The NIH Record

U.S. Department of Health and Human Services

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National Institutes of Health

Pan-American Rheumatology Congress Held in D.C.

The 8th Pan-American Congress of Rheumatology, held June 7-12 in Washington, D.C., was attended by over 3,500 specialists from 40 countries including the countries of Pan America.

A highlight of the conference was the Bunim lecture, given in honor of the late Dr. Joseph Bunim, the first head of what is now the NIADDK Arthritis and Rheumatism Branch.

The lecture was given by Dr. Morris Ziff, long-time NIADDK grantee from the University of Texas Health Sciences Center, Dallas, who spoke on Current Problems in the Pathogenesis of Rheumatoid Arthritis.

A number of scientific presentations discussed therapies for rheumatoid arthritis that are designed to interrupt the cycle of inflammation.

NIADDK intramural scientist Dr. Ron Wilder discussed treating patients with severe rheumatoid arthritis with leukapheresis, an experimental technique in which blood is drawn from the patient, white blood cells are removed, and the blood is returned.

Dr. H. James Williams of the NIADDK-funded clinical trial, cooperative systematic studies in the rheumatic diseases, found that a new oral gold compound, auranofin, could be nearly as effective for rheumatoid arthritis as the traditional in-

(See CONGRESS, Page 10)

With summer comes picnics, long hours at the pool, hikes through the woods—and bees. Insect sting is a serious threat to many people. Precautions for protection from allergic reactions to venom are described on page 4.

Brain-Scanning Technology Developed to Greater Precision

By Ray Fleming

A vastly improved positron emission tomography scanner, dubbed Neuro-PET for its special ability to produce clearer, more precise pictures of the brain, has emerged from the laboratories of the National Institute of Neurological and Communicative Disorders and Stroke.

According to Neuro-PET's creators, Drs. Giovanni Di Chiro, Rodney Brooks, and Victor Sank, the new scanner's most distinctive assets are increased resolution and sensitivity—musts for studying neurological and communicative disorders more closely.

Described by project director Dr. Brooks as a state-of-the-art machine, Neuro-PET will allow neuroscientists to probe more deeply into the brain to fathom its secrets.

"Neuro-PET makes it possible," says an enthusiastic Dr. Di Chiro, "to recognize and outline neurological structures that are not easily identifiable with current available PET scanners.

"We hope we will be able to determine more precisely the location of the pathological involvement in such neuropsychiatric conditions as Alzheimer's disease, and in movement disorders, certain forms of epilepsy, and amyotrophic lateral sclerosis," he added.

Neuro-PET's increased resolving power should also improve the assessment of the degree of malignancy in primary brain tumors, an area of special interest to NINCDS investigators.

This power may also make it possible to study the upper part of the spinal cord, an area of the central nervous system which

(See NEURO-PET, Page 7)

New Atlas Maps Cancer-Related Diseases

The National Cancer Institute has published a new *Atlas of Mortality from Selected Diseases*, mapping the geographic variations in death rates across the United States for 59 conditions.

Although the report does not deal with types of cancer, the *Atlas* includes both diseases associated with cancer and other conditions of public health interest.

Scientists of NCI's Environmental Epidemiology Branch have found mapping techniques useful in the study of cancer causation. They have applied these techniques in the new *Atlas* for the use of the general health community.

The authors are Drs. Thomas J. Mason, Joseph F. Fraumeni, Jr., Robert Hoover, and William J. Blot.

Three general types of diseases are included in the *Atlas*. Some of the diseases have been proven or are suspected to be related to development of cancer, or appear to be different expressions of a common risk factor.

Other diseases were selected because they affect a significant segment of the population, and some have been associated with environmental exposures especially prevalent in certain geographic areas.

The conditions include respiratory, digestive, metabolic, neurological and congenital disorders, infectious diseases, and different types of heart disease and related disorders.

Each disease is mapped by the 506 state economic areas. The SEA is a unit defined

(See ATLAS, Page 11)

Former NIH Director Dr. Donald S. Fredrickson stands in front of the commissioned portrait of himself executed by Norwegian-born artist, Bjorn Peter Egeli. The oil painting was unveiled at a ceremony in Wilson Hall on June 24. Dr. Fredrickson was NIH's 11th Director. His portrait will join the paintings of previous NIH Directors on the first floor in Bldg. 1.

The NIH Record

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The National Institute on Aging recently honored current and former employees for their contributions. NIA Director Dr. Robert N. Butler (l), presented an NIH Merit Award to Marian Emr, a public information specialist, for her communications work in the area of senile dementia of Alzheimer's disease. The support staff of NIA's Biomedical Research and Clinical Medicine program received a special achievement group award. They are (center to r): Jerri Henkendorf, Carolyn Saunders, and Carol Almeida.

Training Tips

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

Communication Skills	*Course Starts*	*Deadline*
Writing Workshop	9/13	8/16
Editing Technical Manuscripts	9/8	8/19
Stress Management for Increased Productivity	9/22	9/7
Office Skills		
Files Maintenance and Improvement	8/25	9/7
Medical Terminology I	9/28	9/13
Medical Terminology II	9/28	9/13
Supervisory and Management		
Effective Supervision	10/4	9/13

To learn more about courses in office and communication skills, contact the Training Assistance Branch, DPM, 496-2146.

For further information on supervisory and management courses, contact the Executive and Management Branch, DPM, 496-6371.

Down Syndrome Volunteers Needed

The National Institute on Aging is currently involved in a study of Down syndrome. Participants must have Down syndrome, be at least 18 years old and have no other current major illnesses. All persons participating will receive compensation. Interested parties should contact Angela Moore at 496-4754.□

R&W Election Results Issued

The election results for the three vacant seats on the R&W Association's board of directors were tabulated in June from ballots submitted by the membership.

Elected were Agnes Richardson, first vice president; Robert Mange, treasurer; and Mary Hodges, recording secretary. Each will serve a 2-year term of office.□

Research Safety Symposium Will Be Held Sept. 15-16

The 1982 NIH Research Safety Symposium, entitled Chemical Emergencies in Laboratories—Planning and Response, will be held at the Sheraton Inn in Frederick, Sept. 15-16.

The purpose of the symposium is to identify critical factors that will minimize both the occurrence of chemical emergencies and the effects of those that do occur.

The symposium is sponsored by the Division of Safety and is being organized by the NCI Frederick Cancer Research Facility. There is no registration fee. Because space is limited, early registration is recommended.

For additional information, contact Linda J. Kesselring at FTS number 8-935-1451 or (301) 695-1451.□

Summer Volleyball Rolls On

For the first time, Sunday night volleyball will be played through the summer season at NIH. Games will be played in the gymnasium on the 14th floor of the Clinical Center from 7:30 to 9:30 p.m. All players are welcome. For further information, contact William Garrett at 496-2636, or Michael Bernstein, 496-1143.□

I always like to hear a man talk about himself because then I never hear anything but good.—*Will Rogers*□

Volunteers Needed To Aid Handicapped

The NIH has need for volunteers to serve as readers for the blind, or sign interpreters for the deaf. NIH employees who wish to donate their time to assist handicapped persons are being encouraged to submit their names to meet the continuing need.

Volunteers will be used at the Clinical Center to assist handicapped patients or relatives in the completion of medical forms, and during medical interviews. Persons with knowledge of medical terminology are specifically being sought.

Volunteers will also aid handicapped persons visiting NIH, applicants for jobs and to provide emergency assistance to fellow NIH employees.

Will Perform Duties as Needed

As part of this volunteer service NIH employees will be asked to serve on an "as required" basis, during normal working hours. Their activities are authorized under Federal regulations, as volunteers without pay, and their position descriptions can be amended to permit this type of service to be rendered.

Currently, no specialized requirements or training are required. Those wishing to apply may contact George Yee, OD/DEO, handicapped programs manager, 496-2906.□

Sunnie Dae To Shine at CC

Washington jazz artist Sunnie Dae and her trio will perform in the Masur Auditorium on Friday, July 30, at 6 p.m. This summer the group has been traveling the area giving free performances to patients at different health care facilities.

The event is being sponsored by the R&W Association and the NIH Career Education Center Student Council. For those attending, other than patients, a $2 donation to the NIH Patient Emergency Fund will be accepted at the door.□

Drug Rehabilitation Program Helps Addicted Children Get 'Straight'

Karen (not her real name), the daughter of an NIH employee, was intelligent, strong, a good athlete and a good student. She was the type of student who didn't have to try to succeed. Everything seemed to come easy for Karen. Or so it seemed to her father.

The first time he suspected she had a problem was when she was sent home from junior high school for taking whiskey to school.

In high school the problem grew worse. Karen drew away from her family. Her interest in school, as well as her grades declined. Her only interest appeared to be sports.

During Karen's senior year in high school she had trouble staying on the school teams. Her outbursts of temper and lack of enthusiasm grew. Finally, after being kicked off the softball team in midseason, Karen became very depressed. The athletic scholarship interest by several universities and a scholarship in art for outstanding work in photography were withdrawn. She felt that life was not worth living.

Attempted Suicide

Karen stayed home from school and tried unsuccessfully to slit her wrists. Then she gathered all the pills in the house and downed them with poisonous weedkiller. This failed too, since the poison induced her to vomit the pills, leaving her insides burned.

Her father knew she looked sick, but she would not go to the doctor. After several days, he proposed that either she go to school or go to the doctor.

The next day, Karen went to school. She cleaned out her locker, told her friends she would never see them again and went home to slash her wrists with a knife.

Her father, who felt ill himself, came home from NIH early that day. He was awakened by a phone call from the Montgomery County Crisis Center. They informed him that his daughter was attempting to commit suicide. He found her in a car surrounded by her friends, and was able to get the knife away from her. If he had not been home she might have died.

Hard Drugs Used in College

Karen managed to graduate and went away to college. However, in college she started experimenting with hard drugs such as cocaine, and the depression came back. In midsemester she swallowed her whole bottle of allergy pills in another suicide attempt. The resident assistant of her dormitory found Karen just in time to rush her to the hospital. After a few days in the hospital she returned to school and completed the semester.

Three weeks into the second semester, Karen wanted to come home. "I don't feel good about myself," she said. Her father was worried. He had a gut feeling that if she attempted suicide again, she would not survive.

Karen came home, but she stayed to herself. Her father ran into a former coworker at NIH who told him about a successful drug rehabilitation program in Florida called Straight, Inc.

Desperate, her father told Karen that he wanted to take her on a fishing trip to Florida. While there, he talked her into going to a "seminar" with him. It turned out to be an open meeting of Straight.

Kids who were more advanced in the Straight program interviewed Karen and convinced her to sign herself in. She now faced a peer pressure of a different kind. Instead of pressure to do drugs and get drunk, she was pressured to get "straight."

Karen is now in the fourth phase of Straight and feels good about herself.

On May 26, John L. Hone, chief of the speakers' bureau of Straight, addressed an interested NIH audience on campus. He explained that Straight, Inc., is a nonprofit, privately funded organization originating in St. Petersburg, Fla., in 1976, and now has branches in Sarasota, Fla.; Atlanta, Ga.; and Cinncinati, Ohio. A northern Virginia branch is scheduled to open this fall.

Straight is for drug and alcohol abusers between 12 and 21 years of age, and involves the entire family since they are affected by this problem too. They attend open meetings and "rap" sessions.

In the first phase of Straight, the participant lives with a foster family who has a member further along in the program. This "oldcomer" is with the "straightling newcomer" 24 hours a day to lend encouragement. The youth is at Straight headquarters from 9 a.m. to 9 p.m. Monday through Saturday and from 2 to 9 p.m. on Sunday.

Outside Influences Removed

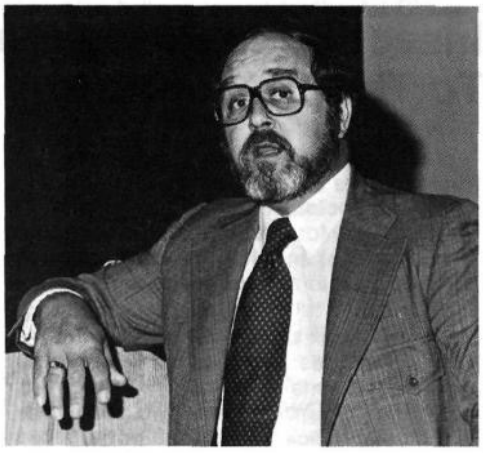
All outside influences are removed. There is no TV, radio, reading or writing with the exception of moral inventories which are written daily. The children must learn to confront their problem honestly before they can progress and regain some privileges.

During the second phase, he returns home to rebuild his relationship with his family. He is still at Straight 12 hours a day and 7 hours on Sunday.

The child returns to school or work in the third phase. This represents the first time he faces peer pressure to "do drugs." The child goes to work or school on weekdays then returns to Straight in the afternoons and evenings, and all day Saturday and Sunday.

The participant begins to withdraw from active involvement in the program in the fourth phase. He comes to Straight after school or work three weekdays and then one of two weekend days.

The fifth phase of Straight gives the youngster more personal freedom. He assists the staff in working with others enrolled in the program. Depending on the progress of each person, it takes from 6 to 24 months to complete the program.



Mr. Hone, a local attorney involved with Straight, told an NIH audience, "The kids in Straight tell us 85 percent of high school students do drugs. This must be stopped."

"Fifty percent of those enrolled in this program complete it successfully. This is the highest percentage rate of any rehabilitative program in this country," Mr. Hone said in his address.

"The drug problems facing our children are much more serious than most people realize. Our children are able to purchase any drug they want from their fellow students. This includes marijuana, PCP (angel dust), cocaine, opium and many more," he explained.

At the present time two NIH families have children enrolled in the Straight program in St. Petersburg, Fla. For more information about Straight, contact Carolyn Kramer, (703) 978-7077; or Mary O'Connell, (703) 978-4557. Both are from the Washington area.

—Jane White□

Dr. J. R. Shapiro To Serve As Acting CC Director

Dr. Jay R. Shapiro was appointed Acting CC Director by Dr. James B. Wyngaarden, NIH Director, on July 1. He has been CC deputy director since January 1982 and served as associate director since 1978.□

Overdraft Program, Draftronic, Offered by NIHFCU

The NIH Federal Credit Union is announcing a new service for members participating in the net check/direct deposit program.

Known as Draftronic, this new overdraft program is designed to protect members from the embarrassment and expense of overdrawing their share draft account.

Instant Access Afforded

Draftronic is a personal line of credit of up to $1,000 that can afford instant access to a loan any place at any time. The special loan will carry a reduced 19 percent annual percentage rate and will be paid automatically through monthly deductions from the member's share draft account.

For more information or an application, call or visit the NIHFCU loan department in Bldg. 31, Rm. 1A07; 496-4758.□

Insect Sting Poses Serious Threat To Those Allergic to Venom

Weather can affect the temperament of *Hymenoptera* or "membrane-winged" stinging insects. Rain may wash pollen from flowers, for example, and anger bees. At such times, an allergic person must be careful to avoid attack, especially if over age 30.

Only a few of the stinging *Hymenoptera*—honey bees, wasps, hornets, yellow jackets, and ants—cause serious allergic reactions in man. Of these five, reactions to the yellow jacket and bee are the most common.

At least 4 of every 1,000 people are estimated to be affected by insect sting allergy in this country. It is known that 50 to 100 people die from reactions to stings every year.

This number may be even higher because many summer deaths attributed to heart attacks or drownings may actually be due from an allergic reaction to an insect sting.

Each year, more people are killed by *Hymenoptera* than by any other venomous creatures, including rattlesnakes.

According to the pamphlet *Insect Allergy,* produced by the National Institute of Allergy and Infectious Diseases, insect allergy simply means that exposure to an insect brings about an overreaction of the immune system in a sensitive person. Research evidence shows that heredity is an important factor in allergy development.

Characteristics Described

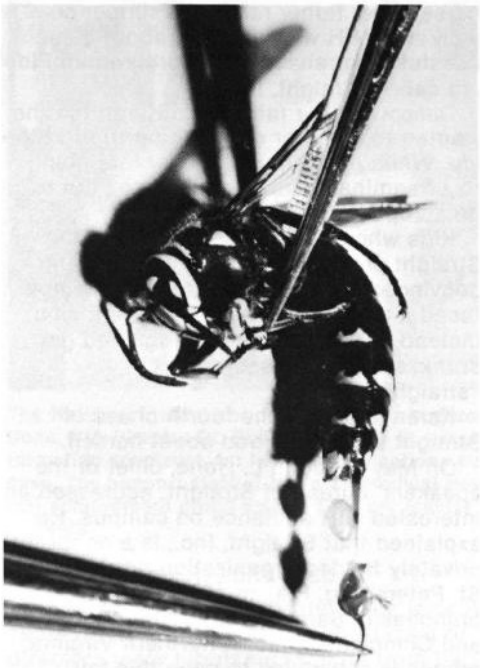
The Committee on Insect Allergy of the American Academy of Allergy has described some characteristics of people with insect allergy. First, allergy to insects is present as often in people who have no other allergies as in those who do. Second, severe reactions occur most often after age 30, although they have been found in people of all ages.

Third, a person's previous reaction to an insect sting may be a warning of a future severe reaction. About one-half of sting victims, however, may have an entirely normal response on one occasion but suffer a serious allergic reaction to the next.

In the *Hymenoptera,* the stinger, found only in the female, has small venom-filled sacs located at its base through which venom is injected by a hollow tube in the center. Most stinging *Hymenoptera* can remove the stinger and use it again and again, but the stinger of the honey bee is barbed. When the honey bee tries to remove its stinger from human skin, both stinger and venom sacs are torn off and left in the victim as the injured bee flies away and dies.

Three Types of Reactions

Insect sting allergy reactions generally fall into three groups. *Normal* sting reactions involve pain, redness, swelling, itching and warmth at the sting site. Lasting a few hours, these symptoms, possibly



Scientists remove the sac from the insect to obtain the venom needed for use in allergy immunotherapy shots. Toxic compounds cause the irritating local reactions experienced by most people.

severe, are considered normal inflammatory responses and pose no danger.

Toxic reactions are the result of multiple stings. Five hundred stings within a short time are considered lethal because of the effects of extremely large amounts of venom injected into one person.

At least 10 stings, closely spaced over time, can cause serious illness and discomfort. Muscle cramps, headache, fever, and drowsiness are the most common symptoms of a toxic reaction.

Allergic reactions produce some of the same symptoms as those of toxic reactions, but allergic reactions differ in that they are only triggered by one sting or a minute amount of venom.

Recognizing Reaction

A severe systemic reaction, a reaction affecting any part of the body in addition to the portion that is stung, may be recognized by the following: difficulty in swallowing, labored breathing, hoarseness and thickened speech, weakness, confusion, and feelings of impending disaster.

The most serious reaction to a sting is closing of the airways or shock (anaphylaxis), in which the patient suffers not only from the above symptoms but also turns blue (cyanosis), or shows evidence of a drop in blood pressure, collapse, or unconsciousness. These reactions may develop within minutes or hours after a sting, and the patient may die if treatment is not given promptly.

Following any insect sting, the stinger with the attached venom sac, if left behind, should be removed immediately by a fingernail or tweezers, because the sac continues to contract for some time after being torn from the insect. The affected area should be washed thoroughly after the stinger has been removed.

In a normal reaction, ice (*not* heat) applied to the spot may lessen pain and swelling. Antihistamines taken by mouth and a calamine solution applied to the skin may help control itching, and aspirin or codeine (by prescription) may lessen pain. A toxic reaction to an insect sting is treated in the same manner.

Remove Stinger Immediately

When stung, an allergic person should remove any stinger as soon as possible. A tourniquet should be placed above the sting site if it is on an arm or leg. The tourniquet should be loosened every 10 minutes so that circulation is not impaired. A cold pack should be applied if possible.

A serious allergic reaction to a sting should be treated as an emergency. Epinephrine (adrenalin), adrenal steroids (cortisones), antihistamines, intravenous fluids, oxygen, a tracheotomy to open the windpipe, are all possible options for treating an allergic reaction.

Anyone who has had an allergic reaction to a sting should take two steps: First, wear a "Medic Alert" identification bracelet or tag and/or carry information on a card identifying the allergy to specific insects and the need for definitive treatment.

Second, always have emergency insect sting treatment on hand, such as epinephrine in a syringe ready for injection or antihistamine tablets, a tourniquet, and alcohol swabs for cleansing the injection site. Such kits are available only with a doctor's prescription.

Preventive Measures

To make oneself less attractive to stinging insects, follow these steps: Wear close-fitting clothes to prevent the insect from getting between the material and skin; white or light khaki color is least attractive to bees, avoid wearing dark-colored clothing which may provoke attack; scented soaps, perfumes, suntan lotions, and other cosmetics should be avoided, as should shiny buckles or jewelry.

Some *Hymenoptera* nest in the ground, and others are attracted to low-growing plants; such insects may attack unprotected feet. Wasps are attracted to food and drink, and people are frequently stung at picnics and swimming pools.

Keeping away from insects, a major approach for treating this allergy, is vital for reducing the chances of being stung. Research on the diverse aspects of insect allergy is moving forward through investigations supported by NIAID.

Venom therapy has been recently made available to doctors in an effort to enhance allergic person's immunology. For more information, contact the NIAID Office of Research Reports and Public Response, 496-5717.

—Joyce McCarthy□

Bob Hinkel Retires; Trades Pen for Plowshare

"You can't go home again," wrote Thomas Wolfe.

"Not so," says Robert N. (Bob) Hinkel, who is returning to Fauquier County after 27 years at NIH, the last 17 of which he spent as a writer in the NINCDS Office of Scientific and Health Reports. Since 1971 he also served as chief of that office's scientific publications section.

In his retirement Bob plans to convert his 260-acre weekend retreat in the shadow of the Blue Ridge Mountains to a working farm, complete with a few head of cattle and a small vineyard.

Born and bred in Fauquier County and graduated from the University of Virginia at Charlottesville in 1954, Bob will soon again take up residence in his native state as a farmer.

In the years preceding his decision to exchange pen for plowshares, Bob held progressively responsible positions in the information offices of various components of the NIH and the PHS. He began his writing career, however, as a cub reporter on the *Washington Star,* "a job," he says, "that was long on excitement."

He recalls covering a suicide story where he "just missed being hit by a man jumping off the Calvert Street Bridge." He also remembers the "horror" of the 1950 airplane crash into the Potomac. Bob was one of the many people at the scene who helped pull victims from the water.

Deciding that these were "thrills he could do without," he completed college, and in 1954 joined the National Heart Institute as a clerk-typist. Soon he was given the opportunity to pinch-hit on writing a speech for NIH advocate, Senator Lister Hill. The senator liked the speech, and Bob advanced quickly to a GS-5 writer-editor.

In the interim between leaving NIH in 1958 and joining the NINCDS in 1965, he wrote and edited health pamphlets in the Office of the Surgeon General, wrote speeches and reports for the Division of Research Grants, and worked as a supervisory editor in the National Clearinghouse for Mental Health Information.

At NINCDS, he was first assigned to the office of the associate director for extramural programs, where for 3 years he directed an information program to publicize grantee activities.

Won Blue Pencil Awards

Bob was named chief of the OSHR scientific publications section in 1971. Throughout his tenure, the publications that he and the members of his section produced won a number of the coveted Blue Pencil Awards from the National Association of Government Communicators.

The most recent Blue Pencil—a first place—went to *The NINCDS Today,* for which Bob wrote the copy and supervised the photography. This four-color brochure has also been selected by the Art Directors Club of Metropolitan Washington for display at its annual show.

NINCDS also honored him for significant contributions to its information program. In 1970, he received recognition for "expediting publication of a 3-volume set of books on the nervous system to commemorate the 25th anniversary on the founding of NINCDS," and in 1978 was given the NIH Merit Award for "the high quality of his performance while serving, for a period, as acting chief of OSHR."

While at NIH, Bob identified closely with the entire information community, in which he was viewed not only as a "competent wordsmith" but as a man whose "wry sense of humor and quiet demeanor" often helped resolve issues related to NIH-wide information activities.

Bob's government service included 3 years in the U.S. Naval Reserve. Preceding his retirement on June 26, he was honored at an OSHR luncheon and a series of parties hosted by his many friends. □

Dr. M. Beaubien Named Acting FIC Director

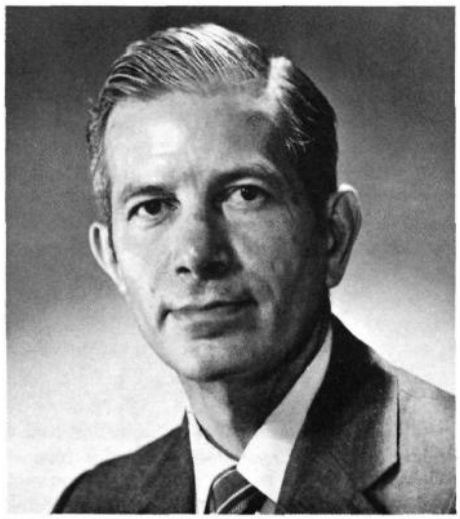
Dr. Mark S. Beaubien was appointed Acting Director of the Fogarty International Center by NIH Director Dr. James B. Wyngaarden, effective July 1.

Since 1980, Dr. Beaubien has been assistant chief of the International Coordination and Liaison Branch, FIC.

When he came to the Fogarty Center in 1971, he brought an impressive international background—having previously served the U.S. Public Health Service in a variety of capacities and countries.

Immediately prior to coming to NIH, he was associate director for professional resources at the Office of International Health.

Dr. Beaubien, a PHS commissioned officer, received his B.S. and M.D. from the University of Chicago. His experience also includes training in the Canal Zone, the Philippines, and at the Centers for Disease Control in Atlanta, as well as employment as a staff physician in internal medicine at Henry Ford Hospital in Detroit, Mich. He has also been in private practice.



Among the many tours of duty completed by Dr. Beaubien in his foreign service career were Peace Corps assignments in East Pakistan and Malaysia, and USAID appointments in Vietnam and Thailand.

Dr. O. Malcolm Ray Dies; Was Program Planning Chief

Dr. O. Malcolm Ray, former chief of the NINCDS Office of Program Planning and Evaluation, died recently in St. Petersburg, Fla. He had retired in 1981 after 25 years of service in grants administration at NIH.

Dr. O. Malcolm Ray

Dr. Ray began his career in 1956 as deputy chief of the Research Grants Branch, NCI. He transferred to NINCDS in 1965 as chief, Research Grants Program, extramural programs, and in 1975 was appointed acting deputy director for extramural programs.

He received an HEW Superior Service Award in 1975 for his efforts in "focusing scientific attention on the health research needs and opportunities in the neurological sciences."

A graduate of Drake University, Dr. Ray received his Ph.D. from the State University in Iowa. He was an assistant professor of zoology and physiology at North Dakota State College in Fargo from 1939 to 1953 when he entered the U.S. Army Air Corps as an aviation physiologist.

He left the service in 1946 to be an assistant professor of biology at the University of Notre Dame. He was later appointed executive secretary of the committee on growth, National Academy of Sciences.

Memorial services will be held July 24 at the Concord Church of Christ, West Concord, Minn. Contributions in the name of Dr. Ray may be sent to that church directed to Rev. Grice, Rt. 1, P.O. Box 24, West Concord, Minn. 55985.

Sucrose Polyester May Facilitate Weight Loss for Severely Obese

Researchers from the University of Cincinnati Medical Center reported on July 15 that a synthetic, nonabsorbable, calorie-free fat substitute called sucrose polyester (SPE) may be an optimal pharmaceutical agent to facilitate weight loss.

Dr. Charles J. Glueck, lead author of a paper on SPE and weight loss, appearing in the June 1982 issue of the *American Journal of Clinical Nutrition,* explained his findings recently at a briefing held in the medical center. Dr. Glueck is director of UC's General Clinical Research Center, a special human-studies unit funded by the Division of Research Resources.

The study was designed to determine whether sucrose polyester, which has physical properties similar to those of common cooking fats, could reduce total caloric intake when covertly substituted for conventional cooking fats under double-blind conditions of free food choice.

The similarity of SPE to conventional cooking fat and oil allowed the investigators to assess the effect of hidden fat substitution on caloric intake and weight loss in severely obese individuals, according to Dr. Glueck.

Previous studies at Cincinnati have shown that SPE could significantly reduce total plasma cholesterol and low-density lipoprotein cholesterol, and that it significantly reduced intestinal absorption of cholesterol.

Since SPE tastes, looks, and smells like common cooking fats, and because it's nonabsorbable, it can be used as a cooking fat substitute.

In the study, patients were allowed to increase caloric intake significantly to compensate for calorie dilution of meals during the SPE substitution period, but they did not increase mean snack calories. There was an average weight loss of nearly 0.4 pound per day despite the self-sustained low calorie intake.

According to Dr. Glueck, the study results suggest that when SPE is used in foods, people don't realize they are taking in fewer calories and don't try to make up for the calorie loss, and it affects a significant reduction in cholesterol levels.

"Sucrose polyester is not a panacea for all obesity," he cautioned, "but it is a new, powerful tool to help bring about sustained weight loss in obese individuals, which in my opinion is the most difficult metabolic intervention to make and sustain in clinical medicine. With sucrose polyester, patients literally can have their cake and eat it, too."

Ten chronically obese subjects were hospitalized in the GCRC for the study. The study was comprised of three periods, one of 7 to 14 days to determine baseline caloric intake, and two 20-day periods. Because the study was double-blind, neither Dr. Glueck nor the patients knew which 20-day period was the SPE substitution period.

An average of 60 grams of SPE per day replaced conventional fat in one of the two 20-day study periods, representing a reduction of 540 calories from conventional cooking fat.

During both 20-day study periods, 60 percent of the baseline caloric intake was "required intake" at mealtime, while an additional 60 percent of baseline caloric intake was allowed as "free choice" foods during a specific snack time.

It was then possible during both 20-day study periods for these habitually obese patients to consume more than 100 percent of the baseline caloric intake, and to actually gain or at least maintain weight.

SPE was administered in three different forms during the diet:

- As a semisolid mixture incorporated into salad dressings and other recipes which contained 80 percent oil and 20 percent hydrogenated palm oil, which liquifies upon heating.
- As a bread spread mixture containing 54 percent SPE oil, with a flavor and consistency similar to corn oil margarine.
- As a mixture combined with milk to make a milk shake-type beverage.

Without SPE	
Vanilla Milkshake	170 grams
Total Calories	234.6
Total Fat Calories	162.0

With SPE	
Vanilla Milkshake	170 grams
Total Calories	95.1
Total Fat Calories	28.8
SPE Calories	0

"In the SPE study period, 40 grams of SPE replaced 40 grams of conventional fat for every 1,200 kilocalories of required intake, resulting in a 30 percent reduction in mealtime caloric intake," Dr. Glueck explained.

"The mean total caloric intake (meal and snack) fell 23 percent during the SPE period, with an average daily weight loss of nearly 0.4 pound per day, he reported. Patients did not subjectively identify a change in feelings of hunger.

"The subjects were clearly better able to reduce their total caloric intake during the SPE period, while at the same time demonstrating appetite satisfaction—a central key to diet continuance. In addition, comparing the SPE period with the non-SPE period, there was a 10 percent reduction in total plasma cholesterol and a 14 percent reduction in major atherogenic cholesterol fraction, low-density lipoprotein cholesterol. There was also a 10 percent reduction in the triglyceride level," Dr. Glueck added.

Toast and margarine normally have 97 calories, but when SPE is substituted for the margarine they have only 61 calories.

A 3-ounce serving of roast beef and gravy lessens from 362 to 198 calories with SPE substitution, while a 150-gram bowl of mushroom soup falls from 124 to 79 calories.

Currently an investigational new drug, SPE has not yet been approved for nonexperimental use by the Food and Drug Administration, according to Dr. Glueck. When it is approved, he expects that it will be available only under medical supervision, and does not speculate when it may be available under these circumstances.

"The NIH-funded clinical research centers provide perfect environments for studies like this where we have taken obese but otherwise healthy people and put them on a hospital unit for 7 weeks to participate in a complex metabolic observation program," he said.□

Dr. Glueck (l) samples food containing sucrose polyester which was prepared by nutritionists Elizabeth Hogg (c) and Charalee Allen at the University of Cincinnati GCRC. The experimental substance holds promise as an effective weight loss agent.

NEURO-PET

(Continued from Page 1)

has yet to be investigated by PET technology.

The Neuro-PET project began nearly 4 years ago, when scientists from NINCDS's Neuroradiology and Computed Tomography Section confronted problems with standard PET scanners: "fuzzy" pictures from low-sensitivity scanners, and resolving power that was insufficient to distinguish certain structures in the brain.

The quality of PET images depends largely on the efficient detection of gamma rays emitted in coincident pairs from the patient's brain—rays indirectly produced by decaying radioisotopes which are injected into the bloodstream and accumulate in brain tissue.

To get sharper images, the NINCDS team decided to concentrate on improving the usual array of crystal gamma ray detectors used in PET scanners.

After testing detectors of different materials and sizes, the scientists identified the arrangement that produced the greatest resolution and sensitivity: four rings of closely packed crystal detectors, each ring positioned directly behind another.

In Neuro-PET, the large sodium iodide crystal detectors of standard PET scanners have been replaced with small, redesigned detectors made of bismuth germanate crystals.

The new scanner is distinctive in both appearance and capability. Neuro-PET relies on 512 crystal detectors, many more than standard PET scanners, packed tightly into the small-diameter rings. These features allow Neuro-PET to detect more gamma rays in the brain, thus producing more detailed brain scans.

Scientists from DRS's Biomedical Engineering and Instrumentation Branch designed a highly sophisticated and complex electronics package for Neuro-PET. The package can identify coincident pulses from two simultaneous gamma rays among 40,960 possible pairs of detectors, and can code the pulses into numerical data to be transmitted to the computer.

Dr. Sank (c) adjusts the position of Neuro-PET mock-patient Barry Shatzman as Dr. Brooks checks electronic settings. During an actual scan, a patient's eyes and ears are covered to minimize sensory information received by the brain.

The BEIB scientists also designed and built a gantry to support the rings of detectors, and a mechanical system for allowing the rings to move in a unique "wobble" pattern around the patient's head during scanning.

The gantry, movement mechanisms, and electronics are the work of BEIB's Walter S. Friauf, Stephen B. Leighton, and Horace Cascio. Alan J. Talbert of NINCDS's Office of Biometry and Field Studies contributed to Neuro-PET's software.

When fully operational, Neuro-PET will produce seven simultaneous brain-slice views, a feature that Dr. Di Chiro says will significantly affect two aspects of the imaging process: the speed of the examination, and the precision alignment of the seven tomograms in relation to each other.

Because of the scanner's multislice capability and speed of operation, the use of Neuro-PET can also result in "an increase in the number of patients studied each scanning day and a better utilization of the radiopharmaceuticals involved in scanning," according to Dr. Di Chiro.

Neuro-PET has also been an economic success. In-house design and some in-house construction have saved hundreds of thousands of dollars over the costs of commercially available scanners with less resolution and sensitivity.

Neuro-PET's usefulness will increase when a cyclotron, an isotope-generating machine, now in the planning stages, is installed on the NIH campus. With such a facility nearby, scientists will have immediate access to the short-lived isotopes Neuro-PET needs.

Presently, isotopes used in brain scanning at NIH are obtained from cyclotrons at the Naval Research Laboratory in Washington, D.C., and at Brookhaven National Laboratory in New York.

Once the cyclotron is installed, said Dr. Di Chiro, "we may be able to perform two or even three sequential studies in a particular patient during the same session.

"The brain might be examined, for example, at resting state; after visual, auditory, and somatosensory stimulation tests; and after mental and pharmacological provocative tests."

Already, an epilepsy patient and two patients with brain tumors, previously studied with a standard PET scanner, have been examined by Neuro-PET. Although the Neuro-PET scans were carried out 4 hours after isotope injection when much radioactivity had been lost, the resulting images verified the new scanner's high resolution capabilities.□

Chief of Sanitation Services Sweeps Up 34-Year Career

Grover "Tom" Fletcher, who helped set up and organize the Sanitation Services Branch, Office of Research Services, retired June 30 after 34 years at NIH.

"Everyone at NIH has benefitted from the services he provided," said Dan Kenney, assistant office services manager, General Services Management. As chief of the Sanitation Services Branch, Mr. Fletcher was in charge of all the cleaning of NIH (except Bldg. 10), the rental of quarters including the Directors' houses, purchase and installation of carpeting, pest control and numerous other services.

He joined NIH in 1948 in the Bureau of Biologics, NIAID. In 1953 he moved to the Office of Administrative Services.

A conscientious and dedicated worker, Mr. Fletcher often spent nights working at NIH. He was also partially responsible for snow removal and clean-up after fires.

Another evidence of his dedication was his 100-mile round-trip commute to NIH from Lovettsville, Va. According to Mr. Kenney, the weather never stopped Mr. Fletcher from driving his carpool.

The retiree received an EEO award in 1975 and a superior work performance award in 1970. He was an active member in the Washington chapter of the Environmental Management Association.

An avid golfer, Mr. Fletcher plans to spend more time on the fairways and greens. He hopes to eliminate all hooks and slices and keep the ball out of the rough.

During World War II, Mr. Fletcher served in the Pacific with the U.S. Army infantry.

He has several trips in mind for his retirement, including one to Hawaii. Woodworking is another of his interests.

A large crowd turned out for the retirement party held June 25 in the Sheraton Potomac. Many friends and coworkers "roasted" Mr. Fletcher by reminding him of amusing incidents in his life.

His three children, all of whom work at NIH, and his wife attended the party. His oldest son is an engineer in the engineering branch, his younger son works for R&W, and his daughter works at Fort Detrick.□

New Specimen Directory Published

The Registry of Comparative Pathology has published a new edition of *Directory: Resources of Biomedical and Zoological Specimens,* listing 114 collections available for the study of the comparative aspects of disease processes.

For a free copy of the directory, write Registry of Comparative Pathology, Armed Forces Institute of Pathology, Washington, D.C. 20306.□

Dr. Philip A. Pizzo Named Pediatric Oncology Chief

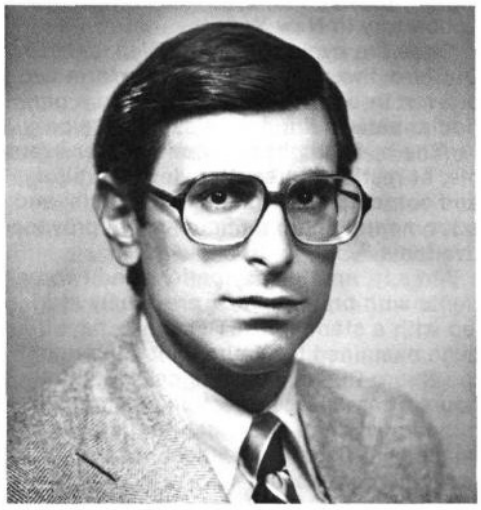
Dr. Philip A. Pizzo has been named chief of NCI's Pediatric Oncology Branch. He has headed the branch's infectious disease section since 1980.

Dr. Pizzo will be shifting the research emphasis from teens to younger children.

"We are concentrating our research on those cancers where the main challenge is the lack of previous treatment success," he said.

"We will continue to study patients with high-risk leukemias, lymphomas and sarcomas but will also initiate new studies in neuroblastoma, a tumor which has stubbornly resisted treatment.

"Treating childhood cancers provides important models for cancer treatment," Dr. Pizzo said. "These tumors are often very responsive to therapy. The principles developed from their treatment serve as models for treating adult cancers as well."



Dr. Pizzo reports that the branch is now in transition. New personnel with different laboratory interests are joining, and the average age of patients is shifting from growing adults to younger children.

Dr. Pizzo received his B.A. from Fordham University. In 1970, he completed his M.D. at the University of Rochester School of Medicine, New York. Following internship and residency at Children's Hospital Medical Center, Boston, he joined the Pediatric Oncology Branch in 1973 as a clinical associate.

He has published more than 80 papers since coming to NIH, primarily related to studies on the diagnosis, management and prevention of infectious complications in cancer patients.

The chief of the branch before Dr. Pizzo was Dr. Arthur S. Levine, who has been appointed special assistant for scientific coordination in the Office of the Director, Division of Cancer Treatment, NCI. Dr. Levine had been branch chief for 7 years.□

In these days of inflation, the process of acquiring money is not easy. Further, it is more difficult to hang on to . . . but to spend it prudently is perhaps the most difficult task of all.—*Gordon Jerome*□

Two NINCDS Employees Recognized For 'Prompt and Heroic Action'

Two National Institute of Neurological and Communicative Disorders and Stroke employees received special recognition recently at the Institute's recent annual awards ceremony, for rescuing an injured visiting scientist during a fire.

Dr. Murray Goldstein, Acting NINCDS Director, praised summer employee David Patterson and chemist Susan Sorrell for "bravery beyond the call of duty."

Mr. Patterson (l), a second-year medical student at Vanderbilt University, and Ms. Sorrell, were commended by Dr. Goldstein (r) for their bravery and quick thinking in rescuing the victim of the recent explosion and fire in a Bldg. 10 laboratory.

In commending Mr. Patterson, he said, "Your immediate and heroic response helped save the life of an NIMH guest researcher after an accidental explosion and chemical fire in a nearby laboratory in the Clinical Center.

"Without regard to your own personal safety, and with concern for the life of the seriously injured victim, you entered the burning room, rescued the employee, made certain that no others were present or injured, and then helped obtain assistance for the victim."

As Ms. Sorrell received her award, Dr. Goldstein said, "You were instrumental in assisting Mr. Patterson to rescue the seriously injured victim, and in obtaining immediate medical, fire, and rescue assistance. We are extremely proud of you, and all of us add our personal thanks for your prompt and heroic action."

Both employees received standing ovations as they were presented with their awards.

While working in separate Bldg. 10 labs around 1 p.m. on July 10, Mr. Patterson and Ms. Sorrell heard a nearby explosion.

Mr. Patterson saw a bright red glow behind the window shade of his closed door. As he moved to inspect the glow, he could see fire under the door. He raised the window shade and looking across the hall saw "a lady moving around in a burning room, but she wasn't coming out."

Meanwhile, the explosion had created a vacuum in Ms. Sorrell's lab, which forced her door shut. She opened the door and went into the hall and joined the medical student who told her that a women needed help. Ms. Sorrell immediately called the fire emergency number.

Mr. Patterson entered the burning room and grabbed the injured scientist, Dr. Nancy Sherwood, by the shirt, pulling her into the hallway which had begun to fill with smoke. They then took the injured woman to a safe area in Bldg. 10.

"I really didn't think about the danger involved," he recalled. "She was really in bad shape. Her pants were gone, but she had a lab coat wrapped around her. Her legs, the outside heel of her left foot, and her left arm were burned."

The victim was taken to the National Medical Center, and later transported to the Washington Hospital Center where she is now recovering from second-degree burns.

The NIH Fire Department extinguished the fire, which apparently started when the vapors from a mixture of acetone and petroleum ether exploded because of a spark from the open motor of a nearby laboratory homogenizer.□

Two FIC Scholars Arrive To Continue Research

Two Fogarty International Center scholars-in-residence, Dr. Sanford Palay and Dr. Mordechai Sokolovsky, arrived recently at NIH.

Dr. Palay, professor of neuroanatomy at Harvard Medical School, is returning for his last term. During his stay, he will be completing arrangements for an FIC Conference on Coexistence of Neuroactive Substances in Neurons, to be held at Stone House, Sept. 27-28.

He is recognized as one of the leading authorities on the fine structure of the nervous system. Using the electron microscope, he identified and characterized fundamental organelles of the nerve cell, including the Nissl body, microfilaments, and microtubules.

More recently, Dr. Palay and his wife, Dr. Victoria Chan-Palay, have published a widely acclaimed monograph on the fine structure of the cerebellar cortex.

Arriving for his first term as a Fogarty scholar is Dr. Sokolovsky, professor of biochemistry at Tel Aviv University, Israel.

Educated at the Weizmann Institute of Science, he has made major contributions to protein chemistry and to the chemical modification of proteins as part of his early studies on structure-function relationships in carboxypeptidases A and B.

In recent years, Dr. Sokolovsky has turned to the mechanisms of nerve transmission and, in particular, to the regulation of acetylcholine release caused by the interaction of drugs with postsynaptic receptors.

While at NIH, he will collaborate with scientists and deliver lectures.

Both scholars have offices in Bldg. 16 (Stone House) and can be reached on 496-1213.□

Dr. Gerald S. Johnston Retires; Was CC Nuclear Medicine Chief

Dr. Gerald S. Johnston, chief of the Clinical Center's Nuclear Medicine Department, and a physician whose research has advanced noninvasive diagnosis of patients by providing "metabolic maps" to see how organs functioned prior to exploratory surgery, ended his 30-year government career.

Dr. Johnston considers the establishment of a nuclear medicine department at the CC as his most notable achievement in his 11 years here. "The department consisted of a very small group of people working independently when I came here," he observed.

"Since that time we have increased our tie-ins with the other Institutes considerably. We're now conducting a multitude of studies. Sixty percent of our work is done with NCI, where we monitor cancer patients' responses to therapy. Twenty percent of our work is done with NHLBI, and the other Institutes make up the remaining 20 percent," said Dr. Johnston.

Saw Many Applications

Among the applications of nuclear medicine that he has pioneered while at the CC has been nuclear cardiology.

Dr. Johnston left on July 1 to head the nuclear medicine department at the University of Maryland Hospital in Baltimore, and also be professor of medicine and radiology there.

"Much of what is going on elsewhere with the diagnosis and treatment of heart disease was developed here," he said, noting that a research team he led developed the ECG-gated scintigraphic angiocardiography procedure, allowing visualization of the heart chambers during rest or exercise.

This is done by injecting a radioactive marker into a patient's bloodstream that sends out signals that are converted by a computer into a motion picture.

This technique enables physicians to see which areas of the heart that are not pumping properly. The procedure is also helpful in diagnosing certain types of heart disease and clogged arteries that prevent the supply of blood. Scintigraphic angiocardiography also enables physicians to determine which of the heart's arteries are diseased or are not carrying enough blood.

Another area that Dr. Johnston has pioneered is the successful diagnostic use of positron emission transverse tomography, a method of radioactive scanning which requires a daily supply of positron-producing isotopes.

These isotopes are very short-lived, and frequently more than half have died by the time they are received in the laboratory.

It is expected by late 1984, a cyclotron will be working in the ACRF that will produce a sufficient supply of positron-producing isotopes and pipe them directly into the laboratory.

Aided America's Leaders

His career spans service at NIH and as a physician with the U.S. Army. Over the years he has also been involved in diagnosing medical problems of such luminaries as former President Dwight D. Eisenhower, U.S. Senators Everett M. Dirksen and Hubert H. Humphrey, Supreme Court Justice William O. Douglas, General Douglas A. MacArthur and U.S. Secretary of State Henry A. Kissinger. He was chief of the nuclear medicine service at Walter Reed General Hospital.

Prior to coming to NIH, Dr. Johnston was chief of nuclear medicine service and director of the army fellowship program at Letterman General Hospital in San Francisco. In 1956, he graduated from the University of Pittsburgh School of Medicine.

In the late 1960's he became interested in the effects of heat stroke. He traveled to South Africa to study its effects on the goldminers working underground there. His research was aided by the plentiful baboon population, allowing him to use them as laboratory animal models.

A direct outgrowth of this project was the establishment of a primate colony at the Karl Bremer Hospital in South Africa, where an emphasis on organ transplantation took precedence over heat-stroke studies. The animals were used in a comprehensive study on renal transplants.

This research led to the first human kidney transplant performed by Dr. Christian N. Barnard. Two months later, Dr. Barnard headed a surgical team that performed the world's first heart transplant.

Dr. Johnston plans to continue his research while in Baltimore. He noted that specific tumor-tagging has been extremely successful, but physicians have to go one step further.

"We need to develop a method of determining when people are susceptible to developing tumors and make whatever physiologic alterations are necessary to head off that problem. This is where the ACRF/outpatient research comes in."□

If we are ever to create enduring peace, we must seek its origins in human experience and in the record of human idealism.—*Herbert Hoover*□

Scientists Collaborate To Supply Human Tissue

To increase the availability of human tissue for neurological research, the National Institute of Neurological and Communicative Disorders and Stroke is cooperating with the National Diabetes Research Interchange to supply neuroscientists with muscle, eye, pituitary, and peripheral nerve tissue.

Investigators studying diabetes-related problems can request tissue samples from NDRI that will be prepared according to research-specific protocols.

NINCDS grant funds may be used to pay for this tissue, but such use may first require a review of research protocols by local institutional review boards.

Established by the Juvenile Diabetes Foundation with support from the Pew Memorial Trust, NDRI acts as a clearinghouse for both diabetic and nondiabetic surgical, cadaveric, and transplant tissue.

Tissue is classified by organ type (i.e., kidney, eye), donor type (i.e., diabetic, nondiabetic), and other characteristics such as age, blood type, and duration of diabetes.

Dr. Carol Riordan at NDRI or NINCDS grant administrators can provide additional information about the tissue bank. An Application for Tissue (501-0981-02) is available from NDRI, 3624 Science Center, Philadelphia, Pa. 19104, telephone (215) 222-6374.□

Visiting Scientist Program Participants

Sponsored by Fogarty International Center

6/24 **Dr. Mitsutoshi Iwashita,** Japan, Endocrinology and Reproduction Branch. Sponsor: Dr. Kevin Catt, NICHD, Bg. 10, Rm. 12N202.
6/25 **Dr. Akifumi Togari,** Japan, Laboratory of Developmental Neurobiology. Sponsor: Dr. Gordon Guroff, NICHD, Bg. 6, Rm. 1A08.
6/27 **Dr. Teresa Czakowska,** Poland, Laboratory of Cellular and Molecular Biology. Sponsor: Dr. Josef Pitha, NIA, GRC, Baltimore, Md.
6/27 **Dr. Mehmet Fer,** Turkey, Biological Development Branch. Sponsor: Dr. Ronald Herberman, FCRF, Bg. 560, Frederick, Md.
6/27 **Dr. John Howard,** Canada, Digestive Diseases Branch. Sponsor: Dr. Jerry Gardner, NIADDK, Bg. 10, Rm. 9D15.
6/27 **Dr. Andrei-Claudian Iager,** Hungary, Adult Psychiatry Branch. Sponsor: Dr. Richard J. Wyatt, NIMH, WAW Bg., Rm. 531, Saint Elizabeths Hospital.
6/27 **Dr. Jean-Pierre Kinet,** Belgium, Section on Chemical Immunology. Sponsor: Dr. Henry Metzger, NIADDK, Bg. 10, Rm. 9N206.
6/27 **Dr. Dov Herbert Pluznick,** Israel/Austria, Laboratory of Microbiology and Immunology. Sponsor: Dr. Joost Oppenheim, NIDR, Bg. 30, Rm. 322.
6/27 **Dr. George Tsokos,** Greece, Connective Tissue Diseases Section. Sponsor: Dr. James Balow, NIADDK, Bg. 10, Rm. 3N114.
6/28 **Dr. Kimitoshi Kohno,** Japan, Laboratory of Molecular Carcinogenesis. Sponsor: Dr. Tsuyoshi Kakefuda, NCI, Bg. 37, Rm. 3C11.
6/28 **Dr. Ellen G. Meier,** Germany, Laboratory of Molecular Genetics. Sponsor: Dr. Robert Lazzarini, NINCDS, Bg. 36, Rm. 4A05.

Congress Hears Latest Rheumatology Data

(Continued from Page 1)

jected gold salts, without the severe side effects that result from injectable gold.

Dr. Peter Lipsky of Southwestern Medical School in Dallas presented evidence that oral gold may work by a specific suppression of the immune system.

Findings in Lupus

Dr. Eng Tan of Denver, Colo., reported on newly revised criteria for the classification of lupus. The study group analyzed 30 potential criteria (including all of the 1971 criteria) using the NIADDK-supported ARAMIS data bank for data storage and processing. These criteria will more accurately define the disorder and foster more standardized research in lupus.

Dr. Simon Carette, NIADDK intramural scientist, reported on a study of cytotoxic drug treatment for the kidney complications of lupus. Dr. Carette found that meticulous analyses of kidney biopsies may be useful in predicting the outcome of therapy. Patients with the healthiest tissue seemed to do well on either of the two drugs tested.

Those with the most diseased tissue seemed to do poorly on either drug, thus treating the high blood pressure and other correctable factors of severe lupus nephritis may be more effective than use of cytotoxic drugs.

Dr. Peter Schur, Harvard Medical School, evaluated a number of lupus patients followed since 1967 who had gone into remission. He found that those who go into remission early in the course of their disease relapse early.

Those who remit later tend to stay in remission. If a patient stays in remission longer than 18 months, she or he is likely to have a long remission.

Several papers discussed ways to intervene once pain and loss of function occur in joints damaged by rheumatoid arthritis, osteoarthritis, or another rheumatic disorder. A number of these presentations were made by researchers located at the NIADDK-supported Multipurpose Arthritis Center at Brigham and Women's Hospital, Boston.

Dr. Lawrence E. Shulman, associate director, NIADDK Division of Arthritis, Musculoskeletal and Skin Diseases, and president of the congress, was elected president of the Pan American League Against Rheumatism (PANLAR), 1982-1986, at the congress. The next meeting of PANLAR will be held in Buenos Aires, Argentina, in 1986.□

Three major congress participants were (l) Dr. John Decker, chief, NIADDK Arthritis and Rheumatism Branch, and chairman of the international committee; (c) Dr. Gregorio Mintz of Mexico City, new secretary-general of the Pan-American League Against Rheumatism; and Dr. James R. Klinenberg of Los Angeles, chairman of the National Arthritis Advisory Board, president-elect of the Arthritis Foundation's American Rheumatism Association, and chairman of the congress program committee.

Photo by Rheumatology News International.

Three New Members Named to NINCDS Council

Three new members were recently appointed to the National Advisory Neurological and Communicative Disorders and Stroke Council. The appointees are:

Dr. Kenneth N. Stevens, C. J. LeBel professor of electrical engineering and computer science at the Massachusetts Institute of Technology;

Jerome H. Stone, a manufacturing executive and president of the Alzheimer's Disease and Related Disorders Association (ADRDA); and

Dr. John M. Tew, Jr., chairman of the section on neurosurgery and director of the graduate education program in neurological surgery at Good Samaritan and Christ Hospitals in Cincinnati.

Dr. Stevens, has been involved in the development of speech training aids for the deaf as well as research in normal and impaired speech.

A fellow of the Acoustical Society of America and the Institute of Electrical and Electronics Engineers, he received his doctorate in electrical engineering and computer science from the Massachusetts Institute of Technology.

Mr. Stone is the chairman of the executive committee of the Stone Container Corporation of Chicago.

He has been an active supporter of Alzheimer's disease research programs and was instrumental in uniting seven separate dementia support groups into the present ADRDA organization.

Dr. Tew, now at Mayfield Neurological Institute, was formerly a clinical associate of NINCDS. Dr. Tew has been honored for his work on trigeminal neuralgia and cerebrovascular disease. He is a graduate of the Bowman-Gray School of Medicine and is president-elect of the Congress of Neurological Surgeons.□

Innovative Educator Named to NICHD Council

Marva Collins, an educator in Chicago, was recently appointed to the National Advisory Child Health and Human Development Council.

Mrs. Collins is the founder and director of the West Side Preparatory School in Chicago. Started as a one-room school in her home, the school now enrolls more than 200 students. Her success with this school was featured in a 1981 television movie, *The Marva Collins Story*.

Mrs. Collins was an educator in the Monroeville, Ala., school district from 1957 to 1959, and in the Chicago public school system from 1960 to 1975. A 1957 graduate of Clark College in Atlanta, Mrs. Collins pursued postgraduate studies at the Chicago Teacher's College and Columbia College. She holds honorary degrees from Howard University in Washington, D.C., and from Wilberforce University in Ohio.

She was named Educator of the Year in 1981.□

Manual Chapter Mailing Keys Revised

The Division of Administrative Services and the Division of Management Policy are currently in the process of revising the procedures for distribution of NIH Manual Chapters and Instruction and Information Memos. The current manual distribution list will be abolished and several new lists will be established.

The new lists will be arranged by subject matter as follows:

Mailing Key	*NIH Chapters Distributed*
F-31	All NIH Manual Chapters and I&I Memos
F-32	General Management Chapters (1000-2999 Series excluding 2300 Series and 2600 Series)
F-33	Personnel Chapters (2300 Series)
F-34	Procurement Chapters (2600 Series)
F-35	Intramural Chapters (3000 Series)
F-36	Grants-Related Chapters (4000-5999 Series)
F-37	Contracts-Related Chapters (6000 Series)
F-38	I&I Memos only

BID AO's/EO's will receive specific procedures to follow in order to place employees on any of the new distribution lists.□

Recently Dr. Thomas E. Malone (l), while serving as NIH Acting Director, received an Equal Employment Opportunity award "in recognition of outstanding leadership and contributions to promoting Equal Employment Opportunity and Cultural awareness at the NIH." A cross section of the NIH EEO community, including representatives of the Equal Employment Opportunity officers, Federal Women's Program, Hispanic American Advisory Committee, Handicapped Employees Advisory Committee, Asian Cultural Committee and Black Cultural Committee gathered in the Director's office to witness the presentation of the award by Theodore W. Blakeney, Acting Director, DEO.

ATLAS

(Continued from Page 1)

by the U.S. Bureau of Census as a county or group of counties similar in economic and social characteristics.

The maps are based on average annual death rates (death per 100,000 population) calculated from deaths in the United States during 1965-1971. For a few diseases the period was limited to 1968-1971.

The data, obtained from HHS' National Center for Health Statistics, are based on death certificates. Rates were computed separately for whites and nonwhites and for males and females. The rates were adjusted to reflect the age distribution of the United States population in 1960.

Summary tables for each disease list the percentile rankings for the mortality rates and number of deaths. Other tables present rates according to 5-year age groups. The tables enable the reader to determine the general range for death rates reflected in the color-coded maps. A separate table lists the average annual death rates for each disease and total number of deaths.

The geographic patterns for many of the conditions are consistent with findings of other investigators, and references to some of these studies are provided.

The NCI scientists believe the special feature of the *Atlas* is the visual picture it provides of the geographic distribution of death rates for a large number of diseases over the same period.

The maps do not permit inferences about causes of these diseases. Their value, the scientists suggest, may be in identifying geographic areas to study these diseases.

Among the specific diseases delineated, which have been associated with cancer, are diabetes mellitus, gallstones, hepatitis, Down syndrome, diverticulosis and diverticulitis of the intestine, lung disease, rheumatoid arthritis, emphysema, ischemic heart disease, high blood pressure, and kidney stones.

Other materials in the *Atlas* include questions and answers that provide additional information on the use and interpretation of the publication. A list of NIH contacts for the various diseases is provided, as well as definitions of the diseases.

The *Atlas* may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The order number is 017-042-00157-9. The cost is $18 for the United States, Canada, and Mexico, and $22.50 for all other countries.□

Ayrlawn Has Summer Program

A full day summer program (7:30 a.m.-6 p.m.) for kindergarten children and first through sixth graders will be available at the Ayrlawn Bldg. on Oakmont Ave. in Bethesda.

The program will include a variety of activities including arts and crafts, music, drama, camping, sports, swimming, field trips and special events.

For further information call Ann Schmitz, 530-5550.□

Pilot Study of Media Impact Released

Physicians, nurses, and pharmacists are influenced by information they receive from mass media and, for the most part, consider the information to be accurate, according to a pilot study conducted last year in Richmond, Va., by the National Heart, Lung, and Blood Institute.

The purpose of the study was to determine the degree to which mass media materials reach health professionals and, to a lesser extent, if they influence or reinforce professional practice. It was conducted after a review of the literature disclosed no similar research on the subject.

Although NHLBI researchers caution that results of this single community effort should be considered preliminary, the findings suggest that mass media may be an overlooked means of communicating selected health information to professionals.

The Richmond study was conducted in two phases during January and April 1981. It involved 362 practicing physicians, nurses, and pharmacists.

In the first phase, a large quantity of high blood pressure media information was released by NHLBI for a period of 1 month through Richmond area radio and television stations, newspapers, and in movie theaters.

Half of the health professionals were then questioned about the content and accuracy of messages they observed. Three months later, the remaining participants were questioned, but without special media backup.

Overall, response rates and responses obtained in the two collection periods were similar, although awareness during phase I seemed to be slightly higher. In both recall (82 percent) and accuracy ratings, television was seen as the most effective informational medium.

Most of the respondents reported watching television at least 2 hours a day, while one-fourth of the nurses and pharmacists reported watching for 3 to 4 hours a day.

Almost all the doctors, nurses, and pharmacists reported reading newspapers (98 percent) and magazines (96 percent), watching television (96 percent) and listening to radio (92 percent).

TV was rated "very accurate" by 78 percent, radio by 72 percent, magazine by 64 percent, and newspaper by 55 percent.

Newspaper was the only medium that was considered "not accurate," by any health professionals (2 percent). Accuracy ratings apply *only* to hypertension content that was recalled, not to total content of any of the media.

One-tenth of the Richmond professionals said there had been a change in their views toward the treatment of high blood pressure as a result of media messages.

One-third said patients discussed a high blood pressure message with them, usually a message seen on television.

A large majority (87 percent) of the respondents recommended television when they were asked what they believed was the best medium to reach the general public with information about hypertension. Radio was recommended for the purpose by about one-third.

The physicians, nurses, and pharmacists who took part as volunteers were selected by NHLBI with the assistance of Richmond area professional societies. Physicians were stratified by specialties of practice.

According to Graham W. Ward, chief of the Health Education Branch at NHLBI, "the interest this survey has generated nationally and internationally suggests it does indeed help to fill a void in health communications research."

—William W. Morrison□

Anne Derby Will Head NIEHS Engineering Units

Anne R. Derby has been selected as supervisor of biomedical engineering and will head two separate units within the Office of Facilities Engineering, NIEHS.

A doctoral candidate in engineering sciences at the Columbia University School of Engineering and Applied Science, Mrs. Derby as head of the instrumentation and art unit will oversee print and electronic media services such as photography and illustration.

She will also be head of the facilities maintenance planning and control unit, and will supervise technical instrument fabrication, and electronic equipment repair.

Before coming to NIEHS she was chief of biomedical engineering at the Veterans Administration Medical Center in the Bronx, N.Y., and assistant in surgery at the Mount Sinai School of Medicine, City University of New York.

Mrs. Derby has also held positions as clinical engineer for the surgical services at the Bronx VA Medical Center, and graduate research assistant in the Artificial Organs Research Laboratory at Columbia University.

She is a member of the Institute of Electrical and Electronic Engineers and the New York Academy of Sciences.□

35 Centers Established For Pulmonary Hypertension

A patient registry in 35 clinical centers across the nation is being established by the Division of Lung Diseases, NHLBI, to obtain and evaluate data on primary pulmonary hypertension.

Because this condition is relatively uncommon, no single medical center has been able to accumulate data on a significant number of patients.

The purpose of the registry is to gather data on a large number of patients in an attempt to obtain new information into the causes and course of the disease, and to suggest new methods of early detection and effective therapy.

It is hoped that data analysis will result in a set of guidelines for use by physicians who are dealing with this disease. A secondary benefit may be the discovery of more effective methods of diagnosing and treating some of the more common pulmonary hypertensions for which the causes can be identified.

Primary pulmonary hypertension is a disease whose cause, natural course, and most effective treatment remain unknown.

It results from the arteries within the lungs becoming occluded (obstructed), although the factor or factors responsible for the development of the occlusions have not been described.

The disease, very serious and life-threatening, occurs in people of all ages, including children and young adults.

Under normal conditions, blood that has coursed through the body returns to the right ventricle which pumps it through the lungs for the carbon dioxide-oxygen exchange to take place. The oxygenated blood then is returned to the left side of the heart from where it is again circulated through the body.

In the event the arteries in the lungs become occluded, the circulation from the right ventricle becomes impaired. The increased resistance within the arteries requires high pressure in the right ventricle and the pulmonary arterial system to maintain blood flow; thus the name pulmonary hypertension.

Some lung conditions such as emphysema or fibrosis can cause such circulatory resistance. But in cases in which no such condition exists and no heart condition is found, the pulmonary hypertension is the primary, or only, disease.

Patients who are eligible for entry into the registry include children older than 1 year of age and adults who have pulmonary hypertension of unknown origin.

The 35 participating medical centers hope to enroll a minimum of 150 patients a year for the 3-year study period. Specific information will be recorded on a patient reporting form and forwarded to a data and coordinating center for analysis.□

First CC Food Service Aide Retires After 29 Years

Eunice Nichols, the first food service aide employed by the Clinical Center, has retired after 29 years of outstanding service.

As senior metabolic cook at the time of retirement on June 11, Mrs. Nichols began her career under the National Heart Institute.

Mrs. Nichols

Edith Jones, chief of the Nutrition Department at the CC stated, "We could not have opened the Clinical Center without Mrs. Nichols' help." She emphasized Mrs. Nichols' accomplishment in moving from a food service aide to the supervisory position of senior metabolic cook in the laminar air flow and 8th floor metabolic kitchens.

"She is a good example of upward mobility in our department. She has moved to the top in the metabolic kitchen," Mrs. Jones explained.

Mrs. Nichols worked under a dietitian and investigator to support the metabolic studies of the NHLBI, NIADDK, and NCI. A metabolic balance study is a method of investigating the metabolism of chemical elements or food constituents in a patient by determining the loss or retention of substances in the body.

On the laminar air flow unit, patients are fed whatever they want, whenever they want it. However, they often will not eat the food prepared for them. "It's rewarding when the patients are able to enjoy a tray. They are so appreciative of whatever you do for them," said the retiree.

Before joining NIH, Mrs. Nichols worked for the Census Bureau and the Labor and Treasury Departments. In 1978, she received an award for being one of the original 25-year employees of the Clinical Center.

She was honored at a retirement party at Bish Thompson's Restaurant. Her retirement plans include sewing, gardening, traveling, and perhaps going back to school.□

Unwanted NIH Library Books Displayed

NIH Library users may continue to view books and monographs scheduled for removal and request that they be retained by the library or transferred to the user's branch or laboratory.

The second display started July 12 and continues through Aug. 6. Another 4-week display will start Aug. 9. The process will continue until all the volumes scheduled for removal have been exhibited.□

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