Dr. C. Hanson Is Named Special Projects Branch Chief, Program Analysis

Dr. Hanson has recently written or co-authored two articles, "Drug Surveillance for Adverse Reactions," and "Quality Control and Medical Information Systems."

Dr. Charles Hanson has been named chief of the Special Projects Branch, Office of Program Analysis, in the office of Dr. Thomas J. Kennedy, Associate Director for Program Planning and Evaluation.

Dr. Hanson comes to NIH from the Health Services and Mental Health Administration where he was chief of the Health Applications Section, Office of Systems Management.

He received his B.A. in 1964 and M.D. in 1969 from Harvard University.

From 1967 to 1968, Dr. Hanson was a special student in the Sloan School of Management, Massachusetts Institute of Technology.

Background Given

While there, he studied operations research and systems design, information technology including comparative programming languages and systems programming, and managerial mathematics and model building.

As part of a Sloan project, in 1968, Dr. Hanson helped develop an information system for the Beth Israel Hospital.

He was also a research assistant with the Laboratory of Computer Science, Massachusetts General Hospital, from 1967 to 1969.

Dr. H. Woolley Appointed As First NIH Economist

Dr. Herbert B. Woolley has been named the first NIH Economist in response to a pressing need to deal with problems of resource allocations and to consider the relevancy of economic principles to the health field.

Dr. Woolley will apply the techniques of economic analysis to assist policy development and program decisions at NIH, and develop econometric models to explain alternative resource allocation decisions in biomedical research.

Analyzes Cost Benefits

Also, he will apply cost benefit analysis to NIH research programs, and help design information and data systems to provide reports required for improved decision-making at NIH.

In addition, he will serve as economic advisor to Dr. Robert Q. Marston, NIH Director, and will represent NIH in inter- and intra-agency meetings and non-governmental forums.

Since September 1971, Dr. Woolley served with the Supporting Assistance Bureau of the Agency for International Development as a senior economic advisor.

He spent 27 months in Vientiane, Laos, with the U.S. Aid Mission as chief of Economics Work and senator.

Dr. Woolley is best known in academic circles for his work at the National Bureau of Economic Research on the area pattern of world trade and payments flows.

At the reception, Dr. Seal (l) and Dr. Kreshover display their award certificates presented to them by Secretary Richardson. The researchers were lauded for studies and achievements in their respective fields.

Secretary Elliot L. Richardson presented honor awards to two NIH staff members at the DHEW Annual Honor Awards Ceremony held April 14 in the auditorium of the Administration Building, Social Security Administration, in Baltimore.

Dr. John R. Seal, Scientific Director, National Institute of Allergy and Infectious Diseases, received the Distinguished Service Award, it is the highest honor given to civilian employees at HEW.

Dr. Seymour J. Kreshover, National Institute of Dental Research, was given the Distinguished Service Medal. That award is presented to Commissioned Officers whose services and achievements merit HEW's highest recognition.

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Achievements Cited

Dr. Robert Q. Marston, NIH Director, assisted the Secretary in presenting the certificates, medals and awards to the award winners.

Dr. Seal was cited for "his extraordinary ability in directing complex intramural and collaborative biomedical research programs and in implementing targeted efforts in hepatitis, respiratory diseases, and cholera."

Dr. Kreshover was honored for "his outstanding leadership in understanding and control of oral diseases, broadening the scientific base.

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Search Committee Named By Marston to Consider Successor to DBS Director

A search committee to consider a successor to Dr. Roderick Murray, Division of Biologics Standards Director, who will reach mandatory retirement age in August 1973, has been appointed by Dr. Robert Q. Marston, NIH Director.

When announcing the seven-member committee, Dr. Marston stressed the need to initiate plans for predictable changes well in advance.

"Dr. Roderick Murray is a man of outstanding scientific ability said Dr. Marston, "We cannot afford a hiatus in DBS leadership.

"With this consideration in mind, and with the full concurrence of Dr. Murray, NIH has established a search committee for his successor and it has already begun its work."

The search committee includes: Dr. John F. Sherman, NIH Deputy Director; Leon M. Schwartz, NIH Associate Director for Administration.
Clinical Center Begins
New Type of Training For Physician's Assistant

A new type of training program for physician's assistants was recently initiated at the Clinical Center on a trial basis. Two students have completed their training here. During February, David Lee was assigned to the National Heart and Lung Institute, and Dennis O'Dell worked with the National Cancer Institute in March.

Two more students, Emmett Noll and Richard Davidson, will be arriving before July.

Under a physician's supervision, they perform bone marrow aspirations, liver biopsies, lumbar punctures, and physical examinations, and assist in peritonoscopy.

At NIH, they start intravenous fluids, draw blood for lab studies, take patients' histories, follow the patient's daily progress, etc.

In addition, physician's assistant students attend rounds.

NIH Television, Radio Program Schedule

Radio

DISCUSSION: NIH

WGMS, AM-570—FM Stereo—103.5—Friday about 9:15 p.m.
April 28
Dr. Jacob Brody, NINDS
Subject: Epidemiology
May 5
Dr. Nathan Watzman, DPHPE
Dr. James E. Bates, Am. Pod. Assn.
Subject: National Foot Health Week

Staff Correspondents

ADA, Robert Manning; BHME/OD, Florence Feolak; CG, Ann Bainbridge; DAHM, Laura Mae Kress; DBS, Faye Peterson; DCRT, Joan Chase; DDI, Carolyn Niblett; DMI, Marian R. Fox; DN, Evelyn Lazari; DPHPE, Eleanor Wesolowski; DRG, Sue Meadows; DRR, Jerry Gordon; DRS, Robert Knickerbocker; FIC, Lois P. Meng; NCI, Elizabeth Shollenberger; NEL, Julian Morris; NHII, Bill Sanders; NIAID, D. K. Noll and Richard Davidson; NIMH, Daniel Rice; NINDS, Anne Tisiker; NLM, Roger Gilkeson.

Computer Resources Survey Conducted by Army Agency

A study of the management of computer resources at NIH will be conducted by the Army Management Engineering Training Agency. The study has been requested by the Office of the Director, NIH.

A team, headed by Fred Svec, AMETA, will conduct interviews at NIH during the next 3 months. A form—the Computer Resources Survey—was distributed last week. Answers to the questions on that form will also be evaluated in the over-all study.

Employees who feel their work will be improved through the use of computers may also fill out the survey and return it to the AMETA Study Team. Their address is included on the questionnaire.

Employees who wish to take part in the study but have not received the form, may call Barbara Bynum, Office of Management Policy, Extension 64603, for a copy.

Dr. Richard Lee Dies in N.Y., NIH Researcher From 1949-53

Dr. Richard E. Lee, a former researcher at NIH, died on April 13 in New York. He had been chief of the National Heart Institute's Peripheral Vascular Group from 1949 to 1953. He also served as a PHS surgeon from 1952 to 1955.

Dr. Lee was physician-in-charge of New York Hospital's high blood pressure clinic, and assistant professor of Clinical Medicine at Cornell University Medical Center.

Dennis O'Dell is assisted by Elizabeth McGlynn, a practical nurse in the Cancer Nursing Service, as he prepares a patient for a bone marrow aspiration. He worked on the Leukemia and Solid Tumor Services at NCI.

Federal Education Program To Begin Classes May 22

The Federal After-Hours Education Program is offering more than 100 undergraduate and graduate level courses for the summer session. Classes will begin May 22.

The College of General Studies, George Washington University, offers courses leading to B.S. and M.S. degrees. Participants seeking self-improvement courses may enroll as non-degree students.

The Government Employee Training Act of 1958 gives Federal agencies broad authority to pay tuition cost and other fees related to present or anticipated job requirements.

All courses are 3 semester hours and tuition is $60 per hour.

Registration will be held in Conference Rooms A, B, and D, Department of Commerce Building, 14th St. and Constitution Ave., N.W., from 10 a.m. to 3 p.m. on Friday, May 19.

For further information regarding the program, call Robert W. Stewart, Jr., G.W.U., at 676-7018 or 7086.

Bache Free Clinic, Bethesda, Needs Volunteers for Staff

Volunteers for the Bache Memorial Bethesda Free Clinic may contact John Eubank in the daytime at the Free Clinic number—666-3222, or in the evening at home—942-3519.

The clinic is in the basement of St. John's Episcopal Church, 6701 Wisconsin Ave., Bethesda. It is open on Sunday, Tuesday and Thursday evenings from 7 to 10 p.m.
A Fellowship Program Aids Minority Schools To Train Researchers

A new program by the National Institute of General Medical Sciences will help minority schools train greater numbers of health research scientists and teachers.

This special program will provide fellowships to further the research and teaching roles of biomedical science educators affiliated with colleges and universities serving predominantly ethnic minority students.

Funds will also be made available on a competitive basis to assist these institutions in bringing outstanding scholars to their campuses to aid in the development of research activities and to teach in fields basic to medicine.

95 Colleges Eligible

Institutions eligible for the awards, and their sponsored faculty members and students working for the Ph.D. degree include the Nation's 95 colleges founded for blacks.

Also, there are 30 additional 4-year schools whose enrollment includes a majority of American Indian, Mexican-American, Puerto Rican, Hawaiian, and other racial descents.

Information and guidelines to apply for funds under the program are being supplied to officials of these institutions.

The NIGMS plans initially to provide funding up to $500,000 for the new program, known as the Minority Access to Research Careers (MARC) Program.

The Institute's effort complements another NIH program administered by the Division of Research Resources. The Division's program termed the Minority Schools Biomedical Support (MSBS) Grant Program, awards funds to strengthen institutional biomedical research capability.

Both programs constitute a major effort by the Bureau of Health Manpower Education to recruit members of minority groups into health careers.

Need Cited

According to Dr. DeWitt Stetten, Jr., Director of NIGMS, these special actions by NIH are urgently needed to help correct the extreme imbalance in the United States of the numbers of minority group health scientists and teachers with doctoral degrees.

Studies show, he noted, that, while approximately 11 percent of the U.S. population is black, only 2 percent of all American physicians are black.

Other studies have shown that for all persons in the country (See MINORITY FELLOWSHIPS, P. 57)
Douglas Christian Wins APhA's Annual Award

Mr. Christian was honored at the First Session of the Military Section at the APhA meeting held in Houston.

Douglas G. Christian, a pharmacist with the Patient Care Pharmacy at NCT's Baltimore Cancer Research Center, will receive the Eighth Annual Award of the American Pharmaceutical Association for a paper, "Drug Interference with the Patient Care Pharmacy" with the Patient Care Pharmacy as an incentive.

The award is sponsored by Eli Lilly and Company as an incentive for publication of interesting and innovative ideas in the paramedical profession.

Mr. Christian's award-winning paper was cited as "very timely and helpful to other members of the pharmaceutical profession."

DHEW AWARDS

(Continued from Page 1)

of dental research, and for setting a pattern of dental research and education which is being followed worldwide."

The Secretary also recognized two NIH scientists as recipients of the Arthur S. Flemming Award.

Other NIH Awarded

Douglas G. Christian, a pharmacist at the National Cancer Institute, was honored for her outstanding contributions to cytogenetic research aimed at elucidating cellular mechanisms in human cancer.

Dr. Richard M. Asofsky, National Institute of Allergy and Infectious Diseases, was cited for his leadership and significant contributions to immunologic research and experimentation. Dr. Asofsky was unable to attend the ceremony as he was at the FASEB meeting in Atlantic City.

After the ceremony, officials, and award recipients and their families attended the Secretary's reception.

Dr. Hicks and Brown to Head Two HEW Women's Programs

Secretary Elliot L. Richardson announced the appointments of Dr. Florence J. Hicks as Director of HEW's Women's Action Program and Dr. Vera Brown as Director of the Federal Women's Programs.

The award is sponsored by Eli Lilly and Company as an incentive for publication of interesting and innovative ideas in the paramedical service fields.

Mr. Christian's award-winning paper was cited as "very timely and helpful to other members of the pharmaceutical profession."

Dr. M. Cummings Calls for 'Clarity, Precision' In Medical Literature

Dr. Cummings (l) congratulates Rep. Rogers on receiving an honorary Doctor of Science degree in recognition of the representative's leadership in national health legislation.

Dr. Martin M. Cummings, Director of the National Library of Medicine, recently spoke at the dedication of the Louis Calder Memorial Library of the University of Miami School of Medicine.

He said that English "is fast becoming the standard language of science, we have a responsibility to learn how to speak and write English properly ourselves."

Dr. Cummings called for "more attention to clarity and precision of expression" in medical writing. One well written account of research in one good journal is all that should be expected of a scientist, he noted.

Rare Book Donated

A 1537 edition of The Aphonian of Hippocrates, With a Commentary by Galen, was donated to the library's rare book collection by Dr. Cummings.

The modern three-story library was financed with a construction grant of $1 million through the Medical Library Assistance Act and a matching amount from the Louis Calder Foundation.

Paul G. Rogers (D-Fla.), chairman of the House Interstate and Foreign Commerce Committee's Subcommittee of Public Health and Welfare, gave the principal address.

Reprints Now Available at DRG

The DRG Information Office is making available reprints of "Who reads your project grant application to the National Institutes of Health?" by George N. Eaves in Federation Proceedings 31: 2-9, 1972.

DRG's Information Office is in the Westwood Building, Room 453, Ext. 67441.

Using Drug Stimulants For Children With MBD Not Considered Addictive

A majority of scientists participating in a recent conference on minimal brain dysfunction have pointed out that drugs administered to children with the disorder does not predispose them to addiction during adolescence.

The stimulant drugs most widely used in treating primary school children with MBD are amphetamine and methylphenidate hydrochloride. The drugs may be administered for 6 months to 5 years in order to subdue the symptoms.

More than 800 educators, clinicians, and behavioral scientists attended the conference which was sponsored by the National Institute of Child Health and Human Development, the National Institute of Neurological Diseases and Stroke, and the New York Academy of Sciences.

Conference researchers declared that drug treatment for MBD has been shown to be effective in reducing symptoms which include hyperactivity and lack of concentration; addiction and euphoria almost never develop.

Identification Difficult

The scientists also emphasized that not all children with the disorder are treated with drugs. Because diagnosing the dysfunction is difficult, a common definition of MBD and accurate means for identifying it was one of the major points of discussion.

Other conference topics included environmental and hereditary influences on MBD, epidemiological factors, and future research.

The New York Academy of Sciences plans to publish the proceedings of the conference; the publication is expected to be ready in about 9 months.

SEARCH COMMITTEE

(Continued from Page 1)

One of the eight special air monitoring stations used by the state of Maryland to test air quality is located near Bldg. 34 (background). Each station—linked by telemetry to the central data processing and control station located in the Maryland Bureau of Air Quality Control Headquarters in Baltimore—measures air quality parameters such as sulfur oxides, oxides of nitrogen, ozone, and total particulates. The Environmental Services Branch, DRS, has arranged for an "open house" to permit those interested to visit the trailer this Thursday, April 27, between 1 and 3 p.m.
Substitute Sight System for the Blind Can Transmit Pictorial Images via Skin

By Bonnie Friedman

Children often play a game of tracing letters on the hand of a blindfolded friend, hoping that the tracing child it is just a game. But through the efforts of California scientists, whose work is supported in part by a National Eye Institute grant, the theory behind that game is providing new hope for the Nation’s blind.

Dr. Paul Bach-y-Rita and Carter C. Collins at San Francisco’s Smith-Kettlewell Institute of Visual Sciences have developed for the blind a substitute sight system that transmits pictorial images via the skin.

The Tactile Vision Substitution System (TVSS) uses the images captured by a television camera to activate a series of stimulators arranged on a grid and positioned over the skin of the abdomen.

Practice Needed

With training and practice, a sightless person learns to translate these painless impulses automatically into crude spatial images within the brain.

Speaking at a recent NEI seminar, Dr. Bach-y-Rita, who is Associate Director of the Smith-Kettlewell Institute, explained why the TVSS can work.

“The brain already has the ability to pick up sensations from the skin because it has receptors laid out in a two-dimensional pattern,” he explained. “It is the only organ besides the retina that is arranged in that way.”

The TVSS is also possible because of the unusual nature of the brain. “The brain is capable of recovering from a number of insults to it. It is even capable of reversing the results of long-term deprivation if the proper input is restored,” Dr. Bach-y-Rita said.

Equipment Explained

The nature of the brain and skin, however, are not the only factors that have made the vision substitution system possible. Long and dedicated research has gone into the project. Dr. Bach-y-Rita and his associates have been working on TVSS for 8 years.

They have progressed from using

The TVSS includes a minute TV camera worn at the waist or shoulder and a one-ounce light-gathering lens attached to the frame of an ordinary pair of glasses. The lens picks up pictorial information which is converted to electrical signals. These activate the electrodes on the belt positioned over the abdomen. The result is a massage-like stimulation of the skin, producing a sensation of what the camera has recorded.

400 pounds of equipment in conjunction with a converted dentist chair to utilizing a 4-pound miniature television system.

In addition, they have advanced from the original nine electrodes on a grid to 256 points with 32 lines. They are currently developing a system 4 times that size to allow even greater detail to be transmitted.

Lines, Shapes Discerned

A blind person learning to use the TVSS begins simply. He is first presented with a series of lines, then moving lines, and then simple geometric shapes.

Later, more complex figures and letters of the alphabet are presented to him. Eventually, the student is able to train all of their subjects especially important in areas such as vocational training.

The investigators would like to achieve transmission to their students of a 20-degree angle of perception. This, Dr. Bach-y-Rita stresses, is necessary before the TVSS can fulfill the needs for which it was developed.

Daylight Saving Time Soon; Move Clocks Up April 30

April 30—the last Sunday of this month—marks the beginning of Daylight Saving Time for the Washington Metropolitan area.

Clocks should be set ahead one hour to compensate for the change which will go into effect at 2 a.m. Sunday.

Pictorial facsimile of a telephone as it is “seen” by a person via the TVSS can also be picked up by the television monitor so researchers can check the patient’s response.
Health Educators Urge Navajos to Establish Center to Train Indians

A report on a study urging the Navajo Tribal Council to establish on its reservation a center to train Indians in medicine and other health professions has been issued by a team of prominent health educators.

The 4-month study was undertaken in response to a resolution sent to HEW Secretary Elliot Richardson by the Council.

It expressed the need for "facilities to train Indian medical personnel, within an Indian reservation, for the benefit of all American Indians."

The team was selected by Dr. Merlin K. DuVal, HEW Assistant Secretary for Health and Scientific Affairs, and Dr. Kenneth M. Endicott, Director of the Bureau of Health Manpower Education, in cooperation with the Indian Health Service.

They urged the Council to establish a Department of Health that would be responsible for:

- Coordinating current health manpower training activities on the reservation.
- Planning health and health manpower training facilities.
- Planning for a Center for Health Professions Education.
- Dr. George Blue Spruce, director of the Office of Health Manpower Opportunity, BHME, served as a member of the study team.

ABC Shows 'Life, Death, and the American Woman'

An intensive look at certain major health problems that can affect American women will be telecast in a one-hour documentary, "Life, Death, and the American Woman," over the ABC-TV network and WMAL (Channel 7), Thursday, April 27, at 10 p.m.

Actress Patricia Neal, who overcame a near fatal series of strokes 7 years ago, will narrate the special, produced by Alan Landsburg Productions of Hollywood.

The General Clinical Research Centers, which are supported by the Division of Research Resources, cooperated with the producer.

The medical experts appearing in the film are mainly program directors of General Clinical Research Centers and medical scientists using the centers.

Susie Coelho Selected In D.C. Metro Pageant As 'Miss Photogenic'

Susie, who ran around frantically for days before the Metro contest looking for a gown and hot pants outfit, enjoys the contrasting coin of a walk on the campus.

With a captivating smile and matching personality, Susie Coelho clearly stands out from the ordinary.

Susie, a part-time employee in the National Heart and Lung Institute, recently entered the Miss Metro Pageant, held in Washington, D.C., to further her modeling career.

Immediately before the judges selected the five finalists for the contest, they announced the awards for Miss Congeniality and Miss Photogenic.

"Miss Photogenic is Susie Coelho from Bethesda . . . ;" the announcer said.

"It came as a complete surprise to me. I did not expect it at all. I knew they had an award for the most congenial, but not for photogenic—I must not have been listening," she explained.

"The pageant was the best thing that could have happened to me as far as setting up contacts for modeling.

"I even got an offer to sing—but I can't sing," Susie commented.

She owes her interest in modeling to her mother. "She entered me in the Miss Teenage Maryland Contest when I was 14," Susie was a finalist in the competition, but she didn't enter any others until the Miss Metro.

A graduate of Walter Johnson High School, Bethesda, in 1971, Susie is finishing her first year as a French major at American University.

She does not intend to put her education to use right away. "I want to take my modeling career as far as possible. I want the education . . . to fall back on when I need it," she said.

Her ambition is to eventually become a model for clothing ads in magazines.

Susie also models part-time for a Baltimore agency—in runway, tea room, and advertising modeling, as well as make up consultation.

Dr. K. Bischoff Awarded Ebert Prize for 1972

Dr. Kenneth B. Bischoff, Walter R. Read Professor of Engineering and Director of the School of Chemical Engineering at Cornell University, has won the 1972 Ebert Prize of the Academy of Pharmaceutical Sciences of the American Pharmaceutical Association.

Dr. Bischoff is a consultant for the Chemical Engineering Section of the Biomedical Engineering and Instrumentation Branch, Division of Research Services.

The Ebert Prize was first awarded in 1874. It honors the senior author of the best scientific report published during the preceding year in the Journal of Pharmaceutical Sciences.

Also to be honored are the co-authors Dr. Robert L. Dedrick, chief, Chemical Engineering Section, BEIB; Dr. Daniel S. Zaharko, Laboratory of Chemical Pharmacology, NCI, and James A. Longstreth, formerly with BEIB, now a doctoral student at Johns Hopkins University.

The winning article, "Methotrexate Pharmacokinetics," describes a pharmacokinetic model which predicts detailed tissue distribution and excretion of methotrexate in several mammalian species including man.

William Rice Wins $1000 Prize

William Rice, science editor of the New York Daily News, recently won a $1,000 prize from the Arthritis Foundation for his series of newspaper articles called "Arthritis: A Very Special Hall."

Much of the material for Mr. Rice's series was supplied by the National Institute of Arthritis and Metabolic Diseases Information Office and included interviews with Dr. John Decker, chief of the Arthritis and Rheumatism Branch, and other staff members.

Her ambition is to eventually become a model for clothing ads in magazines.

Susie also models part-time for a Baltimore agency—in runway, tea room, and advertising modeling, as well as make up consultation.
Scientists Discuss Control of Movement And Posture at FIC, NINDS Workshop

Control of movement and posture was discussed by noted scientists in neuromuscular and brain research during a workshop sponsored by the Fogarty International Center and the National Institute of Neurological Diseases and Stroke.

Dr. Ragnar A. Granit, Fogarty Scholar and Nobel Prize winner, was chairman of the workshop. Dr. Granit was awarded the Nobel Prize for his work on muscle spindles and their motor control.

Dr. Karl Frank, chief of the NINDS Laboratory of Neural Control, served as co-chairman.

Researchers from America and eight foreign countries discussed the clinical aspects of neuromuscular disease; control of movement by the brain; muscle, brain, and spinal cord changes preventing movement; and how visual information gets to distal muscles.

Relationship Is Crucial

Understanding the intricate relationship between muscle, nerve, and brain is crucial to both the treatment of movement disorders and to the possible development of artificial limbs and their direct control by the brain.

Dr. W. King Easle, chief of the NINDS Medical Neurology Branch, well-known for his clinical work with muscular disorders and his research in muscle chemistry, presented a paper showing how individual muscle fibers are selectively affected in various muscle disorders. His research has shown that normal human muscle fibers are of two basic types.

In myotonic dystrophy, for example, he has found that there is a reduction in the size of Type I fibers and an increase in the size of Type II fibers, whereas in myasthenia gravis Type II fibers are reduced in size to a greater extent than Type I fibers.

These findings have obvious diagnostic value, but may also be the key to learning the underlying causes of such disorders as myasthenia gravis and the muscular dystrophies.

Dr. Robert Burke, who is conducting related studies in the NINDS Laboratory of Neural Control, discussed his work relating chemical properties of muscle fiber types to the physiological action of the muscle fibers.

He has shown, for example, that fast-contracting fibers which also tend to fatigue quickly are driven by high quantities of glycogen, while slow-concentrating fibers which are fatigue-resistant are low in glycogen but are richly supplied by capillaries which carry energy to these fibers.

These findings will eventually contribute to the understanding of diseased muscle and add to the knowledge of normal muscle function.

It is well known that the fast-contracting muscle fibers are obviously useful for quick action, while the slow-contracting but fatigue-resistant type are useful when sustained muscle action is necessary.

Studies Discussed

Dr. Ayub Ommaya, associate neurosurgeon of the NINDS Surgical Neurological Branch, stressed the importance of studying the traumatized brain to gain a better understanding of how the nervous system reintegrates following trauma.

Dr. John Van Buren, acting chief of the NINDS Surgical Neurology Branch, and Dr. Frank discussed the prospects and ethical aspects of direct brain control of artificial devices.

Dr. Frank stated that technology could be developed not only for assisting the brain to control artificial limbs but also for augmenting normal muscle movement, increasing an individual's capabilities.

He reported that some scientists have trained an animal to control the electrical activity of a single brain cell.

By electrically stimulating the muscle nerves directly, according to Dr. Frank, initially rapidly fatiguing muscle can be converted into a slowly fatiguing one, allowing for smooth graded contraction of the limb.

He also stressed the importance of using the built-in organization of the nervous system to achieve control of artificial limbs or possible reinnervation of damaged limbs.

Dr. Van Buren stated that while scientists legally have no authority to conduct research on human beings such research is vitally needed if we are to advance.

He added that perhaps new guidelines for basic brain studies in patients and normal volunteers should be established.

According to Dr. Van Buren two present procedures for studying the brain during epilepsy surgery and stereotaxic surgery for Parkinson's Disease—are yielding important information.

Loyd Todd, chairman of the scientific council, spoke on the relationship between the medical world and the future of neurosurgery.

He offered to assist the neurosurgical profession in any way possible, for the advancement of human nature.

Mr. Garrett is waiting to hear from the admissions offices of medical schools. He just attended his first council meeting and has become interested in environmental health sciences research.

Dr. Christian extolled the work of the council after its recent meeting, and said she believes the meetings are contributing to the development of effective guidelines for nurse training.

William H. Johnston, Jr., on the National Advisory Research Resources Council, is a first-year medical student at the University of Alabama Medical Center in Birmingham. He was born in 1940.

During his senior year at Auburn University, he was president of his medical fraternity. Under his leadership the fraternity sponsored several allied health programs.

"We tried to interest freshmen and sophomores who showed an initial interest in medicine but dropped out early, that there were other careers in allied areas. We pointed out fields in nursing, physical therapy, optometry, and opportunities as physician assistants," he explained.

Mr. Johnston was attending his first meeting at NIH. At this point in his career he is torn between "research and the clinical side." Speaking with scientists during council meeting recesses may help the medical student decide that issue.

Wayne L. Garrett, born in 1950, a senior and chemistry major at Muhlenberg College, is on the National Advisory Environmental Health Sciences Council. He hopes to attend a medical school next year.

Mr. Garrett is interested in music, drama, journalism, and law. He has prepared news releases for a statewide news service, and law briefs while serving as a senior justice at college.

Two of the young members are on the Advisory Committee to the NIH Director. They are:

Serves as Staff Attorney

Christine Denis De Flore, born in 1945, a Howard University Law School graduate and a Yale Law School Graduate Fellow, is a staff attorney in Central Headquarters Unit, Neighborhood Legal Services, Washington, D.C. Michael Schatzlein, born in 1950, is a student at the Indiana University School of Medicine.

Other young members are:


Mr. Jarboe, on campus since 1959, came here as a management intern. He is a veteran of the U.S. Air Force and a graduate of the University of Maryland.

Other functions of the office include reviewing papers for clarity and timeliness, and assisting NIH components in developing documents.

Mr. Jarboe has been with NIH since 1959. He came here as a management intern from the Department of Defense where he served as an industrial analyst.

During his tenure here he has been with the Office of Personnel Management, and the Division of Medical Services. He also serves as liaison with the Executive Secretariat of the Secretary at HEW, and other De-

2 Grantees From Japan Receive Academic Honors

A National Institute of Arthritis and Metabolic Diseases' grantee will be one of two winners to receive the Imperial Award, Japan's highest academic honor.

The grantee, Dr. Setsuro Ebashi, is a professor at Tokyo University whose work on the molecular mechanisms of muscle relaxation has been supported by NIAMD for 9 years.

The grantee, Dr. Kozo Okamoto, a National Heart and Lung Institute grantee, will be among the scholars receiving a Japan Academy prize. Dr. Okamoto, who is studying diabetes and spontaneous hypertension in rodents, is a professor at Kyoto University.

Research Grants. Prior to his present position, he was assistant to the Associate Director for Administration.

Mr. Jarboe is a graduate of the University of Maryland and a veteran of the U.S. Air Force.

Dr. Leo Sachs Selected As Scholar-in-Residence

Dr. Sachs received his Ph.D. degree in 1951 from the University of Cambridge, England, and has been with the Weizmann Institute since 1952.

Dr. Leo Sachs, Meyerhoff Professor of Biology and head of the Department of Genetics at Weizmann Institute of Science, Israel, arrived on the NIH campus as a Fogarty Scholar-in-Residence April 12.

Dr. Sachs is known to the scientific community here through frequent visits.

He has gained recognition for his contributions in several fields—genetics, viral oncogenes, and chemical carcinogens in cell culture.

His studies on carcinogenesis have been concerned with the mechanism of transformation of normal cells into tumor cells by the DNA tumor viruses, polyoma, and simian virus 40, and by chemical carcinogenesis, and the reversion of tumor cells into normal cells.

His recent studies, which demonstrate equivalent alterations in the cell surfaces regardless of whether chemicals or viruses have been used to transform cells, have stimulated new efforts with chemical carcinogenesis.

As a Fogarty Scholar, Dr. Sachs will initiate and participate in seminars, present lectures, and collaborate with several laboratory groups through July.

Professor and Mrs. Sachs will reside in Stone House.

Local Chapter of FPA Elects Dr. Alfred Coulombre President

Dr. Alfred J. Coulombre, head, Experimental Embryology Section, Laboratory of Vision Research, NEI, has been elected president of the NIH/NIMH Chapter of the Federal Professional Association.

Others elected to offices were: Dr. George J. Cosimides, NIGMS, president-elect; Marie C. Gardner, NCI, secretary, and Dr. Harold Davidson, DRG, treasurer.

Participating in a "Report to the Nation" on cardiovascular diseases at World Health Day, April 7, were (from left): Dr. Paul N. Yu, president-elect, American Heart Association; Dr. Samuel M. Fox, III, president, American College of Cardiology; Dr. David Boyd, president, American College of Chest Physicians; Dr. Harriet P. Duston, vice chairman, Cleveland Clinic's Research Division; Dr. Michael DeBokey, president and chairman, Department of Surgery, Baylor College of Medicine; Dr. Forrest Adams, past president, American College of Cardiology; Dr. Theodore Cooper, director, NHLI, and Dr. Campbell Moses, medical director, AHA. The news conference followed the dedication of an HEW exhibit on world health and heart disease in the Museum of History and Technology at the Smithsonian.

Soft Contacts May Allow Enough Oxygen To Reach Cornea With Prolonged Wear

Even with prolonged wearing of hydrophilic soft contact lenses, more than enough oxygen reaches the cornea to prevent oxygen starvation, according to research supported by the National Eye Institute.

Oxygen-starvation syndrome is sometimes the result of prolonged wearing of hard contact lenses. Therefore, they can be worn for only relatively short periods and must be removed before sleep.

Clinical experience now indicates that the hydrophilic lens apparently allows the oxygen needed to reach the cornea both through the lens and in the tears that flow under the lens.

The ability of the lens to transmit oxygen had not been quantitatively studied previously.

Because physical properties of lenses vary among manufacturers, NEI-supported investigators at the University of Florida and the Medical College of Wisconsin tested three types of hydroxyethylmethacrylate hydrogel or soft plastic contact lenses and one type of silicone lens.

All four lenses tested supplied more than enough oxygen through the air alone to meet the cornea's needs.

In particular, the silicone lens transmitted oxygen more than four times faster than the most permeable hydrophilic lens.

Silicone Almost Impermeable

No lens could transmit through water alone the amount of oxygen that the cornea needs. The silicone lens was shown almost totally impermeable to water and therefore apparently impermeable to tears also.

The investigators conclude that the oxygen-starvation syndrome observed with the methyl-methacrylate or hard contact lenses should not occur with use of hydrophilic lenses.

These findings by NEI grantees Drs. Dennis R. Morrison and Henry F. Edelhauser were reported in the January 1972 issue of Investigative Ophthalmology.

Dr. Marston to Take Part in Panel Discussion at SAMA Meeting

Dr. Robert Q. Marston, NIH Director, will take part in a panel discussion at the annual meeting of the Student American Medical Association, to be held April 28-May 1, at the Biltmore Hotel in Los Angeles.

Dr. Marston and other panel members will discuss the Nation's Health Manpower Needs and How We Are Responding to Them.

An election of national offices will also take place at the convention, and delegates will hold workshops dealing with SAMA projects.

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