The NIH Record

U.S. Department of Health and Human Services

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National Institutes of Health

3 FIC Scholars Arrive To Do Research

Three Fogarty International Center scholars, Drs. Meir Wilchek, Howard Schachman, and Sidney Bernhard, arrived recently to begin their studies.

Dr. Wilchek, professor of biophysics at the Weizmann Institute, Israel, will collaborate with a number of groups in different Institutes and Divisions while at NIH.

Dr. Wilchek

He is responsible for much of the development of affinity chromatography and related techniques that have revolutionized the art of protein purification, particularly enzyme purification.

Dr. Wilcheck has used synthetic organic chemistry to open up new areas of biology for investigation. Beyond his contributions to methodology, he has applied the techniques he developed to a variety of problems such as transport phenomena, antigen-antibody reactions, and the basis of mitogenicity.

Previously, Prof. Wilchek has visited NIH and collaborated with Dr. Christian B. Anfinsen, NIAMDD, on some of the initial work on affinity chromatography.

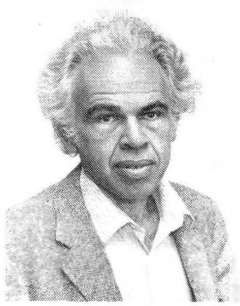
Dr. Schachman, professor of molecular biology, University of California, Berkeley, has resumed his FIC scholarship.

During his first term in 1978, he took part in a series of seminars about evolution; a number of well-known scientists presented the latest findings about the origin of life and the role of the genetic code.

He is a physical biochemist who has made

(See SCHOLARS, Page 12)

Dr. Schachman



Dr. Bernhard

Dr. Drew 'Father of American Blood Bank' Honored By Family, Friends at Exhibit Opening

An exhibit and bust honoring Dr. Charles R. Drew, known as the "Father of the American Blood Bank," was recently unveiled at the National Institutes of Health, making it the first permanent exhibit honoring a black physician on the NIH campus.

With the outbreak of World War II, blood plasma became crucially important in saving the lives of the wounded. Soon it was in short supply in England.

Because of Dr. Drew's pioneering work in blood research, blood collection, and plasma processing, he was the person selected to respond to a British emergency cable request for "5,000 ampules dried plasma for transfusion work immediately and follow this by an equal quantity in three to four weeks—stop—contents each ampule should represent about one pint whole plasma."

It was a big job to be accomplished in a short time, but Dr. Drew did it. Shortly, thereafter, he was named Medical Supervisor of Blood for Britain.

The project was a great success and saved many lives. In 1941, when the American Red Cross assumed control of the blood bank program, Dr. Drew was made director of the blood bank in New York and assistant director of blood procurement for the National Research Council.

Mrs. Drew takes a closer look at the bust of her husband.

In this capacity he was in charge of the collection of blood for use by the United States Army and Navy, a tremendous war-

(Continued on Page 8)

Study Shows Biomedical Research Advances Also Aid Economy Via Commercial Spin-Offs

A recent pilot study, prepared for the NIH Office for Medical Applications of Research, lists 10 examples of discoveries in biomedical research adopted for commercial applications outside the medical field that have had a significant impact on the economy.

In addition to making major contributions to the health and well-being of Americans, the pilot study indicates that commercial spin-offs from these 10 selected examples have also contributed an estimated $37 billion annually to the gross national product.

In all the selected cases, biomedical research furnished a critical element in bringing about technological advancement and industrial growth.

The pilot study, believed to be the first systematic study of the impact of biomedicine on nonmedical industry, noted that certain industries would not exist today without these key biomedical advances. Moreover, other industries have been significantly augmented or refined by them.

The pilot study suggests that biomedical research has proved to be a profitable investment for the health of the Nation as well as the general economy. Among the research advances cited in the study were:

- Development of the process of lyophilization, utilized in the preservation of blood and other biologic products, which has been adopted as a principal method of food preservation by the freeze-dried food industry.
- Elucidation of keratin biochemistry which formed the basis of the home permanent hair wave industry.
- Development of fiber optics technology, used in performing internal physical examinations, which contributed greatly to the telecommunications industry.
- Increase in knowledge of enzyme biochemistry involving the digestive process which has found broad industrial applications in the production of beer, leather, laundry detergents, wine and other products. □

The NIH Record

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OMS Offers Blood Pressure Exams For Employees During May

May is National High Blood Pressure Month. The only way to know you have high blood pressure is to have your pressure checked.

The Occupational Medical Service is offering a variety of services to NIH employees which includes screening; referral for followup evaluation and treatment; and monitoring/education of employees with high blood pressure.

Visit one of the following clinic locations for a free pressure checkup that can be lifesaving:

Bldg. 31, Rm. B2B–47 (Special HBP clinic, Monday, Wednesday and Friday, 2:30–4:30 p.m. in May)
Bldg. 13, Rm. G901
Federal Bldg., Rm. 5C–12
Westwood Bldg., Rm. 28
Bldg. 10, East Wing Clinic (5 p.m.–12:30 a.m.) Rm. 1S230. □

Training Tips

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

Communication Skills	*Course Starts*	*Deadline*
Interpersonal Problem Solving	6/29	6/12
Office Skills		
Files Maintenance and Improvement	5/28	4/29
	6/10	5/13
	6/17	6/3
	6/25	5/28

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

NIH Director Dr. Donald S. Fredrickson points to a model of NIH in the lobby of Bldg. 1 during a recent visit of Dr. Hafdan Mahler (l), Director General of the World Health Organization; his special assistant, Dr. Joshua Cohen (c); the Director of the Pan American Health Organization, Dr. Hector R. Acuna (second from r); and PAHO Deputy Director Dr. S. Paul Ehrlich, Jr. They discussed NIH/WHO joint research projects, including those in cardiovascular disease, tropical diseases, and blindness.

Physical Fitness Class To Begin in May

Sheila Wooters (l), fitness program instructor, "warms up" a few candidates for her conditioning classes.

A "flexible" half-hour physical fitness program designed for NIH employees who wish to improve their awareness about exercise and improve their overall physical condition will begin in May

This $15 minisession will teach participants the proper way to do stretching exercises so that dormant muscles will become more flexible. An individualized program of recording pulse rate will be stressed, as part of an overall cardiovascular awareness program.

Session Times

In addition, exercises for the better development of the upper and lower part of the body will be performed. Sessions will meet on Monday, Wednesday and Friday in the grass plot area adjacent to Bldg. 31–A at the following times: 11 a.m., 11:30 a.m., 4:30 p.m., and 5 p.m.

Starting dates are: first session—May 11 thru 29; second session—June 1 thru June 19; and third session—June 22 thru July 10. Dates and times allow employees to learn about fitness and exercise during and after working hours.

This self-educational program will teach the proper way to do conditioning exercises, while allowing a participant the chance to develop their own fitness schedule during leisure time.

Registration deadline is Tuesday, Apr. 30, at the R&W Activities Desk, Bldg. 31. Classes will be limited to 20 persons. □

West Drive To Be Closed—Parking Lot Users To Relocate

West Drive between Center Drive and Cedar Lane has been closed to all traffic as of Monday, Apr. 20, for alterations planned under the ACRF construction project. North Drive residents may continue to use West Drive.

Also closed is the entrance to parking lot 20–C. Users of this parking area are directed to lots 16–C, –D, –E, or –F.

Alterations will be completed in 3 to 4 weeks. □

Gilbert and Sullivan Featured In NIH Singers, Madrigals Concert

The NIH Singers and the NIH Madrigal Singers, sponsored by the R&W Association, will present a concert in the Masur Auditorium on Monday, May 11, at 12:30 p.m.

The 50-minute program will be in three parts. The NIH Singers, under the direction of Lewis M. Norton, will perform sacred works by Haydn, Gluck, and Franck. Glenn Ricart will lead the NIH Madrigal Singers in renditions of compositions by Josquin des Pres.

Finally, the NIH Singers will present a group of familiar choruses from various Gilbert and Sullivan operettas.

All NIH employees, patients, and guests are welcome to attend. □

Asian Pacific American Heritage Week Starts May 4

This year's Asian Pacific American Heritage Week is being observed with a series of cultural events that have been planned for May 4 through May 8.

The week's activities are being sponsored by the NIH Asian American Cultural Committee in collaboration with the Division of Equal Opportunity.

The purpose of the ninth annual program is to demonstrate some of the unique contributions that Asian and Pacific Americans have made to the diverse cultural life of the United States.

All activities will take place in the Masur Auditorium. During the week, events are scheduled each day from 11:30 a.m. to 1:30 p.m. There will also be an evening program on Friday, May 8, from 7 to 10 p.m.

Midday programs will include films on the archeological, cultural, and historic traditions of some of the Asian Pacific Americans. The films are on such countries as: Thailand, Indonesia, Japan, China, Korea, the Philippines, and the Indo-Pakistan subcontinent. Some of the titles are: "Pakistan: Mound of the Dead"; "Asia: A Continental Overview"; "Cave People of the Philippines"; and "Family of the River: The River, My Home," the story of a young Thai girl's life on the Chao Phraya River.

On Friday, the noontime key speaker will be Dr. Joon Lew, director of the World Vision Special Skin Clinic and Leprosy Research Institute, Seoul, Korea. He will speak on how his group has helped handicapped leprosy patients to develop their skills to share more fully in life through their greater usefulness.

The Friday evening program will feature live performances by artists from five cultural groups: Korea, Malaysia, Japan, the Philippines, and the Pacific Islands.

Ki Whang Kim, a seventh-degree black belt in Tae Kwon Do karate, will give a short demonstration of this Korean art of self-defense.

Groups To Perform Friday Night

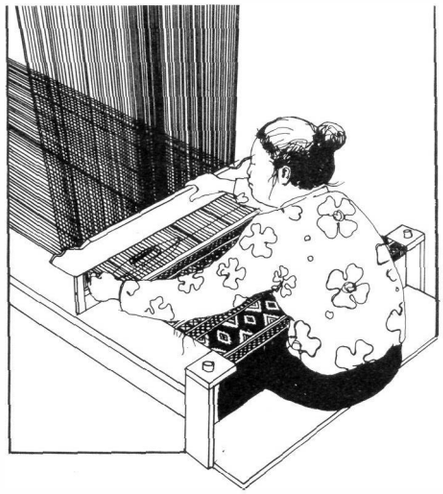
Persons from Malaysia will display native costumes, and explain their cultural significance. A 15–20 minute film of Malaysia will also be shown.

The Japanese will present classical and folk dances, as well as a performance on the Shamisen, an ancient three-stringed instrument.

The Mabuhiay and Sampaguita Dance Troupe, native dancers from the Philippines, will perform a variety of dances. A narrator will explain the meaning of each of the various movements. In Asian dances, nonverbal information is communicated by simple movements.

Hawaiian, Maori, and Tahitian dances will be performed by the Maile Hula Dancers, who will be accompanied by the Aloha Serenaders Band. A continuous narrative will explain the significance and cultural aspects of the various movements.

Both lunchtime and evening activities are open to the public. Persons attending the Friday evening performance are encouraged to park on the south side of Bldg. 10.



In addition, an exhibit of Laotian traditional weaving and embroidery will be on display in the lobby next to the NIH Library. The Lao weavers do their work entirely on hand looms in northern Virginia.

Their activities are part of an HHS-funded homemaking training program designed to assist the unemployed and handicapped. This exhibit is being set up in observance of this year's United Nations-sponsored program for the International Year of Disabled Persons. □

FIC RESEARCH FELLOW

Dr. Zhi-ping Qu, deputy director, department of neurology, Hua Shan Hospital, Shanghai First Medical College, Shanghai, China, arrived on Mar. 30, to begin an international research fellowship at the National Institute of Neurological and Communicative Disorders and Stroke under the preceptorship of Dr. Roger J. Porter. His research is on epilepsy. □

Winnie Lumsden has become committee management officer for NCI. Mrs. Lumsden formerly managed the document control and micrographics staff in the Office of the Administrator, ADAMHA. She was project officer for micrographic contracts for the scientific programs analysis and retrieval system. In her new position, Mrs. Lumsden will be responsible for managing Institute public advisory committees.

Career Week Begins May 16; Many Activities Planned

Career Options in the 80's, a week of information activities beginning May 16, is sponsored by the NIH Federal Women's Program and the Women's Advisory Committee.

On Saturday, May 16, the WAC will cosponsor a workshop on Networking in Science featuring discussions on graduate women in science and women in science and engineering. The workshop will be held at the Uniformed Services University of the Health Sciences from 8:30 a.m. to noon. For more information contact Dr. Elizabeth O'Hern, 496-7001.

NIH Director Dr. Donald S. Fredrickson will open NIH Career Week activities in the Masur Auditorium on Monday, May 18, at 11:30 a.m. Achieving Career Success will be discussed by a panel of women noted in government, academia and private industry.

Information on career change, career paths, continuing education and various personnel topics will be provided at a Career Fair in Wilson Hall, Bldg. 1, on Tuesday, May 19. Employees may visit the information areas between 10 a.m. and 3:30 p.m.

On Wednesday and Thursday, May 20–21, in Bldg. 31 conference rooms, workshops will cover career development, career/life goal setting; SF 171 preparation; concerns of disabled women; stress management; burnout; assertiveness; self-image; holistic health; financial planning; and the superwoman syndrome. One- to two-hour workshops will begin at 11:15 a.m., 12:45 p.m. and 4 p.m.

On Friday, May 22, three films will be shown between 11:15 a.m. and 1:45 p.m.: "Workplace Hustle," on sexual harassment; "The Life and Times of Rosie the Riveter," on employment of women during and after World War II with implication for today; and "Alice in FES Land," on how to prepare for a desk audit.

Linda Bremerman, WAC delegate from the National Cancer Institute, chairs the Career Week committee, and Dr. Patricia Bryant, National Institute of Dental Research delegate, chairs the WAC.

Shuttle Service Provided

Programs will be distributed by WAC members before Career Week. Special shuttle service will travel to and from Westwood, Landow, Federal and Blair Bldgs.

Sign language interpretation will be provided for the Monday program, will be available at the Career Fair, and on request, at the Wednesday and Thursday workshops.

For more information call the NIH Federal Women's Program, 496-2112. □

Only when genius is married to science can the highest results be produced.—*Herbert Spencer (1820–1903)* □

Drs. Nylen and Bowen Installed as Presidents Of Dental Associations

Dr. Marie U. Nylen, director of intramural research, NIDR, was installed as president of the International Association for Dental Research at its 59th general session in Chicago.

Dr. Nylen is the first woman president of the IADR. Her other "firsts" include: first woman president of the American Association for Dental Research; first woman director of intramural research at NIDR; and first woman laboratory chief at the Institute.

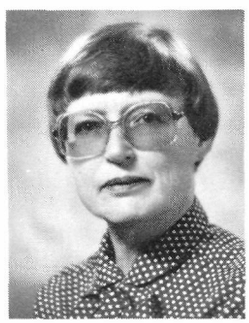
She is internationally known as an authority on the development and structure of mineralized tissues, the morphology of teeth, and the effects of tetracycline on developing bones and teeth. She has served on numerous professional advisory boards, held 11 offices in scientific organizations, authored over 40 scientific papers, and served as associate editor for several dental research journals.

The association also installed Dr. William H. Bowen of NIDR as president of the American Association for Dental Research for 1981. Dr. Bowen is chief of the Caries Prevention and Research Branch of the Institute's National Caries Program.

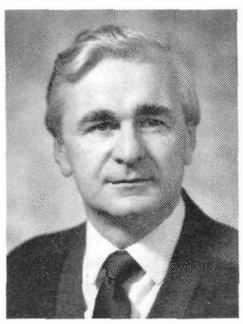
During the session, Dr. Bowen also received the Dental Caries Research Award for 1981. He was honored by the IADR for his pioneering work in developing and using the primate model for the study of caries.

After establishing baseline parameters in bacterial flora, plaque and salivary chemistry and physiology in monkeys, he used these animals to investigate the microbial etiology of caries and development of anticaries vaccines. These studies have provided a flow of knowledge about caries causation and control that can be most directly applied to humans.

The Dental Caries Research Award— supported by Trident professional services division, Warner-Lambert Company—recognizes and stimulates innovative contributions to the basic understanding of



Dr. Nylen



Dr. Bowen

the cause and/or prevention of dental caries.

The recipient must have conducted original caries prevention research which has been fully tested and accepted by the scientific community.

The IADR has some 5,500 members from nearly 60 countries. The American Association for Dental Research, the IADR's largest division, holds its annual session in conjunction with the IADR general meeting.

At this year's combined session, over 1,370 scientific papers were presented. Abstracts appear in the *Journal of Dental Research,* a publication of the AADR.

Drs. Nylen and Bowen served as program chairmen for this year's session. □

Vaccine Development Scheduled For Science Writers Seminar

The next Science Writers Seminar will cover World Health Problems: Prospects for the Development of Vaccines Against Malaria and Schistosomiasis on May 5, from 1:30 to 3:30 p.m., in Bldg. 31, Conf. Rm. 7.

The moderator, Dr. Franklin A. Neva, chief of the Laboratory of Parastic Diseases, NIAID, will discuss Technical and Administrative Constraints to the Control of Malaria and Schistosomiasis: Are Vaccines the Answer?

Dr. Louis Miller, chief of NIAID's Malaria Section, will describe the multifaceted research approaches to malaria vaccines.

Immunity and immune evasion in schistosomiasis will be the subject of the presentation by Dr. F. Alan Sher, chief of the Section on Immunology and Cell Biology, NIAID.

Science Writers Seminars, sponsored by the intramural scientists of NIH and the Division of Public Information, OD, are designed primarily to provide members of the press with background information on the various areas of research conducted at NIH.

For additional information, call Bobbi Bennett, 496-1766. □

Research Center Directory Available From DRR

The 1981 revised directory of major clinical research activities and participants at the General Clinical Research Centers of NIH has been published and is available free.

Titled *General Clinical Research Centers, A Research Resources Directory,* the booklet contains 92 pages outlining in detail facilities and investigations at all Division of Research Resources-supported GCRCs throughout the country.

Seventy-five Centers Open

Today there are 75 centers where scientists study the entire spectrum of biomedicine from genetics to organ transplants. Their research projects are funded by NIH and other agencies of the Department of Health and Human Services, by research foundations and societies, and by industry.

In addition to the current listing and location of the 75 centers, the directory identifies the names of program and associate directors, principal investigators, and specific locations of the facility within the host institution, the number of beds, and the centers' major areas of investigation. Also included are listings of special assay services or new tests available, special instruments or devices, and guides, pamphlets, or booklets from the centers.

A geographic index is provided, indicating the General Clinical Research Centers by state, and alphabetically within each state, according to the names of the host institution.

A single free copy of the 1981 revised *General Clinical Research Centers, A Research Resources Directory* may be secured by writing to the Research Resources Information Center, 1776 East Jefferson St., Rockville, Md. 20852, or by request from the Office of Science and Health Reports, Division of Research Resources, NIH, Bethesda, Md. 20205. □

CU Headquarters Office Moves Back to Bldg. 31

All financial transactions will end at the NIH Federal Credit Union headquarters office located on Old Georgetown Rd., Friday, May 1. This action is taken in compliance with the decision of the Maryland Court of Special Appeals.

As a result, Credit Union operations are being expanded in Bldg. 31 and members will be able to use several services there previously only available in the headquarters office. Some of these include loan interviewing, member services such as new accounts, share certificates, and share drafts.

The physical changes and moves will actually take place during the week beginning May 4, and will continue on an orderly and rapid basis until the end of the month. All other member services will continue in the headquarters office until the final move is completed. The Credit Union will appreciate your patience and cooperation during this time. □

Dr. J. Parrillo To Head CC Critical Care Dept.

Dr. Joseph E. Parrillo, Jr., recently become the Clinical Center's director of critical care medicine.

For the past 3 years Dr. Parrillo, a cardiologist and former NIH clinical associate, has served as chief of the coronary care unit and cardiac surgery ICU at the Cornell Medical Center in New York City.

Dr. Parrillo

Prior to this position, he was chief clinical associate and medical officer at NIAID from 1974 to 1977. His research has concentrated on acute cardiopulmonary conditions, immunology and infectious diseases.

Dr. Parrillo is a graduate of Dartmouth College and Cornell University Medical College. He completed his internship and residency at Massachusetts General Hospital where he concentrated on caring for the critically ill. His research has resulted in more than 30 publications. □

Therapy Devised by Hopkins Group To Treat Disorders of Urea Cycle

Treatments promising to extend significantly the lives of infants stricken by a group of fatal hereditary diseases have been developed by physicians at the Johns Hopkins University in Baltimore.

The Hopkins clinical research team, headed by Dr. Saul W. Brusilow, has devised and successfully tested therapy to control at least two of five hereditary diseases which paralyze the urea cycle and can lead to a fatal accumulation of ammonium ion.

Approximately 1 in 2,500 newborns has a severe deficiency of a urea cycle enzyme. The children seldom live more than a year, and those who survive are often mentally retarded.

The five hereditary disorders result from different mutant genes, each of which causes a different deficiency. Children severely deficient in any one enzyme accumulate toxic quantities of ammonium, which would otherwise be transformed into urea and excreted in urine. Elevated levels of ammonium, the initial product of amino acid catabolism, may cause seizures, brain damage, and death.

To overcome this problem, Drs. Brusilow, Mark L. Batshaw, and colleagues, treat the infants by increasing the excretion of nitrogen in compounds other than urea. Normally, these metabolic pathways produce only small quantities of nitrogenous products.

However, by chemically stimulating alternative pathways, ammonium accumulating in body fluids of newborns can be excreted before toxic levels are reached.

Presently, all affected infants who have been rescued fron neonatal hyperammonemic coma with this new therapy are alive. Their ages range from 4 months to 3 years.

Five children were treated at the Johns Hopkins clinical research unit, supported by NIH's Division of Research Resources. The others were treated at medical centers around the Nation in collaboration with the Hopkins group.

The best method yet found for treating patients with one type of the disorder, known as argininosuccinase deficiency, makes use of urea cycle enzymes not affected by the disease.

Before the Hopkins research began some 3 years ago, only dietary treatments for urea synthesis diseases were available. In such therapy, low-protein diets reduce the production of nitrogen waste. Amino acids essential for growth are provided to the patient because the body cannot produce them.

This conventional therapy is successful only in those patients with partial enzyme deficiencies. Because the production of nitrogen wastes cannot be avoided entirely, failure in severe cases is inevitable.

Drs. Brusilow and Batshaw are convinced that therapy to stimulate metabolic pathways for bypassing the genetic malfunction should be used as a complement to dietary regimens. In combination, the metabolic and dietary treatments may significantly extend the lives of newborns and may prevent brain damage caused by accumulation of nitrogen waste.

The National Institute of Child Health and Human Development supports the study of urea cycle disorders. For more information, contact Dr. Saul W. Brusilow, the J. H. University Hospital, 600 N. Broadway, Baltimore, Md. 21205. □

Visiting Scientist Program Participants

Sponsored by Fogarty Internat'l Center

4/1—**Dr. Lipa Bodner,** Israel, Gerontology Research Center. Sponsor: Dr. Bruce Baum, NIA, Baltimore, Md.

4/1—**Dr. Susan Heckford,** United Kingdom, Immunology Branch. Sponsor: Dr. Howard B. Dickler, NCI, Bg. 10, Rm. 5B15.

4/1—**Dr. Te-Chang Lee,** Taiwan, Laboratory of Pulmonary Function and Toxicology. Sponsor: Dr. J. Carl Barrett, NIEHS, Research Triangle Park, N.C.

4/1—**Dr. Ramanathapuram Manjunath,** India, Pregnancy Research Branch. Sponsor: Dr. Anil Mukherjee, NICHD, Bg. 6, Rm. 1A07.

4/1—**Dr. Benjamin Suarez-Isla,** Chile, Gerontology Research Center. Sponsor: Dr. Stanley Rapoport, NIA, Baltimore, Md.

4/1—**Dr. Roberto Fumagalli,** Italy, Laboratory of Technical Development. Sponsor: Dr. Theodor Kolobow, NHLBI, Bg. 10, Rm. 5D15.

4/1—**Dr. Michael Purnell,** United Kingdom, Laboratory of Pathophysiology. Sponsor: Dr. William Kidwell, NCI, Bg. 10, Rm. 5B39.

4/5—**Dr. F. Anders Karlsson,** Sweden, Diabetes Branch. Sponsor: Dr. Jesse Roth, NIAMDD, Bg. 10, Rm. 8S243.

4/5—**Dr. Motonori Ohno,** Japan, Laboratory of Chemical Biology. Sponsor: Dr. C. B. Anfinsen, NIAMDD, Bg. 10, Rm. 9N307.

4/5—**Dr. Fred W. Widmer,** Switzerland, Laboratory of Chemical Biology. Sponsor: Dr. C. B. Anfinsen, Bg. 10, Rm. 9N307.

4/6—**Dr. Syed Fatehyab Ali,** India, Laboratory of Behavioral and Neurological Toxicology. Sponsor: Dr. Stephen C. Bondy, NIEHS, Research Triangle Park, N.C.

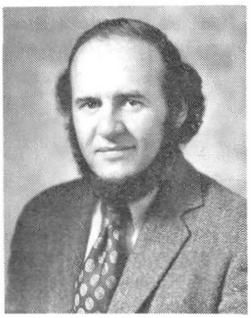
4/6—**Dr. Sekhar Chakrabarti,** India, Laboratory of Molecular Carcinogenesis. Sponsor: Dr. John Fagan, NCI, Bg. 37, Rm. 2D27.

4/7—**Dr. Naotoshi Sugano,** Japan, Laboratory of Neural Control. Sponsor: Dr. Gerald E. Loeb, NINCDS, Bg. 36, Rm. 5A29.

NIAID Director Dr. Richard M. Krause recently presented 1980 NIH Merit Awards to the following Institute personnel (l to r): Grace Ellis, head, Fiscal Management Section, "for extraordinary skill in prompt and efficient fiscal management during a period of reorganization of the NIAID extramural programs"; Mary Donovan, former Office of Research Reporting and Public Response writer and now NIH News Branch assistant chief "for superior efforts in interpreting biomedical research to the medical profession and the general public"; Dr. Krause; and Rosalie Strauss, recently retired as Data Control Section head, "for extraordinary skill in managing the automatic data processing section during development and implementation of a more responsive, complex, NIAID scientific reporting system." Josephine Morris, not shown, was honored "in recognition of her resourcefulness and skill as travel assistant, NIAID." At far left, Frank Fountain, NIAID EEO coordinator, stands with Institute employees who were presented EEO Special Achievement Awards (l to r): Charlotte B. Davis, microbiologist, Laboratory of Clinical Investigation; Vincent A. Thomas, Jr., management analysis officer; Martha J. Mattheis, microbiologist, Clinical Studies Branch; Dr. Krause; Dr. Kenneth W. Sell, scientific director; Eno Camargo, biologist, Laboratory of Infectious Diseases; and Dr. Louis Bourgeois, health sciences administrator, Extramural Activities Program.

Dr. R. Dubner Receives Dental Research Medal

Dr. Ronald Dubner, NIDR, received the 1981 Frederick Birnberg Research Medal at Columbia University's annual Alumni Day celebration Apr. 3. The award, sponsored by the University's School of Dental and Oral Surgery Alumni Association, was established to encourage outstanding dental research and to help arouse public interest for its support.



Dr. Dubner

This year, Dr. Dubner, chief of the Institute's Neurobiology and Anesthesiology Branch, was honored for his outstanding contributions to dental research. He is internationally acclaimed for his leadership in pain and pain control research, and for his contributions to the understanding of the neurophysiological mechanisms of pain in the oral-facial region.

He has been affiliated with the Dental Institute since 1959. He has a D.D.S. degree from Columbia University and a Ph.D. degree in neurophysiology from the University of Michigan. □

Dr. Philip E. Hamrick, NIEHS radiation safety officer, has been voted president-elect of the North Carolina chapter of the Health Physics Society, an organization of professionals who work on a day-to-day basis in the control and safe use of radioactive materials . As president-elect of the 150-member society, Dr. Hamrick will plan and coordinate the organization's programs for 12 months. Then he will serve a 1-year term as president. The society attempts to educate the public on possible hazards, benefits, and safety considerations of various applications of radiation technology.

Learning without thinking is useless. Thinking without learning is dangerous.—*Confucius (551-478 B.C.)* □

Fluorescent Lights Have Their Side Effects NIEHS Researchers Find in Study

Artificial light sources, particularly fluorescent, produce a unique light spectrum and can stimulate certain effects in living creatures. Flourescent lights have a markedly different energy spectra from natural sunlight, and have been identified by various investigators as producing a number of unwanted side effects.

Researchers in the Laboratory of Environmental Biophysics at the National Institute of Environmental Health Sciences have explored in mice the effects of three distinct colors of fluorescent light: daylight simulating, cool white, and pink. In the study, mice were exposed to fluorescent lights 12 hours per day for 19 months in temperature and humidity controlled cages.

The researchers made several observations. The first litter was significantly delayed in both the cool white and pink groups compared to those exposed to daylight simulating light. Females housed under the cool white light produced litters containing fewer pups than daylight simulating exposed females, while females in the pink light group had more litters than the daylight simulated group.

"Mice exposed to the cool white light gave birth to a smaller total number of pups than those kept under the daylight simulating fluorescent lights," Dr. Colin Chignell said.

"We do not mean to imply by this work that the human effects might be the same as for mice," said Dr. Chignell, chief of NIEHS's Laboratory of Biophysics. "But our results in controlled experiments with mice enable us to learn more about the subtle relationships between certain light conditions and biological processes."

The light experiment was conducted using C_3H mice, a strain in which the females naturally develop mammary tumors after a certain age. The researchers found that females kept under the daylight simulating light developed tumors 5.5 weeks later than those kept under the cool white lights, and 3 weeks later than those under pink lights.

The differences observed in both the time of tumor development and the differences in reproduction are attributable to the differences in light spectral energy distributed by the three lighting systems, according to the NIEHS scientists.

Dr. Chignell says he would like to conduct another series of experiments using the same light sources but a different strain of mice to examine whether the different light spectra might produce changes in development or behavior. □

2 New Appointees To Serve On Dental Advisory Council

Two appointments to the National Advisory Dental Research Council were announced recently for 4-year terms.

Dr. James E. Mulvihill, recognized periodontist and educator, is vice president for health affairs and executive director of the University of Connecticut Health Center at Farmington. He received his D.M.D. degree from Harvard University School of Dentistry in 1966 and is the author of several papers on periodontal disease and careers in dentistry.

Associate dean of the School of Dentistry, Meharry Medical College, Dr. Elisha R. Richardson received his D.D.S. degree from Meharry and his M.S. degree from the University of Chicago Medical Center.

He has published numerous articles on periodontal disease and orthodontics, several focusing on the black population. Dr. Richardson is a fellow of the American College of Dentists and diplomate of the American Board of Orthodontics. □

Teams Forming for Relay Run

There is still time to enter 5-member teams in the NIH Institute Relay that is to be held at noon on Wednesday, May 20, in front of Bldg. 1.

All persons interested in forming teams must sign up before May 15 at the R&W Association's Activities Desk in Bldg. 31.

The event will be videotaped this year, and will be shown later at a runners' party to be held at the FAES house on Old Georgetown Road from 4:30 to 7:30 p.m.

For further information, call Al Lewis, 443-1780.

Dr. James R. Fouts of the Laboratory of Pharmacology, NIEHS, has been elected to a 4-year term as counselor of the American Society for Pharmacology and Experimental Therapeutics. The council governs ASPET, which is one of the largest pharmacology societies in the world, and the largest in the Americas.

FIC Publishes Handbook for Sponsors Of Visiting Program Participants

A *Handbook for Sponsors of Visiting Program Participants,* published by the Fogarty International Center, outlines procedures for inviting visiting fellows, associates and scientists to work and study in laboratories.

The handbook compares various fellowships and delineates the responsibilities of the sponsor—from the initial contact with foreign scientists to their termination and departure.

For copies contact the International Visitors Center, 496-6166. □

Gasoline Prices, Physical Fitness Encourage More NIH'ers To Ride to Work by Bike

"I'm the type who likes to find an alternative. I also hate to be ripped off!" are the strong sentiments expressed by Louis Mocca, 30, a recently converted cycling neophyte. He sees the 3,000 to 4,000 miles that he has pedalled while commuting from his home to NIH for the past year and a half as his personal statement against the high cost of gasoline and for better overall physical conditioning.

"It was during the last energy crisis that I decided I did not want to wait in line," Mr. Mocca said about his decision to resurrect his Columbia 5-speed bike that he has had since he was a child in Bethesda.

Commutes 20 Miles Daily

Regardless of the weather, Mr. Mocca makes his daily 20-mile round trip from his Colesville area home, to his office at the Bureau of Biologics.

"My exercise brings me to work" is his philosophy about the 30-minute bike trip he takes each way. Previously, Mr. Mocca rode to work in an older model car that got 19 miles per gallon and reduced his commuting time by only 10 minutes. "I used to be a car rider like everyone else."

Prior to rediscovering the bicycle, Mr. Mocca exercised daily by running 5 miles.

Mr. Mocca sees many "benefits" in bicycle riding.

He finds his new activity as an alternate way of "getting exercise while not investing much time."

He said his running regimen left him with sore knees and other aches. "Bicycling is an excellent, painless form of exercise, particularly for the cardiovascular system."

$1,000 'Benefit'

Since he has been cycling to work, Mr. Mocca said he has probably saved $1,000, a figure that includes costs of gas and oil, insurance, and maintenance but excludes money he would have paid for parking at NIH each month.

His new-found interest has led Mr. Mocca to begin restoring 10-speed bicycles that he has bought at local auction sales. He then sells the repaired bikes and uses that money to restore a damaged Raleigh International touring/racing bike.

Regardless of weather, Mr. Mocca (l) and Dr. Pedersen pedal to work each day.

He says that the bike will be worth approximately $1,000 when he is finished. "Fixing a bike in the evening is a great way to mentally relax," he said.

He has even raced restored bicycles in competition. Although he considers himself a "novice" racer, he has taken a first and a second in two races.

In May, he is looking forward to the beginning of Thursday night bike races at a mile-long oval near Walter Johnson High School. These races are sanctioned by the National Capital Velo Club, a local organization that promotes competitive cycling.

Since becoming active in racing, Mr. Mocca has gotten to know Dr. Frank A. Pedersen, a psychologist with NICHD, who also has become an avid cycling enthusiast over the last 3 years. Dr. Pedersen is just one of 150 NIH Commuter Club members.

Dr. Pedersen, 48, is a master bicyclist, an age-grouping for competitors between 45 and 54 years, and is licensed by the U.S. Cycling Federation. Like Mr. Mocca he commutes by bike every day to NIH, and it is not uncommon for him after work to meet his son, David, for a joint 25-mile "training" ride to Potomac and back in the evening.

Referring to the May 27th "novice" bike race at NIH, Mr. Mocca said that it is being held "not to set any records or for prizes, but to encourage people to start using their bicycles again, to see the benefit in it." □

Cyclists Needed To Compete In Noontime Race, May 27

May is American Bike Month. In observance, the NIH Bicycle Commuter Club will feature a spring bike race at NIH on Wednesday, May 27.

The event is open to all "novice" racers who bring a bicycle to the starting line in front of Bldg. 1 for the beginning of the race at 12:05 p.m.

The event will cover the same route as the annual NIH Institute Relay, in ½-mile laps over a 4-mile course. It is suggested that all participants wear bicycle safety helmets.

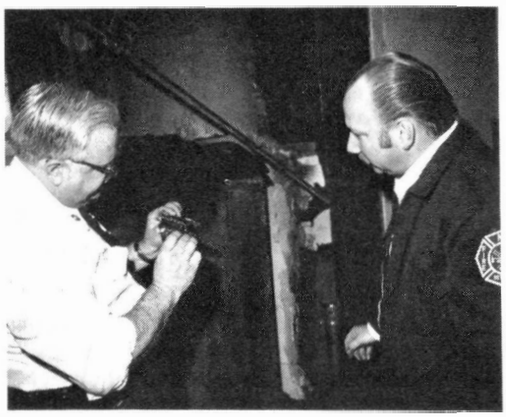
Prizes To Be Given

Prizes such as continental bicycle racing caps will be awarded to the first five men and women finalists.

Entry forms are available at the R&W Association Activities Desk, Bldg. 31, Rm. 1A–18. Applications must be submitted by May 22.

For four consecutive Tuesday evenings beginning May 12, the NIH Commuter Club in conjunction with Georgetown Cycle Shop will hold a basic bicycle repair clinic. The cost is $20. No location has been determined yet for the course.

Further information about the race, club, repair clinic, or upcoming events can be obtained from Louis Mocca, 496-1920. □



Authorities are still investigating the cause of an early morning fire in a room in Bldg. 16–A, resulting in an estimated $10,000 in damages on Friday, Apr. 20. A melted plastic smoke detector, which was credited in alerting officials of the fire, is inspected by NIH fire chief William F. Coleman (l) and deputy fire chief Charles Barrett. There were no injuries as a result of the fire.

Telephone Books for Sale Through Gov't Printing Office

At the suggestion of an employee in the Telecommunications Branch, DAS, and approved and adopted by the appropriate mechanisms, the NIH Telephone and Service Directory is now for sale to interested parties for $6.

Because of increased production costs and postal fees, the publication has become too costly for additional free distribution to non-NIH offices. Currently, the phonebook is printed three times a year for approximately $40,000.

Each time, there are 16,500 copies printed containing yellow pages and another 5,000 without. In the past, those on the mailing list received the first publication of the year, which is the issue the Government Printing Office now has for sale. The stock number is 017–040–00479–6.

The mailing address is: Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

For more information, call (301) 496-5671. □

'FATHER OF AMERICAN BLOOD BANK' HONORED

Members of the Drew family attended the opening of the exhibit: (l to r) Charlene Drew Jarvis, Bebe Drew Price, Mrs. Minnie Drew. They were joined by Dr. Fredrickson and Dr. White.

(Continued from Page 1)

time responsibility.

Unhappy with the existing policy that blood taken from blacks and whites be collected, stored, and administered separately, with great additional expenditure of time, money, and effort, Dr. Drew resigned and returned to Howard University.

The bust, commissioned by the Charles R. Drew Award Committee of Philadelphia, was presented to the "American people" last year in a White House ceremony and forwarded to NIH for display.

The exhibit was specially designed as a "showcase" for the bust. According to committee chairman, Dr. Donald Parks, this small bust will eventually be replaced by a full size bronze one sculptured by Alex Genralis and Thomas Miles.

Dr. Donald S. Fredrickson, NIH Director, said it is appropriate that the exhibit and bust be housed at NIH, "a place that symbolizes the kind of work that Dr. Drew dedicated his life to and into which he made phenomenal contributions.

"Although Dr. Drew never worked at NIH, his presence in a spiritual sense is extraordinarily important," Dr. Fredrickson told the audience which included Dr. Drew's widow, Mrs. Minnie Drew, and daughters Mrs. Bebe Drew Price and Mrs. Charlene Drew Jarvis.

Mrs. Jarvis was affiliated for 8 years with the National Institute of Mental Health as a staff fellow and research psychologist.

Dr. Fredrickson reaffirmed NIH's commitment to equal opportunity in the scientific arena. "Scientists bring to their work reflections of themselves," he said. "It would be tragic—and it *will* be tragic—if we don't continue to persist in our efforts to make sure that blacks and other ethnics gain their full share of opportunity to enjoy early the disciplines, the perspectives, that are necessary to maintain a professional career in biomedical science."

He emphasized that it could be a tragic thing for science if we were deprived of "our pool of creative, original, innovative people."

Dr. Jack White, director of the Howard University Cancer Research Center, reminisced about being a student and colleague of Dr. Drew. He said that Dr. Drew was patient, understanding, unselfish and the "finest, most moral man I've ever known."

Dr. Drew's role as an educator is often overlooked, Dr. White said. As professor of surgery at Howard University Medical School and medical director of Freedmen's Hospital (now Howard University Hospital), Dr. Drew took the initiative in training black surgeons and instilled in them a sense of mission.

"If you travel across this country and visit those who trained under Dr. Drew, you'll find them active participants, constructive in their endeavors, sincere surgeons; all with some evidence of Dr. Drew's personality in their work," Dr. White said. "I was tremendously influenced by Dr. Drew and hardly a day goes by that I don't think about him."

Referring to a favorite picture of Dr. Drew, which he has had for 33 years, and which now hangs in the Howard Cancer Research Center's conference room, Dr. White described Dr. Drew as "an imposing figure" over 6 feet tall and weighing about 220 pounds. "He had very tiny eyes which seemed to change depending on what his reaction would be to something we had done."

The Drew exhibit is in the hall, outside the cafeteria in Bldg. 31. It will be placed in the Clinical Center, the NIH research hospital, when construction is completed on the new Ambulatory Care Research Facility addition.

A portrait of Dr. Drew, unveiled at NIH 5 years ago, hangs in the Clinical Center's Blood Bank.

In recognition of Dr. Drew's birthday on June 3, the U.S. Postal Service will issue a commemorative stamp on that date. □

Division of Research Grants Selects Two Associates

Drs. Zakir H. Bengali, a native of Bombay, India, and C. David Wise, a National Institute of Mental Health research chemist, have been selected for the Grants Associates Program. Associates receive 1 year of training from the Division of Research Grants in health science administration.

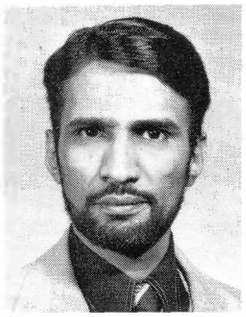
Dr. Bengali received his B.Sc. and M. Sc. degrees in microbiology from the University of Bombay, where he was a research fellow.

In 1966, he became head of the department of microbiology, Sophia College for Women, University of Bombay, a position he held for 2 years, when he took leave to study for his Ph.D. degree in the United States.

At the University of Rochester, Dr. Bengali did his thesis research in bioenergetics and pathway regulation and received his doctorate in 1974. He returned briefly to India before becoming a Fogarty fellow in 1974, with the National Cancer Institute in Frederick, Md., where he did research on the biochemical aspects of oncogenic DNA viruses.

Later, he was a visiting associate with NCI until 1980, when he joined Litton Bionetics.

Dr. Bengali is the author or coauthor of several publications dealing with oncogenic



Dr. Bengali

Dr. Wise

DNA viruses of human and nonhuman primates.

Dr. Wise received his B.A. degree from Susquehanna University in 1957 and his Ph.D. degree in biochemistry from the University of Pennsylvania in 1964. He was a research fellow in the department of biochemistry, University of Pennsylvania, from 1957 to 1964.

In 1964, he joined Wyeth Laboratories in the department of biochemistry, and in 1966 was appointed head of the neurochemical section, department of psychopharmacology. In 1977, he accepted a position with the National Institute of Mental Health.

Dr. Wise is the author or coauthor of 65 publications. His research work concerning the neurochemistry, enzymology and neuropharmacology of the brain's monoamine systems has received international recognition. □

Perhaps the most valuable result of all education is the ability to make yourself do the thing you have to do, when it ought to be done, and whether you like it or not; it is the first lesson to be learned; and, however early a man's training begins, it is probably the last lesson that he learns thoroughly.—*Thomas Huxley (1825–1895)*

More Research Indicates Smoking Risk During Pregnancy May Affect Fertility

By James Hadley

Evidence continues to accumulate indicating that "cigarette smoking during pregnancy is a major threat to the outcome of pregnancy and the well-being of the newborn baby." In addition, several studies suggest that cigarette smoking "appears to exert an adverse effect on fertility."

These are among the findings described in a recent report by Surgeon General Julius B. Richmond, entitled *The Health Consequences of Smoking for Women*.

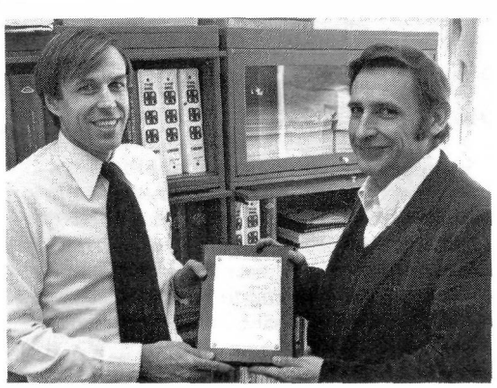
The 400-plus page document contains a chapter on the effects of smoking on pregnancy, infant and child health, and reproduction. It summarizes current knowledge about the effects of smoking on the health of women, offers a comprehensive bibliography, and recommends areas for further research.

Risk Relationship Confirmed

Through clinical, pathological, and epidemiological studies, scientists have found a definite relationship between maternal smoking and an increased risk of fetal, perinatal, and neonatal death, sudden infant death syndrome, spontaneous abortion, low birth weight, and retarded fetal growth in all dimensions.

Smoking, according to the report, also renders pregnant women more susceptible to complications of pregnancy, such as placental abruptions, placenta previa, early or late bleeding, premature and prolonged rupture of membranes, and preterm delivery. Up to 14 percent of prematurity can be attributed to excess risk caused by smoking.

Researchers point out that there is a dose-response relationship. For example, the more a woman smokes during pregnancy, the greater the reduction of birth weight. By the same token, if a woman stops smoking by the fourth month of gestation, the risk of delivering a low birth weight baby is similar to that of a nonsmoker.



Ray Danner (l), head of the statistical software section, Laboratory of Statistical and Mathematical Methodology, DCRT, is congratulated by laboratory chief Dr. James N. Mosimann for receiving the 1981 Statistical Analysis System Users Group Award. Mr. Danner was cited for his outstanding contributions to finding problems with SAS and making suggestions on new features which were later incorporated into the software system.

Reduction is independent of all other factors that influence birth weight, such as race, parity, maternal size, socioeconomic status, sex of the child, and other factors that have been studied.

Several long-term studies provide evidence that children of smoking mothers have slight but measurable deficiencies in physical growth, intellectual and emotional development, and behavior.

Children whose mothers smoked 10 or more cigarettes a day during pregnancy were on the average 1 centimeter shorter and between 3 to 5 months retarded in reading, mathematics, and general ability, as compared with the offspring of nonsmokers. After allowing for social and biological factors, all of these differences were highly significant.

Hospitalization Rates Higher

According to the report, several studies have found that hospitalization rates for pneumonia and bronchitis were higher during the first year of life for infants of smoking mothers. If the smoking parents also had cough and phlegm, the rates were even higher.

One study found that the risk of contracting pneumonia or bronchitis in the first year of life more than doubled if the parents smoked more than 24 cigarettes a day.

Investigators also note an association between maternal smoking and neurological abnormalities, such as minimal cerebral dysfunction and abnormal or borderline electroencephalograms in the infants. Heavy smoking (more than a pack a day) during pregnancy may cause hyperkinetic syndrome in children, the report said.

Smoking may also have an adverse effect on reproduction. Several epidemiologic studies have suggested that smoking decreases fertility in women. In one study, 21 percent of the women who regularly smoked cigarettes were infertile, compared to only 14 percent of the nonsmokers.

Smoking Alters Sperm

Spermatogenesis, sperm morphology, sperm motility, and androgen secretion appear to be altered in men smokers. One study demonstrated decreased sperm density, a cigarette-dose-dependent decrease in sperm motility, and a cigarette-dose-dependent increased abnormal sperm morphology among smokers.

The report cites the woman's physician as "one of the most knowledgeable figures pregnant women will encounter as a source of information." Yet several national surveys found that less than half (37 percent in one study) of the physicians queried reported that they advised all or almost all (95 to 100 percent) of their pregnant patients to quit or reduce smoking.

Obstetricians were more likely to deliver such advice to pregnant patients (49 percent) than were physicians in general practice (38 percent).

A Centers for Disease Control survey also points out that "a noticeably smaller fraction of physicians who are current smokers deliver this message than ex-smokers or nonsmokers."

The chapter on pregnancy and smoking was compiled by Dr. Eileen G. Hasselmeyer and Dr. Donald R. Mattison, NICHD; Professor Mary B. Meyer, Johns Hopkins University School of Hygiene and Public Health; and Dr. Lawrence D. Longo, Loma Linda University School of Medicine.

Single copies of the report are available by writing to the Office on Smoking and Health, PHS, 12420 Parklawn Drive, Rockville, Md. 20857, or phone (301) 443-5287. □

Ursula L. Walz Dies; Former NCI Employee

Ursula L. Walz

Ursula L. Walz, a program analyst and information specialist for the Laboratory of Pathophysiology, National Cancer Institute, and the Breast Cancer Task Force since 1972, died of cancer Mar. 24.

Born in Arlington, Mass. Ms. Walz graduated from Simmons College in Boston. She then worked as a medical technician at the University of Michigan Hospital and a laboratory instructor at the University of Michigan School of Public Health.

Former Microbiologist

In the 1950's she came to the Washington area to work as microbiologist at the Walter Reed Army Institute of Research. Later she became head laboratory technician in the department of microbiology at the University of Maryland Medical School.

Ms. Walz earned a master's degree in library science at Simmons College in 1957 and for 4 years was a reference librarian at the Harvard Medical School.

After moving back to Washington in 1961, she was a reference analyst at the National Institute of Mental Health, a microbiologist at NCI, and a medical librarian at the National Library of Medicine before returning to NCI in 1972.

Survivors include her sister, Doris E. Titus of Bethesda, and two brothers, Hans G. and Thomas C. Walz. □

Dr. David Scott Honored by Two Dental Awards

Dr. David B. Scott, NIDR Director, was recently awarded the docteur honoris causa degree by l'Université Louis Pasteur, Strasbourg, France.

A leader in ultrastructural research, he has introduced new methods for studying calcified biological tissues. His work in this area has led to a better understanding of osseous and dental tissues.

Dr. Scott also received special recognition for his pioneering work in modern forensic dentistry at the 1981 annual meeting of the American Academy of Forensic Sciences, and is the first member of the academy nominated for an award by the section on odontology.

He was the first dental member of the academy and has been a fellow since 1956. In 1953, he presented the first dental paper at the academy's second annual meeting.

Dr. Scott's interests and research in forensic dentistry include determination of personal identity and estimating age from dental evidence, and developing laboratory techniques to study dental evidence.

Dr. Scott is a member of the board of directors of the academy's Forensic Sciences Foundation and of the American Board of Forensic Odontology, which he helped establish.

NLM Director Martin M. Cummings, (seated-l) watches Carolyn Davis of the Cataloging Section demonstrate one of seven new readers which are providing NLM users with cataloging information on microfiche. The demonstration followed Dr. Cummings' announcement closing the Library's traditional card catalog. Although the card catalog must still be used for information on pre-1965 Library materials, patrons will use unique, motorized "strobe/search" readers to access more recent literature. In a few years, over 600,000 NLM book and audiovisual holdings will be accessible through the easy-to-use microfiche readers, as well as in the online catalog (CATLINE) files.

Environmental Chemicals Topic Of June Symposium

Metabolism and Pharmacokinetics of Environmental Chemicals in Man will be the symposium topic discussed June 7 through 12 in Sarasota, Fla.

For further information contact: John G. Smith, Oak Ridge National Laboratory, P.O. Box X, Bldg. 2001, Oak Ridge, Tenn. 37830, or call (615) 574-4718, (FTS 8-624-4718). □

NIDR Booklet Describes Hygiene During Cancer Therapy

Radiation, Chemotherapy, and Dental Health, a pamphlet recently published by the National Institute of Dental Research, outlines special dental problems that may occur while patients are undergoing cancer therapy. It also describes procedures to prevent or reduce possible tooth decay and to alleviate painful oral ulcerations.

Cancer chemotherapy and radiation to the head and neck may cause a noticeable reduction in the saliva normally present in the mouth. Tooth decay can develop quickly and the mouth's soft tissues can become sensitive, irritated, and subject to infection.

Patients can greatly reduce these oral health problems by practicing good hygiene with careful attention to the removal of dental plaque and by the use of daily fluoride applications as prescribed by the dentist. Sweets should be limited to mealtime.

Single copies of the publication may be obtained from the Office of Scientific and Health Reports, NIDR, 496-4261. □

Pamphlet on Elderly Issued by Aging Institute

Perspectives on Geriatric Medicine, a pamphlet which presents interviews with leaders in the development of geriatrics, has been issued by the National Institute on Aging.

Topics include: the history of geriatric medicine in the U.S.; the role of geriatrics in medical school curriculum; proposed changes in health care delivery system; overmedication of elderly patients; and a consumer's point of view.

Copies of *Perspectives*—as well as its companion *Observations on Geriatric Medicine,* a practicing geriatrician's firsthand assessment of the health care needs of the elderly—are available from: Expand Associates/NIA, 8630 Fenton St., Suite 508, Silver Spring, Md. 20910. □

Virology Research Described In New NIAID Brochure

At the Edge of Life: An Introduction to Viruses has recently been published by the National Institute of Allergy and Infectious Diseases. This 75-page illustrated booklet contains a variety of information about viruses—what they are, the diseases they cause, and their uses as research tools.

The publication was prepared to convey to the general public some of the excitement of virology research and to describe the present "state of the art" in the conquest of viral diseases. The report includes some material contained in the comprehensive six-volume *Virology Task Force Report* published by NIAID in 1979.

Single copies of *At the Edge of Life* are available from the Office of Research Reporting and Public Response, NIAID, Rm. 7A-32, Bldg. 31; telephone 496-5717.

Copies may also be purchased from the Superintendent of Documents, Government Printing Office, at $4 each (order #017-044-00037-1). □

'Loan-a-Home' Directory Lists Worldwide Residences

Muriel Hurwitz and her husband, FIC Scholar Dr. Jerard Hurwitz, have returned to the Washington area, where they lived for 2 years in the 1950's. Mrs. Hurwitz thinks it's a little like coming home again—but only a little. "Washington and I have both changed since then," she said.

Mrs. Hurwitz operates "Loan-a-Home"—a directory of housing available all over the world for academic families going on sabbatical. The project got started in 1968, when they went on sabbatical to Paris and had to find a place to live.

The directory has grown to almost 500 listings (living here has enabled her to expand the Washington, D.C., area listings) recommended by university housing offices and foreign embassies, and written up in magazines and newspapers.

For additional information, contact Mrs. Hurwitz, 18 Darwood Place, Mt. Vernon, N.Y. 10553. □

Psychological Roadblocks Subject of 1-Hour Program

Success—Psychological Roadblocks is the subject of a 1-hour program to be presented by Rachelle Selzer, chief mental health counselor, Employee Assistance Program. Why so many people, through self-defeating behavior, fail to reach success in their work or personal lives will be examined.

Occupational Medical Service invites all employees to attend on the following dates:

Monday, May 11, 11:30 a.m., Fed. Bldg., Rm. B-119.

Tuesday, May 12, 11:30 a.m., Bldg. 10, Masur Auditorium.

Wednesday, May 13, 11:30 a.m., Westwood Bldg., Conf. Rm. D.

Thursday, May 14, 11:30 a.m., Bldg. 1, Wilson Hall. □

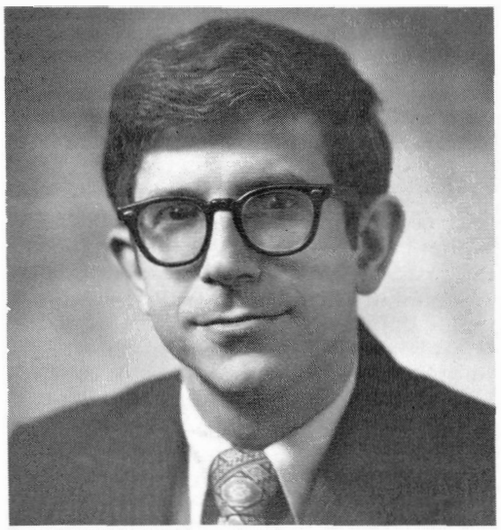
Dr. Moss Shares Award From Passano Foundation

Dr. Joel Moss, head of the section on Molecular Mechanisms of NHLBI's Laboratory of Cellular Metabolism, has received the Passano Foundation Young Scientist Award.

Dr. Moss was cited for his "contribution to an understanding of the action of bacterial toxins and an exemplary combination of clinical and scientific skills."

He shares the award with Dr. William A. Catterall of the University of Washington—a staff member of the NHLBI Laboratory of Biochemical Genetics from 1974 to 1977.

A native of Brooklyn, Dr. Moss received



Dr. Moss has coauthored more than 70 publications. He is a member of the American Society for Clinical Investigation, the American Federation for Clinical Research, and the American Society of Biological Chemists.

his M.D. and Ph.D. from New York University School of Medicine and subsequently served on the medical house staff at the Johns Hopkins Hospital. He joined the Institute in 1974 as a research associate with Dr. Martha Vaughan.

Following work that demonstrated the enzymatic activities of cholera and *Escherichia coli* toxins which are responsible for their ability to activiate adenylate cyclase, he has shown that similar ADP–ribosylation reactions may play a regulatory role in animal cells.

The Passano Award was established in 1945, to be given to a person or persons "who made an outstanding contribution to the advancement of medical science and whose associated work was done in the United States." The Young Scientist Award was inaugurated in 1975. □

Lillian W. Myers Retires; CC's Medical First Secretary

Lillian W. Myers, the first medical secretary at NIH's Clinical Center, recently retired after 33 years of government service. Mrs. Myers was administrative assistant to the director of extramural programs with the National Institute of Allergy and Infectious Diseases.

Mrs. Myers originally joined PHS as a secretary-statistical assistant in the Bureau of State Services working in a temporary building located on the grounds of NIH, where Bldg. 31 now stands.

In 1952—a year prior to completion of the hospital—she joined the original members of the Clinical Center staff housed temporarily in Bldg. 1.

With the opening of the Clinical Center, Mrs. Myers assisted in recruiting, hiring, and training medical typists, receptionists, and file clerks, and trained the support staff in medical terminology. She also aided in setting up an X-ray technician training course, giving 1-hour indoctrination courses to each new group of students.

There were only 23 patients in the first group admitted to the hospital—patients suffering from cancer, heart disease, and arthritis were among the first admitted for study.

In 1962, she transferred to the National Heart Institute as special assistant to the eminent scientist, Dr. Bernard B. Brodie,

Mrs. Myers has only "semi" retired. She is currently working part-time as a library assistant.

chief of the Laboratory of Chemical Pharmacology. Dr. Brodie's work attracted to his laboratory more foreign scientists than any other laboratory at that time.

Mrs. Myers established liaisons with people in countries around the world, including "Iron Curtain" countries. She quickly learned that there was no "Iron Curtain" among scientists.

She transferred to the National Institute of General Medical Sciences in 1967 as a grants technical assistant, and joined NIAID in 1970. □

Dr. Robert L. Dixon, chief of the NIEHS Laboratory of Reproductive and Developmental Toxicology, has been voted president-elect of the Society of Toxicology and will become president in 1982. He came to NIEHS from NCI in 1972 as lab chief. He was on detail at the White House Office of Science and Technology during 1977–78. He has also served as Institute assistant director for international programs for 2 years.

4 New Members Appointed To NIEHS Advisory Council

Four appointments to the National Advisory Environmental Health Sciences Council were announced recently.

Dr. Gareth M. Green, professor and chairman of the department of environmental health sciences at Johns Hopkins University School of Hygiene and Public Health, is an internationally recognized researcher in pulmonary defense mechanisms.

Director of the Native American Science Resource Center and associate adjunct professor at Dartmouth College, Dr. Rayna Green is a widely published author on Native American tradition, education, and folklore, as well as science administration.

Others Noted

Dr. Edwin W. Monroe, vice chancellor for health affairs and professor of medicine at East Carolina University at Greenville, N.C., is a member of the North Carolina joint conference committee on medical care.

The fourth appointment, Dr. Charles D. Proctor, is presently professor and chairman of pharmacology at Meharry Medical College in Nashville, Tenn. Dr. Proctor is a widely recognized researcher in the biochemistry of schizophrenia, tranquilizer drug actions, and actions of addiction and abused drugs.

During the last fiscal year, more than half the Institute's $83 million budget was administered through its extramural program for support of research and research training at universities, colleges, and other nonprofit laboratories throughout the U.S. □

Check Oil, Battery, Tires, and Save on Repairs

Self-service pumps may save you a penny or two, but be careful they don't cost you extra repair dollars.

The Air Force's *Driver Magazine* warns that motorists may be neglecting simple checks of oil, battery, radiator, and tires that the gas station attendant may do under full service.

A driver who spends a few extra minutes on these chores can avoid unnecessary breakdowns on the road.

To learn how to be your car's best friend at the pump, send 75 cents for *Self-Service Gas Up and Go* to the Consumer Information Center, Dept. 104H, Pueblo, Colo. 81009. □

Cyclosporin A Found Effective Against Uveitis; Eye Institute Begins Testing in Humans

By Mary Lynn Hendrix

An experimental drug called cyclosporin A may be a powerful weapon against uveitis, an eye disease responsible for about 10 percent of all cases of visual impairment in the United States.

Recent studies by Dr. Robert Nussenblatt and his co-workers in the Clinical Branch, National Eye Institute, have shown that cyclosporin A is effective against autoimmune uveitis in rats. The investigators are now testing the drug in humans who have this eye disease.

In uveitis, tissues of the inner eye become inflamed. Severe or repeated inflammation may damage the retina, the light-sensing tissue at the back of the eye, and cause blindness.

Many cases of uveitis are now suspected to be autoimmune in origin. That is, they occur because the body's immune defense system somehow mistakes the tissues of the eye for invading microbes and tries to destroy them.

For years doctors have been treating uveitis with steroids and other drugs which relieve inflammation or dampen the action of the immune system. A drawback of these medications is that they are not always effective, often cause undesirable side effects, and interfere with the patient's ability to fight off infections.

Cyclosporin A attracted the NEI investigators' attention as a possible new treatment for uveitis when research reports indicated the drug could prevent immune destruction of tissue grafts. To test the drug's value in autoimmune uveitis, the scientists first created a model of the disease in rats.

In this model, an injection sets in motion a process by which the rat's immune system is primed to attack the animal's own eye tissue. Even though the injection is given at a point far from the eye, severe inflammation of the eye generally occurs within 2 weeks—unless the animal is treated with cyclosporin A. The drug seems to prevent the immune system from mounting an effective attack against the eye.

Dr. Nussenblatt and colleagues are testing a new treatment for autoimmune eye disease.

To determine whether the human eye can be protected from uveitis in the same way, the NEI investigators are now conducting a clinical test of cyclosporin A. Only uveitis patients whose disease appears to have an autoimmune basis will receive the drug.

If cyclosporin A is found to be helpful for these patients, it may be used to save the vision of many people who suffer from particularly stubborn cases of uveitis that have not yielded to conventional treatment.

Also, cyclosporin A may not leave patients as vulnerable to outside infection as do other drugs used in the treatment of uveitis. Most of these drugs dampen the activity of the entire immune system.

But cyclosporin A is much more specific in its effects: It acts on only one component of the system, a class of white blood cells called "T cells" that orchestrate other blood cells' response to foreign tissue.

In the laboratory model of uveitis, rats treated with cyclosporin A lose only those parts of the immune response that are controlled by T cells. They do not lose the ability to form antibodies (infection-fighting proteins).

Participating in this research project along with Dr. Nussenblatt were Drs. Igal Gery, Merlyn Rodrigues, and Mario Salinas-Carmona. Stanley Cevario of NEI and Dr. Waldon Wacker of the University of Louisville in Kentucky also collaborated in the study.

The investigators' findings are published in the April 1981 issue of the *Journal of Clinical Investigation*. □

SCHOLARS

(Continued from Page 1)

major contributions to science at both the technical and the theoretical levels. His early work concerned characterization of macromolecules by physical techniques including ultracentrifugation.

Dr. Schachman participated in development of the artifical boundary cell that, for the first time, made it possible to observe sedimentation of small molecules such as cyclic-AMP.

This year he will again participate in the FIC seminars and lectures program, until he returns to Berkeley at the end of May. In 1982, he will come back to NIH for his last term as a Fogarty Scholar.

Dr. Bernhard has returned for the final term of his scholarship. He is well-known for his work on mechanisms of enzyme action and has made major contributions at the experimental and theoretical levels.

He has also written one of the most popular textbooks in biochemistry, *The Structure and Function of Enzymes*.

During his first Fogarty Scholar term, Dr. Bernhard helped organize a weekly seminar on ATPases and Energy Transduction. In addition, he arranged a series of evening discussions about Evolution From the Prebiotic to the Present.

A future *NIH Record* will announce the seminars that Prof. Bernhard will conduct before he leaves NIH in mid-July. □

Dr. Bruce Chabner Named NCI Clinical Assoc. Director

Dr. Bruce A. Chabner has been named associate director of the Clinical Oncology Program, National Cancer Institute, and will continue to serve as deputy clinical director.

Dr. Chabner

Dr. Chabner joined NCI in 1971, where he has worked extensively on the biochemistry of antimetabolites used in cancer chemotherapy.

He received a B.A. from Yale University in 1961 and an M.D. from Harvard Medical School in 1965. Following an internship and junior residency at the Peter Bent Brigham Hospital in Boston, Dr. Chabner served as a clinical associate in the NCI Laboratory of Chemical Pharmacology.

He returned to Yale in 1969 as senior resident at the Yale-New Haven Medical Center and research associate at the Yale University School of Medicine. In 1971, he became a senior staff fellow in the Division of Cancer Treatment and the next year, became a senior investigator in the Medicine Branch.

In 1973, Dr. Chabner was appointed head of the NCI biochemical pharmacology section, Laboratory of Chemical Pharmacology, and chief of the Clinical Pharmacology Branch in the Clinical Oncology Program in 1976. □

Fulbright Program Seeks Scientists and Lecturers

More than 500 Fulbright awards in over 100 countries are now open to application for university teaching and postdoctoral research in 1982–83. Most awards are for 4–9 months, with an increasing number of research openings.

Applications are due June 1 for the American republics, Australia and New Zealand; and July 1, for Africa, Asia, Europe and the Middle East.

Several countries requesting Fulbright scholars in medical sciences and services are: Australia, orthopedic surgery; Belgium, oncology; Colombia, health sciences, dentistry, administration and preventive medicine; Ecuador, medical technology; Jordan, clinical medicine or pharmacy.

Also Netherlands, study of U.S. and Dutch health and welfare structures; Nigeria, medical science; Norway, internal medicine or physiology; Portugal, biomembranes; Sudan, human physiology; and Uruguay, hematologic or renal physiology.

An applicant must be a U.S. citizen and have appropriate academic and experience credentials. Registration forms may be obtained from the Council for International Exchange of Scholars, Dept. N, Eleven Dupont Circle, N.W., Suite 300, Washington, D.C. 20035. □

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