

# The NIH Record

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## NIH CAMPAIGN 1982 CFC Starts In Early October



The 1982 NIH Combined Federal Campaign of the National Capital Area is scheduled to start on Monday, Oct. 5. Acting NIH Director Dr. Thomas E. Malone is chairman and Dr. Ruth L. Kirschstein, Director of the National Institute of General Medical Sciences, is vice-chairman.

Dr. Kirschstein has appointed William T. Fitzsimmons, NIGMS executive officer, as NIH campaign coordinator.

The CFC campaign is a once-a-year solicitation of Federal Government employees for support of voluntary health and social service agencies in the United Way of the National Capital Area (including the agencies of the United Black Fund), national health agencies, international service agencies, national service agencies and local nonaffiliated agencies.

Each year the President appoints the chairperson for the campaign in the National Capital area. This year, President Reagan has appointed the Honorable Malcolm Baldrige, Secretary of Commerce.

The 1982 CFC goal is \$13,600,000, an increase of \$1,180,000, or 9.5 percent over the achievement of the 1981 CFC. The overall campaign goal is determined by past giving performances from agencies in the current campaign, the needs of the voluntary agencies participating, and an analysis of factors affecting personal giving levels.

The NIH CFC campaign will last approximately 6 weeks. Campaign coordinators from various B/I/D offices will be contacting all NIH employees on ways of contributing to this year's campaign.

Last year, NIH collected over \$213,000 for the 1981 CFC campaign. This year's contributions should well exceed this amount.

"Reaching People Who Need You," is the theme of the 1982 campaign.

Just one CFC-supported agency now conducts child-assisting community self-help programs in 203 overseas communities of 17 countries. □

## Drs. Seal and Talbot Assume New NIH Roles

### Dr. Talbot Named NIAID Deputy Director

Dr. Bernard Talbot, special assistant to the NIH Director since 1978, has been named deputy director of the National Institute of Allergy and Infectious Diseases effective on Oct. 1.

Dr. Talbot succeeds Dr. John R. Seal, deputy director since 1975, who has postponed his previously announced retirement at the request of Dr. Malone to organize a new NIH Disease Prevention Research Program.

Since 1975, Dr. Talbot has been deeply involved in the original development and subsequent revisions of the unprecedented NIH guidelines that cover the conduct of recombinant DNA research at institutions throughout the United States. He represented the NIH before Congress and became a widely utilized spokesman—on this and other issues—to the media and at scientific and citizens' meetings.

In 1978, he received the PHS Commendation Medal for "support of administration of the intramural programs and of NIH activities in recombinant DNA molecule research."

Dr. Talbot came to NIH in 1970 as a grants associate in the Division of Research Grants.



From 1971 through 1975, he managed research contract and review activities in the virus cancer field for the National Cancer Institute. He joined the NIH Director's staff in 1975 as a special assistant for intramural affairs.

Dr. Talbot holds a B.A. from Columbia College and received an M.D. from the Columbia University College of Physicians and Surgeons. He was awarded the Ph.D. degree by the Massachusetts Institute of Technology. □

### Dr. Seal To Develop Prevention Research

Dr. John R. Seal is leaving his position as deputy director of the National Institute of Allergy and Infectious Diseases to develop a new NIH Disease Prevention Research Program.

His assignment as special assistant for disease prevention research, Office of the Director, NIH, begins Oct. 1. The newly created program and Dr. Seal's appointment were announced by Acting NIH Director Dr. Thomas E. Malone.

Dr. Seal has delayed his previously announced retirement to establish the program. Its intent is to take advantage of new opportunities for promotion of disease prevention, to enhance public recognition of numerous NIH contributions to prevention and, where possible, to promote awareness of prevention among NIH constituents.

One of Dr. Seal's first objectives will be to assist individual Institutes in identifying oppor-



tunities for prevention-related research and to enhance these efforts. This will include identifying programs and plans that have a trans-NIH focus and designating the appropriate "lead Institute" for such programs.

The program will be built in part upon a nucleus of established NIH prevention-related initiatives. These include nutrition, accelerated vaccine development, prevention of birth defects, prevention and control of hypertension, and the National Toxicology Program.

At NIAID, Dr. Seal served as director of intramural research from the time he joined the

(See DR. SEAL, Page 11)

# The NIH Record

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## Computers in Medical Care Symposium To Be Held in D.C.

The Fifth Annual Symposium on Computer Applications in Medical Care will be held Nov. 1-4 at the Sheraton Washington Hotel.

Four NIH B/I/D's and one NIMH component are participating in the symposium which is designed to inform physicians, health care administrators, biomedical scientists, engineers, and other health care professionals about current and potential applications of computer technology to health care and to identify areas of research and development that need to be addressed.

NIH computer scientists serving on the board of directors for the symposium are Drs. William R. Baker, DRR; Henry S. Eden, DRS; William C. Mohler, DCRT; and Urs E. Rutiman, NIDR.

The registrar for the symposium is Janice Eldridge at 676-4285.

In addition, on Oct. 31 and Nov. 1, there will be a joint conference of the Society for Advanced Medical Systems and the Society for Computer Medicine. The main topic of this conference will be Computers in Ambulatory Medicine. □

## CPR Instructor Course Offered by OMS

The Occupational Medical Service is offering a six-part CPR instructor candidate course for persons who have a current basic cardiac life support card.

The course will meet on Mondays and Wednesdays from 1 to 4 p.m. on Oct. 19, 21, 26, 28 and Nov. 2 and 4.

For additional details, call the CPR Training Office, 496-4111. □

## Fire Prevention Week Begins in Oct.

NIH employees are reminded that Fire Prevention Week begins Oct. 5. The NIH Fire Department will be holding evacuation drills in all NIH buildings. Employees should inspect their areas to see if there might be any fire hazards where they work. For further information call 496-2372. □



Dr. Ruth L. Kirschstein, Director, National Institute of General Medical Sciences (third from l) presented the NIH Award of Merit to: (l to r) Helen Lourim, office services assistant; Morris Thomas, equipment operator; and Emily Johnson, secretary to the Director. Each awardee was cited for important contributions in furthering the mission of NIGMS.

## Bike Club Holds First Meeting On October 12

The NIH Bicycle Commuter Club will hold its first fall meeting on Tuesday, Oct. 12, at noon, in Bldg. 29, Rm. 115. Club member Al Del Grosso spent a month this summer touring Europe by bike, and will show some of his slides. He will also discuss the details on how to successfully transport a bike and gear by airplane and train.

All interested in biking are encouraged to attend. For further information about the meeting or for commuting information, contact Louis Mocca, 496-1920. □

## Training Tips

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

	Course Days	Deadline
FOI Workshop (Freedom of Information) for Contract Staff	10/9 or 10/16	9/29
Adult Education	*Ongoing	

\*This can lead to general education diploma.

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

## Annual Leave: Use It Or Lose It By Jan. 9, 1982!

Annual leave in excess of the maximum carryover balance is normally forfeited if not used by the end of the current leave year.

If you have not already planned to take those excess hours of annual leave, you should discuss your leave with your supervisor now.

Your bi-weekly Earnings and Leave Statement tells you how much annual you must use so that you will not lose it when the leave year

## Medicine for Layman Lecture Series Continues

Medicines: What You Should Know will be discussed on Tuesday, Oct. 6, as the Medicine for the Layman lecture series continues. Dr. J. Richard Crout, director of the Bureau of Drugs, Food and Drug Administration, will discuss where drugs come from, how they were discovered, and how they are currently developed and tested. He will also describe their benefits and side effects.

Dr. Jay Hoofnagle, senior investigator in liver diseases for the Digestive Diseases Branch, NIADDK, will explain the ABC's of Viral Hepatitis Oct. 13. He will describe the three types of viral hepatitis: type A (infectious), type B (serum), and type non-A, non-B, and how they are transmitted and treated. Dr. Hoofnagle will also discuss current research, including the development of a hepatitis vaccine.

### Exercise To Be Discussed

On Oct. 20, Dr. Ronald Crystal will discuss the Benefits and Risks of Exercise with special emphasis on running. Dr. Crystal, chief of the Pulmonary Branch, NHLBI, is an experienced distance runner himself, having recently completed his fifth Boston Marathon this year.

The Medicine for the Layman lectures are held Tuesday evenings at 8 p.m. in Masur Auditorium. For more information call 496-2563. □

ends Saturday, Jan. 9, 1982.

In spite of planning, circumstances sometimes arise which prevent you from taking leave that has been scheduled and approved earlier during the leave year.

In such cases, you and your supervisor are jointly responsible for ensuring that any "use or lose" leave is rescheduled in writing no later than Saturday, Nov. 28. □

# Historic Smith Island Needs Medical Volunteers

Physicians and nurses who find themselves with time on their hands on a weekend might consider entering into a unique barter arrangement with the historic Chesapeake Bay fishing community of Smith Island. The experience may also provide the feeling that they have helped to preserve a way of life being threatened unless adequate medical care can be found for its 563 water-bound inhabitants.

Since the 1650's, the fishermen or as they prefer to be called today, "watermen" of Smith Island have lived from the proceeds derived from the gathering of the bay's delectable blue crabs and oysters.

Over the years what has evolved is a fiercely independent Christian community with a habit of hard work, and a distinctive speech dialect akin to what was spoken at the time of Maryland's colonial heritage.

For the past 2 years, the medical plight of the Smith Island watermen and their families, as well as a deep interest in the lives and cultures of other Chesapeake Bay fishing communities, has been the pursuit of Dr. Cecil Fox,



Smith Island's fishing fleet is among some of the sights a medical provider will see on a weekend visit.

declining population of young people who are drifting away to the mainland. Another, is that the only way one can commute to the island is by boat or helicopter. Nearby Tangier Island, with a similar fishing community, has the advantage of having an airport. Once a week a physician flies there to treat families.

On Smith Island today there are people who have been born on medical evacuation helicopters en route to the hospital. Usually, a pregnant woman will wait out her last days before delivery at a residence on the mainland. Daily, Smith Island children take the round trip 22-mile commute across the water to attend school. Sometimes freezing winter weather interferes with island travel when it becomes icebound.

Current strategies about meeting the island's medical needs are being discussed with Dr. Fox, Rev. Henry Zollinoffer, and the 1977 Pulitzer prizewinner, William W. Warner, whose book *Beautiful Swimmers* depicts how life has evolved in the Chesapeake Bay region due to the blue crab industry.

Islanders are hoping that a physician, nurse, or a recently graduated physician's assistant might like to involve themselves in a "simpler way of life," and live on their island permanently.

Any prospective candidate who would be interested in coming to Smith Island for a weekend should know that they can bring their family. Free transportation, lodging, and board will be provided by the community at a waterside house. In exchange, the islanders expect that medical services would be provided on an "on-call basis." Sometimes a physician might be called upon to spend 4 hours seeing watermen and their families.

Eventually, the Smith Islanders would like to see a retired medical provider return and come and live with them on the island; so he might tend to the needs of the three small villages comprising the island population.

In the meantime, they are exploring the possibility of establishing a scholarship for a native Smith Islander to attend a nursing school and return later.

"These people are trying to help themselves, but there are some things that they cannot do," says Dr. Fox, a PHS officer, who observes that his interest in these people follows the service's tradition of giving assistance to mariners.

"Besides," he says, "this is my contribution to people I admire." He sees Smith Island as one of the last bastions where the "Protestant work ethic" is still adhered to, and where people still find solutions to problems through their own resources.

Dr. Fox sees several reasons as to why such a community should be preserved: "It is a remarkable display of how our society came into being—through hard work and self-determination. It's a conservative's dream. It shows that a society can provide a solution to most ills."



Those who participate will stay in this guest house.

Pleas for help at Smith Island have been posted on bulletin boards at NIH, the National Naval Medical Center, and at Walter Reed Army Hospital.

Dr. Fox's announcements of the barter arrangement states that anyone applying "must have a Maryland license, and remember that Smith Island is a Christian community with decorum expected."

Candidates can contact the Rev. Zollinoffer at (301) 425-3081, or Dr. Fox at 576-2807. □



The Rev. Zollinoffer (r) met with Dr. Fox on Smith Island over Labor Day weekend. Islanders came together then for spiritual and moral renewal when they held their 92nd annual camp meeting.

a biochemist with NCI's Laboratory of Biochemistry.

The way man has organized his life from around the sea has been a life-long interest for Dr. Fox, who, when not looking into the scientific explanation for the early diagnosis of human cancer, sails his 20-foot catboat to and around the historic island communities of the Chesapeake Bay.

Previously, Dr. Fox has observed life or lived in fishing villages in Texas, Sri Lanka, Sweden, northern Mexico, and the Maritime Provinces of Canada, where he worked as a marine biologist searching for new products from the sea.

"I've always been interested in the 'hunters and gatherers'—the simplest economies," says Dr. Fox. "I'm always amazed that they are still surviving in our modern world.

"These people are intelligent, capable, and industrious," he notes, citing the Smith Islanders resourcefulness at meeting their own medical needs by having 30 watermen take CPR training, and several others trained in emergency medical procedures.

Today, the approximately 5-by-10-mile island is faced with several other problems. One is a

## Credit Union Offering Variety of Certificates

Examples of All Savers yields:

Joint Taxable Income 1981	Your Maximum Tax Bracket	12.61% For taxable equivalent yields of	Single Individuals Taxable Income 1981	Your Maximum Tax Bracket	12.61% For taxable equivalent yields of
\$29,901-35,200	37%	20.02%	\$18,201-23,500	34%	19.11%
\$35,201-45,800	43%	22.12%	\$23,501-28,800	39%	20.67%
\$45,801-60,000	49%	24.73%	\$28,801-34,100	44%	22.52%
\$60,001-85,600	54%	27.41%	\$34,101-41,500	49%	24.73%

(Based on 70% of the average Treasury Bill yield of 18.01%)

The NIH Federal Credit Union is offering a variety of certificates for all kinds of financial investments.

On Oct. 1, the All Savers certificate will be available, permitting up to \$1,000 in tax exempt dividends for individual filers and up to \$2,000 for joint filers. All Savers yields, which are announced monthly, are based upon 70 percent of the average yield of current 52-week Treasury Bill yields.

### Rate is 12.6 Percent

The interest rate starting Oct. 1 is 12.61 percent, which will be effective until Oct. 5.

The key determinant of the All Savers benefit is based on the individual's taxable income bracket. In general, the certificate is preferable for those in the middle or higher income brackets because the equivalent yield is considerably higher than the actual rates available on most taxable certificates.

Rates and regulations on All Savers certificates are subject to change without notice; Federal law prohibits the payment of dividends in excess of available earnings; and, there is a substantial penalty for early withdrawal.

For NIHFCU members with financial profiles not fitting the optimum All Savers certificate guidelines, there are a number of other investment opportunities. All NIHFCU certificates are insured up to \$100,000 by the National Credit Union Administration, an agency of the Federal Government.

The current certificate investment portfolio available is:

- **6 & 12-month Certificates/\$1,000 Minimum**  
9.5% APR  
9.9% Effective Dividend Yield
- **12-month Certificate/\$2,500**  
13.00% APR  
13.88% Effective Dividend Yield
- **30-month T-Bill Certificates/\$1,000 Minimum**  
Based on current Treasury Bill rates; changes every 2 weeks.
- **NIHFCU Money Market Certificates/\$10,000 Minimum**  
Generally 0.25% above the 26-week T-Bill rate as announced every Monday evening.
- **Jumbo Certificates/\$100,000 Minimum**  
Rates are negotiable; a personal appointment must be made.
- **All Savers Certificates/\$500 Minimum**  
Based on 70 percent of the average investment yield of the current 52-week Treasury Bill yield; changes every month; offers special tax exemption status.

A major campaign to promote the Net Check program has been launched by the NIHFCU. Through its use, an employee's paycheck can be deposited directly; the account automatically entitles the depositor a share draft account without service fees or a minimum balance required; and the account earns 5.75% dividend compounded daily.

For more information about the certificate program or other details, call 496-2331. □

## Alex J. Matosian Becomes Chief of Printing Branch



Mr. Matosian, new chief of the recently reorganized Printing and Reproduction Branch, brings managerial expertise and printing know-how to NIH.

Alexander J. Matosian, formerly with the Government Printing Office, has been appointed chief of the NIH Printing and Reproduction Branch.

In addition to his managerial ability, he has had extensive practical experience as a pressman working in both color and web presses. He ran the color presses for a major national printing firm in Washington, D. C., which prints the *National Geographic Magazine*.

After working in private industry, Mr. Matosian joined the Government Printing Office in 1962 where he learned to operate the web press, and subsequently became group chief of second shift operations of the press room, supervising 39 people.

He then worked for GPO Printing Procurement, certifying bids and outside purchase of printing contracts. He was also in charge of all four-color printing. For the following 8 years, he was in the Planning Service Division, Special Services Section, where he was responsible for handling all term contracts and related problems.

Mr. Matosian is on the board of directors, education chairman, and past president of the Franklin Technical Society, which is comprised of printing managers throughout the Federal Government. He is also 1st vice-president and program chairman of the Washington Litho Club, and is past president of the Washington Club of Printing House Craftsmen.

Among many awards, he received the Graphic Arts Award from Joint Graphics Communications and the 1979 and 1981 Craftsman of the Year Award.

In addition, he teaches basic and advanced press work at the Metropolitan Washington School of Printing through Montgomery College, which he has done for the past 10 years.

In his new position, Mr. Matosian will oversee all types of printing at NIH including paper copiers. He will be supervising approximately 74 employees.

Edward Shumate, who has been serving as acting chief of the branch for the past 6 months, has been appointed assistant chief.

Other supervisory positions in the branch will remain the same: Joseph Taylor as staff assistant; Benjamin Jenkins as chief of the production section; and George Mendez as chief of the printing procurement section. □

## An Old Suggestion Finally Rings Bell

Dr. Lloyd G. Herman, retired Division of Research Services environmental biologist, recently received an NIH Suggestion Award, submitted in January 1977. His suggestion: a museum or "Hall of Science" located on the NIH campus.

Dr. Herman, who has been associated with NIH since 1958, suggested:

"NIH is known and respected worldwide, but nowhere, to my knowledge, is there any area designated to display the various instruments used, developed, or modified by research workers who have become famous or been awarded Nobel prizes. Many of these instruments and equipment have been lost, scrapped, surplussed or stored in attics, etc."

He further stated in his 1977 submission, "In many cases, a display of (old) models triggers a new series of ideas for improvement or modification, so that a museum of this nature can be an ongoing educational project, especially for graduate students or those 'near genius' who can grasp an idea merely by observing a model. Science museums also perform a useful function in any developing society, as do halls of fame for hockey, foot-



Dr. Herman's 4-year-old NIH suggestion finally received recognition in July 1981. He retired in 1979 after a long career in environmental contamination research.

ball, baseball, etc."

A museum is planned as part of the new permanent NIH Visitors Center in the ACRF addition to the Clinical Center. □

# Recombinant DNA Advisory Committee Proposes To Relax Gene-Splicing Regulations

Major revisions in the NIH Guidelines for Recombinant DNA Research were proposed recently during a 2-day meeting of the 25-member Recombinant DNA Advisory Committee. The existing Federal safety guidelines could be changed from mandatory standards into a nonbinding code of good laboratory practices.

For now, the proposals on gene-splicing are tentative. The committee has requested that its recommendations be published in the *Federal Register* for public comment, and will meet again in January after studying the comments.

Effective since 1976, the proposed guideline changes would end requirements for special handling procedures and special containment vessels and rooms for keeping gene experiments separate from the environment, as well as easing the current penalties for violations.

The committee also made a recommendation that will facilitate the industrial development of gene-splicing products. The present guidelines require that almost all production in batches larger than 10 liters be approved in advance by the advisory committee. This has resulted in delayed processing since the committee meets only four times a year.

Under the new recommendations, such proposals could be approved locally by one of the 200 biosafety committees. The final recommendation to NIH on this matter is expected

to be approved in the next month.

Even though most experiments can be done on a small scale, shifting to industrial-size production would require far larger batch sizes. Industries producing such substances as human insulin and human growth hormone by gene-splicing methods have already applied for, and been granted permission to conduct large-scale tests that exceed the standard 10-liter limit for some applications.

This change will apply to academic scientists as well as to industry, and was suggested by Dr. Irving Johnson of Eli Lilly and Company.

The advisory committee's proposal on large-scale procedures will apply only to three widely used experimental systems, but these account for most of the work done in gene-splicing research. Those three systems that are exempt from prior Federal approval involve growth of genetically engineered substances in *E. coli*, in baker's yeast, or in a soil bacterium called *Bacillus subtilis*. Almost all current work is done in one or another of these.

Developed in 1973, gene-splicing technology mixes the genetic material, or DNA molecules of two or more species. The genes of interest are spliced into bacterial carriers suitable for growth in the laboratory. The bacteria are then induced to carry out the genetic instruction of the foreign material in a manner as to produce

the desired substance.

Thus far, among the major developments achieved through recombinant DNA research have been laboratory production of human insulin for use in treating diabetes, and interferon, a promising antiviral substance.

The advisory committee acknowledged that thousands of gene-splicing experiments have proved that combining DNA molecules doesn't transform harmless bacteria and viruses into creators of dangerous new diseases as once feared.

Currently, the guidelines are binding on researchers receiving Federal support. Although never binding on industry under Federal rules, they have been followed voluntarily by virtually all those involved in the work.

In the future, the NIH committee will be retained to oversee the guidelines and review experiments voluntarily referred to it by universities or industry. However, the 200 or so local biosafety committees established under the NIH rules would no longer be required, though universities are expected to retain them for local oversight of biohazards. Final action on these proposals will be up to the NIH Director.

For more information, contact Dr. William J. Gartland, executive secretary, RAC, or Dr. Elizabeth Milewski, executive secretary, Large Scale Review Working Group, NIAID, Bldg. 31, Rm. 4A-52; (301) 496-6051. □

## Dr. J. Axelrod Lectures Extramural Associates

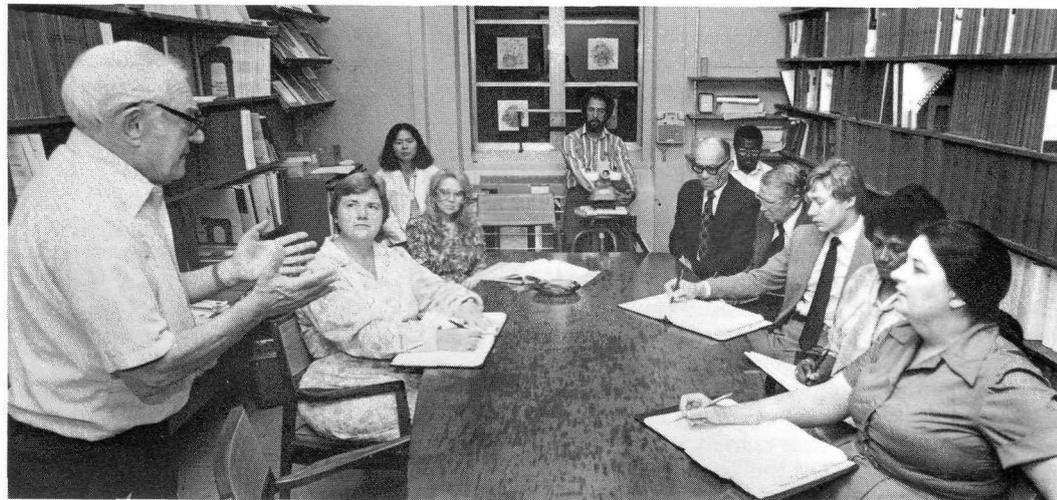
The first group of 1981-82 NIH extramural associates were recently briefed by former Nobel prizewinner Dr. Julius Axelrod, chief, Section on Pharmacology, Laboratory of Clinical Science, NIMH, on the subject of Neurotransmitters and Psychoactive Drugs. The seminar was part of an intensive orientation series just completed by the associates.

The six associates in residence at NIH for their 5-month program of participation in biomedical research programs and how other Federal agencies operate, were exposed to more than 40 top-level NIH science administrators during orientation, including the Acting NIH Director, the Associate Director for Extramural Research and Training, the Assistant Director for Intramural Affairs, and several B/I/D associate directors for extramural programs.

### Assignments Planned

As the program continues, the associates will now plan, with their respective advisors, the assignments and projects to strengthen their own institution's capability for increasing the research base and support of NIH's mission through use of their newly gained expertise when they return.

The present group of advisors for the associates are from six Institutes: Dr. Katherine L. Bick, NINCDS; Dr. Thomas M. Valega, NIDR; Dr. Dennis F. Cain, NCI; Dr. Constance W. Atwell, NEI; Dr. Bitten Stripp, NHLBI; and Dr. Anthony A. Rene, NIGMS.



The six extramural associates listen to Dr. Axelrod explain neurotransmitters and psychoactive drugs while attending a recent seminar in his lab. From the left around the table are: Dr. Axelrod, Dr. Virginia L. Martin, professor of biology, Queens College, N.C.; Jean Oliver, EAP director; Dr. Vivian Hook, NIMH; Dr. Michael Brownstein, NIMH; Dr. Frank Douglas, NIMH; Dr. Joseph L. Harrison, professor and chairman of biology, Lincoln University, Pa.; Dr. Franklin F. Flint, professor and chairman of biology, Randolph-Macon Women's College, Va.; Dr. Andrew B. Rudczynski, assistant director for research and grants, University of Maryland; Dr. Mary E. McKelvey, professor of biology, Fisk University, Tenn.; and Dr. Dorothy M. Feigl, professor and chairman of the chemistry and physics department, St. Mary's College, Ind.

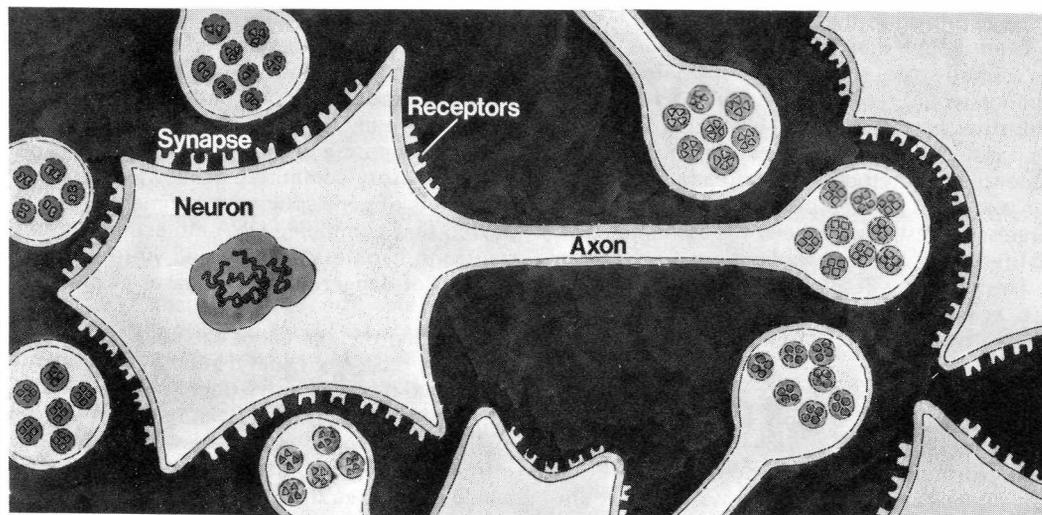
The Extramural Associates Program is a special adaptation of the opportunities available under the Intergovernmental Personnel Act of 1970 to effectively promote the entry and participation of ethnic minorities and women in NIH-supported research.

Under the program, NIH invites key administrators involved in science, from schools contributing significantly to the interests of minorities and women in science, to spend 5 months residing in Bethesda.

After completing the program, the associates will have a comprehensive working knowledge of Federal support of biomedical research, grants and contracts, various policies and functions of the different agencies, and the ability to incorporate this knowledge into their own institution's activities. □

Genius is one percent inspiration and 99 percent perspiration. — Thomas Edison □

# Brain Cell Opiate Receptors Discussed During 1st Medicine for the Layman Lecture



A detailed diagram of a neuron shows the many opiate receptors on the cell surface.

The 1981 Medicine for the Layman series got off to a rousing start Sept. 15 with a talk by Dr. Candace Pert, NIMH, on Brain Opiate Receptors: Keys to the Biochemistry of Emotion. The CC's Masur Auditorium was filled to capacity.

Dr. Pert reviewed briefly the history of the study of brain receptors. She defined opiate receptors as the specific tissue sites in the brain where drugs like opium first bind (or connect) to initiate their psychological effects and where behavior is regulated and "fine tuned."

In her talk, she described the various parts of the nerve cell (neuron), which is the basic functional unit of the central nervous system, and the synapse, across which jump the electrical impulses when the receptors are appropriately set.

She explained that each cell has specific receptors on its cell surface that react to specific neurotransmitters acting as "keys" and open up the cell for ion transport through the membrane.

Dr. Pert elaborated on the distribution of opiate receptors in two specific areas of the brain: 1) in the sensory input zones (areas that receive input from outside stimuli, for example, hearing, sight, smell, and taste) and 2) in the limbic system, the area of the brain that mediates or regulates the emotions. The discovery of opiate receptors enabled the discovery of the brain's own morphine, peptides called enkephalins (meaning "pertaining

to the head").

She coined a new term—"neurojuices"—for the neurotransmitters and neuromodulators. She discussed several neurojuices and their receptors and said that the number of discovered neurojuices is growing rapidly. In 1950 only two were known, but by 1981 at least 50 more have been discovered.

Dr. Pert discussed the various methods of visualizing receptors: by autoradiography, a method whereby a sliced segment of animal brain is put on a slide and then the slide is pressed against tritium-sensitive film. The computer then quantifies the amount and location of the opiate receptors on the slide by the amount of tritium that is bound to the receptor and then produces an image.

Another method of visualizing opiate receptors and cells at the same time is to dip the slide in emulsion and then place the slide in a dark room for many weeks to develop it.

"Understanding the biochemistry of mental illness is one primary goal of neuroscience. The brain is a complicated chemical factory and many things can go wrong. It isn't simply a matter of the way one might have been toilet trained," she said.

Even though neuroscience is in its infancy, Dr. Pert believes it is not premature to suggest that neurojuices, particularly neuropeptides, are involved in filtering incoming sensory information to put it in an emotional context to aid the animal in selecting the important stimuli from the many others in order to survive. □

## Multi-Cultural Fair Held For Summer Students at NIAID

A Multi-Cultural Awareness Fair held as a final salute to summer students was hosted recently by the Federal Women's Program Subcommittee of NIAID. It was planned to give them a glimpse of the ethnic richness of NIH.

The event provided a kaleidoscope of sights, sounds, aromas and tastes from around the world. Crafts from Bolivia and Africa were on display. Italian and Chinese cooking demonstrations were held, and those attending also had the opportunity to see how Oriental brush painting is done. □

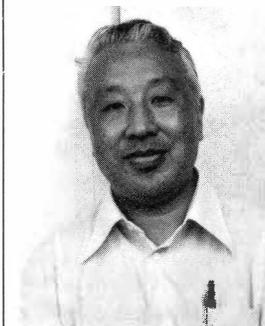
## Teeth Extraction Patients Needed for Study

The National Heart, Lung, and Blood Institute and the National Institute of Dental Research are conducting a study of cardiovascular, hormonal, and psychological responses to tooth extractions in patients with hypertension.

If you are less than 40 years old, have high blood pressure, and need to have wisdom teeth or other teeth extracted, please call Dr. David Goldstein at 496-4042 or 496-3175, or Dr. Ray Dionne at 496-4371 or 496-5237. □

## Dr. W. Chang Arrives From China To Work With NIMH

Dr. Wen-Ho Chang arrived recently from China to implement the National Institute of Mental Health Intramural Research Program's cooperative health agreement between China and the United States.



Dr. Chang

biology Branch, participated in scientific meetings held in China last fall.

### To Study Drugs

While there, NIMH scientists met Dr. Yu-Tsen Shen, associate professor and director of the Institute of Mental Health, Peking Medical College, and Dr. Chen-Yi Hsai, professor and chief, department of psychiatry, Shanghai First Medical College. The collaborative effort was then conceived.

Dr. Chang, chief of the neurobiochemical laboratory in Dr. Shen's program, will spend his year at NIMH learning about the new techniques in quantitative analysis of amine metabolites and psychoactive drug levels, Dr. Goodwin said.

Because of his previous work, Dr. Chang is particularly interested in studying the neurotransmitter norepinephrine and its metabolites as well as other monamine neurotransmitters, such as serotonin and dopamine.

Following his year here, Dr. Chang will bring the new techniques to China and continue collaborative studies involving blood samples from patients in Chinese psychiatric hospitals, Dr. Goodwin continued.

### Interested in Schizophrenia

"We are particularly interested in the multiple generations of schizophrenia in certain Chinese families, as well as the striking differences in rates of depression versus schizophrenia. The ratio of depression relative to schizophrenia is reported to be much lower in China than in the West.

"Also," said Dr. Goodwin, "there are clinical indications that drug metabolism is different in Chinese individuals than it is in Western patients and now we have the techniques to find out whether and why this occurs."

Between 1965 and 1976, the "cultural revolution" placed an 11-year hiatus on mental health research in China. For example, Dr. Chang was ordered from Peking in 1969 to work in a northwest province for 10 years, 6 of which were spent as a "barefoot" doctor with a people's commune hospital.

Between 1977 and 1979, he was permitted to work half-time in Peking and it was not until 1979 that he could resume full-time research activities in the Institute of Mental Health. □

## Dr. Carl Levy, Baltimore Cancer Lab Chief, Dies

Dr. Carl C. Levy, 53, chief of the Laboratory of Molecular Biology at the Baltimore Cancer Research Program, Division of Cancer Treatment, National Cancer Institute, died recently of leukemia.

Dr. Levy joined NCI in 1962 as a senior investigator in the Laboratory of Cellular Physiology. In 1968 at the Baltimore Cancer Research Center, he became head of the Enzymology and Drug Metabolism Section. In 1971, he was named chief of the Laboratory of Pharmacology, and from 1975 until his death, he was chief of the Laboratory of Molecular Biology.

Dr. Levy was well-known for his studies on the regulation of intracellular messenger ribonucleic acid. Through these studies he found that the messenger RNA molecule could



Dr. Levy

inhibit enzymes responsible for the destruction of nucleic acids.

His other major research included the characterization of many new and important enzymes. He was interested in extending his work in protein chemistry to new areas. At the time of his death he was working on the isolation and characterization of certain viral proteins.

Dr. Levy was also writing a lengthy review on ribonucleases, the enzymes responsible for catalyzing the destruction of nucleic acids. During his career, he authored over 100 scientific papers.

A graduate of the College of the City of New York in 1950, he received his Ph.D from Rutgers University in 1957. During the Korean War, he saw combat and was awarded two purple hearts.

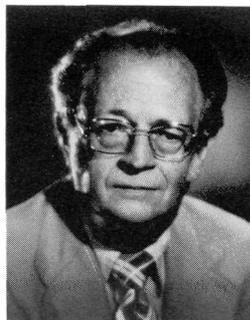
"Dr. Levy was a tireless experimenter. Over the years, he managed to convey his enthusiasm for scientific inquiry to many undergraduate and medical students," said Tim Karpetsky, a long-time companion and co-worker of Dr. Levy. "However demanding his research and administrative duties, Dr. Levy always managed to offer personal and professional advice to everyone."

Dr. Peter H. Wiernick, acting associate director for the BCRP, said, "Carl was an eminent scientist and had little patience with bureaucracy when it inhibited his research. I know he will be especially missed by the young people who looked up to him for guidance."

## Reproduction Society Honors Two NIH Scientists



Dr. Hodgen



Dr. Ross

The Society for the Study of Reproduction this year presented two separate awards to NIH scientists.

The 1981 Carl G. Hartman Award was presented to Dr. Griff T. Ross, deputy director of the Clinical Center. Dr. Gary Hodgen, chief, Pregnancy Research Branch, National Institute of Child Health and Human Development, received the 1981 Research Award.

The Hartman Award is given annually to highlight researchers contributing to the understanding of reproductive biology. The Research Award recognizes outstanding research by an SSR member over the preceding 6-year period.

Dr. Hodgen, who has been at NICHD since 1969, studies reproduction in monkeys, whose reproductive system is similar to that of humans. Among his most notable accomplishments has been the development of nonhuman primate models for research on the menstrual cycle and ovulation. These studies have concentrated on pituitary-ovarian function, the actions of hormones on the uterus,

fertilization, and early embryonic development.

Basic research conducted in the Pregnancy Research Branch has contributed to the development of new treatments for infertility. Last year, Dr. Hodgen and a colleague reported on a new procedure for overcoming infertility caused by blocked fallopian tubes. The procedure, called low tubal ovum transfer, has been used successfully in monkeys and may provide an alternative to *in vitro* (test tube) fertilization for women.

Most recently, Dr. Hodgen and his colleagues have devised a monkey model for treating some fetal malformations while the fetus is still in the uterus. Ultimately, the experimental methods they have developed in monkeys for treating defects of the brain and spinal cord *in utero* may be applied to prevention of such crippling defects in children.

Dr. Ross has conducted extensive research on both human and other animal reproduction. In the course of his career, he has developed clinical and scientific expertise in complications of normal and abnormal pregnancy. He has carried out extensive investigations on endocrine changes in puberty, and the menstrual cycle and its disorders.

"Dr. Ross has made major contributions in female reproduction and has been a mentor to many young doctors," said Dr. John Resko of the University of Oregon Medical School, who is chairman of the awards committee. "He is very well respected and a superb recipient," he stated.

"It is wonderful to receive such a prestigious award for having done something that was enjoyable as my research has been," said Dr. Ross. □

## B. Wright, CC Dietetic Ass't., Retires After 28 Years



Mrs. Wright's retirement plans include travel, church activities, and to enjoy her grandchildren.

Beatrice Wright, a dietetic assistant in the Clinical Center's Nutrition Department, retired on Sept. 11 after 26 years of service there. Ms. Wright began her career as a food service worker in the Nutrition Department, she was later promoted to dietetic assistant.

Although she is looking forward to spending

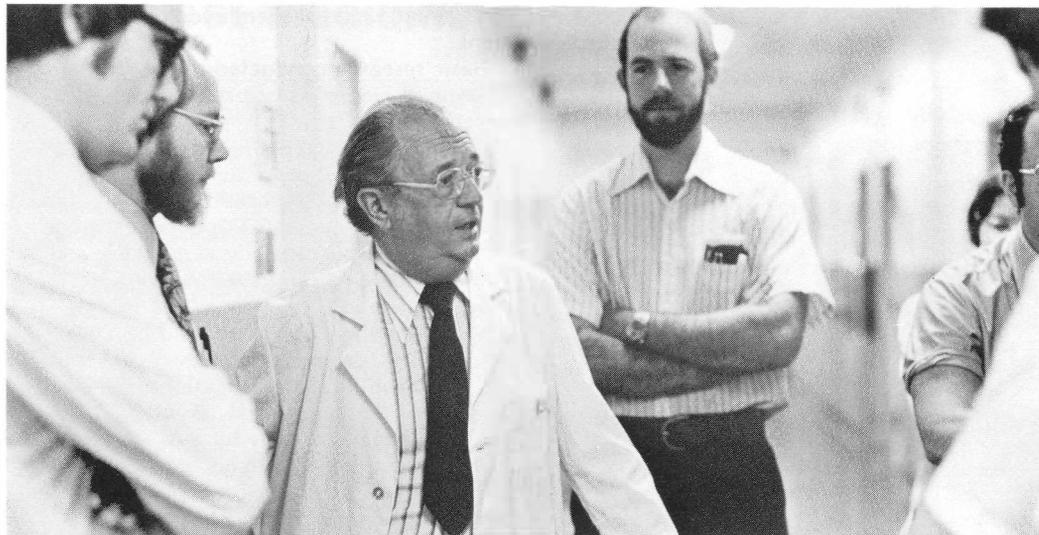
more time with her family, she admits to being "a bit nervous" about retiring. "I have worked for over 40 years and have been able to do many things. My husband and I have given our two children a good education, and we have bought our home. But I think I'm ready to leave."

Ms. Wright had many fond memories of working in the CC. "I really like the people I work with. We have problems, of course, but we've always been able to work them out. I have become good friends over the years with many people here, and I will definitely keep in touch with them."

Edith Jones, chief of the Nutrition Department said, "It's been a pleasure to have Ms. Wright as a member of our team." □

## Eat Sensibly

Overweight individuals are at greater risk for diabetes, gallbladder disease, and high blood pressure. So it makes good sense to maintain proper weight. But good eating habits also mean holding down the amount of fat (especially saturated fat), cholesterol, sugar and salt in your diet. If you must snack, try nibbling on fresh fruits and vegetables. You'll feel better—and look better, too.—*Health Style*-PHS 81-50155. □



Dr. Ross has conducted extensive research on human and animal reproduction. He has developed clinical and scientific expertise in complications of normal and abnormal pregnancy, on endocrine changes in puberty, and the menstrual cycle and its disorders.

After more than 21 years of distinguished service as a scientist, physician, and teacher, Dr. Griff T. Ross, deputy director of NIH's Clinical Center is retiring Oct. 1.

An endocrinologist, Dr. Ross began his NIH career at NCI in 1960, where he was medical officer and senior investigator of the Endocrinology Branch. In 1965, he moved to NICHD where he remained for 11 years serving as assistant chief of the Reproduction Research Branch and clinical director of the Institute.

In his present position since 1976, he is leaving to become assistant dean of clinical affairs at the University of Texas Medical School in Houston.

"I'm not leaving without regret or sorrow," he says. "My time at NIH has been one of the most exciting periods of my life. My activities here have been the fulfillment of my aims and goals as a physician scientist."

Along with his colleagues at NCI, Dr. Ross discovered that actinomycin D was an effective treatment for women with choriocarcinoma, a cancer of the placenta occurring as a complication of pregnancy.

He also helped develop radioimmunoassays as an alternative to biological assays for measuring gonadotropins. This aided in pinpointing malfunctions of the reproduction system, including choriocarcinoma and infertility, and establishing more effective treatments.

The discovery that radioimmunoassays could be used in place of biological assays increased the sensitivity of the tests approximately 2,000 times and made repeated testing feasible.

Dr. Ross and his co-workers were the first to determine that a short luteal phase, which

often leads to infertility, is caused by an occurrence prior to ovulation. The luteal phase occurs after ovulation and usually lasts 10 to 14 days. In some infertile women, however, the luteal phase lasts 7 days or less. As a result of this discovery, specific hormonal therapy of the disorder is now possible.

His experiments also allowed the diagnosis of pregnancy prior to the first missed menstrual period, and determined the mechanism by which hormones exerted effects on ovarian functions—mostly in animal model systems.

The unique understanding and contributions of Dr. Ross have brought him a number of awards and honors. His most recent was the Carl G. Hartman Award presented by the Society for the Study of Reproduction.

In 1977, he received the prestigious Fred Conrad Koch Award from the Endocrine Society. That same year, he delivered the first Carl Gemzell lecture at the University of Uppsala, Sweden, in addition to receiving the Ashbel Smith Distinguished Alumnus Award from his alma mater, the University of Texas. In 1975, he was an invited speaker to the Royal Society of Medicine in London, England.

Later, Dr. Ross was a consultant to the Expert Committee on Biological Standards of the World Health Organization; an outsider examiner for the division of reproductive endocrinology of the American Board of Obstetrics and Gynecology; and in 1977-78, was president of the Endocrine Society. He has published more than 200 scientific papers.

Dr. Ross says, "I leave with tremendous obligation to this institution. NIH offers the best opportunity available to do, to be, and to become. I'm grateful for having been a beneficiary of that kind of opportunity." □

## Communicative Disorders Branch Established by NINCDS

A new Communicative Disorders Branch is being established in the NINCDS Intramural Research Program to focus on research problems involving speech, language, and hearing.

The new branch will enable the Institute to develop and support an integrated clinical research program devoted to the sensory-motor mechanisms of hearing, speech and language

and to other areas of communicative disorders.

Branch resources will include NIH Clinical Center facilities for research patients undergoing surgical and diagnostic or treatment procedures. Among these facilities will be a modern auditory testing laboratory in the new Ambulatory Care Research Facility.

A branch chief has not yet been named. □

## Diabetes Advisory Board Appoints Eighteen Members

Eighteen members have been appointed to 3-year positions on the newly commissioned National Diabetes Advisory Board.

The appointees will review and evaluate the implementation of the Long-Range Plan to Combat Diabetes, update the plan and make recommendations to Congress, the NIH Director, the Director of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, and heads of other appropriate Federal agencies.

Formulated by the National Commission on Diabetes in 1976, the long-range plan was designed to accelerate research and the development of programs in diabetes control, health care and education.

The board's ex officio members include the HHS Assistant Secretary for Health; the NIH Director; the Directors of various NIH Institutes and other Federal agencies involved in diabetes research, education and control programs; and the associate director for Diabetes, Endocrinology and Metabolic Diseases, NIADDK.

The board meets at least four times each year, and is required to produce an annual report that evaluates the year's progress in diabetes research, treatment, education and training; analyzes fiscal year expenditures for the Federal Government's total diabetes effort; and makes recommendations concerning the long-range plan.

Approximately 10 million Americans are affected by diabetes, a leading cause of death in the United States. A disorder of carbohydrate, protein and fat metabolism, diabetes is a major contributing factor to heart attacks, stroke, kidney failure and vascular disease, as well as the leading cause of new cases of blindness among Americans today.

The new board members are: Nina Berlin, Pennsylvania Task Force on Diabetes; Dr. Marvin Cornblath, University of Maryland; Dr. Antonio M. Gotto, Jr., The Methodist Hospital, Tex.; Benjamin Greenspoon, Chevy Chase, Md.; Dr. Matthew D. Davis, University of Wisconsin; Dr. Allan L. Drash, Children's Hospital of Pittsburgh; Leatrice Ducat, Narberth, Pa.; Dr. James B. Field, St. Luke's Episcopal Hospital, Tex.; and Dr. Daniel Foster, University of Texas.

Also Gayle E. Reiber, R. N., Utah State Department of Health; Dr. Arthur H. Rubenstein, University of Chicago; Dorothea F. Sims, South Burlington, Vt.; Dr. C. Ronald Kahn, Joslin Diabetes Research Center, Mass.; Dr. Gerold M. Grodsky, University of California Medical Center, San Francisco; Caroline Lurie, New York, N. Y.; Wendell Mayes, Jr., Pioneer Broadcasting Company; Arthur Raymond, University of North Dakota; and Dr. Gerald M. Reaven, Stanford University. □

## Sailing, Sailing . . . Over the Bounding Main

R&W is chartering the Amazing Grace, reputed to be the largest of the remaining "bugeyes," on Saturday, Oct. 17, from 10:30 a.m. to 3:30 p.m. for a day of sailing.

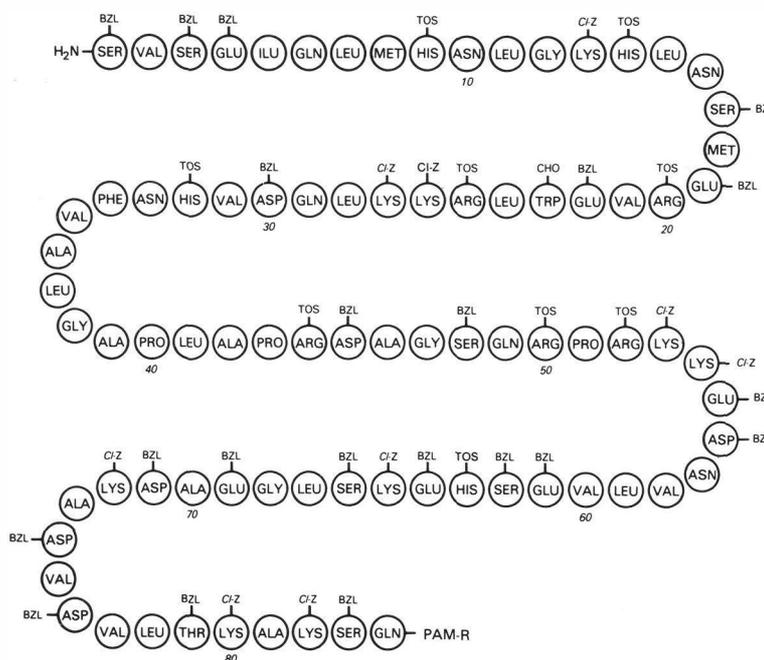
Price per person is \$20. Sign up at the R&W Activities Desk, Bldg. 31, Rm. 1A-18. Space is limited. □

## Visiting Scientist Program Participants

Sponsored by Fogarty Internat'l Center

- 8/27—**Dr. Adina Breiman**, Israel, Laboratory of Molecular Biology. Sponsor: Dr. Elizabeth Freese, NINCDS, Bg. 36, Rm. 3D02.
- 8/28—**Dr. Gerwyn George**, England, Laboratory of Pulmonary Function and Toxicology. Sponsor: Dr. C.E.R. Hook, NIEHS, Research Triangle Park, N.C.
- 8/30—**Dr. Stephen Breathnach**, United Kingdom, Dermatology Branch. Sponsor: Dr. Stephen Katz, NCI, Bg. 10, Rm. 12N238.
- 8/31—**Dr. Atsushi Muraguchi**, Japan, Laboratory of Immunoregulation. Sponsor: Dr. Anthony S. Fauci, NIAID, Bg. 10, Rm. 11B09.
- 8/31—**Dr. Gary J. Murray**, Canada, Developmental and Metabolic Neurology Branch. Sponsor: Dr. John Barranger, NINCDS, Bg. 10, Rm. 4N248.
- 8/31—**Dr. Savvas Papzoglou**, Greece, Surgical Neurology Branch. Sponsor: Dr. Paul Kornblith, NINCDS, Bg. 10A, Rm. 3E68.
- 9/1—**Dr. Nadir Bharucha**, India, Neuroepidemiology Section. Sponsor: Dr. Bruce Schoenberg, NINCDS, Federal Bg., Rm. 904.
- 9/1—**Dr. Susan P.C. Cole**, Canada, Laboratory of Molecular Carcinogenesis. Sponsor: Dr. Harry Gelboin, NCI, Bg. 37, Rm. 3E24.
- 9/1—**Dr. Yoshifumi Fukuhara**, Japan, Laboratory of Kidney and Electrolyte Metabolism. Sponsor: Dr. Maurice Burg, NHLBI, Bg. 10, Rm. 6N307.
- 9/1—**Dr. Gulilat Gebeyehu**, Ethiopia, Laboratory of Medicinal Chemistry and Biology. Sponsor: Dr. David Johns, NCI, Bg. 37, Rm. 6D30.
- 9/1—**Dr. John Grygiel**, Australia, Clinical Pharmacology Branch. Sponsor: Dr. Michael Boyd, NCI, Bg. 10, Rm. 6N111.
- 9/1—**Dr. Ashok V. Hospattankar**, India, Molecular Disease Branch. Sponsor: Dr. Bryan Brewer, NHLBI Bg. 10, Rm. 7N117.
- 9/1—**Dr. Zeev Lando**, Israel, Metabolism Branch. Sponsor: Dr. Samuel Broder, NCI, Bg. 10, Rm. 4N115.
- 9/1—**Dr. Mikael O. Larson**, Sweden, Laboratory of Kidney and Electrolyte Metabolism. Sponsor: Dr. Kenneth Spring, NHLBI, Bg. 10, Rm. 6N310.
- 9/1—**Dr. Maryvonne Laurent**, France, Laboratory of Developmental Biology and Anomalies. Sponsor: Dr. George Martin, NIDR, Bg. 30, Rm. 416.
- 9/1—**Dr. Adavi S.N. Murthy**, India, Laboratory of Cell Biology. Sponsor: Dr. Martin Flavin, NHLBI, Bg. 3, Rm. 16.
- 9/1—**Dr. Masakatsu Nishikawa**, Japan, Laboratory of Molecular Cardiology. Sponsor: Dr. Robert Adelstein, NHLBI, Bg. 10, Rm. 7B15.
- 9/1—**Dr. Makoto Noda**, Japan, Laboratory of Tumor Virus Genetics. Sponsor: Dr. Robert Bassin, NCI, Bg. 41, Rm. D229.
- 9/1—**Dr. Shinichi Ohno**, Japan, Infectious Diseases Branch. Sponsor: Dr. M. Dubois-Dalq, NINCDS, Bg. 36, Rm. 5C10.
- 9/1—**Dr. Dennis Pigott**, United Kingdom, Laboratory of Viral Carcinogenesis. Sponsor: Dr. Kurt Stromberg, NCI, Frederick Cancer Research Center.
- 9/1—**Dr. Moshe Rehavi**, Israel, Clinical Psychology Branch. Sponsor: Dr. Frederick Goodwin, NIMH, Bg. 10, Rm. 4S239.
- 9/1—**Dr. T. Joan Robinson**, Trinidad, Laboratory of Chemistry. Sponsor: Dr. David Johnson, NIADDK, Bg. 4, Rm. 141.
- 9/1—**Dr. Kaoru Segawa**, Japan, DNA Recombinant Research Branch. Sponsor: Dr. Yoshiaki Ito, NIAID, Bg. 5, Rm. B1-34.
- 9/1—**Dr. Mier Stern**, Israel, Macromolecular Chemistry Section. Sponsor: Dr. Josef Pitha, NIA, GRC, Baltimore, Md.
- 9/1—**Dr. Yu-Chung Yang**, Taiwan, Laboratory of Pathology. Sponsor: Dr. Peter Howley, NCI, Bg. 10, Rm. 2N107.
- 9/1—**Dr. Chana Zlotogorski**, Israel, Laboratory of Molecular Pharmacology. Sponsor: Dr. Kurt Kohn, Bg. 37, Rm. 5D19.

## Human Parathyroid Hormone Synthesized



This represents the chain of amino acids linked to form the synthetic parathyroid hormone. Substances attached to the chain at various locations are protective groups removed upon the completion of the synthesis. (BZL = benzyl; TOS = toluene sulfonyl; CIZ =  $\alpha$ -chlorobenzylloxycarbononyl; CHO = formyl).

The successful synthesizing of human parathyroid hormone, which regulates the calcium in a person's body, has been reported by the National Heart, Lung, and Blood Institute. The synthetic hormone may well be the key to a more complete understanding of the physiology of parathyroid hormone in the body, according to the scientists involved.

Drs. Fairwell Thomas, Rosemary Ronan, and H. Bryan Brewer, Jr., of NHLBI's Molecular Disease Branch, in collaboration with Drs. Jaw K. Chang and Meikyo Shimizu of Peninsula Laboratories, San Carlos, Calif., participated in the project.

The successful completion of this collaborative endeavor means that, for the first time, synthetic human hormone can be made available to the scientist to study its role in calcium metabolism and metabolic bone disease, and use in the radioimmunoassay to measure levels of the hormone in the blood.

Synthesis of the total 84-amino acid chain of the hormone was preceded by several years by the synthesis of the amino-terminal 34 amino acids, the end of the hormone which contains all of the biological activity, and various fragments of the carboxyl end of the hormone. Until now, attempts by these and other investigators to synthesize the complete 84-amino acid hormone have been unsuccessful.

One major problem was that during the long step-by-step process of linking the amino acids, the peptide bonds of the growing protein chain could not be protected from cleavage by the acid used during the synthesis. This premature cleavage resulted in fragmentation of the synthesized hormone and the production of various by-products.

The current successful attempt at synthesis was the result, in large part, of the availability of a new resin, the phenylacetamidomethyl (PAM) resin, to which the amino acid chain could be attached during synthesis. The PAM resin provides better protection from acidolysis

than did the resin used in previous attempts at synthesis, and reduced by 99 percent the rate of loss of the peptide from the resin.

The complete synthetic human hormone was compared with the naturally occurring hormone and was found to be virtually identical in biological activity and immunoreactivity.

Accumulating sufficient natural human parathyroid hormone for research purposes is difficult because of the extremely minute amount present in the body. Fresh parathyroid gland tissue contains only 50 parts per million of the hormone. For the analysis of the structure and function of human parathyroid hormone, Drs. Thomas and Brewer enlisted the help of more than 150 institutions and individual surgeons and physicians in 12 countries.

Now, with the availability of the synthetic parathyroid hormone, the need to accumulate quantities of natural hormone for research is eliminated.

— Larry Blaser □

## Flu Virus Vaccine Offered To Susceptible Employees

The Occupational Medical Service is offering influenza virus vaccine to employees who, because of preexisting conditions, are more susceptible to the disease and to secondary infections. It will be given in Bldg. 31, Rm. B2B-47, through November.

These preexisting conditions include heart disease; chronic lung disease, such as bronchitis, emphysema, and severe asthma; chronic kidney disease; and diabetes mellitus.

For more information, call OMS or your own physician. □

Physicians of all men are most happy; what good success they have, the world proclaims, and what faults they commit, the earth covereth. — *Frances Quarles* □

## Public, Physicians Invited to Asthma and Allergy Sessions

In October, NIH will host meetings on asthma and allergies; one for the general public, and one for practicing physicians.

On Wednesday, Oct. 14, a free conference open to the public and affected families will be held in Masur Auditorium at 7:30 p.m. NIH families with asthma or allergy problems are also encouraged to attend.

On Saturday, Oct. 17, a 1-day continuing medical education course on Practical Applications of Allergy for Primary Care Physicians will begin at 8 a.m.

Three NIAID allergists in the Allergic Diseases Section, will appear as panelists at the public conference: Dr. Michael Kaliner, section chief, and Drs. Dean Metcalfe, senior investigator, and Robert Lemanske, research fellow; along with Dr. Allan Weinstein, a Washington, D.C., allergist and consultant to NIAID; will constitute the panel.

They will briefly present the latest information on asthma and allergies; how persons can cope with related medical problems; and the newest developments in treatment. During a question-and-answer session the audience will be able to participate.

The conference is sponsored by the National

Jewish Hospital and Research Center, National Asthma Center in Denver, and the metropolitan Washington chapter of the Asthma and Allergy Foundation of America.

The Saturday physicians course will be directed by Drs. Kaliner, Weinstein, and Charles H. Kirkpatrick, head of the Division of Clinical Immunology, NJH.

The Saturday morning session in Masur Auditorium will cover the underlying mechanisms, diagnosis and treatment of the problems frequently encountered in allergic patients. In the afternoon, attending physicians will be involved in practical demonstrations of the office techniques used to evaluate and treat patients.

The course is sponsored by NIAID in cooperation with the Asthma and Allergic Diseases Center at the John Hopkins Hospital; the Center for Interdisciplinary Research on Immunologic Diseases at Georgetown University School of Medicine; the Metropolitan Washington AAFA; and the NJH.

Additional course information is available at 299-4380. The AAFA has information on the public conference at 424-6617. □

## Herpes Infection in Newborn Transmitted Through Birth Canal

One to five infants out of every 10,000 live births in the United States are born each year with genital herpes infection, according to researchers.

Pregnant women who have genital herpes may transmit the infection to their babies during delivery via the birth canal. Approximately 70 percent of pregnant women with genital herpes have no apparent symptoms of infection within 8 weeks of giving birth.

Doctors report that the risk may be as high as 50 percent for a baby to contract the infection if its mother is shedding virus during this time. Data also suggest that pregnant women with genital herpes are two to three times more likely to miscarry or deliver earlier than pregnant women who are not infected.

Herpes infection in the newborn is much more serious than in the adult; even a low level of virus can readily infect the child. As in the adult, symptoms may not be immediately obvious in the newborn, but if not treated promptly, death or serious and long-term disorders can result, said Dr. Charles A. Alford, Jr., an NICHD grantee at the University of Alabama, participating in a recent NIH genital herpes workshop.

Dr. Alford specified three categories of newborn herpes infection: localized, multiple organ, and brain infections. Localized infection refers to the eye, the mouth, the skin, or those in combination. Multiple organ infection affects one or more organs and possibly the central nervous system.

The death rate from these infections is very high, said Dr. Alford, and newborns who survive rarely recover without damage to the central nervous system if it is affected. Brain infection, also known as herpes encephalitis, is confined to the brain, and as in organ infection, the death rate is extremely high.

If a newborn with this infection does survive, brain damage such as mental retardation is almost inevitable. "Prolonged or severe morbidity is a major problem in these infants," said Dr. Alford.

"Ara-A is the only drug that has been shown to have any effect on the newborn with herpes," said Dr. Richard J. Whitley, an associate NIH-supported researcher from the University of Alabama. He added that ara-A therapy for the newborn has been very effective, particularly for organ infection and herpes encephalitis where it has increased the newborn's chances of survival three times.

Dr. Whitley added that when further clinical trials of acyclovir; ara-AMP; 2-fluoro-5-iodoaracytosine; and interferon are completed, doctors may have more clues about the safety and efficacy of these potentially promising drugs for the newborn as well.

When genital herpes in a pregnant woman is detected, a physician performs a culture to determine if the patient is shedding virus. If the culture is positive he may opt to deliver the baby by cesarean section to prevent exposure to the virus in the birth canal.

At present, this treatment is the only way infant herpes can be prevented if diagnosed prior to delivery. "There are no approved experimental antiviral drugs that can be given to the mother to prevent viral shedding before delivery," Dr. Whitley added.

Researchers stress the importance of detecting genital herpes in all pregnant women who are infected. This can be achieved in two ways: patient cooperation, and improved diagnostic techniques for detecting asymptomatic carriers. The doctors emphasize that if a woman is pregnant and knows or suspects she has genital herpes, she should notify her doctor immediately to plan the safe delivery of her child. □

## Dr. Anne R. Bourke Retires

Dr. Anne R. Bourke, a member of the Division of Research Grants staff since 1962, recently retired after 38 years of Federal service. To mark the occasion, friends and colleagues attended a recent reception.

Dr. Bourke began her government career in 1938 as a technical assistant at the Army Medical School at Walter Reed Army Hospital after receiving a B.S. degree in bacteriology from the University of Maryland. During World War II, she served 2 years in the U.S. Navy as a laboratory officer at the Naval Hospital, Corpus Christi, Tex.

She first came to NIH in 1947 as an assistant bacteriologist in the Division of Infectious Diseases, but left the same year to enter graduate school at George Washington University. After receiving a M.S. degree in microbiology and a doctorate in pharmacology in 1951, she worked at the U.S. Food and Drug Administration as a pharmacologist in the toxicological evaluation of food additives.

In 1956, she transferred to NIH to join the recently established Cancer Chemotherapy National Service Center, where she headed the screening section with responsibility for planning and developing the mass primary testing



Dr. Bourke (l) is presented a farewell gift at her retirement party by Mischa Friedman, assistant chief, Clinical Sciences Review Section.

of chemicals and natural products for activity against various animal tumors, cell culture lines, and bacteria. She also had responsibility for the monitoring of activities and evaluation of performance of contract laboratories engaging in conduct of tests.

In August 1962, Dr. Bourke came to the Division of Research Grants as executive secretary of what was then called the Chemotherapy Study Section and is now the Experimental Therapeutics Study Section. In 1972, she assumed the additional responsibility as a referral officer.

During Dr. Bourke's 18 years as executive secretary, she has worked with some of the most prestigious names in cancer research, primarily of those engaged in studies in experimental therapy of neoplastic diseases; in mechanism of action of chemotherapeutic agents; immunotherapy and clinical testing of agents; and combinations of therapeutic modalities.

Dr. Bourke's retirement plans include a trip to Ireland. She also plans to spend time during the winter months in Florida. □

## DR. SEAL (Continued from Page 1)

staff in 1965 to 1969, then as scientific director until his appointment as deputy director in 1975.

Prior to joining the Institute, he had served 2 years on the NIH Cholera Research Advisory Committee. He was chairman from 1965 to 1973, and in that role was responsible for the operation of the SEATO Cholera Program and Cholera Research Laboratory in Dacca.

His contributions as a skilled administrator have been recognized with designation as a meritorious executive in the Senior Executive Service and with the HEW Superior and Distinguished Service Awards. In 1976 his alma mater, the University of Virginia School of Medicine, observed John R. Seal Day with a scientific program on infectious diseases.

Dr. Seal came to NIAID following a long and productive medical career in the U.S. Navy. He had conducted research throughout the world in prevention, treatment and epidemiology of a broad variety of infectious diseases.

His excellence as a scientist and an administrator won him the Founders Medal of the Association of Military Surgeons on two occasions, the first Stitt Award of the same association for outstanding contributions in the field of antibiotics, and the Medal of Commendation from the Secretary of the Navy. In 1965 he retired from the Navy as commanding officer of the Naval Medical Research Institute in Bethesda. □

### Hooks, Slices, and Putts

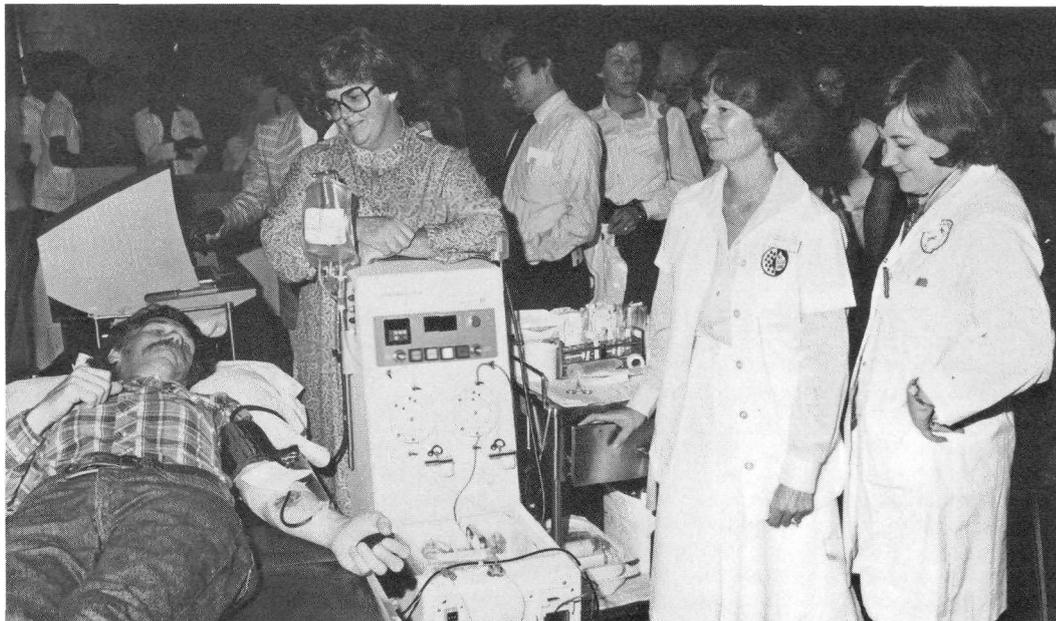
Sixty golfers participated at the Montgomery Country Club on Aug. 28 for the NIH annual fall fun tournament.

Play resulted in a three-way tie for first place—Team 3, Curt Furberg, Jim Quinn, Joe Adamik and Andy Hoffer; Team II, Ed Fitzgerald, Dave Vistica, Dorothy Viener and John Snell; and Team 13, John Lucas, Syd Carter and Grover Fletcher. Last place honors and prizes were awarded to Jim Waters, Emmanuel Zissis, Elmira Brown and Marguerite Caruso, Team 16. □



An animal care technician feeds an infant rhesus monkey in the new two-story annex at the New England Regional Primate Research Center. The new area, dedicated on Sept. 25, will house up to 400 monkeys to be used in studies of dietary effects on cardiovascular disease. The Division of Research Resources supports the center in Southborough, Mass.

## Blood Donors Praised at Thank-You Party



Platelet donor Robert B. Kerby (l) demonstrated how easy it is to give platelets or whole blood during the party. His wife, Phyllis (c), CC Blood Bank Nurse Donna Meyer, and Elaine Lee (r) watched the procedure. In the rear, donors queue to have their records updated.

NIH blood donors filled the Clinical Center's 14th floor assembly hall for the second annual thank-you party given in appreciation by the CC Blood Bank on Wednesday, Sept. 16.

Dr. Paul Holland, chief of the CC's Blood Bank Department, greeted donors and expressed his appreciation for their contributions during the past year. "We are grateful to all of you," he said. "You can help us even more by recruiting your friends or relatives as donors. But for now, we want you all to enjoy the party."

CC Director Dr. Mortimer Lipsett, and Dr. Charles McIntosh, NHLBI senior surgeon, were also on hand to thank donors and enjoy the party.

Thomas Talbot, a mechanical engineer in DRS, won the grand door prize, a 1-day round

trip for two to Atlantic City, N.J. Other prizes included Blood Bank tee-shirts and mugs, two tickets for an evening at a Roth's theater, a bakeware set, and an assortment of cards from Hallmark. Blood Bank bumper stickers, key-chains, and shopping bags were given to guests as they entered the party.

Cookies, cheese, punch, and two special cakes decorated with the CC Blood Bank's logo were provided by Blood Bank employees.

Even though there are approximately 13,500 NIH employees, only 2,200 are registered donors. Donating blood only takes 20 to 30 minutes of a person's time, and doing so will make blood and blood products available for those who need them.

Appointments for giving blood can be made by calling the Blood Bank, 496-1048. □

### July 1981 Public Advisory Group Publication Not To Be Printed

The July 1981 issue of *NIH Public Advisory Groups: Authority, Structure, Functions, Members* will not be published this year. The January 1982 issue will be published as usual. □

### Lillian Kallir, Pianist, Featured in FAES Concert

The first concert of the 1981-82 Chamber Music Series, sponsored by the Foundation for Advanced Education in the Sciences, will be held on Sunday, Oct. 4, at 4 p.m. in Masur Auditorium. It will feature pianist, Lillian Kallir.

Admission is by ticket only. □



Jack M. Rigsby, a former supervisory cost accountant, Division of Financial Management, recently became budget officer at the National Institute of Environmental Health Sciences. A native of Carrollton, Ga., he served 4 years in the Air Force and is a graduate of West Georgia College in Carrollton. Before joining NIH, he was an accounting officer management intern at State Farm Insurance Company, and served with the U.S. Postal Service as a systems accountant at Postal Service Headquarters.

## NIA/DRR Create Joint Aging Monkey Resource

To provide suitable laboratory animal models to investigators across the country who are interested in the study of aging, the National Institute on Aging and the Division of Research Resources have recently created a unique national primate resource program.

The new cooperative arrangement provides for the establishment of set-aside colonies of aged monkeys at the California Primate Research Center, Davis; the Oregon Regional Primate Research Center, Beaverton; the Wisconsin Primate Research Center, Madison; and the Regional Primate Research Center of the University of Washington, Seattle. This arrangement will provide a research and training resource using nonhuman primates as models for biological, behavioral, social, and clinical studies of the aging process and the diseases and other special problems of aged humans.

The program is coordinated by Dr. Leonard F. Jakubczak, health science administrator, NIA, and Dr. Leo A. Whitehair, director of the Primate Research Centers Programs, DRR.

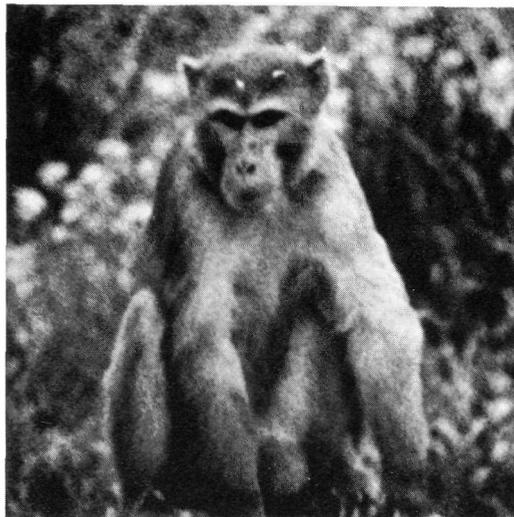
In line with the agreement, collaborating investigators, visiting scientists, and graduate and postdoctoral students who are supported by NIA grants and awards can conduct research for specified periods of time at any of the four national primate centers. Approval must be secured from the respective center directors.

Each center has a core staff of professional and supporting personnel for consultation, collaboration, and service to NIA-supported investigators.

At present the program involves approximately 160 rhesus (*M. mulatta*) monkeys and 30 pigtailed (*M. nemestrina*) monkeys. Their ages vary from 14 to 15 years. The typical life span of these monkeys is about 30 years.

The size of the set-aside colonies will be maintained at constant levels by replacement for losses due to natural death or other reasons.

Investigators interested in availing themselves of these resources are advised to contact the director of the relevant primate research center and the NIA extramural research



**Defined older rhesus monkeys, from 14 to 15 years of age, will be made available for aging studies under the new "set-aside colonies" program. A smaller quantity of pigtailed monkeys is also included in the new resource project.**

program staff prior to submitting a research grant proposal. Specific services required for the proposed research are to be negotiated with the center, with appropriate documentation of all such agreements appended to the grant application.

Costs for the experimental use of the animals, including necessary expenses for research-related services to be procured for the center, are to be itemized in the budget of the application. The per diem maintenance costs for the aging monkeys used in the proposed research, however, are covered under the NIA-DRR agreement.

The creation of the primate aging resource was evolved as the result of the expressed concern of Dr. Robert N. Butler, NIA Director, who feels that "the establishment of the set-aside colonies of aging monkeys as a research resource is a significant step towards achieving the goals of biomedical and behavioral research in aging." □

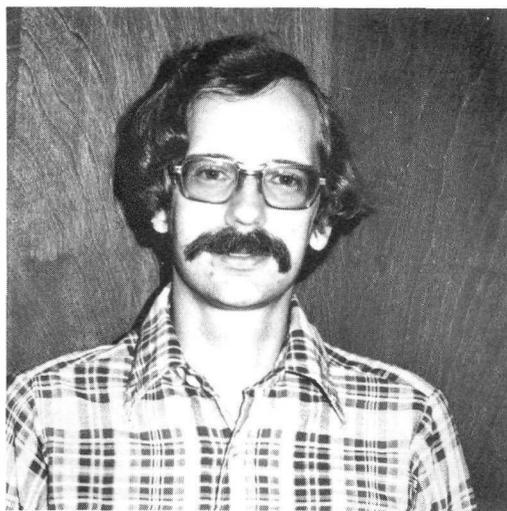
## W. D. Robertson Elected Official of Library Ass'n.

W. Davenport Robertson, librarian, National Institute of Environmental Health Services, has been elected the 1982 chairman of the Environmental Information Division of the Special Libraries Association.

The SLA is an international association of 10,000 librarians and other information specialists in industrial, research and business libraries.

At NIEHS, he oversees the Library and Information Services within the Office of the Director. Since 1977, he has directed the library's operation and has extensively expanded the collection, as well as automating various library functions. He has also aided in improving the interlibrary loan system.

Mr. Robertson has received both the NIH Merit Award and quality performance award for his work at NIEHS.



**Mr. Robertson will be responsible for planning the 250-member Division's program for the 1983 Special Libraries Association annual conference in New Orleans.**

## Human Growth Mutant Cell Repository Catalog Available

Cell cultures stored in a highly specialized "cell bank," the Human Genetic Mutant Cell Repository, are listed in the eighth edition of a catalog just published by the National Institute of General Medical Sciences, which supports the repository.

Located at the Institute for Medical Research in Camden, N.J., the repository makes cultures available to qualified investigators from all over the world for a nominal fee. Each of the 2,145 cell lines available is well characterized, thoroughly documented and contaminant free. This year, 246 new ones have been added.

The repository collection includes human fibroblast, lymphoid and amniotic fluid cell cultures from patients with a wide variety of hereditary diseases, from patients with certain common disorders in which genetic factors play an important role, from patients with chromosomal abnormalities and from normal individuals.

In addition, there are a limited number of SV40-transformed cell lines, nonhuman mammalian cell lines and hybridomas.

A unique addition to this year's catalog is a map of known human chromosomal aberrations. While maps of known human gene loci have been published previously, this is the first map of chromosomal aberrations to be published.

References to publications containing clinical descriptions of patients and their families, and to studies using cultures obtained from the repository, are listed in the catalog. Also included is a listing of cells relevant to studies of aging, maintained in the repository under support from the National Institute on Aging.

Established in 1972, the repository last year shipped more than 3,000 cultures to investigators in the U.S. and abroad. Organizations purchasing cell cultures from the repository are required to complete a written agreement, renewable annually, indicating that none of the cultures, progeny, or derivatives will be used in human experimentation and that the cultures will not be resold.

Copies of the new cell bank catalog may be obtained from the NIGMS Office of Research Reports, Westwood Bldg., Rm. 9A-10, 496-7301, or the Institute for Medical Research, Copewood and Davis Streets, Camden, N.J. 08103. □

## Import-Export Permit Manual Issuance Revised

Manual Issuance 1340-1 entitled, Permits for Import or Export of Biological Materials, has recently been revised and distributed to those interested in importing or exporting etiologic agents, their vectors, animals and plants.

Copies of the Manual Issuance can be obtained from the Quarantine Permit Service Office by calling 496-2960. The office will also provide information on the need for permits and will issue permits or applications for permits when they are required. □

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