

The NIH Record

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National
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Rules Expand HHS Authority To Prevent Misuse of Funds

Institutions and individuals convicted of wrongdoing or failing to honor the terms of previous Government grants can be barred or suspended from receiving financial aid from the Department of Health and Human Services under recently issued rules.

The new HHS rules go into effect 30 days after publication in the Oct. 9, 1980, issue of the *Federal Register* (Nov. 10).

These rules are designed to weed out in advance anyone who, on the basis of past performance, would be likely to misuse HHS funds. Violations must be of a serious nature to lead to debarment or suspension.

Institutions or individuals notified of proposed debarment action against them may, within 30 days, request a hearing at which they may be represented by counsel. Suspensions, however, may be put into effect prior to a hearing for up to 6 months.

Causes for debarment include conviction of fraud or other crimes, any offense indicating a lack of integrity, violation of conditions of previous financial awards, or unsatisfactory performance on previous Federal contracts or awards, or any cause that significantly affects responsibility as a participant in a Federal program sufficiently serious to warrant debarment.

Requests for information or a copy of the HHS regulations may be sent to the Legal Advisor, NIH, Office of General Counsel, Bldg. 31, Rm. 2B-50. □

Dr. Roth Wins Gairdner Award for Studies On Peptide Hormone Interactions With Cells

Dr. Jesse Roth, chief of NIAMDD's Diabetes Branch, was one of six winners of the 1980 Gairdner Foundation Awards for outstanding contributions to medical science.

Dr. Roth was cited for his elucidation of mechanisms through which insulin and other peptide hormones interact with cells, and the ways in which these interactions are altered in disease states.

Since its founding in Toronto, Canada, in 1957, the Gairdner Foundation has honored 139 scientists worldwide for superior achievements in the field of medicine.

The 23rd annual awards, presented Oct. 17 in Toronto, included a \$15,000 prize and a guest lectureship at the University of

Five Grantees Win Nobel Prizes

CHEMISTRY

Two American grantees of the National Institute of General Medical Sciences, together with a British scientist, have won the 1980 Nobel Prize in Chemistry for their work in elucidating the "chemical basis of the

genetic machinery in living organisms."

The NIGMS grantees are Dr. Paul Berg, biochemistry professor at Stanford University, and Dr. Walter Gilbert, professor of molecular biology at Harvard, who is also a grantee of



Dr. Gilbert

the National Institute of Arthritis, Metabolism, and Digestive Diseases. The British scientist is Dr. Frederick Sanger, a professor at Cambridge University.

Dr. Berg is considered the "father" of recombinant DNA technology, having led the field in this area. He is in his 23rd year of NIGMS support.

Dr. Berg was one of the first geneticists to urge a moratorium on the manipulation of gene structures, however, until appropriate

(See CHEMISTRY, Page 9)

PHYSIOLOGY OR MEDICINE

The 1980 Nobel Prize in Physiology or Medicine recognizes three eminent immunologists, two Americans and a Frenchman, Drs. Baruj Benacerraf, George Snell, and Jean Dausset, all NIH grantees.

The work for which they were honored was their discovery of the immune response genes and a complex of antigens known as the histocompatibility system.

All three have had associations with the National Institute of Allergy



Dr. Benacerraf

and Infectious Diseases in the form of research grants or contracts, and all have made important contributions to NIAID's immunology program.

Dr. Benacerraf, currently chairman of the pathology department of the Harvard Medical School, was chief of the NIAID Laboratory of Immunology during 1968 through 1970. He received the Nobel Prize for his pioneering work on immune response genes, a series of studies done in the 1960's and early 1970's.

Part of the work was performed at NIH, and two NIAID intramural scientists, Drs. Ira Green and William Paul, collaborated closely on several of the key papers.

Before coming to NIH, Dr. Benacerraf

(See NOBEL, Page 9)

Dr. Tower To Retire From NINCDS

Dr. Donald B. Tower, Director of the National Institute of Neurological and Communicative Disorders and Stroke since 1974, has announced his decision to retire as of Feb. 1, 1981.

Dr. Tower, an Assistant Surgeon General in the PHS Commissioned Corps, joined NIH in 1953.

A search committee, appointed by NIH Director Dr. Donald S. Fredrickson and headed by NIH Deputy Director Dr. Thomas E. Malone, will begin at once seeking candidates for the NINCDS directorship. □

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The NIH Record

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Amended Travel Rules Provide for Increases

Federal travel regulations have been amended—effective Oct. 5—to increase the mileage for privately owned vehicles and per diem and actual subsistence allowances, and to revise the high rate geographical areas listing.

Major Changes Listed

Major changes in the regulations include: When the use of a privately owned conveyance is authorized or approved as advantageous to the Government for the performance of official travel, reimbursement will be 22.5 cents per mile for a privately owned automobile; 20 cents per mile for a motorcycle; and 45 cents per mile for an airplane.

When the use of a privately owned vehicle is authorized or approved in lieu of a Government-furnished automobile and use of a Government-furnished automobile is determined to be most advantageous to the Government, the reimbursement is 16.5 cents per mile.

Maximum Per Diem Noted

The maximum per diem allowance for official travel within the boundaries of the U.S. has been increased to \$50. The allowance for meals and miscellaneous subsistence expense allowance is also increased to \$23. Per diem is still computed on a lodging-plus basis.

The statutory maximum daily rates for actual subsistence expense travel involving unusual circumstances is increased to \$75, previously, it was \$50.

Certain previously designated high rate geographical areas, which no longer qualify because of the new per diem rate, have been deleted. Certain existing HRGA's maximum daily actual subsistence expense

Health Benefits 'Open Season'—Employees May Enroll, Change Options or Plans

During the Federal Employees Health Benefits Program "Open Season," Nov. 10 through Dec. 5, eligible employees may enroll in 1 of 18 different plans, change options or types of enrollment, or any combination of these.

A booklet (BRI 41-331), entitled *Enrollment Information and Plan Benefits Summaries*, will be distributed to all employees. Premium rates for all plans will be included.

The general plans are: Indemnity Benefit Plan (Aetna Life and Casualty Company), Service Benefit Plan (Blue Cross-Blue Shield), Group Health Association of Washington, D.C. Plan, Kaiser Georgetown Community Health Plan, George Washington University Health Plan, and Health Plus, Inc., Plan.

Other plans available to NIH staff are: American Federation of Government Employees Plan, Alliance Health Plan, American Postal Workers Union Plan, Government Hospital Association Plan, and Mail Handlers Benefit Plan.

Also, National Association of Letter Carriers Health Plan, Postmasters Benefit Plan, National Association of Government Em-

ployees Plan, National Federation of Federal Employees, and National Treasury Employees Union Benefit Plan.

To enroll in one of these, an employee must be, or must become, a member of the sponsoring organization.

Employees living in the area surrounding Columbia, Md., may enroll in the local comprehensive Columbia, Md. Medical Plan. Staff members living in the service area of Baltimore and Calvert County, Md., may enroll in the Blue Cross and Blue Shield Comprehensive Medical Plan Network.

During the "Open Season," registration assistants will answer questions on the program and help employees to complete forms. The names of these assistants will be listed on official bulletin boards.

Representatives of various Federal health plans will answer individual questions concerning coverage under their plans at a session in Bldg. 1, Wilson Hall, on Wednesday, Nov. 12, from 9:30 a.m. to 12:30 p.m.

All employees are invited, but permission to attend should be cleared with supervisors.

New Rates for Employees

GROUP HEALTH ASSOCIATION OF WASHINGTON, D.C.

	1981	1980
<i>Self</i>		
High Option	13.80	\$13.62
Low Option	5.48	5.76
<i>Family</i>		
High Option	38.27	36.75
Low Option	19.94	19.81

INDEMNITY BENEFIT PLAN (AETNA)

	1981	1980
<i>Self</i>		
High Option	10.17	8.23
Low Option	3.20	2.75
<i>Family</i>		
High Option	15.11	12.56
Low Option	7.56	6.52

SERVICE BENEFIT PLAN (BLUE CROSS-BLUE SHIELD)

	1981	1980
<i>Self</i>		
High Option	14.84	12.31
Low Option	2.46	2.06

<i>Family</i>	1981	1980
High Option	30.52	26.87
Low Option	7.14	5.97

KAISER GEORGETOWN COMMUNITY HEALTH PLAN (*)

	1981	1980
<i>Self</i>		
High Option	11.76	11.75
<i>Family</i>		
High Option	32.44	31.75

GEORGE WASHINGTON UNIVERSITY HEALTH PLAN (*)

	1981	1980
<i>Self</i>		
High Option	12.00	10.47
<i>Family</i>		
High Option	34.65	28.75

HEALTHPLUS, INC. (*)

	1981	1980
<i>Self</i>		
High Option	12.07	12.51
<i>Family</i>		
High Option	35.40	35.22

* Plans offer only one option.

rates are increased and/or boundaries redefined.

The newly designated areas are being provided to B/I/D's.

All travel orders issued prior to notification of this change are automatically amended to provide for the increased rates on or after Oct. 5.

"These changes are extensive and impact on most NIH travelers," according to Bill Arnwine, chief of the Travel and Administrative Services Branch, DAS. He recommends that "all travel-approving officials and travelers be made aware of these changes."

For further information, call Mr. Arnwine, 496-6876, or Helen Donovan, 496-4775. □

NIH-Navy Power Plant Study Results To Be Aired; Public Invited

The results of an engineering study on the proposed installation of a cogeneration power plant to serve both NIH and the National Naval Medical Center will be presented at a public meeting in Bldg. 31, Conf. Rm. 6, on Wednesday, Oct. 29, at 8 p.m.

The public will be given an opportunity to participate in a discussion of the report. □

New System Identifies Waste Chemicals

A new procedure for identifying and labeling waste chemicals to be discarded from the NIH reservation was supported and adopted by the Scientific Directors on Sept. 17.

The procedure was developed to provide for more prudent control over the approximately 300 pounds of waste chemicals being generated each day from campus laboratories and support activities.

NIH personnel support in implementing this procedure will allow the chemical waste disposal contractor, Triangle Resource Industries, to characterize the waste according to known environmental health and safety hazards.

The new characterization will assist in protecting employees, the public, and the environment during transport and disposal of these wastes.

The procedure also will meet NIH's responsibility for complying with recently promulgated State and Federal hazardous waste management laws.

Generators of waste chemicals are asked to use the new tie-on-tag system outlined in the *NIH Waste Chemical Disposal Bulletin*, recently distributed desk-to-desk.

The tags can be obtained from NIH Self-Service stores in Bldgs. 10 or 35, or ordered through stock requisition Form NIH-20, listed as stock #7-5985.

For your convenience, the contractor will pick up all properly identified chemical waste at your work place (laboratory, shop, etc.). To arrange for pickup, call 496-4710.

If the contractor is out, a recording will ask you to leave your name and telephone number so that the contractor can contact you upon his return. Pickup is usually within 1 day of notification during normal working hours, Monday-Friday, 8:30 a.m. to 5 p.m. and in no case will it be delayed for more than 3 days.

For further information or clarification of a particular chemical waste problem, call the Division of Safety's Environmental Protection Branch, 496-3537.

NIH Waste Chemical Tag

USE OF THIS TAG: To be used to identify the contents of a chemical waste container where:

1. the container is a solvent safety can or
2. where the original mfg's label is missing or
3. the vessel contains chemical other than stated on original label. (In this case place a double XX through the original mfg's label).

INSTRUCTIONS: Using the wire tie, attach tag to chemical waste container and provide information indicated on tag.

Call 496-4710 for waste pick-up service.

Person to contact regarding information on this tag.

Bldg. _____ Room _____ Phone: _____

Date	Volume	Name of Chemical

Rare Frog Peptide Identified in Mammals by NIEHS Group

The bioactive peptide physalaemin, formerly believed to exist only in the skin of certain frogs and presumed to be important to the physiology of the human body, has been identified for the first time in mammals by National Institute of Environmental Health Sciences investigators.

Although the scientists have not yet isolated the peptide, they have developed a highly specific antibody to the amphibian peptide, and report that the recently discovered substance in mammals has identical immunoreactivity.

NIEHS researchers Drs. Lawrence H. Lazarus, R. Ilona Linnoila, and Richard P. DiAugustine in the endocrinology group of the Laboratory of Pulmonary Function and Toxicology—along with Dr. Oscar Hernandez from the Laboratory of Environmental Chemistry—found the neuropeptide with physalaemin-like immunoreactivity in extracts of the gastrointestinal tract and in other tissues of several animal species, such as rabbits, guinea pigs, pigs, and man.

It was localized in the epithelial cells of villi and glands, and in the nerve fibers in smooth muscle. The story of the discovery of the neuropeptide appeared in *Analytical Biochemistry*, Vol. 107, Sept. 15, and *Nature*, Vol. 287, 1980, pages 555 to 558.

Dr. Lazarus in describing the finding said, "this is one of the most potent bioactive peptides known on the basis of its physiological activity."

It was previously found only in the skin of the amphibian *Physalaemus*, a genus of exotic frogs from Argentina.

The peptide would appear to be preserved through evolution, and possibly serve a similar biological role. Since it has been identified, not only in the gastrointestinal tract but also in the mucosal layer of the trachea of mammals, it could be an important peptide in the regulation of many organs.

Dr. Lazarus also noted that the next step



This is the rare 1-inch frog, *physalaemus bigilonigerus*, that has the bioactive peptide that was found for the first time in mammals.—Smithsonian Photo.

is to isolate and characterize the peptide from mammalian tissue and perform further investigations to identify its specific functions.

Discovery Could Further Understanding

In order for scientists to evaluate the mechanism by which toxins are handled by various organs within the body, it is necessary first to understand the normal function of that organ. The discovery of this peptide in mammalian tissue could further this understanding.

Dr. Vittorio Erspamer, the Italian pharmacologist who first isolated physalaemin in frog skin nearly 2 decades ago, has indicated to the NIEHS scientists that the discovery of this peptide in mammals represents "brilliant results, which are of the utmost interest to the scientific community because of its implications in the regulatory function." □

Training Tips

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

	Course	Starts	Deadline
Office Skills	Office Management	Nov. 17	Nov. 7
Secretarial Productivity Through Individual Leadership		Jan. 26	Jan. 12
Communication Skills	Human Relations Workshop	Dec. 10	Nov. 19
Interpersonnel Problem Solving		Dec. 3	Nov. 14
Personnel Management	Personnel Staffing in the Federal Government	Dec. 15	Dec. 1

To learn more about courses in Office and Communication Skills, call 496-2146.

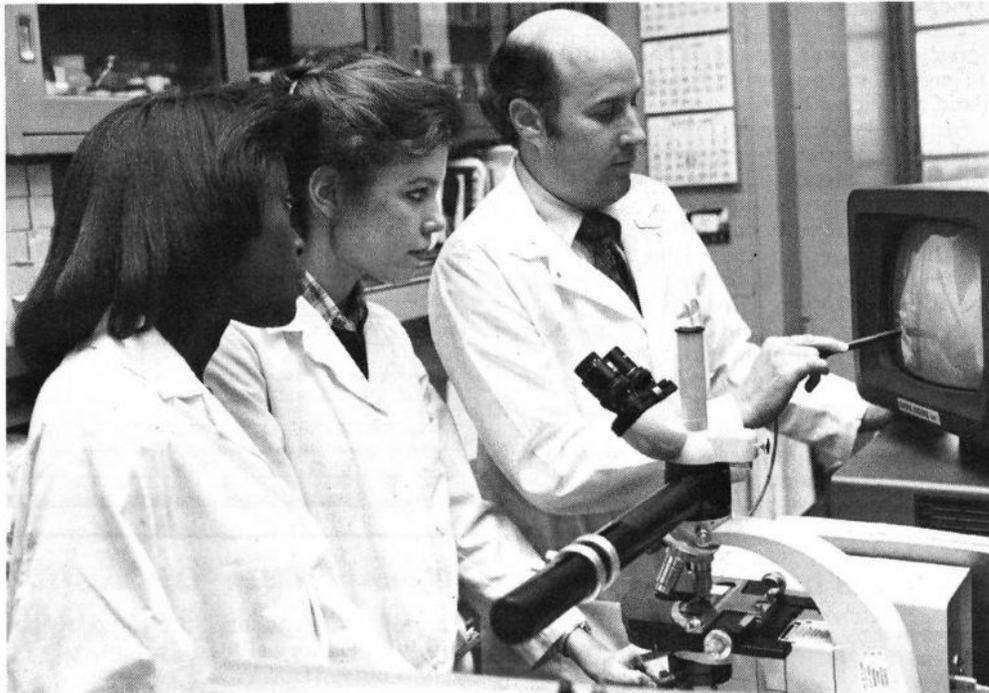
Nursing Career Education Day Offered Nov. 13

A Career Education Day in Nursing for NIH nurses is being offered Thursday, Nov. 13. The Career Development Branch, Division of Personnel Management, and the Nursing Education Section, Nursing Department, Clinical Center, are sponsoring the program.

Representatives from local schools offering the bachelor of science nursing degree, and accredited by the National League of Nursing, have been invited to participate. Each representative will speak about their institution's academic policies.

A complete program will be offered at 9 a.m., and 1 and 3 p.m. in the Bldg. 10, 14th floor auditorium, so that nurses' schedules can be accommodated. For more information, call Pat Brady, DPM, 496-6211. □

Effects of Chemotherapy on Fertility Continues To Puzzle Scientists



Dr. Sherins (r) and assistants Natasha Norman (l) and Amy Patterson examine tissue taken from the testis of a patient being treated for Hodgkin's disease.

The increased life expectancy of many cancer patients resulting from advances in chemotherapy has sparked interest in how these powerful drugs affect the patients' ability to have children. Studies at NIH and other research centers have shown that long-term infertility is a common side effect of chemotherapy.

The recent finding by the National Cancer Institute that Hodgkin's disease, a once-fatal cancer, can be cured with a combination of drugs underscores the importance of research in this area.

About half of the approximately 7,000 Americans stricken by Hodgkin's disease each year are young adults, primarily men.

Studies conducted jointly by the National Institute of Child Health and Human Development and NCI have shown that the drug combination responsible for the cure causes sterility in 95 percent of men and about 50 percent of women treated. The drug-induced infertility has persisted in patients followed for as long as 12 years.

Men are more susceptible to gonadal damage from chemotherapy than are women because cell division is more frequent in the testes than in the ovaries, explains Dr. Richard Sherins, an infertility specialist in the Developmental Endocrinology Branch, NICHD. Anticancer drugs inhibit rapid cell division, and therefore have a greater impact on the testes.

In men, the four-drug combination used to treat Hodgkin's disease destroy the cells which give rise to sperm. In women, scientists believe, the drugs destroy a certain number of eggs in the ovaries.

As a result, women over 35 often become sterile after treatment, while women under

35 usually continue to ovulate. Younger women have more eggs than older women, so their supply is not depleted as readily.

At least 10 more years of followup is needed to determine if the younger women treated with chemotherapy will experience early menopause.

The testes of adolescent boys are highly sensitive to the drugs used to treat Hodgkin's disease, studies by NICHD and NCI have shown. Sperm production ceases after treatment, and production of testosterone, the hormone responsible for secondary sex characteristics in the male, decreases.

Followup Studies Needed

The NIH studies suggest that prepubertal boys may be protected from damage to the testes caused by these drugs, but followup of the boys into adulthood will be necessary to determine whether their testicular function remains normal. The effect of the drugs on the ovaries of adolescent girls is still unknown.

Not all anticancer drugs are as harmful to reproductive capability as those used to treat Hodgkin's disease.

A nearly completed study by NICHD and NCI indicates that the combination of drugs frequently used to treat acute leukemia little affects the testes of adolescent boys. An earlier study by the two Institutes showed that the ovaries of most adolescent girls receiving chemotherapy for acute leukemia develop normally.

The drug combination used to treat another cancer, soft tissue sarcoma, usually causes transient sterility in men and women

under 40 and long-lasting infertility in patients over 40.

These were the research results shown in studies by Dr. Sherins, NICHD, and Drs. Robert Shamberger and Steven Rosenberg, NCI.

Patients who receive radiation near the testes or ovaries while taking the drugs suffer long-term sterility regardless of age.

The effect of chemotherapy on reproductive capability depends on the class of drugs used and the dosage given, not on the disease being treated, says Dr. Sherins.

The drug combinations given to patients with Hodgkin's disease and soft tissue sarcoma contain alkylating agents, a class of drugs known to damage the testes and ovaries. Another class of drugs known to cause gonadal injury, the methylhydrazines, is also included in the Hodgkin's combination. Chemotherapy for acute leukemia includes neither class of drugs.

According to Dr. Sherins, infertility must be considered an unavoidable side effect of some anticancer drugs. It is an acceptable side effect in view of the consequences of untreated cancers.

Preservation of semen collected before treatment offers hope for some men who wish to father children following cancer chemotherapy, but it cannot help most patients, he added.

The process of freezing and thawing semen decreases the quality of sperm. Even with preserved semen from healthy men, the chance of conception is only about 50 percent.

The sperm of men with serious tumors is often of poor quality to begin with, thus further lowering the chance of preserving viable sperm.

Many questions about the effect of anticancer drugs on fertility remain unanswered, Dr. Sherins says. While the impact

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Dr. Harold Blum Dies at 81; Noted Cancer Researcher

Dr. Harold Blum, 81, world renowned cancer researcher, died on Sept. 29 at Chester County Hospital. He retired from the National Cancer Institute in 1967 after serving 29 years. In 1943, the Institute assigned him to the Navy, and in 1947, he was assigned to Princeton University, where he did much of his major research.

Dr. Blum was one of the original eight members of the NCI when it was organized in 1937. He was best known for his discoveries in the role of ultraviolet light in the development of skin cancer, and was an authority on the biological effects of light.

His studies on the effects of light and chemicals on cells were major advances in the understanding of skin cancer and other diseases.

The author of three major medical books *Photodynamic Action and Diseases Due to Light*, *Carcinogenesis by Ultraviolet Light*, and *Time's Arrow and Evolution*, Dr. Blum was also an international authority on Paleolithic, or Stone Age, cave art.

Dr. Blum is survived by his wife, Mabel, and daughter, Janet S. Lewis.

Liquid Protein Diets Cause Heart Irregularities, Rochester Med. Center Researchers Warn

The popular liquid protein diets used by thousands of obese Americans to lose weight have been found to be directly associated with life-threatening heart irregularities, and their use should be discontinued according to a report in the Sept. 25 issue of the *New England Journal of Medicine*.

Clinical researchers at the University of Rochester Medical Center recommend that liquid protein diets should be terminated "pending further investigation of the causes and prevention of cardiac toxicity."

The article noted that liquid protein diets and protein-supplemented fasts have been in widespread use since 1976. In 1977, 60 unexplained sudden deaths occurred in obese people on liquid diets.

Until the study was done, there was no clinically demonstrated evidence that liquid protein diets were directly associated with heart irregularities.

To study the diet, a team of investigators headed by Drs. John M. Amatruda and Dean H. Lockwood monitored cardiac electrical activity and the daily loss of important minerals and other nutrients in six obese patients on a 40-day protein-supplemented fast.

During the fast, the six volunteers were hospitalized and kept under tightly controlled conditions on the medical center's Clinical Research Center, a special hospital unit funded by the Division of Research Resources.

As criteria for entering the study, each obese volunteer had a normal physical examination and tests of cardiac function. The subjects spent their first 8 days in the hospital undergoing extensive testing while on a balanced, weight maintenance diet.

For the next 40 days, they ingested 300 calories per day of a commercially available

liquid amino acid preparation supplemented with vitamins and potassium. During the study, the research volunteers could walk around, and engage in moderate physical activity.

Routine electrocardiograms and 24-hour continuous cardiac monitoring were performed periodically. No abnormalities were observed before or after the diet period, but serious cardiac arrhythmias (variation from the normal heart beat) were documented in three of the six patients during the diet.

These arrhythmias were shown only on the 24-hour ambulatory recordings and were not shown on the routine electrocardiograms.

According to the researchers, the electrocardiograms were not adequate to detect serious arrhythmias during the course of the diet, and 24-hour monitoring is necessary.

The researchers say that their study does not determine the cause of these cardiac abnormalities, but suggest deficiencies of protein, electrolytes, trace elements, and essential fatty acids as possibly playing a role.

These arrhythmias occurred as early as 10 days after the beginning of the diet and were not detected on repeat 12-lead electrocardiography.

Drs. Amatruda and Lockwood say, "It is disturbing that routine chemical determinations and numerous metabolic balance studies failed to identify patients at risk for the development of cardiac complications." They feel that "for the moment, this form of weight reduction therapy should be abandoned."

Other researchers in the study were Drs. Rafael Lantigua, Theodore L. Biddle, and Gilbert B. Forbes. □

Donna F. Spiegler Joins Office of Research Services

Donna F. Spiegler recently started in her new position as deputy associate director for Research Services, ORS.

Mrs. Spiegler has extensive experience in program analysis, coordination, and



Mrs. Spiegler

trouble-shooting in the health/science field. She has worked in these areas previously for the Office of the Assistant Secretary for Health, specializing in issues concerning NIH, the Food and Drug Administration, and the Alcohol, Drug Abuse, and Mental Health Administration. In 1979, she was acting executive officer for the Fogarty International Center.

In January 1980, Mrs. Spiegler went to work for the Health Services Administration as executive officer of the Bureau of Community Health Services.

In her new position, working with Dr. Edwin D. Becker, NIH Associate Director for Research Services, Mrs. Spiegler will advise and assist in management and provision of the technical and administrative programs serving all components of NIH in support of its research mission.

Originally from Cleveland, Ohio, Mrs. Spiegler got her B.A. degree from the University of Chicago. She came to Washington in 1954 and started her career as a research coordinator for the Office of Naval Research.

In 1969, she started working in the Office of the Assistant Secretary for Health, HEW, specifically for Dr. Leon Jacobs, then Deputy Assistant Secretary for Science. □

FERTILITY

(Continued from Page 4)

of some drugs, such as the alkylating agents has been defined, the effects of other commonly used anticancer drugs are not known.

Further studies are needed to determine which drugs can cause infertility, at what doses, and how long the drug-induced sterility will last.

Also unclear, he says, is the role that age plays in susceptibility to gonadal damage from anticancer drugs. For example, scientists would like to know why men over 40 suffer more damage to the testes from chemotherapy for soft tissue sarcoma than do younger men.

One concern for patients who remain fertile or regain their fertility following chemotherapy is whether their offspring will have increased risk of birth defects.

Currently, the risk of genetic damage to sperm and egg cells from anticancer drugs is unknown says Dr. Sherins. However, few experimental studies have shown that the offspring of rats treated with alkylating agents have no increased incidence of genetic damage. □

Kathryn Himmelsbach Leaves CC Social Work



Mrs. Himmelsbach received the HEW Superior Service Award for "exceptional leadership in providing comprehensive social services to patients and families and her significant sustained contributions to community education." □

Kathryn K. Himmelsbach, chief of the social work sections for both the National Cancer Institute and the National Institute of Child Health and Human Development at the Clinical Center, retired Aug. 31 after 24 years of Government service.

Mrs. Himmelsbach received her A.B. degree from George Washington University and her M.S. degree from Columbia University School of Social Work.

Throughout her long career in the cancer field, Mrs. Himmelsbach's central concern has been for the patient, both in and out of the hospital.

She is a charter member of the National Association of Social Workers, a member of the Academy of Certified Social Workers, and a licensed social worker in the State of Maryland.

In June 1975, Mrs. Himmelsbach received the HEW Superior Service Award. She plans to spend her leisure time in increased community activities, and enjoying golf with her husband, Dr. Clifton K. Himmelsbach, former CC associate director. □

Combined Federal Campaign Contributions Benefit All

The goal of this year's NIH Combined Federal Campaign is to reach all employees and provide them with information about the importance of their help.

The message the keyworkers are taking to the employees is that their contributions not only help those who are less fortunate, but they also benefit our own lives.

Every employee should be able to find one or more of the CFC-supported agencies with a personal appeal, according to John Smart, CFC coordinator at NIH.

"Too often we may tend to think of the CFC-supported agencies in rather limited terms," he said. "They have an image of being involved only with people who have critical problems.

"It's true, many agencies do help individuals who are facing a crisis in their lives. There are, however, many agencies which are directed towards improving the quality of our own lives."

Some of these agencies include the American Cancer Society, American Red Cross, American Heart Association, Girl Scouts, and Boy Scouts. These agencies contribute to the quality of every person's life.

You or your family may not now be receiving services from one of these organizations, however, you may need their services in the future, and when you do, you will be glad that they are there to help.

If you have not given and wish to do so, please tell your keyworker. If you do not know your keyworker, contact your B/I/D coordinator.

The names and phone numbers of all coordinators are listed below. They will be happy to assist you.

FIC	Robert Slevin	496-6603
NINCDS	John Jones	496-6731
CC	Arnold Sperling	496-2276
NIDR	Joan Shariat	496-1363
NLM	Norman Osinski	496-6546
NIAID	Helen Hathaway	496-4634
DRS	Karen Faunce	496-5791
NICHD	Ben Fulton	496-4121
NIGMS	Georgia Norton	496-7303
DRR	Suzanne Stimler	496-5411
NCI	Stephen Ficca	496-6556
NHLBI	Jack Nance	496-2411
DCRT	Gloria Crawford	496-4647
DRG	John Wassell	496-7881
NIAMDD	Dave Dwyer	496-5765
NEI	Phyllis McKee	496-4233
OD	Donna Knepper	496-2421
NIA	Dave Chicirichi	496-5345



Reaching people who need you: that's what the CFC is all about.

Energy Experts To Speak On November 5

Amory and Hunter Lovins, international energy experts, will speak on Living Better Without Nuclear and Fossil Fuels, on Wednesday, Nov. 5, at noon in the Masur Auditorium.

Amory Lovin's 1975 book, entitled *Soft Energy Strategies*, outlines safe alternatives to nuclear power. For years both have been active in energy policy issues.

Their NIH talk will be about how, if existing energy technologies are employed now, they can be used to permit a phaseout of nuclear power, a substantial reduction in fossil fuel use, and allow continuation of the present standard of living with a major improvement in public health. □

Flu Virus Vaccine Offered To Susceptible Employees

The Occupational Medical Services 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. □

NIH Ski Club Meets Oct. 29.

The NIH Ski Club will hold an organization meeting tomorrow (Wednesday, Oct. 29) from 11:30 a.m. to 12:30 p.m. in Bldg. 31C, Conf. Rm. 10, 6th floor.

Trips to Mt. Tremblant, Killington, Aspen, Blue Knob, Camelback, and Wintergreen are planned, and representatives from these areas will discuss the latest on skiing. Ski movies will also be shown.

Nonskiers who are interested in learning are welcome to attend. □



Members of the cast of "Bell, Book, and Candle" react to the pyrotechnics that will be part of the 3-act play during performances at the Masur Auditorium on Oct. 31, Nov. 1, Nov. 7, and Nov. 8, at 8 p.m. The \$4 adult ticket price will support the CC Patient Emergency Fund. Tickets are available at the R&W Association's Activities Desk and gift shops.

R&W Has Tickets for Events at Kennedy Center, Arena Stage

R&W has tickets for the following events:

Galileo: Play by Bertolt Brecht, translated by Charles Lughton, about a man who loved eating, drinking, and thinking to excess—Arena Stage; Oct. 29; ticket price, \$9.35.

Lunch Hour: Jean Kerr's newest play, directed by Mike Nichols, starring Gilda Radner and Sam Waterson—Kennedy Center; Oct. 31; ticket price, \$16.90.

One Mo' Time: Play by Vernel Bagneris, evening of the 1920's Black vaudeville with on-stage jazz combo and two dozen blues and Dixieland songs from that period—Arena Stage; Nov. 6; ticket price, \$9.35.

Order tickets at the R&W Activities Desk, Bldg. 31, Rm. 1A-18. □

NIH Gashouse Gang Wins 'Battle of Rockville Pike' Fund Raiser



The NIH Gashouse Gang team members are (front row l to r): Dale Mirth, Gary Tyler, Mario Miles (official bat boy), Loren Gordon, Primal de Lanerolle, and Maurice Miles. Standing are (l to r): Ken Kirk, Herman Vandenburg, Wayne Berry, Eric Schmader, Willie Perkins, Len Miller, Ron Deacon, and Jim Alexander. Freddie Harris is not shown.



After the game, Willie Perkins (r), NIMH, congratulates a member of the "Bad News Blades" on his team's performance.

Elva Hershey, Comm. Management Officer, Retires

Elva Hershey, committee management officer in the National Heart, Lung, and Blood Institute, Division of Extramural Affairs, has retired after more than 31 years of service.

Mrs. Hershey joined the NHLBI information office in June 1949.

In 1952, she transferred to what has since become the NHLBI Division of Extramural Affairs, where she served in various positions until 1963, when she was appointed committee management officer.

Served in Dual Capacity

In 1969, while still retaining her management duties, she was appointed administrative assistant in the Institute's Office of Administrative Management. She served in this dual capacity until 1973, then returned full time to her earlier position until her retirement.

Her retirement plans include moving to Fort Myers, Fla., with her husband, traveling, and pursuing her hobbies of sewing and bowling.



At Mrs. Hershey's recent retirement luncheon, she was given many gifts along with a letter from Dr. Robert I. Levy, Institute Director, notifying her that she has been named a recipient of the NIH Merit Award.

FIC RESEARCH FELLOW

Dr. Sarah Sariban, an assistant at the Brugmann University Hospital, Brussels, Belgium, arrived Oct. 14 to begin an International Research Fellowship of the Fogarty International Center at the National Heart, Lung, and Blood Institute, Laboratory of Kidney and Electrolyte Metabolism.

Training under the preceptorship of Dr. Maurice B. Burg, her research is on renal physiology.

Rachelle Selzer To Present Program on Loneliness

Rachelle Selzer, mental health counselor, Occupational Medical Services, will present a 1-hour program starting at 11:30 a.m. on the topic of Loneliness on the following dates:

- Monday, Nov. 10, Bldg. 1, Wilson Hall
- Wednesday, Nov. 12, Bldg. 10, Masur Auditorium
- Thursday, Nov. 13, Westwood Bldg., Conf. Rm. D
- Friday, Nov. 14, Fed. Bldg., Rm. B119 □

NIH's Gashouse Gang came from behind to hand the National Naval Medical Center's Bad News Blades a 7 to 1 loss in a game that was billed as the "Battle of Rockville Pike."

The game, the fifth annual fund raiser for the Clinical Center Patient Emergency Fund, was held on Sunday, Sept. 28, with the first ball thrown out by Dr. Griff Ross, CC deputy director. Master of ceremonies was WJLA-TV coanchorman Chris Gordon.

The Gashouse Gang, captained by Maurice Miles, NHLBI, and managed by Doren Vest, DCRT, found itself at the bottom of the eighth inning with the score tied at 1-1.

A NIH hitting spree, led by Freddie Harris, NICHD, started the rally that led to a win. The game was marked by brilliant fielding of Herman Vandenburg, NIMH, and equally brilliant pitching by Maurice Miles, who held the Pike rivals to a two-hitter.

Spectators who attended the game had a chance to win a variety of door prizes donated by the R&W Association. □

Polls Are Open on Nov. 4; Some Absences Excused

Polls will be open at the following times:
 District of Columbia: 7 a.m.-8 p.m.
 Maryland: 7 a.m.-8 p.m.
 Virginia: 6 a.m.-7 p.m.

The general rule concerning excused absence to vote is:

- Where polls are not open at least 3 hours either before or after an employee's regular hours of work, the employee will be excused for enough time to permit him/her to report for work 3 hours after the polls open, or leave 3 hours before the polls close, whichever requires less time off.

- If an employee's voting place is beyond normal commuting distance, and voting by absentee ballot not permitted, the employee may be allowed time off to make the trip to the voting place. This leave is not to exceed a full day. □

VISITING SCIENTIST PROGRAM PARTICIPANTS

Reported by Fogarty International Center

9/30—**Dr. Agneta Oskarsson**, Sweden, Laboratory of Organ Function and Toxicology. Sponsor: Dr. Bruce Fowler, NIEHS, Research Triangle Park, N.C.

10/1—**Dr. Yue-wah Chan**, Hong Kong, NIH Animal Center. Sponsor: Dr. Robert Whitney, DRS, Bg. 14G, Rm. 102, Poolesville.

10/1—**Dr. Ryuya Horiuchi**, Japan, Laboratory of Molecular Biology. Sponsor: Dr. Ira Pastan, NCI, Bg. 37, Rm. 4B27.

10/1—**Dr. Nobuko Kimura**, Japan, Laboratory of Molecular Biology. Sponsor: Dr. George Johnson, NCI, Bg. 37, Rm. 2E26.

10/1—**Dr. Christine Meyer**, Austria, Laboratory of Microbiology and Immunology. Sponsor: Dr. Reuben Siraganian, NIDR, Bg. 10, Rm. 2B12.

10/1—**Dr. Johannes Stoof**, Netherlands, Experimental Therapeutics Branch. Sponsor: Dr. D. B. Calne, NINCDS, Bg. 10, Rm. 6D16.

10/3—**Dr. Christina Pintus**, Italy, Laboratory of Pathophysiology. Sponsor: Dr. Seoras Morrison, NCI, Bg. 10, Rm. B1B53.

10/5—**Dr. Ursula Hurtenbach**, West Germany, Immunology Branch. Sponsor: Dr. Gene Shearer, NCI, Bg. 10, Rm. 4B55.

10/5—**Dr. Chiranjiv Kapoor**, India, Laboratory of Pathophysiology. Sponsor: Dr. Yoon Sang Cho-Chung, NCI, Bg. 10, Rm. 5B43.

10/5—**Dr. Tamar Koch**, Israel, Laboratory of Biochemistry. Sponsor: Dr. Edward L. Kuff, NCI, Bg. 37, Rm. 4C03.

10/5—**Dr. Michael Lerman**, Stateless, Laboratory of Biochemistry. Sponsor: Dr. Francine C. Eden, NCI, Bg. 37, Rm. 4A15.

10/5—**Dr. Lars S. Lohmander**, Sweden, Laboratory of Biochemistry. Sponsor: Dr. Vincent Hascall, NIDR, Bg. 30, Rm. 111.

10/5—**Dr. Atsushi Naoi**, Japan, Laboratory of Socio-Environmental Studies. Sponsor: Dr. Carmi Schooler, NIMH, Bg. 31, Rm. 4C21.

10/5—**Dr. Katari S. Raju**, India, Laboratory of Pathophysiology. Sponsor: Dr. Pietro M. Gullino, NCI, Bg. 10, Rm. 5B36.

10/5—**Dr. Yavuz Renda**, Turkey, Neuro-epidemiology Section. Sponsor: Dr. Bruce Schoenberg, NINCDS, Federal Bg., Rm. 7C10.

10/5—**Dr. Paolo Sarmientos**, Italy, Laboratory of Molecular Genetics. Sponsor: Dr. Michael Cashel, NICHD, Bg. 6, Rm. 335.

10/5—**Dr. Zvi Selinger**, Israel, Molecular Virology Section. Sponsor: Dr. Edward Scolnick, NCI, Bg. 41, Rm. A114.

10/5—**Dr. Nikola Sofijanov**, Yugoslavia, Office of Biometry and Field Studies. Sponsor: Dr. William Weiss, NINCDS, Federal Bg., Rm. 7A13.

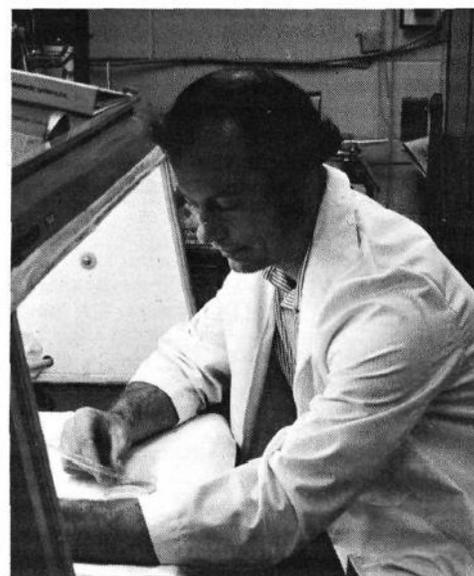
10/5—**Dr. Pillarisetti Subba Rao**, India, Laboratory of Clinical Investigation. Sponsor: Dr. Michael A. Kaliner, NIAID, Bg. 10, Rm. 11N250.

10/6—**Dr. Matej Penca**, Yugoslavia, Laboratory of Chemistry. Sponsor: Dr. George W.A. Milne, NHLBI, Bg. 10, Rm. 7N318.

10/6—**Dr. Masahiro Tsuji**, Japan, Laboratory of Chemical Biology. Sponsor: Dr. Jurrien Dean, NIAMDD, Bg. 10, Rm. 9N314.

10/6—**Dr. Yehuda Yinon**, Israel, Laboratory of Environmental Chemistry. Sponsor: Dr. J. Ronald Hass, NIEHS, Research Triangle Park, N.C.

Dr. George Lucier Discusses Chemical Exposures Of Newborn At Swiss Conference



Dr. Lucier is internationally known for his research on the effects of neonatal exposure to environmental agents.

Eleven Nobel Prize laureates and other leaders of international repute in biological research heard Dr. George Lucier, National Institute of Environmental Health Sciences, speak at a recent conference on Biology and the Future of Humanity held in Lausanne, Switzerland, Oct. 8-11.

Dr. Lucier was among the invited guest speakers at the conference, sponsored jointly by G.A. Chevallez, president of Switzerland, and the Swiss-based Institute of Life.

Dr. Lucier, acting chief of the Laboratory of Organ Function and Toxicology at NIEHS, spoke at the conference's opening session on the effects of chemical exposures of the newborn as it effects organ function in later life.

This session was devoted to the influence of external factors on biological functions.

Dr. Lucier explained, "Many environmental chemicals are hormonally active and could therefore alter the normal development of hepatic metabolism and either potentiate or antagonize the toxic response to chemicals later in life. These chemicals include DES, DDT, methoxychlor, zearalenone, and kepone.

"Our studies demonstrate that subtle changes in the delicately balanced endocrine milieu during early development may have long-term and irreversible consequences in organ function and in organ susceptibility to chemical toxins."

Attendance at the first three scientific sessions was limited to 100 invited participants, primarily scientists from around the globe. The fourth session commemorated the 20th anniversary of the Institute of Life with additional scientific presentations, followed by an orchestral concert, to which a larger audience was invited. □



John O. Smart was appointed the new Division of Research Services executive officer on Sept. 7. Mr. Smart was formerly the intramural administrative officer for the National Institute of Child Health and Human Development. His NIH career began in 1954, when he was a research physiologist with the then National Institute of Neurological Diseases and Blindness.

Animal Resources Directory Lists Valuable Information

The second revised edition of the *Animal Resources Directory* from the Division of Research Resources is available.

The 56-page publication is designed to guide scientists to sources of assistance and collaboration involving animals in biomedical research.

The directory identifies animal diagnostic laboratories, information projects, and reference centers, special colony and model study centers, and NIH's major primate research centers supported by DRR.

It identifies the resources provided, research emphasis or application, principal investigator or director, and address and telephone number. A contact person is indicated for each resource.

A single copy of the directory can be obtained by writing to the Research Resources Information Center, 1776 E. Jefferson St., Rockville, Md. 20852, or by request from the Office of Science and Health Reports, DRR, Bethesda, Md. 20205. □

NOBEL

(Continued from Page 1)

held a professorship in pathology at New York University. For 10 of his 12 years at NYU, he received two research grants from NIAID, one of which directly supported his earlier work on immune response genes.

During 1970-77, Dr. Benacerraf was awarded an NIAID research grant for studies in immunological responsiveness and, an NIAID training grant in immunology and immunopathology. Since 1978, Dr. Benacerraf has had an NIAID program project grant in lymphocyte biology.

Dr. George Snell spent the majority of his research career from 1935 until his retirement in 1969, at the Jackson Laboratory in Bar Harbor, Me. During the 1940's and 1950's he described the histocompatibility genetics of the mouse, the so-called "H-2" antigen system, for which he won the Nobel Prize.

These mouse antigens were the first known transplantation antigens—markers conferring a biologic uniqueness on the tissue cells of each individual which distinguish self from nonself. The histocompatibility (tissue compatibility) antigens stimulate graft rejection in animals who receive skin or organ transplants from genetically dissimilar donors.

Dr. Snell was also instrumental in establishing many lines of inbred mice that have

precisely defined H-2 genes, and the Jackson Laboratory has been a source of animals and typing sera serving the immunology research community for years.

Dr. Snell, in a contract extending from 1965 to 1973, was one of the first contributors to the NIAID Serum Bank that was established in 1965. The bank provides standard reagents for tissue typing for both basic and clinical research. It is a valuable resource to kidney transplant teams.

Dr. Jean Dausset, currently the head of the department of immunology at the University of Paris, was honored for his discovery of the first *human*, major histocompatibility antigen in the 1950's, and for work demonstrating their role in transplantation.

The importance of his work was recognized early, and he successfully competed for NIH support in 1961, receiving an NIAID research grant that is still continuing. Also, Dr. Dausset had a 3-year contract (1965-68) to provide human tissue typing reagents to the NIAID Serum Bank.

The three scientists also received research support during the early days of their careers to the present time from the National Cancer Institute. Dr. Snell received support from 1952 to 1973 for research on the immunogenetics of tumor and tissue transplantation; Dr. Dausset from 1961 to 1969 for research on antigens on white blood cells; and, Dr. Benacerraf from 1973 to the present for research in cancer immunology. □

New FIC Book Describes British Health System

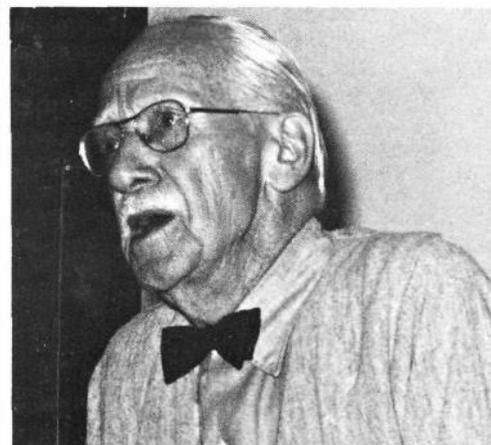
A new book describing the growth and development of the British medical profession and the emergence of the National Health Service is now available from the Fogarty International Center.

The British National Health Service: A Sociologist's Perspective traces the development of the British health system through social and economic change.

Broad changes in the basic structure of British society during the 19th century, the disruptions of two world wars, the unemployment of the 1920's and 1930's, and the introduction of scientific medicine are all examined.

Written by Dr. Derek Gill, chief of the section of behavioral sciences, department of family and community medicine, University of Missouri School of Medicine, the book is the latest addition to studies on health systems of other countries published by the International Cooperation and Geographic Studies Branch, FIC.

Other books dealing with the United Kingdom are also available to professionals at the Fogarty Publications Office, Bldg. 16A, Rm. 205. □



A series of electrobiology seminars this past summer honored the 80th birthday of NINCDs scientist Dr. Kenneth S. Cole, known to colleagues as "the father of biophysics." The seminars were held at the Marine Biological Laboratory in Woods Hole, Mass., where Dr. Cole served for many years. Over his 50-year research career, Dr. Cole won wide recognition, especially for his work on nerve impulse transmission. His achievements include the development in 1949 of the voltage clamp, which demonstrated the relationship between electrical voltage and current flow during an impulse in a squid axon.

R&W Sponsors Energy Conservation Seminar on Nov. 6

R&W is sponsoring a seminar on Energy Conservation, on Thursday, Nov. 6, at 11:30 a.m. in the Masur Auditorium.

Chris Comuntzis, an energy management coordinator in PEPCO's customer services

development department, who works with the latest developments and issues of energy management and conservation, will conduct the seminar.

Anyone interested may attend. □

CHEMISTRY

(Continued from Page 1)

safeguards for such research could be developed.

He himself adhered to this moratorium for 4 years, until guidelines for controlling recombinant DNA research conducted with Federal funds were put into effect by NIH.

Dr. Berg is widely recognized for his contributions to knowledge of how living cells make proteins. His findings on enzymatic activation of amino acids, and their linkage to transfer RNA, paved the way for later work on ribosomal protein synthesis.

SV40 Virus Used as Model

In his most recent work, he has been using the SV40 virus as a model to explore the mechanism of gene expression in higher organisms, particularly the interplay of viral and cellular genes in regulating cell growth and division.

Other work by Dr. Berg on viral tumorigenesis is supported by the National Cancer Institute.

Dr. Gilbert has been a pioneer in exploring the molecular basis of cellular regulation. An NIGMS grantee since 1969 a major achievement in his research was the discovery, together with Allan Maxam, of a highly efficient method for sequencing nucleic acids in DNA.

Before then, sequencing had been a very laborious chemical process, requiring months of work to attain very limited information.

The advent of rapid nucleic acid sequencing and the use of restriction enzyme mapping have brought scientists revolutionary new insights into the functioning of the genetic material of higher organisms.

Genes Transfer Mechanism Studied

In other work, Dr. Gilbert has employed the Rous sarcoma virus and the *E. coli* bacterium to study the expression of genes transferred to animal cells and the mechanisms of their cellular regulation.

In addition to his long-standing NIGMS support, Dr. Gilbert has also received funding from NIAMDD, through which he was aided in studying the expression of proinsulin in bacteria, and in insulin gene structure.

Dr. Sanger, also a pioneer in reading the fine details of DNA structure, was the first scientist to work out a way of determining the sequence of chemicals in DNA, however, his technique was superseded by Dr. Gilbert's faster method.

This year's Nobel award in chemistry is Dr. Sanger's second (he also won in 1958). He is only the fourth person to win more than one Nobel award. □

FAES Concert To Feature Quartet Beethoven di Roma

The third concert in the 1980-81 Chamber Music Series, sponsored by the Foundation for Advanced Education in the Sciences, welcomes the return engagement of the Quartet Beethoven di Roma.

The concert will be held on Sunday, Nov. 9, at 4 p.m. in the Masur Auditorium.

Admission is by ticket only. □

NIAID Advisory Council Meets at Rocky Mt. Laboratory for First Time



Dr. Swanson (third from right) discusses his laboratory's research efforts with NIAID council and staff members.

For the first time, NIAID's National Advisory Allergy and Infectious Diseases Council met Sept. 29-Oct. 1 at the Rocky Mountain Laboratory in Hamilton, Mont.

Dr. Richard M. Krause, Institute Director, and Dr. Kenneth Sell, NIAID scientific director, headed a delegation from Bethesda, which included Dr. Robert Goldberger, NIH Deputy Director for Science, representatives of the Division of Research Grants, and Institute staff.

The recently reorganized laboratory was chosen as the site for this meeting so that council members could meet personally with the lab chiefs and their teams of scientists to learn about current research programs and future research goals.

Presentations to the council were made by Dr. John Swanson, chief, Laboratory of Microbial Structure and Function; Dr. Bruce Chesebro, who heads the Laboratory of Persistent Viral Diseases; and Dr. Robert Philip, acting chief of the Epidemiology Branch.

Established in 1902 to help control Rocky Mountain spotted fever, the laboratory became a field station of the Public Health Service in 1921 and a part of NIAID's predecessor, the National Microbiological Institute, in 1948.

With its current reorganization, the laboratory's research programs have been diversified to continue important studies on the natural history and epidemiology of certain infectious diseases, particularly rickettsial diseases, as well as to develop research at the molecular level of host-parasite relationships.

The Institute's major research efforts in bacteriology are also conducted at RML. One of the newer programs is directed at determining the cause of the recently diagnosed toxic shock syndrome.

During the meeting, the council approved, in principle, the NIAID Study



During NIAID council session, Dr. Krause (r) presents a PHS Commendation Medal to Dr. Chesebro for his outstanding research efforts.

Group Report on Immunology, which was presented by Dr. William Paul, vice chairman of the study group, and Dr. Dorothy D. Sogn, executive secretary.

The study group was chaired by Dr. Baruj Benacerraf of Harvard Medical School, NIAID grantee and co-winner of the 1980 Nobel Prize for Physiology or Medicine. The final study group report will be published in 1981. □

R&W Sponsors Classes In Middle Eastern Dance

The NIH Recreation & Welfare Association is sponsoring six 1-hour classes of Middle Eastern (belly) Dance/Exercise, beginning Wednesday, Nov. 5, from 5:30 to 6:30 p.m., in the 14th floor auditorium of the Clinical Center.

The \$25 fee includes a pair of cymbals. Enrollment is limited to 20 students. Leotards and tights are recommended.

Pam Jones, instructor, has 20 years of dance training, and has performed professionally throughout the Washington area.

DR. ROTH

(Continued from Page 1)

In subsequent research, Dr. Roth and associates detected antibodies to the insulin receptor in certain patients with very severe insulin resistance and diabetes mellitus.

The use of such antibodies in the laboratory, as well as the recently developed radioimmunoassay for insulin receptors, have significantly increased our understanding of hormone-receptor interactions.

These basic findings about the mechanisms of hormone action may ultimately lead to better methods of management of diabetes and other receptor disorders.

Other winners of the 1980 Gairdner Foundation Awards include Dr. Paul Berg, Stanford University School of Medicine, California; Dr. Irving B. Fritz, University of Toronto, Canada; Dr. H. Gobind Khorana, Massachusetts Institute of Technology; Dr. Efraim Racker, Cornell University; and Dr. Michael Sela, Weizmann Institute of Science, Israel. □

USUHS Now Accepting Applications for 1981 Medical Officers Program

The Uniformed Services University of the Health Sciences School of Medicine is accepting applications from both civil service and commissioned officers for its 4-year program beginning July 1981.

USUHS has been established to prepare men and women for careers as medical officers in the uniformed services.

Candidates should be no more than 28 years of age by June 30, 1981; have a bachelor's degree from an accredited institution in the United States, Canada, or Puerto Rico, with 1 year of course work in organic and inorganic chemistry, mathematics, physics, biology, and English; and have taken the new medical college admission test.

Prior to enrollment in the university, civil service employees must qualify for a commission in the uniformed services, and commissioned corps officers must obtain a letter of approval to apply from the Assistant Secretary for Health and Surgeon General.

Students serve as commissioned officers (0-1). Upon graduation, they become medical officers (0-3) and incur a 7-year service obligation.

Complete information may be obtained from the Admissions Office, USUHS, 4301 Jones Bridge Road, Bethesda, Md. 20014, telephone 295-3102.

Applications must be received by the American Medical College Application Service, 1776 Massachusetts Ave., N.W., Washington, D.C. 20036, no later than Nov. 1. □

She is a computer systems analyst at DRG. Sign up now at the R&W Activities Desk, Bldg. 31, Rm. 1A-18. □

Mary T. Flather Dies; NCI Research Chemist



Mary T. Flather

Mary T. Flather, a research chemist and expert in chemical nomenclature at the National Cancer Institute for 26 years, died of cancer Oct. 3, at the Washington Home.

Mrs. Flather joined NCI in 1954 as a chemist in the Laboratory of Chemical Pharmacology, where she analyzed and synthesized chemical compounds.

In 1958, she began working in the Cancer Chemotherapy National Service Center (now the Developmental Therapeutics Program of the Division of Cancer Treatment) and later was promoted to head the Nomenclature Unit.

As a nomenclature chemist, she determined the structures of chemical compounds and named them. Mrs. Flather was responsible for building a file of drugs that might have potential value in cancer treatment.

Expert in Chemical Nomenclature

"She knew as much about chemical nomenclature as anyone in the country," declared Eleanor Sloane, chief of the Literature Research Section and her supervisor for 5 years.

In 1975, Mrs. Flather moved to the Literature Research Section, where she combed scientific literature for reports on cancer treatment. She was also assistant project officer preparing abstracts on cancer therapy.

After becoming ill, she transferred in May 1979 to the Natural Products Branch to expedite the special testing of potential anticancer drugs derived from plants and other natural sources.

In the course of her career at NCI, Mrs. Flather coauthored several technical papers on chemical synthesis and analysis, including one on the activity and toxicity of nitrogen mustards. These chemicals have been used as chemotherapeutic agents.

Mrs. Flather was born in Washington and reared in Bethesda. She earned a bachelor's degree in chemistry at American University.

Rickettsial Disease Conference Held at RML; New Professional Society Established

A major conference on rickettsial diseases was held recently at the NIAID Rocky Mountain Laboratory in Hamilton, Mont. Sponsored by the National Institute of Allergy and Infectious Diseases, the conference was attended by more than 100 rickettsiologists from the United States, as well as from Sweden, France, England, Switzerland, and Austria.

Rickettsial diseases are caused by a group of infectious organisms which are divided into four main groups on the basis of their clinical, epidemiological, and immunological features: typhus, spotted fever, scrub fever, and Q fever.

Dr. Theodore Woodward, professor of medicine at the University of Maryland School of Medicine addressed the group on Perspectives of Rickettsial Diseases, Past, Present, and Future. Dr. Woodward's early research led to the first identification of murine typhus in Jamaica.

More recently, he demonstrated that the diagnosis of Rocky Mountain spotted fever could be rapidly confirmed by direct-immunofluorescent staining of the causative agent in tissue obtained by skin biopsy.

Other scientists, Drs. Willy Burgdorfer, Stanley Hayes, and Anthony MAVROS presented evidence that a nonpathogenic rickettsia interferes with and limits the growth of virulent *Rickettsia rickettsii* (the cause of Rocky Mountain spotted fever). This finding may explain why most ticks are parasitized by rickettsiae avirulent for man.

Drs. Thomas McCaul, David Hackstadt,

and Jimmy Williams demonstrated that a type of cell differentiation can occur in Q fever which may account for the high levels of resistance to physical and chemical agents.

Also, Drs. Robert Lane, Robert Philip, and Elizabeth Casper isolated for the first time in the United States, *R. canada*, a rickettsia considered to be intermediate in properties between those of typhus and spotted fever groups of rickettsiae. Previously, this organism had been found only once—and that time in eastern Canada.

Another accomplishment at the conference was the establishment of the American Society for Rickettsiology and Rickettsial Diseases. Dr. Emilio Weiss, Naval Medical Research Institute, is its first president, RML's Dr. Robert Philip, vice president, and Dr. Charles Wissemann, Jr. (University of Maryland), secretary-treasurer.

Cochairmen of the conference from RML were Dr. Robert L. Anacker and Dr. Willy Burgdorfer. Representing NIAID from Bethesda were its deputy director, Dr. John R. Seal; scientific director, Dr. Kenneth Sell; and director, Microbiology and Infectious Diseases Program, Dr. William Jordan.

Their first meeting is to take place in approximately 18 months at the University of Maryland site at Port Deposit.

A summary of the conference will appear in a forthcoming issue of the *ASM News*, and texts of the 50 scientific papers will be published in book form in early 1981.



Invited lecturers at the RML conference were (l to r): Dr. Emilio Weiss, Chair of Science, Naval Medical Research Institute, Bethesda; Dr. Robert Traub, professor, department of microbiology, University of Maryland; Dr. Susumu Ito, professor, department of anatomy, Harvard Medical School; Dr. Joseph Osterman, chief, department of rickettsial diseases, Walter Reed Army Institute of Research, Washington, D.C.; and Dr. Charles Wissemann, Jr., professor and chairman, department of microbiology, University of Maryland.



Save the Children with your Combined Federal Campaign gift. Save the Children now conducts child-assisting community self-help programs in 203 overseas communities of 17 countries. The gift you give today promises a better tomorrow.

Internat'l Program Is Seeking To Control Chemical Hazards

An international program concerned with the effects of chemicals on human health and the environment will receive \$800,000 from the National Toxicology Program.

NTP Director Dr. David Rall said that the money, provided by the National Cancer Institute and the National Institute of Environmental Health Sciences, will help the International Program on Chemical Safety to achieve several goals:

- Encouraging international cooperation in evaluating the effects of chemicals on health and the environment, and coordinating chemical testing and toxicological research to eliminate unnecessary duplication of effort; and,
- Improving the world's capacity to respond to chemical emergencies which may be international in scope.
- Also, developing international guidelines and exposure limits for chemicals in air, water and food, in addition to limits for hazardous chemicals in workplaces; and,
- Working out international testing protocols for mutagenic, carcinogenic, neurotoxicological and reproductive ef-

Dental Caries Prevention In Public Health Programs Topic of 2-Day Conference

The National Caries Program of the National Institute of Dental Research is conducting the first in a series of conferences on dental caries prevention in public health programs.

The purpose of this 2-day conference—which began yesterday (Oct. 27) and continues today (Oct. 28)—is to provide a review and update on caries prevention research and information for key public

health personnel on how the National Caries Program can assist in prevention.

Invited participants include dental directors and supervising dental hygienists of each state health department, a representative from each HHS regional office, and the director or representative of each dental public health school or program.

Also, representatives from other government agencies—Indian Health Service; Division of Dentistry; Administration for Children, Youth and Families; the National Health Service Corps and Office of Health Information, Health Promotion, Physical Fitness, and Sports Medicine. □

There are an estimated 70,000 chemicals in use today including 1,500 pesticide ingredients, 4,000 drug ingredients and 5,500 food additives. About 10,000 of these chemicals are in international commerce. □

health personnel on how the National Caries Program can assist in prevention.

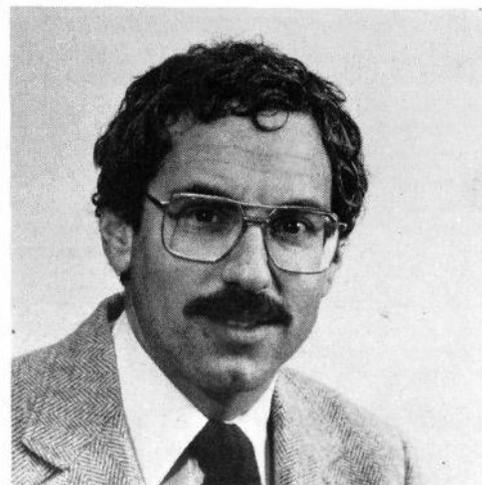
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Also, representatives from other government agencies—Indian Health Service; Division of Dentistry; Administration for Children, Youth and Families; the National Health Service Corps and Office of Health Information, Health Promotion, Physical Fitness, and Sports Medicine. □



The support staff for the Special Foreign Currency Branch, Fogarty International Center, was recently presented a Group Award for sustained high quality performance in fulfillment of its varied responsibilities by Dr. Morris T. Jones, branch chief. L to r are Marie Harps, Eileen Trevisan, and Mary MacMaster. Group members were cited for excellent attitude and adaptability in the face of demands imposed on them by additional activities in support of the Subcommittee on Biomedical Research of the U.S.-Egyptian Joint Working Group on Health Cooperation and the first U.S.-Romania Conference on Biomedical Research.

Dr. Franklin A. Sher Named to NIAID Post



Dr. Sher received the Rockefeller Foundation's Research Career Development Award in Geographic Medicine in 1979.

Dr. Franklin Alan Sher, noted immunologist, has recently joined the NIAID's Laboratory of Parasitic Diseases as head of the Cell Biology and Immunology Section.

Dr. Sher's research interests have been focused upon parasites, especially schistosomes, as an approach to certain types of immunologic reactions.

He has studied humoral antibodies that affect the parasite, the role of complement in cell-mediated reactions involving the parasite, and more recently, in histocompatibility complex antigens that can affect host immune reactions against the parasite.

His work has also featured examination of critical events in host-parasite interactions which allow some extrapolation to human infections.

Dr. Sher began his career in immunology as a summer research trainee with the Immunology Research Laboratory, Children's Medical Center, Boston, in 1963.

He earned an A.B. degree from Oberlin College in Ohio in 1966. His graduate research was conducted with Dr. Melvin Cohn at the Salk Institute, La Jolla, Calif., where in 1972 he earned the Ph.D. degree from the University of California-San Diego.

Dr. Sher completed 2 years of postdoctoral research in the laboratory of Dr. S. R. Smithers, department of parasitology, National Institute of Medical Research, Mill Hill, London, England, from 1972 to 1974, and later in 1974 served as a visiting worker with the Wellcome Trust Research Laboratory in Nairobi, Kenya.

Following this assignment, Dr. Sher worked for 2 years in the laboratory of Dr. Franz von Lichtenberg as principal associate in pathology at Harvard Medical School and Peter Bent Brigham Hospital, and for the past 4 years with Dr. John David and his group as assistant professor of pathology at Harvard and Peter Bent Brigham Hospital. □