Record

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

May 27, 1969 Vol. XXI, No. 11

NATIONAL INSTITUTES OF HEALTH

Conferees Will Describe Progress in Developing Artificial Heart Devices

On Monday, June 9, Dr. Frank W. Hastings will welcome participants to a 5-day Artificial Heart Program Conference at the Shoreham Hotel, Washington, D.C.



Dr. Hastinas

Dr. Hastings is chief of the Artificial Heart Program of the National Heart Institute, sponsor of the conference.

His assistant, Dr. Lowell T. Harmison, will also make introductory remarks.

Ninety scientific presentations will describe progress toward development of circulatory assist devices and total heart replacements under research contracts awarded by the NHI Artificial Heart Program.

The sessions will be open to the scientific community and to the press.

The Monday sessions will high-(See ARTIFICIAL, Page 3)

National Eye Institute's First Advisory Council Appointed by Marston

The first National Advisory Eye Council of the newly established National Eye Institute has been appointed by Dr. Robert Q. Marston, NIH Director.

The 12 appointees are nationally recognized leaders in the fields of ophthalmology, optometry, and the basic sciences.

The primary function of the National Advisory Council is to review and recommend to the Director, NIH, grants to support nongovernmental research and training in the field of vision research.

Another important Council responsibility is to survey total research efforts in this field and to recommend action necessary to stimulate additional work in gap areas.

An orientation and planning session for the new Council members was held recently.

Dr. Edward F. MacNichol, Jr., (See NEI COUNCIL, Page 7)

King Baudouin, Queen Fabiola of Belgium Visit NIH, Tour Clinical Center Facilities



The King and Queen of Belgium, accompanied by Dr. Robert Q. Marston, NIH Director, ascend the steps into Building 1 for a briefing on NIH research activities prior to their inspection of facilities in the Clinical Center. Behind them are Ambassador Emil Mosbacher, Jr., U.S. Chief of Protocol, and Mrs. Mosbacher.—Photos by Tom Joy.

The King and Queen of Belgium—King Baudouin and Queen Fabiola—spent late Tuesday afternoon, May 20, touring NIH facilities.

Dr. Robert Q. Marston, NIH Director, and Dr. Robert W. Berliner,

Deputy Director for Science, greeted the Royal couple as they arrived in Building 1. There, they received a description of NIH and its activities.

Accompanied by Dr. Berliner and Dr. Robert M. Farrier, CC Acting Director, the Belgian King and Queen visited the Clinical Center to witness computer research demonstrations, including application to clinical pathology.

Dr. George Z. Williams, chief, Clinical Pathology Department, CC, and Dr. Arnold W. Pratt, DCRT Director, explained the demonstrations.

At 5 p.m. the King and Queen went their separate ways in order (See VISIT, Page 5)

Dr. Earl Reece Stadtman Elected AAAS Fellow

Dr. Earl Reece Stadtman, chief, Laboratory of Biochemistry, National Heart Institute, was recently elected to a Fellowship in the American Academy of Arts and Sciences.

The Academy, founded in Boston in 1790 by John Adams, acts as a center for studies on current, social, and intellectual issues.

In April, Dr. Stadtman was presented with the Hillebrand Award of the Washington Section of the American Chemical Society, and was also elected to the National Academy of Sciences.

Dr. Confrey Is Appointed BEMT Assoc. Director For Program Planning

Dr. Eugene A. Confrey has been named Associate Director for Program Planning and Evaluation of the Bureau of Health Professions and Manpower Training.

The appointment was announced by Dr. Leonard D. Fenninger, Bureau Director.

Since 1963, Dr. Confrey has been Director of the Division of Research Grants.

Under his direction, a management information system was developed, numerous scientist administrators recruited and trained, and grant policies formulated.

Directs Other Studies

During this period, he also directed analytical studies in such fields as bioengineering, molecular biology, and transplantation.

Dr. Confrey has been a PHS staff member since 1956; from 1963 through 1968 he was also on the staff of the Office of the Director of NIH.

In 1966 he received the DHEW superior service award.

Dr. Confrey, a graduate of Yale University, is a member of the American Association for the Advancement of Science.

He is the editor of the textbook, Administration of Community Health Services, and has published articles on medical ethics, science administration, pathology research, and other related subjects.



While Dr. Confrey was Director of the Division of Research Grants, he initiated several new programs.

Record

Published biweekly at Bethesda, Md., by the Publications and Reports Branch, Office of Information, for the information of employees of the National Institutes of Health, Department of Health, Education, and Welfare, and circulated by request to interested writers and to investigators in the field of biomedical and related research. The content is reprintable without permission. Pictures are available on request.

The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper and the Department of Health, Education, and Welfare.

NIH Record Office Bldg. 31, Rm. 2B-03. Phone: 49-62125

Editor

Frances W. Davis Assistant EditorFay Leviero

Staff Correspondents

Tony Anastasi, DRS; Bari Attis, NINDS; Lloyd Blevins, NICHD; Thomas Bowers, CC; Katie Broberg, NIAMD; Art Burnett, HMES; Lawrence Chamblee, DDH; Helene Doying, DRR; Florence Foelak, BEMT/OD; Gladys Ganley, DCRT; Sue Hannon, NIDR; Marjorie Hoagland, NIMH; Sheila Jacobs, NCI; Elizabeth Y. James, NIEHS; John P. Kelly, NLM; Laura May Kress, DAHM; Evelyn Lazzari, DN; Jan Logan, FIC; Marion Oakleaf, DRG; Faye Peterson, DBS; Richard Schroder, ADA; Anne Tisiker, NHI; Pat Vienna, NIAID; Wanda Warddell, NIGMS; Beverly Warran, DERF; Eleanor Wesolowski, DPM.

NIH Employees Offered **Basic Training Courses** In Supervisory Skills

A training course to develop supervisory skills, was conducted here recently for 24 NIH employees. Participants included I/D supervisors and supervisors from the Clinical Center.

The course, entitled "Introduction to Supervision," was given by the CC Personnel Office. Dennis Blome, CC Personnel management specialist served as instructor.

It covered such subjects as concepts of leadership, individual and group behavior, administrative activities of the supervisor, communication skills and current Federal programs such as Equal Employment Opportunity.

Guest speakers presented their views during the sessions. They included Thomas A. Johnson, CC personnel officer; Mary Bertha, chief, Labor Management Branch, Office of Personnel Management, OD, and George Miles, safety engineer, Protection and Safety Management

Blood Bank at CC Reports 173 Units Donated in April

The Clinical Center Blood Bank reports that 173 units of blood were received from NIH donors in April, and CC patients received 1,611 units of blood.

Two donors joining the Gallon Donor Club were: Dr. Robert J. Byrne, NIAID, and Pamela Mondell, HSMHA-DRMP.

Make an appointment to donate blood now. Call the Blood Bank, Ext. 64506.

BEMT Staff Assured Blood Bank Coverage

Employees of the Bureau of Health Professions Education and Manpower Training formerly located in Arlington, Va., have blood assurance coverage until June 30, through the Arlington Chapter of the American National Red Cross.

After that date, coverage will be provided by the NIH Clinical Center Blood Bank, Bldg. 10A, Room 1-E-33.

The CC Blood Bank is affiliated with the Washington Regional Blood Program of the Red Cross.

Branch, Office of Administrative Services, OD.

Information about future supervisory training programs is available from the Office of the Assistant Director for Training and Employee Development, Office of Personnel Management, OD, or I/D personnel offices.

NIH Cafeteria Employee Robbed on Way to Bank

About \$1600 in cash was stolen by an armed man from Martha Ann Davis, an employee of Government Services, Inc., May 15 at 10:05 a.m. on NIH grounds.

Miss Davis was taking the money from Bldg. 31 to make a deposit in the Bank of Bethesda branch office in Bldg. 10.

The armed man escaped with the money in a car driven by a second

Because the robbery took place on the grounds of a Federal facility, the Federal Bureau of Investigation agents have entered the case.

2 RML Employees Win Superior Work Awards



DHEW Superior Work Performance awards were presented to RML employees Vernon Haley and Emory Buker. At the ceremony were (from left): Edward Grimes, chief animal husbandman, Mr. Haley, Dr. Cora Owen, Mr. Buker, and RML Director Dr. H. G. Stoenner.

Two NIAID Rocky Mountain Laboratory employees-Emery Buker and Vernon Haley—recently received DHEW Superior Work Performance awards.

Mr. Buker, assistant to Dr. Cora Owen who is doing research on tularemia and other zootic diseases, was cited for assuming new responsibilities so that a research

NIH Television, Radio **Program Schedule**

Television

NIH REPORTS

WRC, Channel 4 Sundays-4:55 p.m.

Dr. Philip Corfman, head, Center for Population Research, associate director, NICHD Subject: The Population

Problem (Part 1)

June 8

Dr. John C. Bailar III, head, Demography Section, NCI

Subject: Third National Cancer Survey (Part 1)

Radio

DISCUSSION: NIH

WGMS, AM-570-FM Stereo 103.5-Friday evenings-About 9:15 p.m.

May 30

Dr. Nathan W. Shock, head, Gerontology Research Center, NICHD

Subject: Research in Aging

June 6

Dr. Frank J. Rauscher, Jr., associate scientific director for Viral Oncology, NCI

Subject: Virus and Cancer

Both interviews take place during intermission, Marlboro Summer Festival Series.

project on Aleutian diseases in mink could be completed.

Mr. Haley, laboratory animal caretaker, was honored for exceptional accomplishments in rearing rabbits and inbred strains of guinea pigs and hamsters.

Dr. William E. Rogers **Begins Training Program**

Dr. William E. Rogers, a biochemist, has begun a year of training in the Grants Associates program, administered by the Division of Research Grants.

The program trains scientists for administrative positions in extramural research activities.

Since October 1966 Dr. Rogers has been a research biochemist in the Laboratory of Nutrition and Endocrinology, NIAMD.

From 1961 until 1966 he was affiliated with the University of Illinois as a research associate in the effects of vitamin A deficiency on metabolism.

For 4 years before 1961, he was an assistant professor in basic sciences at Indiana University from which he received the Ph.D. degree

An alumnus of Massachusetts Institute of Technology, he has done graduate work in techniques of tissue culture at the University of Colorado School of Medicine.

Author and coauthor of several papers on vitamin A deficiency, Dr. Rogers will address a Symposium on the Fat Soluble Vitamins at the University of Wisconsin in mid

Dr. Rechcigl Named AIC Fellow

Dr. Miloslav Rechcigl, Jr., Division of Research Grants, was recently appointed a Fellow in the American Institute of Chemists.

Dr. Rechcigl, who is with the Grants Associate Program, is also a Fellow in the Washington Academy of Sciences.

ARTIFICIAL

(Continued from Page 1)

light progress in the development of blood and tissue-compatible materials and the results of in vitro and animal studies evaluating the effects of various materials on blood.

On Tuesday, June 10, the sessions will feature studies on blood flow through pumps and valves, indices of heart function useful in the regulation of heart-assist devices, and the development of improved oxygenators for heart-lung machines or other medical uses.

On Wednesday, June 11, circulatory assist devices and the physiological effects of these devices in animals will be covered.

The Thursday, June 12, sessions will deal with instrumentation applicable to the development, evaluation, and use of artificial heart and circulatory assist devices; through-the-chest leads for powering and controlling implanted devices; biological fuel cells as a potential implantable power source, and the physiological effects of heat generated by the implanted power drive of artificial hearts.

The Friday, June 13, sessions will cover recent developments and problems in the area of implantable energy systems.

3 NIH Scientists Attend Joint Seminar in Tokyo

Ten American scientists-three from NIH-and observers from Belgium and Russia are attending a joint U.S.-Japanese Seminar on interferon, in Tokyo, this week.

Dr. Hilton Levy, National Insti-tute of Allergy and Infectious Diseases, is coordinator of the American delegation. The other NIH scientists are Dr. Robert Friedman, National Cancer Institute, and Dr. Samuel Baron, NIAID.

The seminar, supported jointly by the National Science Foundation and its Japanese counterpart, is designed to encourage collaborative efforts and increase scientific communications between the two groups of scientists.

Kathleen Snowden Takes to the Hustings, Dr. Hatchett Appointed Wins Council Seat in a Landslide Victory Acting Director, DRG

Kathleen Snowden, a biological laboratory technician for the Division of Research Services, has entered politics in what she considers a very small way.

Several weeks ago Mrs. Snowden was elected to the Council Board of New Market, Md. She is the first woman and the first Negro ever elected to that office in this Frederick County town.

Her picture has been printed in the papers, and she's been interviewed by several reporters. Mrs. Snowden cannot see what all the shouting is about.

Landslide Victory

In New Market there are 138 voters, a majority of them white. Nine candidates were running for the five council seats. Mrs. Snowden won in a landslide with 90 votes. more than any other candidate.

Mrs. Snowden ran for office because "in a town as small as this it is almost impossible to stay uninvolved. Anything that happens there affects everyone."

She is no soap-box orator. She speaks quietly, unaffectedly, and firmly.

New Market has some of the same problems that New York and Chicago have, in miniature, of

The town is growing, new zoning laws have to be promulgated.

"We want to face our growth problems slowly and gracefully,' Mrs. Snowden said.

"We like to preserve what we have, but we don't want to stop growing either."

Antique Haven

On weekends New Market is jumping—with antique hunters. But antiquing is no hobby for the inhabitants, it is a way of life and of livelihood for many New "Marketeers."

Antique shops line the town's Main Street. The inhabitants love antiques as much as the hunters.

Mrs. Snowden also loves New Market for other reasons, and she enumerates them.

"This is a good town to bring



Four new members have been appointed to the NIH Equal Employment Opportunity Council. They are (I to r), Charles Coates, BEMT, Lucille Dublin and Florence S. Sato, CC, and Sype S. Pointer, DRS.



Mrs. Snowden, her hands and arms encased in rubber gloves, is numbering animals who "live" in a pathogen-free isolator.

up dogs, cats, people and boys. It's a nice place to go home to.

Mrs. Snowden explained that New Market is 33 miles from NIH "with the shortcut-I take the shortcut."

Loves Animals

The new board member came to NIH-to DRS-in 1959 as an animal caretaker. She had always loved animals and raised them as a hobby.

"I raised cats, dogs, guinea pigs, rabbits, chickens, anything that I could afford. I soon ran out of 'affords' and had to go to work to support my hobby."

On her to and fro trips Mrs. Snowden does not ride alone. Her husband, William K. Snowden, works with animals at the National Cancer Institute, and they commute together. They have a son Steven, age 12, who likes "bugs, snakes, and baseball."

Mrs. Snowden said her husband kept his cool about her running for office "up until voting time, then he became excited, but he was with me all the way.'

Speaks Well of Mayor

She was asked if she had further political ambitions-would she ever want to run for mayor?

"The only way I would run for mayor is if someone ran to whom I was opposed—but in this town there is no one like that, no one I feel that way about."

She spoke of New Market's mayor, Franklin Shaw.

"I've never been so proud of anyone as I have of him. He's adaptable. The whole town really loves him."

Dr. Stephen P. Hatchett has been named Acting Director of the Division of Research Grants. He succeeds Dr. Eugene A. Confrey who has been appointed Associate Director for Program Planning and Evaluation of the Bureau of Health Professions Education and Manpower Training.

Dr. Hatchett has been deputy director of the Division since 1964. He came to the DRG in 1955 as assistant chief of the Career Development Review Branch and was appointed chief in 1958.

A former professor of biology and department head at American University and Presbyterian College (Clinton, S.C.), Dr. Hatchett was associated with the PHS Commissioned Corps as an assistant sanitarian from 1943 to 1946.

In 1963 he received the DHEW Superior Service Award, which cited Dr. Hatchett's exemplary direction of the CDRB.

A Fellow of the American Association for the Advancement of Science, Dr. Hatchett is a member of the Society of Systematic Zoology, American Microscopial Society, and the American Society of Limnology and Oceanography.



Dr. Hatchett, at DRG since 1955, received the DHEW Superior Service Award in 1963.

NIAMD Brochure Details Scope of Its Research

A new National Institute of Arthritis and Metabolic Diseases brochure describes the Institute's research studies of arthritic disorders and diseases of metabolism such as diabetes and cystic fibrosis.

The publication also details the NIAMD program to develop more efficient and less costly artificial kidney machines.

Single free copies of the illustrated Institute Brochure may be obtained from the Information Office, NIAMD, NIH, Bethesda, Md. 20014.

Multiple copies may be purchased at 50 cents each from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

'Talking' Computer at DCRT Can Give Quickly Needed Medical Advice by Phone May Differ Significantly



When the portable pushbutton pad is used to convert a dial telephone to a computer terminal, the telephone hand set is placed above the coupler as a receiver. The pad, powered by alternating current or battery, can be carried anywhere and linked to any telephone.

By Julian Morris

Important and quickly-needed medical information can be provided to physicians and others by linking an ordinary pushbutton telephone to a computer that "talks."

Researchers at the Division of Computer Research and Technology report their use of a "touch-tone" telephone as an effective and inexpensive computer terminal, and their development of a portable coupler which converts any telephone into a pushbutton terminal.

Dr. Scott Allen and Michael Otten explain the system through an example situation in which a physician must give emergency fluids to a 2-year-old burn victim.

Data Punched into Phone

The physician punches information into his telephone, including age of the child, weight, height, type of burn (scald or flame), and the percentage of the body surface burned.

The computer, using a recorded voice, almost immediately tells him how much colloid, saline, and dextrose in water to administer, and furnishes other information about treatment. Thus the physician does not need to refer to a bookshelf and avoids computational errors.

The DCRT scientists demonstrated that this was practical by storing the information in a computer and retrieving it through the telephone (see table).

Other illustrative programs include differential diagnosis of certain diseases of calcium and phosphorus metabolism, and informa-tion on incompatibility of intravenously administered drugs.

A wide variety of computer-based services, the scientists say, are becoming increasingly important to support medical care and education efforts.

But high cost, complicated operating procedures, and lack of available computer space has confined

these services mainly to large medical centers.

In the voice answer-back system, a practicing physician who has subscribed to the computer service places a phone call to a computer center.

He uses the pushbutton telephone tones to send simple coded mes-sages. He may be aided by automatic dial plastic cards containing codes for a specific program. The computer answers back in a normal speaking voice.

When the portable pushbutton pad developed by these scientists is used to convert a dial telephone to a computer terminal, the telephone's hand set is placed above the coupler to be used as a receiver. The pad weighs only 7 pounds and can be linked to any telephone.

Method Simple, Cheap

The telephone terminal offers some major advantages over the only other relatively low cost remote terminal, the electric typewriter. It is cheap, it is readily available, and it is easy to use.

Reliability of computer support can be assured by storing the information in several centers. If one is out of order, another can be

The preparation of additional voice response information programs for storage will require considerable effort on the part of competent medical authorities, the investigators say.

Dr. Allen and Mr. Otten describe this system in the Journal of the AmericanMedical Association, April 28, 1969.

Cell Makeup of Placenta In Malnourished Women

Preliminary studies of placentas of malnourished women indicate these organs which nourish unborn children may be significantly different in cellular makeup from the placentas of healthy women.

Although carried out on too small a scale to provide conclusive evidence, the studies may eventually help explain the effects of malnutrition on fetal develop-ment—with the possible consequence of damage to unborn in-

The studies compared placentas from 13 Guatemalan women in a low-income bracket with placentas from 23 healthy, middleclass American women.

Dr. Delbert H. Dayton, a health science administrator for the National Institute of Child Health and Human Development, reported these unique studies to the Federation of American Societies for Experimental Biology, April 15, in Atlantic City.

Coauthors of the report were Drs. Lloyd J. Filer, Jr., University of Iowa, and Cipriano A. Canosa, Institute of Nutrition for Central America and Panama.

The placentas of the malnourished Guatemalan women contained only about 70 percent of the number of cells than in the placentas of American women. But these cells were one and a half times larger than those from the healthy placentas.

The placentas from malnourished women also contained significantly less protein, sodium, potassium, magnesium, iron, and selenium.



Donald B. Spencer, who had been with NIH from 1953 to 1967, has returned here as assistant director, Grants and Contracts, OFM. Previously he was deputy executive officer of NIMH.

When the amounts of these constituents were determined for individual cells rather than for the total organ, the placental cells from malnourished women contained significantly less selenium - a substance implicated in stimulating growth in children convalescing from severe malnu-

This deficit at a cellular level may be even more important than the deficiencies found in the whole placenta.

Since 1965 NICHD, through the Pan American Health Organization, has supported a long-term study carried out by INCAP on effects of malnutrition on growth and development.

The study will attempt to determine the physical and mental consequences of malnutrition occurring in children during gestation and through the first 7 years of life.

This preliminary study of placentas is part of the first phase of the long-term project.

Sample Telephone Transcript for Burn Therapy Program

Computer Voice "Hello. Enter Identity." "Enter program name." "Start B-U-R-N program. A-G-E enter." (Because of its limited vocabulary, talk-ing computer must spell out "burn," "age" and other words.) "W-E-I-G-H-T enter." "H-E-I-G-H-T enter." "Percent H-E-A-D and N-E-C-K enter." "Percent T-R-U-N-K enter."

"Percent A-R-M-S enter."

"Percent L-E-G-S enter."

"For eight hours order:*
129 cc C-O-L-L-O-I-D plus
86 cc S-A-L-I-N-E
397 cc D/W (dextrose in water)
for 12.6 percent B-U-R-N

Physician Input

201339876 0# (This is the physician's user number. The 0# is a code that acts as a period.)

12 0# (Burn program.)

 2 0# (Patient is 2 years old.)

30 0# (Patient weighs 30 pounds.)

32 0# (Patient is 32 inches tall.)

30 0# (Patient is burned over 30 percent of the head and neck.)

10 0#
(Patient is burned over 10 percent of the trunk.)

20 0# (Patient's arms are 20 percent burned.)

0 0#
(Patient's legs are not burned.)

*This last computer entry is the recommendation for treating this particular case.



HEW Secretary Robert H. Finch discusses research activities during a visit to NIH on May 14 with Dr. Robert Q. Marston, Director of NIH, Dr. Robert W. Berliner, Deputy Director for Science, and Dr. Donald S. Fredrickson, Director of Intramural Research, National Heart Institute.

Psychiatric Association **Gives Hofheimer Awards** To Drs. Goldberg, Bunney

Scientists from the National Institute of Mental Health were honored at the recent 125th annual meeting of the American Psychiatric Association.

Dr. Solomon C. Goldberg shared the Lester N. Hofheimer Prize for Research with two former NIMH



Dr. Bunney

Dr. Goldberg

scientists, Dr. Jonathan O. Cole and Dr. Gerald Klerman.

Dr. William E. Bunney, chief, Section on Psychosomatic Medicine of the Adult Psychiatry Branch, Division of Clinical, Behavioral and Biological Research, received an honorable mention.

The Hofheimer award was established in 1947 to honor U.S. research investigators for outstanding accomplishment in psychiatry and mental hygiene. It was created as a memorial to Lt. Hofheimer who was killed in World War II.

Dr. Goldberg and his co-workers did their collaborative research under the auspices of the Psychopharmacology Research Branch.

They were cited for demonstrating "the usefulness and effectiveness of the phenothiazines in relieving the acute disabling symptoms of schizophrenia and in encouraging the long-range control of the psychoses."

Dr. Bunney has been with NIMH since 1962. He was cited for "his outstanding research investigation of biochemical and behavioral aspects of the manic-depressive disorders '

VISIT

(Continued from Page 1)

to inspect areas of their special interests.

Queen Fabiola visited the Leukemia Service of the Medicine Branch, National Cancer Institute. Dr. Gordon Zubrod, Scientific Director for Chemotherapy, NCI, discussed the functions of the Service with the Queen. A more detailed explanation was given by Dr. Edward S. Henderson, chief of the NCI Leukemia Service.

The King remained at the computer demonstration and met with Belgian scientists working at NIH under the auspices of the Visiting Program of the Fogarty International Center.

The Belgian scientists included Dr. Marcel Roberfroid, NHI, Dr. Pierre Neve, NCI, and Dr. Benoit de Crombrugghe, NIAMD.

Later King Baudouin and Queen Fabiola met with Dr. Andrew G. Morrow, chief of the Surgery Branch, NHI, and spoke with child

Brazilian Officials Visit NIH and Plan to Tour Other Health Facilities

A group of Brazilian medical officials recently arrived in the United States for a 7-week tour of Federal, State and local public health agencies.

The six officials who plan and administer public health policy in their country are being sponsored by the Agency for International Development and PHS.

Their itinerary and program have been arranged by the Foreign Students Education Branch, Division of Health Manpower Educa-

tional Services, BEMT. Surg. Gen. William H. Stewart welcomed them.

The group visited NIH and the National Communicable Disease Center in Atlanta, Ga. They also plan to tour health departments in Mississippi, California, New York and Puerto Rico.

The officials visiting here are: Dr. Antonio Moniz de Aragao, State Secretary of Health, and former President of the World Medical Association, Santa Catarina; Dr. Jose Duarte de Araujo, State Secretary of Health, Bahia; Dr. Jose de Rocha Furtado, State Secretary of Health, Ceara.

Also, Dr. Jose Dualibe Murad, State Secretary of Health, Maranhao; Dr. Abel Tenorio de Souza Rocha, Director, Regional Health Department, Para, and Dr. Antonio Dias Santos, Professor of Medicine of the Medical School of Paraiba.

cardiac patients.

On Thursday, May 22, King Baudouin and Queen Fabiola visited Houston, Tex., to see Dr. Denton A. Cooley, Baylor College of Medicine, and to inspect the Manned Space Center.



In the Clinical Center, King Baudouin and Queen Fabiola, with members of the royal party, witnessed automated, computerized clinical laboratory equipment in operation. Here, Dr. George Z. Williams, chief of the CC Clinical Pathology Department, explains its application to clinical pathology. At far left is Dr. Robert M. Farrier, Acting CC Director. At extreme right is John D. Stimpson, a digital computer system operator in the Clinical Pathology Department.

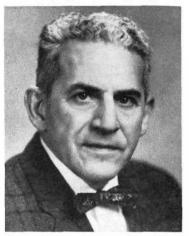
Dr. Jacobs' Distinguished Career Spans 28 Years In Government Service

Dr. Leon Jacobs, recently named Assistant Director for Collaborative Research, NIH, has had a distinguished career in Government service for the past 28 years.

Dr. Jacobs, whose appointment was announced in the last issue of the NIH Record (May 13, 1969), will serve under Dr. Robert W. Berliner, NIH Deputy Director for Science.

In his new position, Dr. Jacobs will be responsible for coordination of several NIH collaborative pro-

These programs bring together



Dr. Jacobs has served as editor of both the "Journal of Parasitology" and "Tropical Medicine News."

certain efforts of NIH scientists with those contracted for by institutes and divisions of NIH in non-governmental institutions throughout the country.

Dr. Jacobs retired from the PHS Commissioned Corps in 1966 after 25 years of outstanding service.

During his PHS career, he was a research parasitologist at NIH, serving as chief of various sections and laboratories from 1956 to 1964.

He was acting scientific director for the National Institute of Allergy and Infectious Diseases for one year before becoming scientific director of the Division of Biologics Standards.

Since June 1967, Dr. Jacobs has served as the Deputy Assistant Secretary for Science in the Office of the Secretary, DHEW.

For his studies on toxoplasmosis and other infections, he has re-ceived the Washington Academy of Sciences Award for Scientific Achievement in the Biological Sciences, the Arthur S. Flemming Award, and the Henry Baldwin Ward Medal of the American Society of Parasitologists.

Dr. Jacobs received his B.A. from Brooklyn College and his M.A. and Ph.D. degrees from George Wash-

ington University.

June Directory Includes New Buildings On Map and Changes in Reorganization

By Carolyn Holstein

NIH Information Trainee

Buildings 35, 36 and 37 as well as the National Library of Medicine are now officially on the map-the NIH Telephone and Service Directory map that is.

More than 18,000 copies of the long-awaited directory are being dis-

tributed and will include all the reorganization changes up to April.

Changes after that will be included in the next directory to come out in September.

The June directory will have over 13,000 listings and will retain the same organizational and yellow pages format—a format that is so successful the DHEW Directory follows it.

Readers will continue to find phone listings and hours for the barber and beauty shops, credit union and bank, and the R&W film development desk.

No excuses either for showing up late for an appointment at the Willste Building-the new shuttle bus schedule is in the yellow pages.

Just in case of a civil defense emergency, instructions in the phone book range from securing all classified material to prohibitions against smoking in the fallout shelter.

And for those who wish to launch a pneumatic tube toward a specific destination, a revised tube station directory is listed, with the sug-gestion that users refrain from "removing papers by pounding or whipping carriers."

Also - NIH bachelors rejoice. The listings for the new secretaries and nurses will soon be here.



Mary Cavey, phone operator, knows just what to do with the complicated crisscross of wires on an NIH switchboard.

Dr. Brinkhous Will Join **Heart Advisory Council**

The appointment of Dr. Kenneth M. Brinkhous to the National Advisory Heart Council of the National Heart Institute has been announced by Dr. Robert Q. Marston, Director of NIH.

Dr. Brinkhous, Alumni Distinguished Professor of Pathology, University of North Carolina, will serve from 1969 to 1973.



You don't find everything in the yellow pages! (The object of admiring glances is Karen Reider, BEMT.)

Dr. Bert O'Mailey Named Dr. Richard H. Adamson To Chair at Vanderbilt U.

Dr. Bert W. O'Malley, a senior investigator in the Endocrinology Branch of the National Cancer Institute, has been named to the Chair in Reproductive Biology at Vanderbilt University Medical

Dr. O'Malley, a specialist in cell biology who has been with NCI for the past 4 years, is the first person to fill this newly endowed post in the Department of Obstetrics and Gynecology.

Studies Sex Steroids

He is currently doing research on the mechanism of the actions of sex steroids in stimulating the growth differentiation and functions of female and male reproductive tissues.

Dr. O'Malley served his internship and residency at the Duke Medical Center. He received a B.S. degree at the University of Pittsburgh, and an M.D. degree from Pittsburgh's School of Medicine.

He will assume his new position at Vanderbilt in the early summer.

Will Direct Research In New NCI Section

The National Cancer Institute has announced the creation of a Pharmacology and Experimental Therapeutics Section in the Laboratory of Chemical Pharmacology.

Dr. Richard H. Adamson, head of the Section, is directing research in the development of new anticancer drugs.

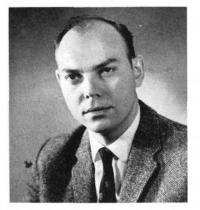
Dr. Adamson's specific research interests include cancer chemotherapy, drug metabolism, toxicology, comparative pharmacology, and marine biology.

Interested in Internat'l Affairs

He is also interested in the science of government. In 1968 he received an M.A. degree in International Affairs from George Washington University.

Dr. Adamson is a native of Iowa. He attended the State University of Iowa for both his M.S. and Ph.D. degrees in pharmacology.

He did his undergraduate work



Dr. Adamson is also interested in the science of government — he has an M.A. degree in International Affairsas well as the science of pharmacology.

in chemistry at Drake University.

A Fulbright Award to conduct research at St. Mary's Hospital Medical School in London was presented to him in 1965.

Dr. Adamson belongs to a number of scientific organizations as well as the American Academy of Political and Social Science, and the Academy of Political Science.

Microscopic examination of the old and new tissue in the area of the lung connection revealed the formation of new smaller vessels which directly linked lung tissue with the heart wall.

Reported in JAMA

Dr. Kazi Mobin-Uddin and his associates reported their work in the April 14 issue of the Journal of the American Medical Association.

Their research was also supported by the Florida Heart Association and the Heart Association of Greater Miami.

NHI Grantees Perform Simple Operation That Prevents Heart Damage in Dogs

A simple operation that prevents damage to dogs' heart muscle after an experimentally induced constriction of the coronary artery has been demonstrated by grantees of the National Heart Institute.

The technique, in which a portion of the lung is placed against the outer wall of the heart, establishes an accessory blood flow to nourish the heart muscle.

It is much easier and safer to perform than implanting an artery deep in the heart's muscular wall for the same purpose.

Relieves Angina Pectoris

The latter procedure has been used to relieve angina pectoris and to improve heart function in selected patients.

A University of Miami School of Medicine research team drew upon previous work of other investigators in which a constricting plastic ring, placed around the left coronary artery in dogs, gradually caused the artery to occlude, eventually completely blocking the flow of blood to the left side of the heart.

This experimental occlusion leads to heart muscle damage (myocardial infarction) as does an occlusion caused by coronary artery disease.

The Miami group placed such a ring around the left coronary artery in each of a group of dogs. But then a section of the left lung (lingular) was connected to the heart with sutures, affer the branch of the pulmonary artery which carries oxygenated blood to the lingular portion was tied off.

This increased the pressure and flow of blood in remaining arterial

branches, aiding the formation of connecting links between the implanted lung tissue and the oxygenstarved heart muscle.

In another group of dogs, the constricting ring was placed, but the connecting operation was not

Heart muscle damage began to occur in members of this group within one week of the operation.

But, in the first group (those undergoing the heart-lung operation), heart muscle damage either did not occur or was negligible up to 4 months after the operation.

During this period, the left ventricle of these dogs' hearts maintained its normal contractility, even though the coronary artery had become completely occluded as early as 3 weeks following the operation.

Collateral Circulation Established

At the end of 4 months the dogs were killed for post mortem examinations.

Arteriography in the living dogs revealed that a collateral circulation had been established as early as 3 weeks after the operation.

Post mortem studies showed that connections had formed between enlarged bronchial arteries and the coronary artery resulting from the tying off of the pulmonary artery and the constriction of the coronarv.

Scientists Evaluate Data On Cancer of Breast

NIH scientists took part in a recent meeting of the National Conference on Breast Cancer held in Washington, D.C.

The meeting was cosponsored by the PHS Cancer Control Program and the American Cancer Society.

Dr. Sidney J. Cutler and Herman W. Heise, National Cancer Institute, presented evidence suggesting that the proportion of women with breast cancer being saved had risen nearly 50 percent since 1940.

This data was gathered by the End Results Evaluation Program sponsored by NCI. Dr. Cutler heads the program organized in 1956 to provide a record from which to measure progress against cancer.

Dr. Mortimer B. Lipsett, chief, Endocrinology Branch, NCI, described the goals and research of the National Breast Cancer Task Force. Dr. Lipsett is chairman of the Task Force organized in 1966 to help speed progress in the treatment and control of breast cancer.

Members are from 10 leading research institutions.

Other NCI Task Force members are Dr. W. Roy Bryan, Dr. Cutler, and Dr. Erwin P. Vollmer.

Dr. Manning Feinleib, National Heart Institute, also presented his research findings at the conference.

NEI COUNCIL

(Continued from Page 1)

Acting Director of the National Eye Institute, commented, "Appointment of this Advisory Council is the first step in establishing the administration of the new Institute. The grant support program of the Institute can now get under way in fact as well as in law."

The National Eye Institute was authorized by Congress on Aug. 16, 1968.

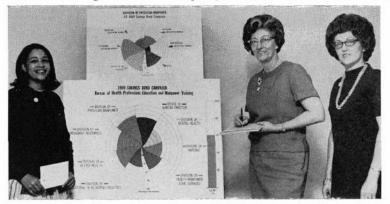
Members Listed

Members of the Advisory Council, under the chairmanship of Dr. Marston, are:

Dr. Bernard Becker, professor of Ophthalmology, Washington University School of Medicine; Dr. David G. Cogan, professor of Ophthalmology, Harvard Medical School; Dr. John W. Perree, Executive Director, National Society for the Prevention of Blindness, Inc.; Dr. Glenn A. Fry, Regents Professor, College of Optometry, Ohio State University.

Also, Dr. John E. Harris, professor and head, Department of Ophthalmology, University of Minnesota Medical School; Dr. H. Keffer Hartline, member and professor, Rockefeller University; Dr. V. Everett Kinsey, Director, Institute of Biological Sciences, Oakland University, Rochester, Mich.; Dr. A. Edward Maumenee, Director, The Wilmer Institute, Johns Hopkins

Scientists Evaluate Data 1969 Savings Bond Campaign Seeks to Raise Percentage of Participation



Dr. Marilyn Hutchison, assistant director, DPM (center), makes Savings Bond participation 100 percent for the Office of the Director, Division of Physician Manpower, BEMT. Present for the official signature are Anna Slyke, a bond drive keyman (I), and Opal Hoffman, bond canvasser. DPM's Continuing Education Branch also reports 100 percent participation. The color wheel, an invention of Charlotte Bloom, in the Graphic Arts Section of the BEMT Information Office, shows Bureau and Division standings.

NIDR Scientists Discover New Visual Region of Cerebral Cortex in the Cat

A new visual region of cerebral cortex in the cat has been discovered by National Institute of Dental Research scientists. The research was done as part of a study of pain mechanisms in the brain.

NIH Orchestra to Feature Dvorak, Mozart, and Haydn

The NIH Orchestra, conducted by Mark Ellsworth, will present a concert on Friday, June 6, at 8:30 p.m. in the Clinical Center Auditorium.

The program will include a Dvorak and a Haydn Symphony and a Mozart Concerto.

The soloist in the violin concerto will be Dr. Richard Lederman, who was, at one time, concertmaster of the Princeton University Orchestra.

CC patients and NIH staff members and their families and friends are invited. Admission to the concert is free.

Hospital.

Also, Dr. Meredith W. Morgan, Dean, School of Optometry, University of California at Berkeley; Dr. George K. Smelser, professor of Anatomy, Department of Ophthalmology, College of Physicians and Surgeons, Columbia University; Dr. Jules Stein, Chairman, Board of Directors, Music Corporation of America, Inc., Universal City, Calif.; Dr. Kenneth C. Swan, professor of Ophthalmology, University of Oregon Medical School.

Dr. Noble J. David, chief of Neurology Service, Veterans Administration Hospital, Miami, Fla., will serve as alternate for Dr. H. Martin Engle, Chief Medical Director, Department of Medicine and Surgery, VA, Washington, D.C.

Dr. James F. Culver (Col.), USAF (MC), AWC, Maxwell AFB, Alabama, also will serve as alterThe investigators have discovered that one association region in the cat, the anterior portion of the middle suprasylvian gyrus, is primarily a visual center.

They inserted minute electrodes into this convolution and recorded electrical discharges from single cells in response to various light stimuli.

About two-thirds of the cells examined responded to light stimulation of some kind. Ninety-two cells were studied to permit systematic mapping of that region of visual field over which the cell's firing rate is influenced.

Find 3 Cell Types

They found three types of cells:

1) Illumination detector cells respond briefly when a stationary spot of light flashes on and off, and do not respond to motion. 2) Movement detector cells respond to motion of any object in any direction in their receptive fields. 3) Edge detector cells respond selectively to moving edges.

Some prefer horizontal, some vertical, and some diagonal edges. Some even prefer that the edge move in only one direction.

These studies show that many cells in this particular convolution of the brain receive visual messages from other sources than the visual cortex.

The investigators present arguments that the messages may come from the superior colliculus,

nate for Dr. Louis M. Rousselot, Deputy Assistant Secretary (Health and Medical), Office of the Assistant Secretary of Defense for Manpower, Department of Defense.



Leslie H. Fellows, Supply Management Branch, OAS, holds a certificate for dinner for two at the Shangri-La Restaurant. He won the prize in the first campaign drawing. Seven weekly drawings and one final drawing will be held.

The Division of Physician Manpower reports that more than 77 percent of its employees are purchasing bonds. This, in turn, has put BEMT—of which DPM is a part—into first place in the 1969 Savings Bond Campaign.

Running a close second is the Division of Research Grants with nearly 60 percent of its personnel bond purchasers.

During the first reporting period, total savings bond participation at NIH increased by 263 persons—increasing the percentage of bond holders from 35.4 to 37.8 percent.

a visual center in the midbrain, known to be involved in the control of eye movements.

Since illumination detector cells could alert an animal to sudden movements, and edge detector cells reveal the general shape and direction of moving objects, this region of the cortex could play a role in visual attention and orientation.

The investigators are planning further experiments.

Drs. B. M. Dow and R. Dubner, NIDR, reported these studies at the meeting of the Federation of American Societies for Experimental Biology.



Dr. Robert Tosi (left) and Dr. P. L. Mattiuz, visiting scientists from Italy's Institute of Medical Genetics, Turin, set up plates used in tissue typing of leukocytes as Dr. Ralph Reisfeld, NIAID, looks on. They are continuing American - Italian collaboration on transplantation immunology research.

NIH Art Exhibit at CC Through June 14; Awards Are Presented by Mrs. Marston

Mrs. Robert Q. Marston, honorary chairman, presented awards to the winners of the 11th Annual NIH Art Exhibit on May 19 in the Clinical Center lobby.

Award winners were Jennie Lea Knight for "Best in Show" for her sculpture, "Origin of the Roc." Miss Knight also won two Honorable Mentions.

Other first-place winners were Peter Muntjan, for his painting entitled "Pot," Cil Sirotkin, first in watercolors and pastels, for "Small Grove," David Switzer for a drawing, "Old Woman," and Aline Fruehauf, for her illustration in the graphic class, "Musical Chairs."

The exhibit, sponsored by the R&W, may be viewed in the East and West bays of the Clinical Center lobby through June 14.

NICHD Report Identifies Effects of Deprivation

An assessment of how deprivation affects human beings was reported by fifty of the Nation's leading experts in that field.

The report, released by the National Institute of Child Health and Human Development, is entitled Perspectives on Human Deprivation — Biological, Psychological, and Sociological. It identifies the effects of deprivation and recommends areas in which additional research is needed.

Copies of the book may be purchased for \$2.75 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

Single free copies are available from the Information Office, NICHD, NIH, Bethesda, Md. 20014.



Norma Golumbic, editor, accepts an award for the NCI publication, Progress Against Cancer 1969, from Senator Edmund S. Muskie of Maine. The publication won second place in the Blue Pencil Award of the Federal Editors Association 1969.



Walter Clark, chairman of the NIH Art Show (I) and Dr James L. Stabenau, president of the NIH Art Club, ponder where to place show entries. The object at left, "Origin of the Roc" by Jennie Lea Knight, won first prize as Best in Show.



Art show judges—Blaine Larson, Ben Forgery, and Andrew Hudson—weigh the merits of the Art Show entries.



Walter Clark and Jennie Lea Knight view a prize-winning illustration by Aline Fruehauf entitled "Musical Chairs."

NIAMD Booklet Reveals Diagnostic Cause, Successful Treatment in Controlling Gout

Modern medical research is winning its battle against an ancient foe—gout—an extremely painful form of arthritis that affects some half million Americans.

Victims of gout now can be maintained with reasonable comfort and

can be assured that their disorder, if diagnosed early and treated properly, will neither cripple them nor seriously interfere with their daily life or general health.

This is the theme of a new pamphlet prepared by the National Institute of Arthritis and Metabolic Diseases.

Entitled Gout, the pamphlet details in nontechnical language the remarkable progress that medical science has made during the past few decades in understanding and controlling this painful disorder.

Gout, long believed to be a result of "high living," was treated primarily through dietary restriction

In order to control the agonizing pain of acute attacks, physicians relied almost soley upon colchicine, a specific symptomatic remedy for gout that has been known since the sixth century and is still being used.

Neither form of therapy had any effect, however, upon the steady progression and frequent crippling effects of the disease.

Today, the pamphlet points out, gout is known to result from an inherited defect in body chemistry that disrupts the body's metabolism of uric acid.

Salt Crystals Form

Thus, salt crystals of this chemical accumulate in certain tissues and joints, causing recurrent, painful attacks of gouty arthritis.

Several drugs are now available to combat the disorder, however, and dietary restrictions have been relegated to a secondary role. These drugs, developed during the past 15 years, act to rid the body of excess uric acid via the urine, and decreases the frequency of joint attacks.

The newest drug to control gout is allopurinol, which attacks the body's production of uric acid at its source.

It prevents over-production of uric acid in the body and is especially helpful in combating uric acid stone formation, which may occur in the urinary tract and kidneys of gouty individuals.

Significant progress in discovering the underlying causes of gout is also reported.

For example, a specific enzyme defect associated with excessive production of uric acid has been described in a number of gouty patients.

Single free copies of Gout may be obtained from the Information Office, NIAMD, Bethesda, Md. 20014. Copies may be purchased at 15 cents each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.