Dr. Bruce, Dr. Whiteside Named Division Directors Of Manpower Bureau

Two Directors of Divisions in the Bureau of Health Professions Education and Manpower Training were recently appointed. They are Dr. Harry W. Bruce, Jr., Director of the Division of Educational Research Facilities and Dr. Daniel Whiteside, Director of the Division of Health Manpower Educational Services. Both are career commissioned officers of the Public Health Service.

The appointments were announced by Dr. Robert Q. Marston, NIH Director.

Dr. Bruce was formerly assistant director for Manpower and Edu-
(See MANPOWER, Page 8)

Cancer Institute Scientists Produce First Mouse Cancer Virus RNA Micrographs

The first electron micrographs of ribonucleic acid from a virus which produces cancer in mice have been produced by scientists at the National Cancer Institute.

This further clarification of virus contribution to the knowledge of those viruses which cause cancer in animals and those which are suspected as agents in human cancer.

Dr. Tatsuyoshi Kakefuda, Cancer Etiology, and John P. Bader, Cancer Therapy, extracted the ribonucleic acid (RNA) from Rauscher mouse leukemia virus and highlight it with platinum-carbon vapor so that it could be seen in an electron microscope.

Seenas Single Filaments

The RNA molecules were seen as single continuous filaments from 6 to 14 microns long. A micron is equal to one millionth of a meter. This structure is not observed in nucleic acids from other kinds of viruses.

Curly areas were seen in many of the shorter filaments. These and the twisting of other strands indicated that the RNA had been unwound from a natural coiled state

(Continued on Page 8)

Dr. Albert Hastings Given 2-Volume Oral History of Self at Farewell Meeting

Dr. Albert Baird Hastings, a member of the Training Review Committee of the National Institute of Child Health and Human Development, was presented with a 2-volume, 706-page oral history of himself on April 21. Dr. Hastings is with the Department of Neurosciences, NIH; it was Dr. Robert Q. Marston, NIH Director.

Dr. Hastings' last meeting with them. With Dr. Oehl, Dr. Hastings took part in a 29-hour series of tape recorded interviews from December 1967 to May 1968.

The interviews will provide an autographical memoir which is to be placed in the Oral History Collection of the NLM. This will supplement a vast collection of Dr. Hastings' personal papers which will also be deposited with NLM.

Since its beginning in 1966, the Library's Oral History Program, under the direction of Dr. Oehl, has accumulated over 175 hours of oral history materials.

The majority of these audio tapes are interviews with individuals who have made significant contributions to the development
(See DR. HASTINGS, Page 7)

NIH Savings Bond Drive To Begin May 1; DHEW Goal Is 80 Percent

NIH will officially open its annual U.S. Savings Bond campaign on Thursday, May 1. Nearly 600 canvassers will carry the bond message to fellow employees not now enrolled under the payroll savings plan. The DHEW goal is 80 percent. NIH now has just over 44 percent participation.

Weekly prize drawings are planned for the 7-week campaign.

They will be supplied through R&W discount merchants. Those eligible will include current bond holders and new participants.

A grand prize drawing is set for the campaign's closing day. First

'Story Joe,' PHS Cancer Film, Shown Tomorrow in Building 1

"Luckily Joe," a film that shows "safeguarding oneself against cancer is not a game of chance," will be presented at Wilson Hall, Bldg. 1, tomorrow (Wednesday), April 30, at 11 a.m.

It was produced by the Cancer Control Program of PHS, and stars Rod Serling.

Dr. William L. Ross is chief of the program.

NIH Bond Drive chairman, Dr. Donald J. Davis (I), and working chairman, Charles Moyer, go over plans for the annual campaign which opens Thursday.

week's prize is dinner for two at the Shangri-La Restaurant.

Those now enrolled in the program will be asked to wear a "bonded" badge which denotes that they are participating.

The "bonded" badges and prize drawing cards will be distributed this week.

Rally Held Last Week

Bulletin boards will carry progress reports, the prize of the week, and current prize winners.

The drive was given an informal pre-campaign send-off last Friday at the Clinical Center auditorium.

NIH Bond Drive Chairman, Dr. Donald J. Davis, Director of the National Institute of Allergy and Infectious Diseases, and NIH Director Dr. Robert Q. Marston, spoke briefly.

(See BOND DRIVE, Page 6)
Federal Program Offers College Level Courses After Working Hours

More than thirty college level courses will be offered after working hours this summer through the Federal After-Hours Education Program.

This program—coordinated by the Civil Service Commission, Bureau of Training, in cooperation with George Washington University—offers undergraduate or graduate courses leading to a B.S. or M.S. degree.

Those seeking self-improvement courses to expand their career may enroll as non-degree students.

Most of the classes, which begin the week of June 2, are held in downtown Federal buildings; however, a few courses are offered at the National Naval Medical Center.

Queries Answered

For further information on the downtown courses inquiries may be directed to Robert W. Stewart, the G.W.U. field representative, telephone 670-7018. Ed Wright, also a G.W.U. field representative, telephone 670-7024, will answer queries on the courses at AMC.

Registration for the 15-week session will be held on May 27 in Conference Room D, Department of Commerce lobby, 14th Street and Constitution Avenue, N.W. from 10 a.m. to 3:30 p.m.

Registration for the 7½-week session will be held on July 22 at the same location and time.

The tuition rate is $47 per semester hour.

The NIH Office of Assistant Director for Training and Development, Office of Personnel Management, Bldg. 31, Rm. B2B-07, has a list of the courses offered.

NIH Annual Art Exhibit In CC Lobby to Include Collage and Graphics

The 11th Annual NIH Art Exhibit sponsored by R&W will be held from Monday, May 18 through Friday, June 19, in the Clinical Center lobby. An informal ceremony will take place on the opening day.

R&W members and their families (children over 16 years of age) may submit art work on Friday, May 15 from 4 to 6:30 p.m., in the CC auditorium.

The judges for the exhibit will be Ben Forsey, assistant art critic and gallery director of the Washington Post Magazine; Walter Schneider, painter, art critic and lecturer at the Corcoran Gallery of Art, and Blaine Larson, painter, and instructor in drawing and painting at the Corcoran School of Art.

Prizes will be awarded for painting and collage, sculpture, graphics, watercolor and pastels, and drawing.
**Students Advocate Need For Reform at Meeting On Medical Education**

Medical students from the U.S. and foreign countries advocated changes in medical education at a Colloquium sponsored by the Fogarty International Center's Conference and Seminar Program.

The meeting, chaired by Dr. Julius Krevans, Johns Hopkins University, was cosponsored by the Board on Medicine of the National Academy of Sciences. It was held at NIH on April 9 to 11.

**Others Participate**

Medical educators and biomedical investigators also took part in the Colloquium on Reform of Medical Education.

Geoffrey Lloyd, president of the British Medical Students Association, was spokesman for the students attending the meeting. The students were from the U.S., United Kingdom, Peru, Canada, and France.

Mr. Lloyd advocated such reforms as additional free time to pursue problems which interest the individual student; increased relevance in basic science studies and greater flexibility in curriculum; a change in methods of assessing achievement with less emphasis on final examination grades, and lower entrance requirements for admission to medical schools.

**Pressures Explained**

Dr. John R. Ellis, London Hospital, London, England, said in a summary statement the pressures to change medical curriculum were due to the highly developed social conscience of medical students. The students wished for an active role due to the highly developed social conscience of medical students.

**Mass communications media have made the social justice more apparent,** Dr. Ellis stated. This had led to dissatisfaction with society, medical care—especially to underprivileged people, and medical education.

Dr. Ellis indicated that medical students in advanced countries today have not come of age in a stable society with fixed guidelines. They are accustomed to changes and are willing to press for changes of their own. He thought these pressures should be understood in the light of today's environment.

**Etchings, Serigraphs on Display In Bldg. 31 Lobby Until May 9**

Etchings and serigraphs by Phylis Hoffman will be on display in the lobby of Building 31 until May 9.

The one-woman art show is sponsored by the R&W.

Mrs. Hoffman is the wife of Dr. Harold Hoffman, NCI.

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**NICHD's Betty Barton Safaris to Africa And 'Shoots' Wild Game With Camera**

Miss Barton took this "shot" of another shutterbug "shooting" leopards.

By Lloyd Blevins

It's a rare occasion to be able to participate in an African "safari"—especially for a lady.

But recently Betty Barton, chief of the Scientific Conference Branch, National Institute of Child Health and Human Development, and Council Secretary—probably the last person you would expect—journeyed through the wild game reserves of Kenya.

An official safari is usually considered a 30-day journey in search of one particular animal. Miss Barton's safari to Kenya and Tanzania in East Africa was for 3 weeks.

While there, she shot about 360 animals—all through the lens of a 35 millimeter camera.

On the Serengeti plain, she lived in an adobe hut, but in the wild game preserves, her home was a tent, a camping luxury in that part of the world.

Uninvited guests in the middle of the night can be a problem in the jungle.

One night, while all were asleep, an elephant jabbed a tent through the side of one of the tents. Quite a commotion ensued, augmented by the clanging of tin pans to scare away the mighty pachyderm.

During visits to the wild game reserves, Miss Barton, an enthusiastic bird watcher, observed many species.

At one point she stood in awe as hundreds of thousands of flamingos rose up in a kaleidoscope explosion of pink against the blue of the sky.

She also observed the colorful sun birds, hornbills, weaver birds, and crested cranes, and she saw the cattle egrets riding the backs of the rhinoceroses.

**Wildlife Abundant**

Each day, Miss Barton's camera focused on the wildlife: there were giraffes, leopards, hynies, wildebeests, cape buffalos, hippos, elephants, baboons, monkeys, lions, and zebras.

Many of the larger animals were content to remain when the safari vehicles approached. Fumes from vehicles masked human scent, and this enabled pictures to be taken at a few yards distance.

At times the animals thought the vehicles were intruders. Miss Barton's car was once charged by an irate rhinoceros, but her chauffeur through crafty maneuvering, blinding of lights, and flashing direction signals, confused the beast and saved the party from the raging rhino.

**Elephant Approaches Car**

Near the snow-capped mountain of Kilimanjaro, which towers over 19,000 feet, a large bull elephant walked out of the bush within 20 feet of the car.

The animal was huge and bore tasks measuring nearly 7 feet. His ears flapped like sails.

Miss Barton also visited the Ngorongoro Crater in Tanzania which

(See SAFARI, Page 7)

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**John A. Beglin Retires, Helped Start Automated Payroll System for NIH**

John A. Beglin, a supervisory computer systems analyst with the Division of Computer Research and Technology, retired recently. He had been with NIH for 19 years.

Mr. Beglin came here from the PHS Hospital in Baltimore, where he had been fiscal and budget officer. His first job at NIH was chief accountant for the Financial Management Branch.

Later he was made supervisory accountant in the Division of Business Operations, and then became a digital computer systems analyst in that Division.

**Joined NIH in '58**

In 1958 he joined the Management Policy Branch in the Office of the Director, NIH. Mr. Beglin was instrumental in designing the automated payroll system for NIH.

He served on the steering committee which recommended the direction NIH's data processing function should take, and prepared the groundwork for the establishment of DCRT.

Mr. Beglin was also a member of the NIH-National Bureau of Standards team charged with determining the requirements for a new NIH computer system.

Mr. Beglin came to DCRT as special assistant to the division chief for ADP (automatic data processing) policy.

He reviewed and evaluated NIH plans and proposals for computation and data processing applications, equipment and services.

For several years he was treasurer of the NIH Federal Credit Union.

Mr. Beglin now hopes to do some cross-country traveling in his camp trailer.

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**Dr. John C. Eberhart, associate director, Mental Health Research, NIMH, was presented the DHEW Distinguished Service Award by Secretary Robert Finch on April 11. Dr. Eberhart was cited for "his role in advancing research of high quality in the mental health disciplines."**
New System Provides Easy, Rapid Preparation Of Biological Samples

A new system for rapid and convenient preparation of biological samples for liquid scintillation counting has been developed by Dr. J. I. Peterson, staff chemist, Biomedical Engineering and Instrumentation Branch, Division of Research Services.

The system is based on a combustion apparatus which allows preparation of a much larger number of samples for radiotracer measurement than was formerly practical.

Liquid scintillation counting is the most common method for doing radiotracer analyses in biological experiments. Combustion is often an ideal method of preparing samples for liquid scintillation.

In the past, it has been avoided because the technique was tedious and time consuming.

The new apparatus increases the number of samples a technician can prepare for counting by as much as five times.

The system accepts a variety of sample materials, and provides a method for evaporating tissue homogenate in gelatin or plastic capsules.

The operator drops a capsule into the top of the apparatus and collects the combustion products in scintillation solvent at the bottom, ready for counting, at a rate of one sample every 3 minutes.

The system accepts samples of at least 500 milligrams, limited by solvent capacity for water or carbon dioxide.

The apparatus provides catalytic combustion in a flowing stream of oxygen. Collection of the water and carbon dioxide into scintillation solvent is done simultaneously with combustion.

The first apparatus has been while visiting NIH to take part in an international medical education conference, Madame Claudine Escofier-Lombiotte, medical editor of the Paris newspaper L’Mondo, met other French nationals who work at NIH. At a tea given by the Fogarty International Center in her honor, she talks with Dr. Milo D. Leavitt, Jr., FIC Director (center) and Dr. Charles Huttner, chief of International Liaison Activities, FIC.

Monitoring System Developed for Care Of Coronary Patients in Small Hospitals

Scientists at the University of North Carolina have developed a computerized monitoring system designed to facilitate the care of coronary patients in small hospitals. They were assisted by a grant from the National Institute of General Medical Sciences.

The unit, built under the direction of Dr. Ralph W. Stacy, professor of Bioengineering and Bio­mathematics, and Dr. Richard M. Peters, Department of Surgery, is undergoing a trial at North Carolina Memorial Hospital in Chapel Hill.

The system consists of two small computers plus monitoring technicians.

It works by obtaining electrocardiogram signals and other electronic data continuously from the patient through electrodes attached to his body. These are fed into and stored by a small computer. Periodically, every few minutes or on a continuing basis if necessary, the monitoring technician “recalls” the stored electrocardiogram information which is turned on an electronic screen in the form of ECG “waves.”

The technician is trained to select various “peaks or dips” that are of medical significance. This he does by tracing waves or portions of waves seen on the view scope with a light pen.

In this way, insignificant data is eliminated while that which is most meaningful is automatically transmitted to and stored by another slightly larger computer.

As requested by attending physicians, the second computer prints out an up-to-date report on the condition of each patient under surveillance.

Technician Monitors Patients

Through central console facilities, the new system makes it possible for a single technician to monitor up to six or more patients simultaneously.

If an emergency were developing—signaled, say, by the appearance of a pre-ventricular contraction or “PVC” wave which reliably indicates forthcoming fibrillation in a coronary patient—it would be spotted by the monitor and medical teams summoned quickly.

“Cost and efficiency are both involved here,” Dr. Stacy said. “A totally automated heart monitoring system requiring much larger computers may cost more than $1 million.

“Our system, using small computers and a technician, may cost under $100,000, a far more realistic figure for the small hospital,” he explained.

Limited Motor Activity May Cause Weight Loss Associated With Cancer

A new understanding of the weight loss associated with cancer growth in patients may result from recent research on cancer in rats, according to a report presented at the 53rd annual meeting of the Federation of American Societies for Experimental Biology.

Dr. S. D. Morrison, Laboratory of Physiology of the National Cancer Institute, reported that cancer-bearing rats reduce their food intake as part of a general restriction of their physical activities.

Activity Level Explained

Normal rats have been found to spend about 75 percent of their total daily energy on spontaneous motor activity, such as exploring, grooming, feeding, and drinking. This activity level is not altered by food deprivation or food availability.

In the present study, five rats were injected subcutaneously each with one-milligram fragments of a type of cancer known as Walker 256 carcinoma. With the growth of the implanted cancer beyond about 10 grams (3 percent of body weight), the percent of energy the rats spent in motor activity began to fall progressively.

When the implanted cancer attained 15-20 percent of total body weight, only 13 percent of the rats’ daily expenditure of energy was spent on motor activities.

A decrease in food intake did not occur until several days after the decrease in motor activity. When the rats’ activity level fell below the normal lower limit of 20 percent, daily food intake became significantly correlated with the activity level.

Thus the decline in food intake appears to be a direct consequence of the depression of the entire motor activity, activity being caused by cancer’s growth.

Sodium Added to Food

Both the food intake and level of motor activity were temporarily and partially restored to normal by the addition of sodium to the food to replace the amount depleted by tumor growth.

Lowering the environmental temperature to increase the overall energy expenditure of the rats had the same effect.

Surgical removal of the tumor also restored food intake and motor activity levels to normal. Twenty-four hours after removal of a 116-gram tumor from one of the rats, the motor activity level returned to 23.3 percent, as compared to 15.7 percent before the operation.

The rats’ food intake, which had fallen to approximately half-normal, returned to normal by the third day after the operation.

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Dr. O’Brien, Exec. Secy.
At DRG, Retires April 1

Dr. Thomas O’Brien, executive secretary of the Neurology B Study Section in the Division of Research Grants, retired on April 1 after 20 years at NIH.

Commissioned to the PHS Corps in 1949, Dr. O’Brien was assigned as an assistant to the chief, National Heart Institute.

In 1952 he joined DRG as executive secretary of the Virology and Rickettsiology and the Microbiology Study Sections. A year later he took over the Neurology and Sensory Diseases Study Section. In 1962, after holding several other posts at DRG, he assumed his present position.

Worked With Dr. White

Dr. O’Brien was introduced to NIH by Dr. Paul Dudley White under whom he worked in the Cardiac Laboratory at Massachusetts General Hospital from 1946 to 1949.

A 2-year tour as Captain in the Army Medical Corps ended 7 years as an instructor in pharmacology at Tufts University preceded his work with Dr. White.

Dr. O’Brien earned his M.D. degree from Tufts University Medical School.

A gift from his friends and colleagues at DRG was presented at a farewell luncheon. He was also honored by 35 study section members during the January round of meetings at a special dinner party in Philadelphia.

The members expressed their esteem for Dr. O’Brien by presenting him with a bound volume of 80 letters from those study section members with whom he had been associated during his years with the NIH, and a silver tray engraved with their message of appreciation.

They also presented him with airline tickets to Europe and a book of rail passes to travel in various European countries.

USIA Selects NIH Film For Internat’l Festival

An 18-minute National Heart Institute color film was one of the entries selected for showing at the Festival International du Cinema Medical held recently in Nantes, France.

The movie, “Implantation of a Radio Frequency Coro Id Stimulator for Relief of Angina Pectoris,” had been selected to represent this country by the U.S. Information Agency from numerous applicants.

The film is based on the promising clinical results obtained by NIH scientists on the application of a device for angina pain.

Its use has allowed a number of patients to resume a relatively normal life after years of enforced inactivity.

DPM Tackles Problems of MD Shortage,
Medical Education, Health Care Services

By Judy Roberts

NIH Information Trainee

America’s remarkable population growth and increasing demands for medical care have undergone the aged, the dependent, and the deprived serve to highlight the acute shortage of physicians in this country.

Current estimates indicate a need to provide adequate health care for the Nation’s people.

To meet these problems, a Federal focus on physician manpower activities was set up in the Division of Physician Manpower, where the direction of Dr. Frank W. McKee.

The Division is one of seven components in the Bureau of Health Professions Education and Manpower Training.

Although a relatively young organization (the division was created Jan. 1, 1967), DPM has several vigorous programs to alleviate for 60,000 additional physicians to help break the rigidity of the past.

By contract, PEB supports proposals for research in medical education, application of new teaching techniques and means for increasing student enrollment and thus the number of graduates.

Studies have been made of retraining programs for inactive physicians, greater use of community hospitals as teaching resources, and a semi-annual admission system for increasing the number of graduates.

Although very important, medical schools cannot provide all the answers to physician manpower problems.

“From the time planning for a new medical school begins, up to 10 years can pass before the school receives its first class and another 5 to 7 years after that before the first graduates enter practice,” Dr. James W. Long, chief of the Professional Activities Branch, pointed out.

“If the quality and quantity of medical care are going to be improved now, better ways to use the already-practicing physician’s time need to be found,” he added.

Health care often is trapped by the old way of doing things. Traditionally, only doctors have performed certain tasks, yet some tasks may very well be carried out by trained intermediate workers and with the use of automated record-keeping and laboratory equipment.

Some doctors already have found more effective methods of practice, such as Dr. Robert I. Daugherty of Lebanon, Ore.

In order to satisfactorily test the complaints of half his patients

A chart in Dr. Daugherty’s office, called “Year Planner,” illustrates the organization of his medical practice for the entire year. He points out to his assistant, Mildred Larsen, some of the fine details of the plan.

Techniques Demonstrated

In one project, physicians from teaching centers go out and spend 8 days in a community hospital. While they are there, they take part in demonstrating the latest techniques in medical care.

In another study, 40 physicians from the Jacksonville, Fl. area are going to spend a week in special training at the University of Florida at Gainesville.

After that training, Norman Tucker, education expert for the Continuing Education Branch, will conduct a 2-day teaching techniques seminar for the physicians. Some will be appointed to the University staff and return to Jacksonville to provide continuing education to other physicians.

An outgrowth of one study led to a cooperative plan with the National Library of Medicine.

Libraries with basic medical literature were established in several community hospitals enabling doctors to keep up with medical research reported in journals.

To further assist medical schools and physicians, the Physician Resources Branch, headed by Dr. Allen B. Kaplan, education chief of the Continuing Education Branch, said.

To develop this plan, branch contract activities are aimed at the community hospital—the place of the greatest physician activity.
Changes in Heart Wall May Indicate Rejection Of Transplanted Heart

Changes in the stiffness of the heart wall may be an early indication of rejection of a transplanted heart, according to a study aided by NIH grants.

A research team at Stanford University believes stiffening can be detected through use of a phono-cardiograph, an instrument which graphically records heart sounds.

Such information may then aid in determining the proper use of immunosuppressive drugs to reverse acute early rejection before there is damage to the transplanted heart.

Early Warning Important

Knowledge of early acute rejection is important in beginning immunosuppressive drug therapy at the optimum time.

However, a major problem is to obtain maximum effectiveness from such drugs without altering the patient's resistance to infection.

Because no reliable method has been available to monitor early heart rejection in humans, surgeons have walked the tightrope between too much drug treatment and not enough.

Hopefully, if the proper immunosuppressive drug is introduced in the appropriate quantity before the first rejection episode and in later crises, long-term survival of the patient may be achieved.

The Stanford research is supported by grants from the National Heart Institute and the former Division of Research Facilities and Resources, now the Division of Research Resources.

Population Research Ctr.
Issues Report on Family

A 7-page report, entitled Relationships Among Intended, Expected, Desired, and Ideal Family Size: United States, 1965, has been issued by the Center for Population Research, National Institute of Child Health and Human Development.

The research conducted by the authors, Drs. Norman B. Ryder and Charles F. Westoff, was supported by NICHD.

Dr. Ryder is professor of Sociology at the University of Wisconsin; Dr. Westoff is chairman of the Department of Sociology and associate director of the Office of Population Research, Princeton University.

Collagen Protein 'Cuffs' Can Be Used to Identify Tumors of Cherubism

Deposits of the protein collagen in "cuffs" around small blood vessels can now be used to distinguish the tumors of cherubism from other bone tumors, Dr. J. E. Hamner, National Institute of Dental Health, reports.

Cherubism is a painless tumor of the jaw bones that causes facial roundness and sometimes forces the eyes to turn upward. Sometimes the growth is so great that surgery is necessary to enable a young child to eat and talk comfortably.

Because there is no explanation of the physiological significance of the cuffs of collagen, their presence serves to identify the tumor, and helps decide how it should be treated.

Because the cherubism tumor differs little in cell make-up from other giant-cell lesions, Dr. Hamner made a histochemical analysis of cherubism tumor tissue from eight children as compared with a number of other jaw tumors — cementifying fibroma, "brown tumor," fibrous dysplasia, benign giant-cell tumor.

Collagen Deposits Form

He found that deposits of collagen formed around the blood vessels—capillaries—in all cases of cherubism, but no collagen cuffs appeared in any of the other tumors he examined.

There was no clinical or histological evidence to associate cherubism with the usual collagen diseases or with hypersensitivity. Cherubism is of familial and generally becomes noticeable between the ages of two to five. The tumor increases rapidly in size during the first few years; then slowly, improvement begins and by age 30 reshaping of the jaw bones and regression of the lesions occur.

Although the tumor has affected both sides of the lower jaw in every case recorded, one side may enlarge considerably later than the other. Often the upper jaw is also involved. The tumor plays havoc with the development of both primary and secondary teeth.

This condition appears to be inherited as a dominant gene which is more likely to be fully expressed than females. Minimal involvement in a parent is often overlooked because it is not readily apparent.

factor.

Drs. Kakefuda and Bader recently reported their findings to the American Association for Cancer Research.
SAFARI
(Continued from Page 3)

drops 2,000 feet below its ledge and covers many square miles.

There is always water here, and the area serves as a maternity ward for hundreds of baby animals.

After spending nights listening to the sounds of nearby wild animals, safari members rose at 5:30 for the morning game drive. One morning, less than a hundred yards from Miss Barton's tent, vultures were fighting over the carcass of a beast which was killed by lions the previous night.

Visits Olduvai Gorge
A highlight was the trip to the Olduvai Gorge. Here, for almost 35 years, a British archeologist, Dr. Louis S. B. Leakey, has been conducting a search of ancient ruins with his wife and three sons. A skull of near-man found by Mrs. Leakey in 1959, and named Zinjanthropus, has been radiocarbon dated as more than 1,750,000 years old.

This spring, while Miss Barton was visiting Olduvai Gorge, Dr. Leakey was visiting the NIH campus.

On the way home Miss Barton went to Ethiopia and Egypt. She left Cairo via Japan Airlines in the middle of the night. The Egyptian army had already moved into their airport because of Middle East tensions.

NIMH Scientists Receive Superior Service Awards At Ceremonies in CC

Five scientists of the National Institute of Mental Health at NIH were among the recipients of Superior Service Awards presented by Health Services and Mental Health Administration, at ceremonies held April 18 in the Clinical Center auditorium.

Honored were: Dr. Giulio L. Cantoni, chief, Laboratory of General and Comparative Biochemistry; Dr. Seymour Kaufman, acting chief, Laboratory of Neurochemistry; Dr. Melvin L. Kohn, chief, Laboratory of Socio-Environmental Studies; Dr. David E. Rose, chief, Laboratory of Psychology, and Dr. H. En-
Schedule of 30 Courses Of Laboratory Training In Atlanta Announced

Thirty training courses are being offered by the Laboratory Division, National Communicable Disease Center, Atlanta, Ga. from August 4, 1969, to June 20, 1970.

The schedule includes courses on laboratory methods in mycology, detection of viruses, virology, parasitology, and bacteriology.

Other courses cover such areas as problems in blood banking, fluorescent antibody techniques, complement fixation, isolation of salmonella from food products and animal feeds, and diagnosis by aero-logic methods.

Also offered are courses on human blood cell morphology, clinical chemistry instrumentation, and management of scientific services for public health laboratories.

Information and application forms may be obtained from the Training Office, Laboratory Division, NCDC, Atlanta, Ga. 30333.

Artificial Heart Conference to Be Held June 9-13

Progress in artificial heart development will be discussed at an Artificial Heart Conference to be held June 9-13 at the Shoreham Hotel, Washington, D.C.

The conference, sponsored by the National Heart Institute, will be open to the scientific community and to the press.

At the meeting papers will be presented on the problems of scientists who are conducting bio-engineering research on the development of circulatory-assist devices and artificial hearts.

The research is funded by the NIH Artificial Heart Program.

The Artificial Heart Program, which began operations in 1964, is seeking to reduce death and disability from heart disease through the development of techniques that will provide assistance to a failing circulation, and devices that will replace hearts damaged beyond salvage.

$19 Million Awarded

Over the past 4 years the Program has awarded more than $19 million in contracts to support research for bioengineering, physiological, and related problems of artificial heart development.

Research has been carried out not only in universities and medical centers, but also by private industry, including chemical and engineering firms and electronics corporations.

More than 100 scientists are expected to attend the conference.

They will review the current status of research in such areas as circulatory assist devices and the physiological effects of assist circulation, total heart replacement devices, material development and evaluation, blood oxygenators, energy systems and control mechanisms.

DR. OLIVERIO

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Bacteria May Contribute To Plasma Cell Tumors

Recent studies at the National Cancer Institute indicate that bacteria and other normal body flora may contribute to the development of plasma cell tumors in mice that are genetically predisposed to plasma tumors.

Dr. K. Robert McIntire gave supporting evidence for the theory that microbial flora may be necessary for the development of the plasma cells which respond to cancer-causing stimulus at the 60th annual meeting of the American Association for Cancer Research—held March 23-25 in San Francisco.

Following extended exposure to mineral oil, a substance known to cause tumors when injected in the strain of mice (BALB/c) used in these studies, 28 of 40 mice raised under normal, optimal conditions developed plasma cell tumors.

Fever Tumors in Germfree Mice

However, only 2 of 33 mice raised in a germfree environment and having no bacterial flora whatever, developed tumors.

Both of the tumors in the germfree mice developed 18 months after injections were started. Normal mice developed tumors approximately 11.5 months after the injections began.

In 24 of 31 mice born in a germfree environment but later placed in an ordinary environment, plasma cell tumors developed 11.3 months after mineral oil injections began.

Dr. McIntire noted that germfree mice have underwent lymphoreticular systems and fewer than normal numbers of plasma cells.

Perhaps as a result, they developed a high incidence—80 percent—of lymphoreticular tumors, arising from cells less highly developed than plasma cells.

Medical Library Project Sponsored by NLM, DPM

Because of inadequate medical library facilities, research for developing a community hospital library project has been undertaken by the Postgraduate Medical Institute. The institute, an educational, non-profit corporation, is sponsored by the Massachusetts Medical Society.

The project is in cooperation with the New England Regional Medical Library Service at the Francis A. Countway Library of Medicine.

It is supported in part by a grant from the National Library of Medicine and by a contract with the Division of Physician Manpower.

In order to establish the nucleus of a medical library, 400 specialists were asked to recommend books in their area of special interest.