

While the risks and complications arising from the procedure are slight, it is expensive, time-consuming and no clear explanation has emerged for its occasional success.

Plasmapheresis has attracted interest as an alternative to conventional drug treatment for SLE, which includes aspirin, anti-malarial drugs, corticosteroids, immunosuppressive agents, and drugs, some with undesirable side effects.

For SLE patients who have not responded to drugs, plasmapheresis has been proposed and undertaken as an unproven treatment approach. The NIADDK controlled trial results cast significant doubt on its value. □

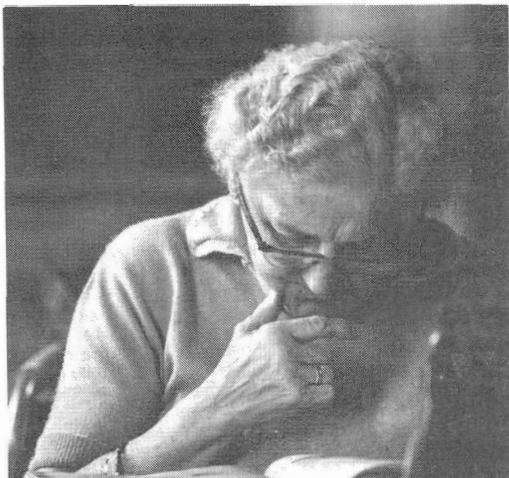
The greatest, the most important of the arts is living.—Aldous Huxley □

# Elderly Personalities Remain Stable Over Time, Report NIA Gerontologists

By Jan Ehrman

There is no such thing as a "typical" older person, according to four National Institute on Aging intramural researchers. Elderly individuals show significant variance in their intellectual capabilities, and each possesses a unique personality which is stable over time.

The psychologists presented their findings during a recent science writers' seminar at the NIH Gerontology Research Center in Baltimore. The program, Aging and the Behavioral Sciences, highlighted work on personality, memory, and cognitive performance—vital areas "critical to human



Even though many older persons have difficulty in recall, they have been found to perform memory tests comparable to younger people.

adaptation," according to Dr. Robert N. Butler, NIA Director.

Drs. Paul T. Costa, Jr., and Robert R. McCrae, from the center's stress and coping section, Laboratory of Behavioral Sciences, said that personality is established by early adulthood and remains stable thereafter.

Usually no decline or change in personality compared to other cognitive changes due to aging is evident, the researchers said. If radical changes in personality do occur among older individuals, it may indicate brain disease, and alert the family to the need for medical attention.

Longitudinal studies of aging individuals for as long as 12 years show little or no evidence of age changes in personality. When the subject's spouses were asked, they also reported that little or no change occurred in the personalities of their mates throughout the years.

Drs. Costa and McCrae found that periods of psychological crisis in adulthood do not occur at regular intervals, contrary to some theories regarding stages of adult development. Instead, individuals with a long history of emotional instability are more likely to encounter more crises.

These findings do not imply that individuals remain firmly locked into rigid behavior patterns. The investigators noted that changes in roles, attitudes, and situational demands create the need for new behaviors, and the majority of elderly persons adapt effectively to these new demands.

Dr. David L. Arenberg, chief, learning and problem solving section, Laboratory of

Behavioral Sciences, said that although elderly individuals typically experience recall difficulties, they execute some memory tasks about as well as their younger counterparts.

For instance, most 60- and 70-year-olds in the Baltimore Longitudinal Study of Aging can recall seven successive digits, such as a telephone number, as accurately as younger people. Similarly, no age differences in memory exist when recalling past events, designated by Dr. Arenberg as "old" information.

However, he added, a relationship does exist between adult age and performance memory for designs. This type of memory task uses "new" information. After studying geometric designs for 10-second intervals, male subjects reproduced the designs from memory, setting their own pace.

Cross-sectional data showed that younger participants erred infrequently, middle-aged subjects made a modest number of errors, and a substantial number of designs were incorrectly reproduced by 76- to 86-year-old men. Repeated measurements spaced over time confirmed these cross-sectional findings.

While the threat of memory loss and intellectual impairment creates fear for many aging individuals, Dr. Arenberg reminded the audience that test results represent group and not individual averages.

Dr. Elizabeth A. Robertson-Tchabo from GRC's Laboratory of Neurosciences concluded, "Aging does not manifest itself in global deterioration of all cognitive functions.

"The major problem is that many elderly internalize or anticipate catastrophic mental changes. This could have a negative impact on their performance of day-to-day tasks and might hamper motivation."□

## Oat-Bran Added to Diet Lowers Cholesterol Levels

In a recent study supported by the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases and the Veterans Administration, the addition of oat-bran to a normal diet was shown to significantly reduce total serum cholesterol levels and concentrations of low-density lipoproteins in seven out of eight hypercholesterolemic men.

The study, led by Dr. James W. Anderson, involved investigators from the University of Kentucky College of Medicine and the University of Toronto.

Eight men with previously documented hypercholesterolemia (high serum cholesterol levels) were fed two solid diets for 10 days each. The diets were composed of commonly available foods and were identical in energy, carbohydrates, protein, and fat content. The test diet, however, included 100 grams of oat-bran per day provided in muffins and hot cereal.

The men were tested at the University of Kentucky hospital on an inpatient basis. Blood samples were taken daily during each 10-day diet period, and measurements were made of total cholesterol, high-density lipoprotein cholesterol, low-density lipoprotein cholesterol, fats, and sugar. Stool specimens were sent to the University of Toronto for analysis.

The investigators found that seven of the

eight men on the oat-bran diet had lower total serum cholesterol and lower low-density lipoprotein cholesterol. No changes in cholesterol levels were observed when the men were on the diet without oat-bran.

Additionally, the high-density lipoprotein cholesterol concentrations were not changed by the oat-bran diet. This is important in light of the recent discovery that not all cholesterol is dangerous. While low-density lipoprotein cholesterol seems to promote atherosclerosis, the high-density fraction seems to protect against the disease.

Different fibers have different effects on lowering cholesterol. Water-soluble fibers, such as cellulose and cellulose-rich wheat bran, do not lower cholesterol levels; while water-insoluble fibers such as pectin and oat-bran do.

Oat-bran also has the advantages of being inexpensive and palatable. Although it is not yet commercially available, 300 grams of whole oats will provide about 100 grams of oat-bran, according to Dr. Anderson.

The cholesterol-lowering effects of oat-bran were reported in the May 1981 issue of the *American Journal of Clinical Nutrition* by Drs. James Anderson, Robert W. Kirby, Beverly Seiling, E. Douglas Rees, Wen-Ju Lin Chen, Ralph E. Miller, and Ruth M. Kay.□

**If Your  
Clothing  
Catches Fire  
Stop  
Drop  
and Roll**



**Prevent Fires—Save Lives!!**

# Mismatching of Chromosomes Found In DES-Exposed Animal Tissue Cultures

Studies at the National Institute of Environmental Health Sciences have determined that diethylstilbestrol in animal tissue cultures produces a mismatching of the diploid number of cell chromosomes, called aneuploidy, which may contribute to the later development of cancer cells. Normally chromosomes occur only in perfectly matched pairs.

Like other chemical carcinogens, DES causes cancerous transformation of these isolated tissue cells; however, unlike most other established chemical carcinogens, it does not display mutagenic activity when tested on two gene markers used for identifying mutagenic action.

In the 1960's, DES was used as a therapeutic drug for expectant mothers, and until 1979, as a growth enhancer in beef cattle. Earlier work has shown DES to cause vaginal cancer in the daughters, and genital dysfunction and malformation in male offspring of women who took the drug during pregnancy.

Now greatly restricted for use as a drug and banned as an agricultural feed additive by FDA, DES has become a tool and a focus for research in reproductive and developmental toxicology, including birth defect research, immunology, and investigations on the mechanisms of carcinogenicity.

The Ames test using bacteria is widely supported as a tool to screen suspect sub-

stances for mutagenicity. If, in the tests, the substances display mutagenic activity they become candidates for carcinogenicity testing.

The NIEHS research team wondered if the failure of DES to show mutagenicity in bacterial cultures might be due to factors which are present in cells of higher animals. Using hamster cells in culture, they demonstrated that again DES showed no measurable mutagenicity in these cells.

The recent study on DES's role in causing cancer appeared in *Science*, Vol. 212, No. 4501, June 19, 1981, in a paper entitled *Diethylstilbestrol Induces Neoplastic Transformation in Cultured Cells Without Measurable Somatic Mutation at Two Loci*, by Dr. J. Carl Barrett, environmental carcinogenesis group, Laboratory of Pulmonary Function and Toxicology; Annette Wong, and Dr. John A. McLachlan, transplacental toxicology group, Laboratory of Reproductive and Developmental Toxicology, NIEHS.

This observation made in tissue cultures mirrored clinical findings made elsewhere of aneuploidy in the female offspring of DES-exposed women, which found aneuploidy in the precancerous dysplasia of their reproductive tracts.

Since other carcinogens can induce aneuploidy, these studies with DES should stimulate new thinking about how some chemicals cause cancer. □

## Animal Facility Staffers Win Award for Excellence

Recently, a group award for excellence was presented to the animal facility staffers of the Division of Cancer Biology and Diagnosis in the Clinical Center.

They were cited for their work in establishing a new centralized animal facility in which "a cleaner environment is maintained, resulting in improved research experimentation and working conditions for the investigators. Each individual contributed to making this project a success."

The recipients were: Roch O'Donovan, Patey Arnone, Paul Walker, Nathaniel Swindler, Donald Rippeon, John Barone, William Hinkle, Dr. Gene Shearer, Nathaniel Nelson, Thomas Younger, Roosevelt Ingram, Jeffery Henderson, Jay Linton, and David Hoffman. A posthumous award was given to William Kenneth Snowden.

Participating in the award ceremony were Dr. Shearer, chairman of the DCBD Animal Advisory Committee, and Mr. Hinkle, manager of the animal facility. □

## The Villain Comes to NIH

The NIH R&W Theatre Group is planning an evening of "old time melodramas" to be presented in early fall. Anyone interested in acting, directing or helping with the production in any way, call Sally Richardson, 496-7716. □

## Electrical Equipment Specialist Disconnects Federal Career



Electrical shop foreman Mr. West and his staff were presented with a group award in 1976 for outstanding performance.

James C. West, equipment specialist in the Maintenance Engineering Branch, Division of Engineering Services, retired in June after completing 20 years of Federal service, 13 of which were at NIH.

Mr. West began his government service at the Federal Aviation Agency. In 1968 he came to NIH as a production planner in the Shops Branch, DES, and later advanced to the position of electrical shop foreman.

In 1978, he was transferred to the office of the chief, MEB, as an equipment specialist (electrical). He provided expertise on numerous projects dealing with emergency power systems, fire alarm and central monitoring systems, and elevator systems.

Mr. West served as president of the Federal Managers' Association in 1980. This involved representing the managers and supervisors in the government, and testifying before congressional committees on legislation concerning government employees.

His retirement plans include farming, hunting, and fishing at his new home in North Carolina. □

## Mrs. Anfinen Leaves Career As Clinical Social Worker

Libby Ely Anfinen, senior health services officer for the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, recently inactivated her commission with the Public Health Service to move to Israel with her husband, Dr. Christian B. Anfinen.

Mrs. Anfinen, who worked in the Clinical Center for the past 15 years, focused on the emotional aspects of illness, particularly of systemic lupus erythematosus and rheumatoid arthritis.

Her contributions to the social work program included clinical services to individuals, group "rap" sessions, group therapy, and community liaison work.

She received the M.S.S. degree from New York University in 1956. The first nonphysician and the first female elected to the Medical Board of the Clinical Center, she is included in *Who's Who in American Women*. □

## Fire Extinguisher Training Given

The NIH Fire Department wants to remind employees that fire extinguisher training classes are conducted on the first Wednesday of each month, from 2:30 to 3:30 p.m., between buildings 7 and 9. For further information, contact William Coleman, chief of the NIH Fire Department, 496-2372. □



Grace Rizzo, supervisor of the tape library, Computer Center Branch, Division of Computer Research and Technology, recently retired after 38 years of government service. While at DCRT, Mrs. Rizzo established and managed the NIH computer center tape library, which now holds 60,000 magnetic tapes and requires a staff of four to maintain. During her years of service, she received two superior performance awards.

# Children of Manic-Depressive Parents Show Early Signs of Emotional Problems

Some children as young as 1 to 2 years of age, born to manic-depressive parents, show signs of emotional problems, according to Dr. Carol Z. Waxler, National Institute of Mental Health intramural scientist.

Dr. Waxler, a psychologist with the Laboratory of Developmental Psychology, reported study results at a recent NIMH review committee meeting. She described the collaborative study in which LDP scientists observed seven children, as young as age 1, born to families in which one parent suffers from manic-depressive (bipolar) disorder.

Manic-depressive disorder, she explained, involves alternating cycles of symptoms of depression (sadness, helplessness, and diminished energy, interest, and responsiveness) with those of mania (euphoria, hyperactivity, flight of ideas, grandiosity, irritability, and anger).

## Characteristics Noted

Evidence suggests that this illness may be genetically transmitted, but environmental factors cannot be discounted as contributing to the children's problems, Dr. Waxler said. Of particular interest to the researchers were the risk of depression or other problems, the effects of the environmental climate on the children's social interactions, their emotional communication, and ability to empathize with others.

Children of bipolar families and those of two control groups were compared by the researchers in home and laboratory settings. Using observation and testing procedures, families were screened for absence of psychopathology and matched with the bipolar families for age, race, socioeconomic status, number of siblings, and sex of the child; a larger group was made up of families participating in other LDP studies.

Except for one severely depressed child, children from bipolar families showed no more symptoms of depression than did those in the control groups, nor were there cognitive differences. "But preliminary data suggest these children to be, from the first years of life, remarkably sensitive to and af-

ected by stress and distress in their environments," Dr. Waxler reported.

Researchers acted out angry interchanges in the laboratory which severely disrupted the social interactions and play of the "bipolar children," but had little impact on the control children who continued their activities unperturbed. It's possible that the bipolar children's supersensitivity to anger is a consequence of exposure to parental outbursts that has generalized to other settings and situations, she said.

## Parental Distress Affects Children

Overexposure to parental distress and neediness was indicated by the children's extreme reactions to obvious discomfort in others: five bipolar children persistently ignored neediness in others and two were "exquisitely" emphatic, occasionally inferring another's need for comfort where none existed. In general, said Dr. Waxler, the two empathic children appeared to have better social skills than did the other bipolar children.

"Across time and settings, observers—whether they were blind to or knew the conditions of the study—found the bipolar children, as a group, to have more behavior problems, to be more excitable, to show disturbances in social relations in and out of the family, and to be less skillful in inferring another's feelings," she said.

"Thus far, the children appear to be affected more by the manic than by the depressive elements in their environments, but one thing is clear—these children are exposed to considerable stress, and show signs of stress in their actions," she continued.

Other researchers involved in the study, were Drs. Marian R. Yarrow, chief, LDP; Mark Cummings and Ronald Iannotti, LDP; Yolande Davenport, Laboratory of Clinical Psychobiology; and Leon Cytryn and Donald McKnew, Laboratory of Biological Psychiatry.

—Marilyn Sargent □

## The 'NIH Record' Travels To Many Countries

Did you know that *The NIH Record* is read in many parts of the world? In addition to distribution in the U.S., the *Record* readership also includes biomedical scientists and retirees in West Germany, India, Ghana, Venezuela, Greece, Italy, England, Israel, Japan, Brazil, Belgium, Peru, Philippines, Sweden, Spain, Switzerland, Pakistan, The Netherlands, Canada, Guam, South Africa, France and USSR. □

If you want to test your memory, try to remember the things that worried you yesterday.—*Unknown* □

## NIH Institute Renamed

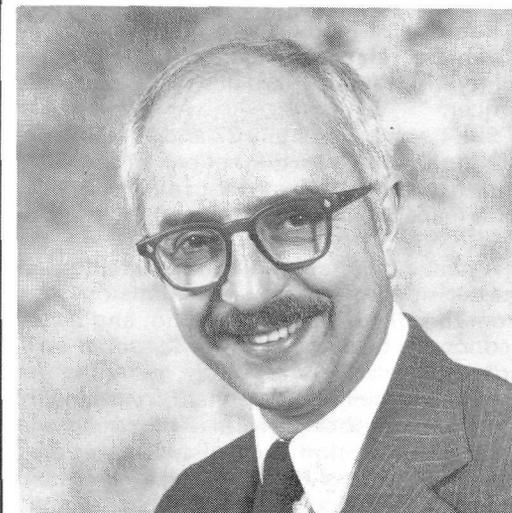
The new name of the National Institute of Arthritis, Metabolism, and Digestive Diseases has been officially confirmed in a recent issue of the *Federal Register*.

The 31-year-old Institute is now officially the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases. Diabetes and kidney disease were added to the name to give appropriate emphasis to the four major extramural research programs of the Institute.

This important NIH component also supports substantial research in bone and skin diseases, endocrinology and metabolism, nutrition, and urologic and blood diseases.

The common acronym to be used for its quick NIH identification is NIADDK. □

## New Medicine Branch Chief Appointed at NIEHS



Dr. Richter's research interests include experimental carcinogenesis, the innate behavior pattern and husbandry of marmosets, and respiratory disease of rodents.

Dr. Conrad Richter has been appointed chief of the Comparative Medicine Branch, National Institute of Environmental Health Sciences in Research Triangle Park, N.C.

After receiving his D.V.M. at the University of Pennsylvania in 1959, Dr. Richter, a native of Pennsylvania, practiced veterinary medicine in his home state.

From 1966-73 he worked at the Central Animal Facility, Oak Ridge National Laboratories in Oak Ridge, Tenn. In 1973 he joined Hoffman-La Roche Pharmaceuticals, Nutley, N.J., as manager of Laboratory Animal Services for 2 years.

Dr. Richter then returned to Oak Ridge as chief scientist in veterinary medicine and experimental pathology, Oak Ridge Associated Universities, Medical and Health Division, until his recent appointment to NIEHS. □

## International Women's Group Plans Picnic on Aug. 30

The NIH International Women's Group is planning a family picnic on Sunday, Aug. 30, from 10 a.m. to 1 p.m., at Lake Needwood, Md. All NIH foreign visitors and friends are welcome.

For further information contact Janet Barch, 496-4335, or Derry Nicholas, 468-9143. □

## FIC RESEARCH FELLOW

Dr. Elizabeth Spellacy, a clinical scientific officer with the Medical Research Council, Northwick Park Hospital, Middlesex, England, arrived on July 6, to begin an international research fellowship at the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases under the preceptorship of Dr. Elizabeth F. Neufeld. Her research is on genetic disorders. □

## Suzanne Stoiber Becomes New CC Executive Officer

Suzanne A. Stoiber, a former Deputy Assistant Secretary for Health, HHS, has joined the Clinical Center staff as executive officer.

She began duties July 27 and is responsible for administrative functions of the CC and the interrelations of those functions with management and professional services.

A native of Eufaula, Ala., Mrs. Stoiber has master's degrees in public administration, from the University of Colorado, and in economics from the London School of Economics.

In her former position, held from January 1980, Mrs. Stoiber performed planning, program evaluation and policy analysis duties for the Public Health Service. She was awarded an HHS citation for outstanding service by former Secretary Harris.

She has also served as director for national health insurance analysis in the Office of the Assistant Secretary for Planning and Evaluation, HHS. In this capacity, she was responsible for recruiting and managing a staff to develop the administration's national health insurance proposal.

Her background also includes positions as principal analyst for health financing programs of the U.S. Congressional Budget Office, and assistant director of the Committee for National Health Insurance.



**"To be a part of the Clinical Center management team as we open ACRF is a unique and exciting opportunity," said Mrs. Stoiber. "I look forward to the challenge."**

Mrs. Stoiber is a bicycle enthusiast, having completed a 1,200-mile bike ride through England and Scotland. She was accompanied by her husband, Carl, who is assistant general counsel for the U.S. Arms Control Agency.

Mrs. Stoiber has written and edited a number of health policy and analysis papers including: *Working Papers on National Health Insurance; Volumes I and II, U.S. DHHS, 1980;* and *Catastrophic Health Insurance: An Analysis of Major Health Care Costs, U.S. Congressional Budget Office 1977.* □

## PERFORMANCE

(Continued from Page 1)

are scheduled to begin about mid-August.

EPMS will be carried out in three major stages:

- **Performance planning**—At the beginning of the performance appraisal period, the supervisor and the employee work together to determine the major elements of the employee's job, and to set up standards for performance of these elements. These standards then serve as a basis for measuring the employee's performance.

- **Progress review**—Midway through the performance appraisal period, the supervisor and the employee review and record the employee's progress in relation to the performance plan. At this time, changes in the plan may be made, and training or corrective action may begin if needed.

- **Performance assessment**—At the end of the performance appraisal period, the supervisor and a higher-level official rate the employee's performance, based on the employee's actual achievement of each job element.

Employee performance may be rated at five levels ranging from "unsatisfactory" to "outstanding." The employee is provided a copy of the assessment and given an opportunity to review and comment upon the ratings.

The EPMS is designed to provide for comprehensive periodic appraisals of employee job performance, encourage employee participation in establishing performance standards, and to be used as a basis for personnel actions, such as training, reassigning, and promoting. □

## How To Survive a Hotel Fire

What would you do if you were staying in a hotel and awakened by a fire alarm?

The answer to this question as well as others can be found in a booklet produced by the National Safety Council, entitled, *How to Survive a Hotel Fire.*

The booklet describes in step-by-step fashion what to do when you check into your room, as well as what to do if there is an actual fire.

Available from the Fire Prevention and Control Branch, Division of Safety, Bldg. 12, Rm. 102, 496-2372, the booklet will also be included with airline and rail tickets issued from the NIH Travel Office. □



**Elnora Jackson, EEO specialist and assistant to the NIAID-EEO manager, has been named Federal Woman's Program manager for NIAID, effective until 1983. She joined the NIAID Travel Office in 1966 after serving 2 years at the Clinical Center Medical Records Department. A participant in the Upward Mobility College Program, she earned a degree in social welfare rehabilitation from Federal City College (now the University of D.C.) in 1975.**

## Visiting Scientist Program Participants

Sponsored by Fogarty Internat'l Center

- 7/1—**Dr. Andrey Gritsman**, Stateless, Clinical Oncology Program. Sponsor: Dr. Paul Bunn, NCI, VA Medical Center, Washington, D.C.
- 7/1—**Dr. James B. Johnston**, Ireland, Laboratory of Medicinal Chemistry and Biology. Sponsor: Dr. Robert Glazer, NCI, Bg. 37, Rm. 6A01.
- 7/1—**Dr. Solveig Aud Aarnes Krumins**, Norway, Endocrinology and Reproduction Research Branch. Sponsor: Dr. David Rodbard, NICHD, Bg. 10, Rm. 13N238.
- 7/1—**Dr. Cameron D. Little**, Canada, NCI-Navy Oncology Branch. Sponsor: Dr. John D. Minna, VA Medical Center, Washington, D.C.
- 7/1—**Dr. Tetsuo Nishikawa**, Japan, Endocrinology and Reproduction Research Branch. Sponsor: Dr. Charles A. Strott, NICHD, Bg. 10, Rm. 12N204.
- 7/1—**Dr. Fujio Otsuka**, Japan, Dermatology Branch. Sponsor: Dr. Jay Robbins, NCI, Bg. 10, Rm. 12N258.
- 7/1—**Dr. Rajasekharan P. Pillai**, India, Laboratory of Cellular and Molecular Biology. Sponsor: Dr. Gunther L. Eichhorn, NIA, GRC, Baltimore, Md.
- 7/1—**Dr. Aldo Rosembat**, Argentina, Surgical Neurology Branch. Sponsor: Dr. Paul Kornblith, NINCDS, Bg. 10A, Rm. 3E68.
- 7/1—**Dr. Raymond Sawaya**, Syria, Surgical Neurology Branch. Sponsor: Dr. Paul Kornblith, NINCDS, Bg. 10A, Rm. 3E68.
- 7/1—**Dr. Haji Masafumi**, Japan, Gerontology Research Center. Sponsor: Dr. George S. Roth, NIA, Baltimore, Md.
- 7/2—**Dr. John Bradford**, U.S.A., Arthritis and Rheumatism Branch. Sponsor: Dr. John Decker, NIADDK, Bg. 10, Rm. 9N218.
- 7/6—**Dr. Juichiro Nakayama**, Japan, Laboratory of Experimental Pathology. Sponsor: Dr. Stuart Yuspa, NCI, Bg. 37, Rm. 3A21.
- 7/8—**Dr. Samuel Adeniyi-Jones**, Nigeria, Neonatal and Pediatric Medicine Branch. Sponsor: Dr. James Sidbury, NICHD, Bg. 10, Rm. 13N260.
- 7/8—**Dr. Svante Odman**, Sweden, Gerontology Research Center. Sponsor: Dr. Stanley I. Rapoport, NIA, Baltimore, Md.
- 7/8—**Dr. Branka Vranesic**, Yugoslavia, Laboratory of Chemistry. Sponsor: Dr. C.P.J. Glaudesmans, NIADDK, Bg. 4, Rm. 205.
- 7/12—**Dr. Genshi Egusa**, Japan, Phoenix Clinical Research Section. Sponsor: Dr. Stephen Aronoff, NIADDK, Phoenix, Ariz.
- 7/12—**Dr. George Morstyn**, Australia, NCI-VA Medical Oncology Program. Sponsor: Dr. John D. Minna, NCI, VA Medical Center, Washington, D.C.
- 7/13—**Dr. Sirpa Orvokki Karenlampi**, Finland, Developmental Pharmacology Branch. Sponsor: Dr. Howard J. Eisen, NICHD, Bg. 10, Rm. 3N266.
- 7/13—**Dr. Yves Pommier**, France, Clinical Oncology Program. Sponsor: Dr. Bruce Chabner, NCI, Bg. 10, Rm. 6B15.
- 7/14—**Dr. Louise Lev**, Israel, Clinical Pharmacology Branch. Sponsor: Dr. Vincent Bono, NCI, Bg. 37, Rm. 6E22.
- 7/15—**Dr. Arther Aguas**, Portugal, Laboratory of Pathophysiology. Sponsor: Dr. P. Pinto da Silva, NCI, Bg. 10, Rm. 5B47.
- 7/15—**Dr. Ioannis Ioannou**, Greece, Pediatric Oncology Branch. Sponsor: Dr. Philip Pizzo, NCI, Bg. 10, Rm. 2B50.

The one sensible thing to do with a disappointment is to put it out of your mind and think of something cheerful.—Mark Twain □

# Newly Published HHS 'Standards of Conduct' Include Changes, Broadened Allowances

The first complete revision in 15 years of the HHS *Standards of Conduct* regulations was recently published by the Office of the Secretary. New or expanded sections on sexual harassment, acceptance of gifts, and

political activity are included in the new guidelines. A limit is set on the honoraria that speakers and others can accept.

Some of the provisions carry criminal penalties if abused. They can be added to disciplinary action, which can range

from admonishment to demotion or dismissal.

## Sexual Harassment

Sexual harassment is described as "deliberate unsolicited verbal comments, gestures, or physical contact of a sexual nature which are unwelcome." Sexual harassment is unacceptable conduct and is expressly prohibited.

Supervisors and managers are prohibited from taking or promising personnel actions in exchange for sexual favors, or failing to take action because an employee or applicant for employment refuses to engage in sexual conduct.

The same prohibition applies to relationships between Department personnel who take or recommend action on a grant or contract and the grantee or contractor.

## Financial Obligations

Employees' debts are regarded generally as their own business. But they are expected to pay their financial obligations in a "proper and timely manner."

Disciplinary action may be taken against employees when creditors' complaints take up a considerable amount of official time; when financial difficulties impair the employee's efficiency on the job; or when the employee's financial irresponsibility reflects on the Department as a whole.

## Gratuities

The new *Standards of Conduct* continue the familiar prohibition of soliciting or accepting gifts from those with whom the government does business. But it is more explicit than before on accepting food or other refreshments.

Suppose, for example, an HHS employee is conferring at a contractor's plant and is invited to a restaurant for lunch. The HHS employee must pay a proper share of the bill.

On the other hand, the HHS employee could eat without paying if the company provided food for all attendees on company premises, and no cashier was at hand to accept separate payment. Also, an HHS employee could accept food if it was offered to all participants at a convention or meeting. An employee may accept gifts, entertain-

ment and favors that stem from a family relationship. Loans from banks or other financial institutions may be accepted on customary terms. Unsolicited advertising or promotional material such as fountain pens may be accepted. Inclusive regulations concerning political activity have also been included in the revised guidelines.

## Outside Work

Outside work is permissible when it does not adversely affect performance of an employee's official duties or reflect discredit on the government or Department. However, certain types of outside work give rise to a real or apparent conflict of interest.

Incompatible duties include: outside employment that impairs the employee's capacity to perform government duties; work which ties the Department or the employee to commercial products or commercial advertising matter; or work that gives the impression that it is an official act of the Department or represents an official point of view.

## Honoraria

HHS employees cannot accept payment for work done on government time. For example, they can't accept payment for papers that they wrote while on duty. They can't even accept an offer for payment to be made to charities instead of to themselves.

"Honorarium" means payment for an appearance, speech or article. It does not include payment for services on a continuing basis, such as teaching, or as proceeds from the sale of a book or something similar.

Federal law limits the amount of an honorarium paid to any employee for any one speech, writing, or appearance to \$2,000, not including amounts for actual travel and subsistence expenses for employee or spouse, and a total of \$25,000 in any calendar year.

## Professional Services

Outside professional and consultative services are permissible for employees under certain conditions. However advance administrative approval must be secured before employees may perform these services. The approval must be obtained whether or not the services are for compensation and whether or not related to the employee's official duties.

Employees are encouraged to engage in outside writing and editing, whether or not for pay, or subjects directly or indirectly related to their official duties. Government financed time or supplies may not be used by such authors and official support must not be expressed or implied in the material itself.

Authors who list their HHS affiliation on outside writings must either publish disclaimers of HHS support or else get advance approval for the text. Some employees who engage in outside writing must also get advance administrative approval.

Complete copies of the new HHS *Standards of Conduct* may be obtained from B/I/D personnel offices. □

# RESCUE

(Continued from Page 1)

when their boat capsized while night fishing.

"I was up on the bridge and she was too far out," Mr. Prather said in relating the incident. He immediately attempted to flag down passing motorists but only one would stop, even though the traffic was heavy. "I yelled and waved. Some people waved back. I guess I wouldn't have stopped either."

The motorist who stopped told Mr. Prather that he would call the rescue squad. "It took such a long time that I wondered if I should depend on this person," he said. He then yelled to Mrs. Albert, informing her that he was going for help.

Running a half-mile to a service station, Mr. Prather telephoned the Hamilton Volunteer Rescue Squad. Within minutes, they arrived, drove him back to the bridge, and sent for a rescue boat.

However, they were unable to use a boat because of the swirling, rough water. The rescuers then called for a Maryland State Police helicopter which evacuated Mrs. Albert.

The following day, authorities recovered her drowned husband's body.

In a letter sent by Mrs. Albert to Mr. Prather after her rescue, she wrote "You'll never know how thankful I'll always be to you. I couldn't have hung on much longer, so you really saved my life. I'm sure the Lord will bless you."

—Nathan Rosen □

## HHS Secretary Reports On His NIH Campus Visit

In speaking before the Senate Committee on Labor and Human Resources on July 16, HHS Secretary Richard S. Schweiker referred to his June 25th tour of NIH.

"I recently visited the NIH campus for the primary purpose of talking about their prevention research activities," he said.

"While there, I heard about some of the breakthroughs which might be expected by the year 2000 . . . breakthroughs like those related to chemoprevention of cancer, use of multiphasic metabolic profiles to detect developing conditions at early stages, identification of different factors contributing to aging . . . for example, shifts seen in brain metabolism during the onset of senility . . . and development of effective ways to motivate people through health education and health promotion efforts."

He further added, "Because of the importance of this work, I intend to focus greater attention on the prevention component of our research at NIH."

"It is time that we think broadly about the potential to bring about interdisciplinary skills to bear in support of our efforts both to find new solutions and to apply more effectively what we now know." □

A cynic is a man who knows the price of everything but the value of nothing.

—Oscar Wilde □

# Father and Son Cell Research Team Plans To Create Human Protein Index

By Cynthia L. Butler

Molecular biologist Dr. Norman G. Anderson recently told the NCI's National Cancer Advisory Board that he plans to isolate and index the structure and function of each of the myriad proteins known to exist in man.

Dr. Anderson, who heads the molecular anatomy program at the Argonne National Laboratory near Chicago, was presenting a talk to the board on molecular anatomy, the science that describes the human body in terms of its proteins and genes.

Much of Dr. Anderson's previous work in the field of molecular anatomy was supported by the National Cancer Institute.

In the 1950's, such "anatomical" studies were barely conceivable among scientists, a farfetched idea at best. But technological developments, particularly those of the past decade, have given this field a new life.

With recombinant DNA technology and the ability to sequence nucleic acids, scientists can read the genetic code, and they are beginning now to understand gene function. Genes are hereditary units of the DNA molecule containing the information a cell needs to make particular proteins.

Norman Anderson's interest is proteins. He and his X-ray crystallographer son, Dr. Leigh Anderson, have laid the foundation for charting the first Human Protein Index that may later alter biomedical science's approach to human health and disease. Scientists estimate that there are some 30,000 to 50,000 of these minute and mysterious functional units in the human body.

Much of the body's structural parts, such as muscle and connective tissue, and many of its functional units, such as enzymes and some hormones, are made up of proteins. But so far, scientists have been able to identify only 1 to 2 percent of these proteins.

According to Dr. Anderson, fewer than 10 percent of proteins are expressed in each individual cell. This fact led scientists to believe—and subsequent studies seem to further suggest—that genetic expression is an orderly process in which different sets of genes are active at specific times during a cell's normal development.

The Andersons hope the HPI will take the gene set idea one step further by offering the first data-based theory of how gene programming occurs.

Because many diseases and the degenerative aspects of aging are associated with changes in the function, amount and location of proteins, they believe the underlying mechanisms behind disease may be discovered by comparing the activities of protein sets of diseased cells with those of normal cells at different stages during their development.

They envision a day when physicians perhaps can treat patients with protein replacement therapies for genes that are not producing essential proteins.

From the point of view of cancer, Dr. Anderson theorizes that in the cancer cell a gene set normally expressed only during an

early stage of development is reactivated.

"This appears to be a disease of gene expression with some genes turned on in the cancer cell when they should be turned off, others turned off when they should be turned on," he said.

"If we were able to index thousands of proteins, even if we only had a description of where they might fall on some kind of map and how they were turned on or off in the cancer cell, there are a number of things we could do."

For example, the Argonne scientist spoke at the NCAB meeting of identifying misprogrammed genetic expressions in cancer cells. In fact, he has produced protein maps that already show differences in patterns of proteins expressed in cancer cells and in normal cells.

This ability to index proteins was made possible by the technique of two-dimensional (2-D) electrophoresis, a two-step procedure for identifying and separating proteins.

Traditionally, one-dimensional electrophoresis, a technique developed in the 1940's, had been used. But by 1975, it was improved and expanded upon by a young molecular biologist named Dr. Patrick O'Farrell at the University of Colorado at Boulder.

Dr. O'Farrell's 2-D electrophoresis first isolates proteins, either singly or in groups, while they are moving by electrical charge through a gel.

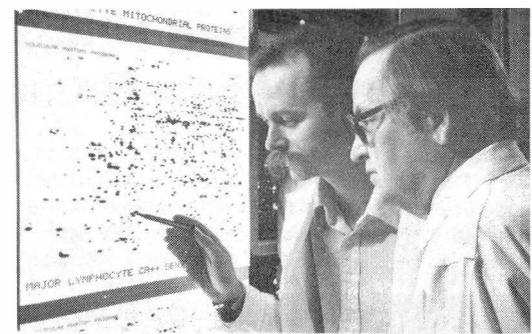
The gel is then turned on its side and a detergent is added that interacts with the proteins. Then they are moved electrophoretically at a right angle to the first direction and this time the proteins are separated by size.

Finally the 2-D gel is stained with a dye and the proteins appear as a pattern of spots that have been separated both vertically by their size and horizontally by their electrical charge.

The Andersons have coupled Dr. O'Farrell's method with computers, scanners and TV displays for higher resolution of subcellular particles and for more rapid analyses of protein patterns. At present, Dr. Anderson's lab is able to analyze 100 samples a day.

Tissue proteins now can be mapped both individually and in parallel for intercomparisons. Scientists are able to manually select specific spots for more detailed study, after which the computer responds by adjusting its coordinates so that a standard reference can be superimposed. A visual screen displays a pattern as a 2-D map in one color, with a standard reference seen in a different color.

At the Argonne lab, Dr. Anderson and colleagues already have begun to work directly with human tissues. They have prepared protein maps of several human tissues including lymphocytes, muscle, urine and plasma. Dr. Anderson emphasizes that the HPI for normal cells need only be made once.



Dr. Norman Anderson (r), and son, Dr. Leigh Anderson, examine a two-dimensional electrophoresis pattern of human lymphocyte proteins.

After a full index is complete, health scientists will have a standard reference with which to compare proteins of diseased tissues as well as to detail gene expression and misregulation, and genetic disease. Little surprise, then, that he calls the index "the atomic table for the chemistry of the cell." □

## NHLBI Produces Cable TV Program

In an effort to provide health information on a regular basis over U.S. cable television, the National Heart, Lung, and Blood Institute and Cox Cable Corporation recently cooperated to produce the first cable version of the Institute's "Silent Disease" television program kit. Jane Simon of Cox Cable was host for the program and Dr. Frank L. Douglas of NHLBI was medical guest.

Starting in the fall, Cox will offer the programs along with teletext read-outs on a daily basis to subscribers in San Diego and Omaha. In the future, the show will be cablecast in cities throughout the country with some cities using Spanish-language and Sioux Indian versions.

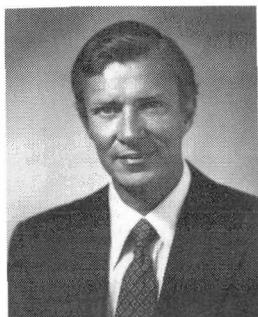
NHLBI's "Silent Disease" television kit is designed so local television outlets can produce their own specials on high blood pressure at low cost. So far more than 30 TV stations have produced the program and many more have requested the kit. □



Leroy Goldman, a former HSA program analysis officer, has been made chief of the NINCDS Office of Planning and Analysis. His background includes policy analysis and planning for student medical and health care programs, and health educational centers. From 1971 to 1977, he directed the staff of the Senate Subcommittee on Health and Scientific Research.

## Dr. John Ziegler Leaves Varied 15-Year NCI Career

Dr. John L. Ziegler, editor-in-chief of the *Journal of the National Cancer Institute*, will leave NCI on Aug. 17 after 15 years of service. He will become associate chief of staff for education at the Veterans Administration Medical Center, San Francisco, and associate dean and professor of medicine at the University of California at San Francisco.



Dr. Ziegler

Dr. Ziegler's varied NIH career included significant research efforts on Burkitt's lymphoma, research project leadership, a tenure as an NCI deputy clinical director, and editorial duties at NCI.

With a B.A. in English from Amherst College and an M.D. from Cornell University Medical College, he began his career as a clinical associate in the NCI Medicine Branch in 1966.

He spent his first year working closely with Dr. Paul Carbone, then Medicine Branch chief. They planned a Burkitt's lymphoma research project for Dr. Ziegler to carry out in Kampala, Uganda. He commented, "Long before medical school, I harbored a fantasy about becoming a tropical missionary doctor."

In 1967 he moved to Uganda as a senior investigator with the Medicine Branch, NCI. There he founded the Lymphoma Treatment Center at Makerere University.

In developing the center he found it necessary to "build a hospital, literally from

scratch." Primitive living and medical conditions added to the challenge.

During the next 5 years he served as director of the center, which grew into the Uganda Cancer Institute, where Burkitt's lymphoma, Kaposi's sarcoma, malignant melanoma, liver cancer, and tropical splenomegaly syndrome were studied.

In clinical trials in Uganda on Burkitt's lymphoma, Dr. Ziegler and his associates combined cyclophosphamide with other drugs. Within 5 years, they had increased the disease's cure rate from 20 percent to 50 percent by refining the chemotherapy protocol.

"Disturbing political events and personal circumstances forced me to leave Uganda in August 1972," Dr. Ziegler said. "However, we had started many studies on indigenous tumors which are still continued under Ugandan leadership."

Returning to Bethesda, he headed the new Pediatric Oncology Branch, reorganized from the Leukemia Service. "The branch's mission was to apply some of the treatment lessons learned in leukemia and lymphoma to other selected tumors of childhood," he said.

Dr. Ziegler became NCI's deputy clinical director in 1975, and in 1976 directing the clinical oncology program was added to his duties. Shifting gears in 1980, he became editor-in-chief of the *JNCI*.

He has authored or coauthored more than 140 articles on cancer causes and treatments.

In his new posts in San Francisco, Dr. Ziegler will be involved in medical education, administration, and will participate in building UCSF's new oncology division at the VA center. □

## Tumor Cell Mobility Could Enable Removal

Chemotaxis is a property of tumor cells which may allow physicians to "call" these cells to areas of the body from which they can be easily removed.

Metastasis, the transfer of the primary tumor to a few or many secondary sites in the body, is one of the major problems in cancer treatment.

Most patients who die of cancer succumb not to the original tumor but to the metastasized cancer. If a tumor can be contained to its original location, the chances are good that the patient will survive.

This exciting possibility was suggested in work performed by Dr. John A. Wass, and fellow researchers Drs. James Varani, E.J. Lovett III, Dan Axelrod, K.M.K. Rao, and Peter A. Ward of the University of Michigan, through a National Cancer Institute grant.

Dr. Wass told the recent meeting of the Federation of American Societies for Experimental Biology of their success in demonstrating that certain strains of tumor cells will move toward a chemical stimulus in the process known as chemotaxis, the property which may make it possible to move tumor cells in the body.

What causes cancer cells to leave the original tumor site and migrate to other parts of the body is still a mystery to scien-

tists. Metastasis has been triggered by surgery and anesthesia for some unknown reason.

The Michigan investigators have been trying to better understand metastasis on the molecular and biochemical levels by studying several aspects of the tumor cells' gross responses to chemical stimuli called chemotactic factors.

Dr. Wass explained that certain normal body cells, such as white blood cells, are attracted to chemotactic factors produced by bacteria due to synthetic chemicals mimicking the action of these natural bacterial products. This attraction causes the cells to move towards the chemotactic factors.

Using several laboratory tests to evaluate the response of certain tumor cells to minute quantities of a chemotactic factor, the researchers found all of the tests indicated that tumor cells, like white blood cells, will move towards a chemical stimulus.

Dr. Wass suggested that chemotaxis may be exploited in the treatment of certain cancers. It may become possible, Dr. Wass speculated, to use chemotactic factors to "call" tumor cells to certain areas of the body where they could be easily excised. Such a procedure would greatly diminish the effects of metastasis. □

## Salt and Bitter Taste Acuity Declines With Age

A report was recently made to the International Association for Dental Research by Drs. James Weiffenbach and Robert Wolf, National Institute of Dental Research, and Dr. Bruce Baum, National Institute on Aging, on new studies of the relation of taste sensitivity to age.

People experience the taste of most foods and beverages as mixtures of two or more of the basic four qualities—salty, sour, sweet, and bitter. Some elderly people report changes in the taste of foods, but the widely held belief that taste sensitivity declines with age has recently been questioned.

Reviewing earlier studies, the investigators found that many of the study designs were deficient, and the conclusion that taste sensitivity declines with age is not firmly established. The nature and extent of a possible diminution remain unclear.

The scientists tested taste perception of sodium chloride (salty), sucrose (sweet), citric acid (sour), and quinine sulfate (bitter) in 69 healthy men and women between the ages of 28 and 88, participating in the NIA Baltimore Longitudinal Study of Aging.

The investigators determined taste sensitivity by asking subjects to sample different concentrations of taste solutions. Each individual first rinsed with distilled water to clear their mouth of any residual taste, and then sampled liquid from two cups—one containing plain water, and the other containing a taste solution.

The subjects were to choose the sample having the taste. They were not told which cup contained the test liquid, and received no clues from the order of their presentation. An incorrect choice was followed by testing with an increased concentration of the taste solution.

When two successive correct responses were obtained, the concentration was decreased. The taste thresholds were then calculated and plotted in relation to age.

The investigators found that taste acuity declines with age for salty and bitter, but not for sweet and sour.

They concluded that although the decreases in taste sensitivity with age are clearly measurable, they are always quite small. However, even a minimal loss may dramatically influence taste experience if sensitivity has declined selectively. The complex tastes of foods and beverages may then be distorted rather than simply diminished. □

## New Literature Searches Available

Two new titles in the 1981 series of NLM literature searches may now be requested from the Library's reference section. They are: LS 81-3, *Infant Botulism*, Jan. 1977 through June 1981, 65 citations; and LS 81-4, *Toxic Shock Syndrome*, Jan. 1979 through June 1981, 34 citations.

Literature searches are printed bibliographies produced through MEDLINE on subjects of current interest, and are free of charge. □

## Catheterization Methods Found To Increase Infection Risk

Urinary tract infections, most often related to urinary catheterization, is the leading hospital-acquired infection. Some current methods of catheter care actually increase the risk of infection and cannot be recommended, according to research supported in part by the National Institute of Allergy and Infectious Diseases.

Use of methods of closed urinary catheter drainage has substantially reduced hospital-acquired urinary tract infection in the United States. But closed drainage provides a major pathway between the catheter and the opening of the urethra (called the meatus) by which bacteria can enter the bladder. This creates a major risk for subsequent bacterial infection (bacteriuria).

Frequent cleaning of the surface where the catheter enters the meatus and application of antimicrobial substances to this junction are the standard methods recommended to block the pathway and to reduce the number of bacteria on the meatal surface.

However, Dr. John P. Burke, and colleagues at the University of Utah College of Medicine found that rates of bacteriuria were higher in patients so treated than in untreated patients.

In a randomized controlled trial, they compared twice-daily meatal care using a povidone-iodine solution and povidone-iodine ointment with no treatment. In a second study, they compared once-daily cleansing using green soap and water with no treatment.

In each study and by four different methods of statistical analysis, the risk of bacteriuria was greater in the treated than in the

untreated group. Results were pronounced in the second study, although in neither one was the overall excess significant.

However, combining the results of both studies, the investigators found significant excess rates of bacteriuria within subgroups: treated patients who had received no antibiotics at time of catheterization; female patients; female patients with positive meatal cultures during the first 24 hours after catheterization; and, in both studies, to a strikingly similar degree, treated females 50 years or older with positive cultures who did not receive antibiotics.

The Utah investigators suggest that urethral manipulation during cleansing may cause the increased rate of infection, since rates are highest in the group in which the possible risk from manipulation was not countered by the application of antimicrobial agents (green soap and water only).

They suggest their findings should discourage the use of current methods of care while encouraging further research into the problems of UTI during catheterization.

Dr. David Alling, special assistant for biometry in the Office of the Scientific Director, NIAID, served as statistician to the research group. □

Think "safety first" at home, at work, at school, at play, and on the highway. Buckle seat belts and obey traffic rules. Keep poisons and weapons out of the reach of children, and keep emergency numbers by your telephone. When the unexpected happens, you'll be prepared.—*Health Styles* PHS-81-50155 □

## 80-Year-Old Health Technician Retires From Gerontology Center

Jeanne Horstman, 80, recently retired for the second time after 4 years' service at the National Institute on Aging Gerontology Research Center in Baltimore. She was a health technician in the human performance section of the Clinical Center's Physiology Branch.

This energetic woman has held a wide variety of jobs, and all her life dreamed of working for the government. In 1977 she was finally hired at the GRC.

Ms. Horstman came to Baltimore from Poland when she was 6. Her professional training includes a 2-year premed program in pharmacology at the University of Maryland and additional classes at State Teacher's College in Towson, Md.

Her diverse career has included work as a pharmacist, cosmetic saleswoman, and later a cosmetic advisor in Baltimore drug stores. From 1960 to 62 she handled medical claims for an insurance company.

After her first retirement, she became a volunteer English teacher to foreign students at a YWCA, and later a volunteer pharmacist at Baltimore City Hospitals.

In 1975 Ms. Horstman reentered the working world as the head of an art department library for 1 year. The next year she worked as an interpreter for the Baltimore Department of Health Services prior to her appointment to the GRC.



**Ms. Horstman gets ready to cut her "second retirement" cake at the Gerontology Research Center in Baltimore.**

Ms. Horstman's present retirement plans are to travel and enjoy herself. She has also become one of the 900-plus participants in the Baltimore Longitudinal Study of Aging. This requires her to go through 2½ days of comprehensive testing once a year.

Even at 80, this spry woman refuses to slow down. She says, "There's too much going on in today's world to dwell on yesterday." □

## Candidates Search Spurred by Dr. Malone

The search for qualified candidates for four major positions at the National Institutes of Health is proceeding under the leadership of Dr. Thomas E. Malone, Acting NIH Director. The goal is to develop lists of recommended candidates for consideration when the successor to Dr. Donald S. Fredrickson is appointed.

Thirty-two nominations for the position of Director of the National Institute of Neurological and Communicative Disorders and Stroke have been reviewed and evaluated by a search committee appointed early this year. The committee will shortly interview six of the nominees and is expected to recommend a panel of three or four.

A search committee, cochaired by Dr. Malone and Dr. Ruth Kirschstein, Director of the National Institute of General Medical Sciences, was recently established to identify and recommend candidates for the directorship of the National Heart, Lung, and Blood Institute.

A few weeks ago, the Acting Director appointed a committee to seek candidates for the post of Director of the National Institute of Child Health and Human Development. The cochairman of the NICHD committee with Dr. Malone is Calvin B. Baldwin, Jr., NIH Associate Director for Administration.

A previously appointed panel, headed by Dr. Mortimer B. Lipsett, Director of the Clinical Center, will shortly advertise for nominations to fill the position of director of the Office for Medical Applications of Research. □

## NLM Announces New Appointments

Duane W. Arenales, Sheldon Kotzin, and Carolyn B. Tilley have been recently appointed to positions in the National Library of Medicine.

Ms. Arenales has been named deputy chief of the Technical Services Division. With a B.A. from the University of Colorado and a M.L.S. from the University of Maryland, she joined the NLM serial records section in 1971. She later moved to the Reference Services Division, and in 1978 became head of the circulation and control section, RSD.

Mr. Kotzin, named chief of the Bibliographic Services Division, joined NIH in 1968 following a year's traineeship as an NLM library associate. In 1971 he became head of the loan and stack section, and since 1978 was NLM's regional medical library coordinator. He has a B.A. from the University of Maryland and his M.L.S. from Indiana University.

Ms. Tilley has been named head of the MEDLARS management section, Biographic Services Division. She has been a technical information specialist in the MMS since 1972. She received a B.S. from American University and a M.L.S. from the University of Maryland. □

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