

the



Record

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

August 3, 1971
Vol. XXIII, No. 16

NATIONAL INSTITUTES OF HEALTH

34 NHLI Grants Given To Universities, Hospitals For Research Centers

The National Heart and Lung Institute has awarded 34 grants totalling \$16.4 million to establish Specialized Centers of Research (SCORs) at 29 universities and hospitals throughout the country.

Each SCOR will focus its resources, facilities, and manpower on specific problems in one of the following disease areas: arteriosclerosis, pulmonary disease, thrombosis, or hypertension.

Goal Explained

The goal of the SCOR program is to develop new knowledge relevant to the prevention, diagnosis, and treatment of these diseases and to hasten the clinical application of this knowledge.

Thirteen SCORs will deal with arteriosclerosis, 11 with pulmonary disease, five with thrombosis, and five with hypertension. The number of research tasks to be undertaken will vary from one SCOR to the next.

No individual center will attempt
(See CENTERS, Page 7)

NINDS Releases Booklet On Huntington's Disease; Genetic Nerve Disorder

In hereditary disorders for which no cure is known, early recognition, followed by accurate genetic counseling, may be the only means of control.

This is stressed in a new publication on Huntington's disease (HD) recently issued by the National Institute of Neurological Diseases and Stroke.

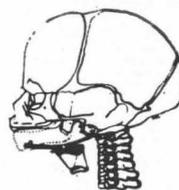
HD is a grave genetic disorder marked by a gradual destruction of nerve cells in the brain.

One important phase of HD research described in the illustrated pamphlet *Huntington's Disease (Huntington's Chorea), Hope through Research*, aims at developing an accurate diagnostic test.

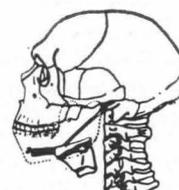
According to the booklet, research to find a reliable test for HD is particularly valuable because persons with a defective gene usually do not show typical symptoms—flinging arms and legs and mental deterioration—until they have reached middle age.

By this time, the defect has already been passed on to one or
(See NERVE DISORDERS, Page 7)

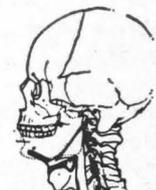
Neanderthal Man Aids Speech Research: Child's Pharynx Growth Repeats Evolution



MODERN NEWBORN



NEANDERTHAL



MODERN ADULT MAN

The similarity of the newborn and Neanderthal skulls and pharynxes differ greatly from that of the modern adult man. The undeveloped shallow pharyngeal tubes are not as efficient as the deeper, more flexible adult man's for forming speech.

The reconstructed vocal apparatus of Neanderthal man, who lived some 40 to 70 thousand years ago, shows that regardless of his intelligence he could not have spoken a modern language any more than an ape or today's normal infant.

If speech were primarily a function of intelligence, apes, who can make simple sentences in sign language, should be able to learn to speak.

Studies supported by the National Institute of Dental Research show that the vocal tract of Neanderthal man as well as of today's infants is more like those in monkeys and apes than modern adults.

Dr. Philip Lieberman and other investigators from the University of Connecticut and the Haskins Laboratories in New Haven reported their findings in *Linguistic Inquiries*.

They found that apes and monkeys cannot speak because the shape of their throats approximates a slightly flared straight tube which is incapable of producing the varied sounds of speech.

The voice box is so high in the throat that most of the pharynx is missing. It is the flexible chamber of the pharynx that forms some consonants and vowels.

Dr. Lieberman began studying Neanderthal man after he noticed certain Mongoloid children who do not talk have heads with an infantile shape. He found that, internally, Neanderthal skulls are similarly shaped.

Computer analysis of the cries of infants, and of mature apes and monkeys, with direct measurements of vocal tracts, allowed the development of models which show

the sounds can be produced by a slightly flared tube.

A reconstruction of the vocal tract of Neanderthal man, following methods of comparative anatomy, produced similar limited sounds with fewer vowels and consonants than today's human speech. Apparently, Neanderthal speech was inefficient and monkey-like.

Having a voice box high in the throat makes it possible for apes, monkeys, and infants to breathe and swallow simultaneously without choking.

Modern Man Lost Skill

Neanderthal man also had this skill, but the modern adult human lost it when his vocal tract became a bent, three-chambered structure (larynx, pharynx and mouth) with complicated neurological controls to match.

The position of the human voice box actually hampers the efficiency of adult eating and breathing.

The investigators suggest that the lowered position of the larynx evolved because natural selection favored individuals with more sophisticated calls.

The scientists propose that the shape of the adult skull reflects the evolution of the pharynx, and that childhood development of the vocal tract repeats primate evolution.

Studies of infant anatomy are
(See NEANDERTHAL, Page 5)

Register, Donate Blood, You May Win a Color TV

If you are a blood donor, as well as an NIH employee, you may win a color television set.

Dr. Thomas C. Chalmers, Clinical Center Director, said the contest marks the beginning of a 6-month stepped-up drive to recruit new blood donors.

The television set, donated by the NIH R&W Association, will be given to the employee whose name is drawn from a lottery of donors.

The drawing will take place in January; that month has been designated by Congress as National Blood Donor Month.

During the 6-month period, members of the Blood Bank hope to collect 3,600 units of blood and add many new names to their list of eligible NIH donors.

Each employee who registers as a blood donor, and each time he donates a unit of blood, will have his name put in the lottery.

Donors already registered and those who register early August may be eligible to donate three

units of blood before the January drawings. Donors may give up to five times a year.

Members of the immediate Offices of NIH Director and the CC Director and Blood Bank employees, are not eligible for the drawing.

For further information call Rodney Douglass, Ext. 64506.



Carol Williams, a summer aid, admires the poster announcing the drawing, and dreams of winning the color TV.



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 Editor Fay Leviero

Staff Writer Ed Driscoll

Staff Correspondents

ADA, Nelson Sparks; BHME/OD, Florence Foelak; CC, Ann Bainbridge; DAHM, Laura Mae Kress; DBS, Faye Peterson; DCRT, Joan Chase; DDH, Carolyn Niblett; DMI, Beverly Warran; DN, Evelyn Lazari; DPHPE, Eleanor Wesolowski; DRG, Sue Meadows; DRR, Dave Dunlap; DRS, Robert Knickerbocker; FIC, George Presson; NCI, Elizabeth Shollenberger; NEI, Julian Morris; NHLI, Bill Sanders; NIAID, Krin Larson; NIAMD, Katie Broberg; NICHD, Lloyd Blevins; NIDR, Sue Hannon; NIEHS, Elizabeth Y. James; NIGMS, Wanda Warddell; NIMH, Daniel Rice; NINDS, Anne Tisiker; NLM, Roger Gilkeson.

Becky Speicher Retires, Answered NCI Inquiries For Almost 25 Years

Mary Rebecca (Becky) Speicher of the National Cancer Institute's Research Information Branch will retire Aug. 6. For almost 25 years she has directed the processing of public inquiries.

Miss Speicher joined the Institute on July 1, 1946, as a secretary in the Office of the Director, Dr.



At her retirement party, Miss Speicher is handed a Certificate of Merit by NCI Director Dr. Carl G. Baker (l), as James F. Kieley, Information Officer, waits to congratulate her.

Roscoe R. Spencer, whose staff included the *Journal of the National Cancer Institute* and a small purchasing unit, all located in a part of the first floor of Bldg. 6.

Before coming to NCI, she served as secretary to the Dean of Women at the University of Maryland.

Miss Speicher was born in the small town of Accident in Western Maryland. After graduating from State Teachers' College in Frost-

NIH Television, Radio Program Schedule

Radio

DISCUSSION: NIH

WGMS, AM-570—FM Stereo
103.5—Friday, about 9:15 p.m.

August 6

Harry Blum, DCRT
Subject: Shape and Seeing (R)

August 13

Dr. Malcolm C. Johnston,
Visiting Scientist, NIDR
Subject: Facial Mouth Formations (R)

Interview is during intermission,
Library of Congress concerts.

Television

PANORAMA:

(Ask the Doctor)

WTTG-TV, Channel 5, 12:30 p.m.

August 3

Dr. John G. Bieri, NIAMD
Subject: Nutrition

August 5

Dr. Edward S. Henderson, NCI
Subject: Leukemia

burg, she taught elementary school for 4 years.

She then left teaching to attend Mountain State Business College in West Virginia.

Later, she joined the Garrett County Health Department.

Miss Speicher was recently commended by NCI for her outstanding services in processing inquiries.

A farewell party was given for her and it was attended by Miss Speicher's many friends here.

Clerk-Typists Complete 3 Months of Training



Richard L. Seggel (l) presents Myrtle Coleman with her course certificate as Dee Richard, Montgomery County Training coordinator, looks on.

The second class of clerk-typist trainees recently completed 13 weeks of classroom training in a program to provide new career opportunities.

Richard L. Seggel, NIH Associate Director for Administration, presented certificates of completion to the employees of the class in a ceremony July 13.

The certificates were issued by the Montgomery County Adult Education Program whose members conducted the training.

The 23 trainees, who were in jobs with limited advancement, were chosen from 87 applicants in accordance with the Merit Promotion System.

Classroom work consisted of typing, English and telephone usage, math, filing, and general office procedures.

The program is a joint effort of the Personnel Staffing Branch and Training and Employee Development, OPM. The 6-month project consists of 3 months classroom training and 3 months on-the-job training.

Graduates have been placed in many Institutes and Divisions on the campus.

Articles Feature Women Associated With NINDS

Two women associated with the National Institute of Neurological Diseases and Stroke are subjects of two separate articles in *Good Housekeeping* magazine's section called "Women in Action."

Mary Litty, founder and executive director of the Tri-State Epilepsy Association, is featured in the July issue. Her work with epileptics in Kentucky, Indiana, and Illinois includes referral of patients to the Clinical Center.

Scheduled for this autumn is an article about Virginia Bunton, mother of the famous Siamese twins joined at the head and brain.

The twins, now teenagers, were successfully separated when 4

National Urban League Conducts Training Study

The potential for training allied health workers in colleges and universities founded for blacks will be determined by the National Urban League. This study will be conducted under a contract awarded by the Bureau of Health Manpower Education.

The Division of Allied Health Manpower has the responsibility for administering the contract.

In announcing the award, Dr. Kenneth M. Endicott, BHME Director, said "... the Urban League will examine the current status of allied health training in educational institutions founded for blacks, and begin to design a plan to increase the number and quality of allied health training programs in these institutions."

Indications show that the need for allied health workers in 1980 will be nearly two times greater than the present supply.

Selected for Research

According to Dr. Endicott, the National Urban League was selected to undertake the research because of its close contact with colleges and universities founded for blacks and its orientation to problems of social concern.

Thomas D. Hatch, DAHM acting director, explained that "... possible consortium arrangements to link educational and training resources of these colleges and universities with other institutions and medical facilities in the same geographical area will be explored."

Catalog Lists Courses Offered During 1971-72 By Graduate Program

New courses offered this fall by the Graduate Program at NIH include Psychodynamics, Physiology for Non-Biologists, Intercellular Communication in the Nervous System, and an Introduction to Statistical Genetics.

Other courses include languages and general studies, mathematics, microbiology and immunology, and statistics.

Catalogues listing the schedule of all the courses plus a mail registration form, are available from the Foundation for Advanced Education in the Sciences, Bldg. 10, Room B1-L-101. For further information call Ext. 66371.

months old by the late Dr. Maitland Baldwin, eminent neurosurgeon, at the Clinical Center.

Both features were written by William Cole, who has previously written a number of articles on neurological problems.

Joseph J. Cooney Dies; Served for 40 Years In Federal Government

Joseph J. Cooney, former chief of the Contracts Staff, Office of Administrative Management, Bureau of Health Manpower Education, died Tuesday, July 13, at Northern Virginia Hospital.

He had retired from the Bureau last May after 40 years of service with various Government agencies.

Mr. Cooney began his Federal career in Cleveland in 1928, with the Veterans Administration.

He came to Washington in 1933 for that career, attended evening classes at Columbus University where he received his LLB degree, and was admitted to the D.C. Bar.

Mr. Cooney served tours of duty in Manila and in Puerto Rico as an examiner, adjudicator, and claims board member for the VA. During World War II, he served in the Army Air Corps in Italy.

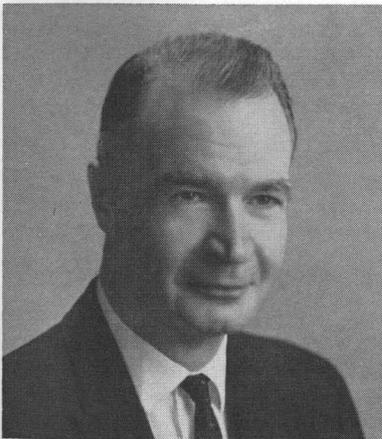
In 1950 Mr. Cooney began work in contracts and procurement for the Department of the Army at Fort Belvoir.

Named Branch Chief

In 1956 he transferred to the Department of the Navy as a contract specialist. He remained there until joining the Public Health Service in 1963, as chief of the Contract Branch of the Bureau of State Services (Community Health).

On several occasions Mr. Cooney was cited by the Department of the Navy for the quality of his work. He also received several letters of commendation for his work in the PHS.

At the recent Third Annual NIH



Mr. Cooney was cited for his work at PHS and the Navy Department. He retired from BHME this past May.

Honor Awards Ceremony, Mr. Cooney received in absentia the 40-year Length-of-Service Award from NIH Director Dr. Robert Q. Marston.

Mr. Cooney is survived by his wife, Lucille, and two sons, Thomas J. and Daniel P., of the home ad-

Katherine Ryan's Work Appraisal Given At Retirement Party, Adds Up to A-Plus

"Leaps tall buildings with a single bound; is faster than a speeding bullet; is stronger than a locomotive." This was the beginning of Katherine Ryan's "performance appraisal," and it was all said in jest at her recent retirement party.

She was honored, after 25 years of Government service, by friends and colleagues of the Office of Personnel Management who presented her with a parting gift and best wishes.

Miss Ryan remarked later that "the party . . . was certainly the highlight of my Federal career."

Came Here in 1963

Miss Ryan, a personnel management specialist, Systems and Actions Branch, came to NIH in 1963 as appointment supervisor in the Program Services Section.

One of her important assignments here was setting up personnel operations for the National Institute of Environmental Health Sciences in N. C.

Her last assignment before retirement, was taking part in a review of personnel records and files operations in the Office of the Secretary, HEW.

Miss Ryan began her Federal career in 1941 at Tilton General Hospital, Fort Dix. At that post she later became civilian personnel officer.

Other personnel positions followed with the U.S. Treasury Department in N. Y. and at McGuire Air Force Base in N. J.

On that last assignment she trav-

Nursing Division Issues School Planning Booklet

A brochure, describing how a nursing school pooled resources with other professional schools in a university, is now available from the Division of Nursing, Bureau of Health Manpower Education.

Cooperative Planning for a School of Nursing Within a Health Science Complex discusses in detail the complicated planning and coordination required for remodeling and building an addition to the Health Science Building at the University of Washington.

The Health Science Complex will permit enrollment in medical, pharmaceutical, dental, and nursing fields to grow from 4,000 to 6,000.

The booklet may be purchased for 25 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

A single free copy may be obtained from the Division of Nursing, NIH, Bethesda, Md. 20014.

dress, 5410 10th Street, North Arlington, Va.; a brother, George Cooney of Detroit, Mich., and a sister, Marie English of Cleveland, Ohio.



At her retirement party, Kate Ryan displays a bracelet charm given by co-workers. Helene Devay, Systems and Actions Branch chief, presented the gift.

eled to Bermuda, Iceland, Scotland, France, England and the Azores to help establish and improve personnel operations at air force installations.

Before coming to NIH she was in the personnel office at Bolling AFB.

During her Government career, Miss Ryan received a number of honors, including seven cash superior awards and a sustained superior performance award.

Miss Ryan has retired to New Jersey to live with her sister, but she will come down to Washington on an as-needed basis to work in the Office of the Secretary, HEW.

Registration for Federal Education Program Will Start Week of Sept. 13

The Federal After-Hours Education Program will offer more than 150 college-level courses this fall to Federal employees, military personnel and the general public.

The courses will be given after working hours, in Federal buildings located in downtown Washington, D.C.

This program, coordinated by the CSC's Bureau of Training and the College of General Studies, George Washington University, offers courses leading to B.S. and M.S. degrees. Participants may also enroll as non-degree students.

Registration will be held on Sept. 7 and 8, from 10 a.m. to 3 p.m., in conference rooms A, B, and D, Department of Commerce, 14th and Constitution Ave., N.W.

Classes begin the week of Sept. 13. For further information call Robert W. Stewart, Jr., G.W.U., 676-7018 or 7028.

AFNA Program Opens Medical, Health Fields To Minority Students

A special program to increase significantly the number of minority students qualified to enter medical and health sciences schools will be developed under a Division of Physician and Health Professions Education contract awarded to the American Foundation for Negro Affairs (AFNA) of Philadelphia.

AFNA is a nonprofit organization set up to increase the number of blacks in the major areas of American life.

AFNA will formulate a 4-year premedical curriculum to take into account the varying backgrounds, abilities, and goals of disadvantaged students. It will specify the major science, liberal arts, and remedial subjects required as "core" studies.

The program will be devised so that if a student does not complete courses required for admission to medical school, he can enter other health professions.

Deans Included

Studies will be formulated under the supervision of AFNA's Steering Committee which includes the deans from the University of Pennsylvania School of Medicine, and Hahnemann Medical College and Hospital.

Also, Temple University School of Medicine; Medical College of Pennsylvania; Thomas Jefferson University, and Philadelphia College of Osteopathy.

The contract covers the second phase of a long-term project under way at AFNA. The first phase is concerned with orienting minority group students in high school toward medical careers.

The first group of 60 high school students will begin the orientation studies this month.



Professor Ruggero Ceppellini, Institute of Medical Genetics, University of Torino, Italy, distinguished in the field of immunogenetics, is a Fogarty Scholar at Stone House. He spent a year at Columbia Univ., and conducted genetics research at the Galton Laboratory, University of London.

Latest Participants in NIH Visiting Scientists Program Listed Here

7/8—Dr. Akira Tanaka, Japan, Laboratory of Experimental Neurology. Sponsor: Dr. William F. Caveness, NINDS, Bldg. 36, Rm. 4A27.

7/8—Dr. Erik Westergaard, Denmark, Laboratory of Neuro-pathology and Neuroanatomical Sciences. Sponsor: Dr. Milton W. Brightman, NINDS, Bldg. 36, Rm. 3B28.

7/16—Dr. Akira Hasegawa, Japan, Laboratory of Chemistry. Sponsor: Dr. Hewitt G. Fletcher, NIAMD, Bldg. 4, Rm. 205.

7/18—Dr. Friedhelm Lamprecht, Germany, Laboratory of Clinical Science. Sponsor: Dr. Irwin J. Kopin, NIMH, Bldg. 10, Rm. 2D46.

Area Stables Offering Discounts To R&W Riding Club Members

Trail rides are now being formed by the R&W Riding Club which meets 4 times a week; Wednesday and Friday evenings, and Saturday and Sunday afternoons.

Discounts are offered to members of the club by area stables—1½ hours will cost \$4. Annual membership fee is \$3.

For further information contact Sandy Epperson, Ext. 65064.



R&W Riding Club members are up in the saddle in preparation for a trail ride.

Hazel Rea Appointed to FEGLI Advisory Committee by CSC

Hazel W. Rea, administrative officer for the Mental Health Intramural Research Program, has been appointed to serve on the five-member Employee Advisory Committee on Federal Employee Group Life Insurance (FEGLI).

She was named to the post by Civil Service Commission Chairman Robert Hampton.

Mrs. Rea is especially interested in suggestions and recommendations from all HEW staff members. Suggestions may be directed to Mrs. Rea, Bldg. 36, Room 1A-07, NIH, Bethesda, Md. 20014.

Personnel Offices will answer questions about the program.

DRS Planning Conferences Are Preludes To Successful Employee Training Courses



Dr. DeWitt (c), who gives the final nod of approval for training plans, discusses the courses that will be of most benefit to employees, with John DuBay (l) and Fredric Fagan.—Photos by Tom Joy.

Long before the beginning of the fiscal year, the Division of Research Services Training Program knows where it's going—in the right direction. And all because of advanced planning.

Fredric G. Fagan, DRS training officer, explains the planning for the program in terms of personnel, "You have to be concerned about your people as people."

And it's people, working throughout NIH, who take DRS training courses.

DRS branch chiefs, who make up the justification for training, submit their plans in April. Then, accompanied by their administrative officers they meet with Dr. William B. DeWitt, DRS Director; John DuBay, DRS executive officer, and Mr. Fagan.

Manhours Estimated

During these conferences, man-hours are estimated and costs are figured.

Training classes—from college courses to factory-training courses—are held anytime during the year. "Everybody has an equal chance for DRS courses, regardless of who he is," said Mr. Fagan.

A 40-hour Basic Chemistry course was recently conducted for DRS personnel.

"The course could easily have been 80 hours because of their interest and several want to continue in chemistry lab calculations," Mr. Fagan said.

Animal caretakers have taken a comprehensive course in lab animal care. Later, with additional training, some of these employees may be qualified to apply for lab technician jobs.

There is an NIH High School Equivalency Program which many DRS employees are attending. The reward to a qualified student at the end of that program is a bona fide diploma awarded by the employee's residence state. That possession may very well lead to jobs with further advancement possibilities.

If a particular course would in-

crease his knowledge and his chances for a better job, the employee may take it, the training officer said.

"But," added Mr. Fagan, "I continually emphasize one point, and that is, at the end of the course don't expect automatic promotion."

In discussing the basic adult education classes which DRS was the first to offer, Mr. DuBay, who has been executive officer since 1962, explained that DRS allows time off during working hours to take part

(See CONFERENCES, Page 5)



Anita Biser is examining "quality control" samples of tissue culture media which are held for 7 days to spot possible contamination before it is released to campus researchers. Contamination rate for the past 12 months was extremely low—just one-half of one percent of the total volume produced.

Lipid Metabolism Branch To Establish 6 Clinics, Central Patient Registry

The Lipid Metabolism Branch of the National Heart and Lung Institute has awarded seven contracts totaling \$2.6 million for the establishment and support of six Lipid Research Clinics, and a Central Patient Registry and Coordinating Center, at medical institutions across the Nation.

Clinics Carry Out Research

The Clinics will carry out research directed toward the prevention of premature atherosclerosis through the identification and treatment of blood-lipid abnormalities.

Elevated levels of cholesterol and other fatty substances, collectively called lipids, are strongly associated with increased risk of atherosclerosis (hardening of the arteries) and related consequences of the disease such as heart attacks and strokes.

During the past 6 years, research studies involving more than 2,500 patients by scientists and clinicians of the NHLI's Molecular Diseases Branch and elsewhere have established that elevated blood lipids may be indicative of at least five different disorders.

Type Differs

Designated as hyperlipoproteinemias Types I through V, each type differs from the others in clinical manifestations, risk for the patient, and responsiveness to therapy.

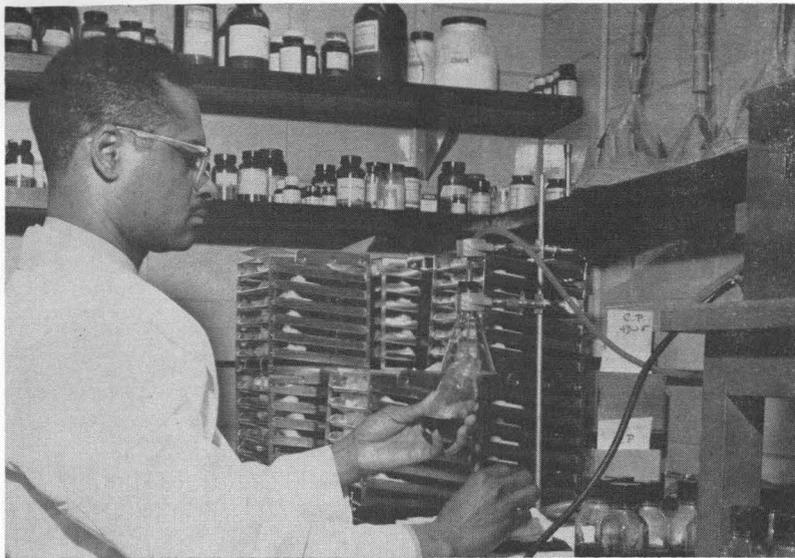
Research has also resulted in 1) effective means for differentiating among lipid-transport disorders by lipoprotein analysis or other techniques and 2) development of therapeutic diets, supplemented as necessary with specific lipid-lowering agents that can correct or substantially improve the lipid-transport abnormality in nearly all instances.

The studies carried out by the new clinics will be an extension of previous research. Their aim will be to improve the detection and clinical management of hyperlipoproteinemias in the U.S. population.

Center Monitors Projects

One contract was awarded to the University of North Carolina for a Central Patient Registry and Coordinating Center. This center will plan and monitor collaborative projects of the clinics and collect, process, and store data.

The educational institutions receiving contracts are Stanford University, University of California, University of Washington, Johns Hopkins University, University of Alabama, and Baylor University College of Medicine.



Frank King is using a method that he devised—and for which he received a Suggestion Award—for dispensing thermolabile (heat-sensitive) bacteriological media. Mr. King adapted the tubing system attached to the machine used for dispensing the sterile media into bottles. Before adaptation the procedure was done manually. Miss DeLauder, Miss Biser and Mr. King completed the basic chemistry course.

CONFERENCES

(Continued from Page 4)

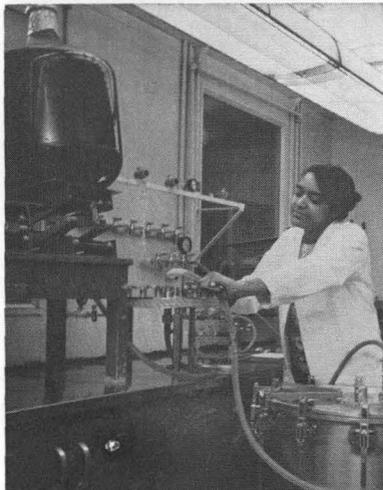
in the program.

DRS employees are about as diversified a group as can be found on the campus. Veterinarians, chemists, and biomedical engineers are part of the staff.

And to meet staff needs employees may enroll in courses ranging from simple arithmetic to scientific, technical, and administrative courses.

Recently, a combined course for junior and senior animal technicians was given. Just half of the class members were from DRS, the others came from different institutes.

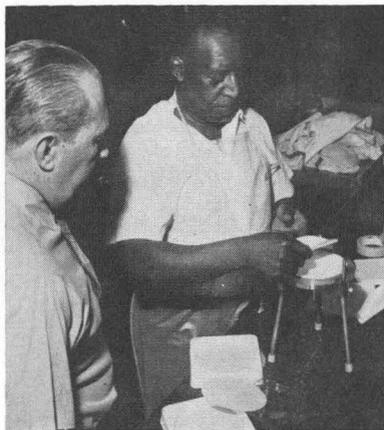
Because a number of employees



Delores DeLauder is filtering non-sterile tissue culture media from a stainless steel pressure tank. It passes through tubing and membrane filter and is then collected in glass reservoir for depositing into pre-sterile bottles placed in a sterile cubicle. For this part of the procedure Miss DeLauder dons a cap and clean lab coat.

in the Glassblowing Unit will soon reach retirement age, DRS has established a position for a glassblower who will be trained "from scratch."

It is a 5-year program, and, Mr. Fagan said, the "opportunity is there."



Robert Grubbs, Sr., observes John Green deftly assemble a membrane filter unit for sterilizing tissue culture media. Mr. Green is taking basic adult education classes. In his first year he set a "personal goal"—reading one book a week. He exceeded his quota by reading 53. Lab personnel in photos are from the Media and Glassware Section, LAB.

Moratorium Committee Sponsors Rock Concert Tomorrow (Wed.)

The NIH-NMH Vietnam Moratorium Committee is sponsoring its second annual rock concert tomorrow (Wednesday, Aug. 4), from 12 Noon to 1 p.m., on the lawn behind Stone House (Bldg. 16).

Rickie Lyon's rock combo will play. Employees, including summer training aides, are invited to the concert.

Froehlich, Kulwich Named Assistants in NIAID's Extramural Programs

Drs. Luz A. Froehlich and Roman Kulwich have been named as assistants to the associate director for Extramural Programs of the National Institute of Allergy and Infectious Diseases.

Dr. Froehlich will be assistant for clinical programs, while Dr. Kulwich will serve as assistant for program review and evaluation. Both will work with Dr. William I. Gay.

Dr. Froehlich received her M.D. degree from the University of the Philippines in Manila in 1953.

Later, she became a diplomate of the American Board of Pathology and was certified in 1961.

Dr. Froehlich was senior cancer research scientist at Roswell Park Memorial Institute, Buffalo, from 1960 until 1962 when she joined the Buffalo Children's Hospital, finally serving as acting head of the Department of Pathology.

Since 1963 she has been a pathologist for the Perinatal Research Branch, National Institute of Neurological Diseases and Stroke.

Dr. Kulwich received his B.S. degree in Agriculture in 1949 and his Ph.D. degree in Animal Nutrition in 1951, both from the University of Florida.

Before coming to NIH as a grants associate in 1962, Dr. Kulwich worked for the U.S. Department of Agriculture for 11 years.

He has since served on the staff of the National Institute of Child Health and Human Development and was director of the Endocrinology Program for the National Institute of Arthritis and Metabolic Diseases.

In 1969 he went to the National Center for Health Services Research and Development. His most recent position there was Director, Office of Review and Advisory Services.

Dr. Boomer Given PHS Medal For Services as EEO Official

Dr. Donald S. Boomer received the PHS Commissioned Corps Commendation Medal on Thursday, July 29. He is a research psychologist, Division of Clinical and Behavioral Research, National Institute of Mental Health.

The award, presented by NIMH Director Dr. Bertram S. Brown, was given to Dr. Boomer for his outstanding leadership, service, and achievement while serving as the Deputy EEO Officer for the NIMH Intramural Research Program, 1968-1970.

Dr. Boomer's friends, fellow workers, and those who share a special interest in the EEO Program attended the award ceremony.

NEANDERTHAL

(Continued from Page 1)

being conducted to learn when each change occurs which permits the cries of the newborn to develop into infant babble, and thence into true speech.

The authors conclude: "Neanderthal man's disappearance may have been a consequence of his linguistic—hence intellectual—deficiencies with respect to his . . . competitors. In short, we can conclude that Man is human because he can say so."

Publication Summarizes New Research Findings In Neurologic Disorders

Latest research findings on the major neurological and sensory disorders are summarized in a new publication, *NINDS Research Profiles, 1970*, published by the National Institute of Neurological Diseases and Stroke.

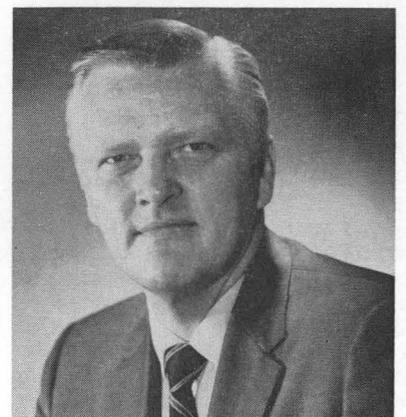
One of the most exciting developments in the last year, following about 12 years of research effort, was approval of the drug L-dopa for general prescription use. Success with this drug in treating patients with Parkinson's disease has opened many new areas of study.

The pamphlet also reports continued success in learning about a group of lipid-storage diseases—the sphingolipidoses—which cause grave neurological disorders in the newborn and young children.

A missing enzyme has now been identified in six of these disorders, including Tay-Sachs disease.

The new publication also reports advances in epilepsy, cerebral palsy, muscular dystrophy, multiple sclerosis, stroke, head injury, speech and hearing, and spinal cord injury.

A free copy is available from the NINDS Information Office, NIH, Bldg. 36, Rm. 4D-04, Bethesda, Md. 20014.



John E. McShulsis has been named chief, Systems and Operations Planning Branch, NCI. Formerly, he was research director with Booz-Allen Applied Research, Inc., in Bethesda. He received his B.Sc. in Civil Engineering from Kansas State College.

Tufts to Evaluate Test For Early Cancer Signs In Gastrointestinal Tract

A project to evaluate an early detection test for cancer of the colon (large intestine) and rectum will be initiated by the Tufts University School of Medicine.

The university was awarded a National Cancer Institute contract for the study. Dr. Nathaniel I. Berlin, scientific director for General Laboratories and Clinics, will direct the research.

Dr. Robert Schwartz, with Drs. James Patterson, Larry Nathanson, and other co-workers at Tufts, will examine the specificity of a test developed earlier by Dr. Phil Gold of McGill University.

Dr. Gold and his colleagues have been engaged in experiments indicating that all human cancers of the colon and rectum contain an identical tumor-specific antigen—a protein which elicits a distinctive immune response—thus distinguishing tissue of colon-rectal tumors from other types of tissue, whether normal or cancerous.

The Canadian scientists developed a radioimmunoassay test to measure the antigen, called carcinoembryonic antigen (CEA), in blood samples, and found consistently elevated levels of CEA in specimens from patients with cancers of the large intestine and rectum.

Observes Test Response

Other investigators have been unable to confirm the specificity of this test. But they have observed a test response indicating the presence of CEA in the blood of patients with other common diseases including inflammation of the pancreas, cirrhosis of the liver, chronic kidney failure and cancers of the lung, pancreas, and breast.

The first phase of the project will determine if this test is indeed specific for cancers of the large intestine and rectum and other areas of the gastrointestinal tract, or if it also indicates other diseases in those areas and in other organs.

The study participants, from Tufts and the New England Medical Center Hospitals, will include about 100 apparently normal individuals and 1500 to 2000 patients with various diseases. Development of a new and more rapid test for CEA will also be attempted.

The second phase will be started if Dr. Gold's test proves specific for gastrointestinal cancers. It will determine the usefulness of the CEA assay for early detection of cancers of the colon and rectum.

Data collected from patients in the first phase will form the basis for this part of the study. These patients will be monitored to determine how closely the levels of CEA in their blood relate to the development and extent of intestinal and rectal cancers.

Seven Primate Research Centers Help To Solve Many Human Health Problems

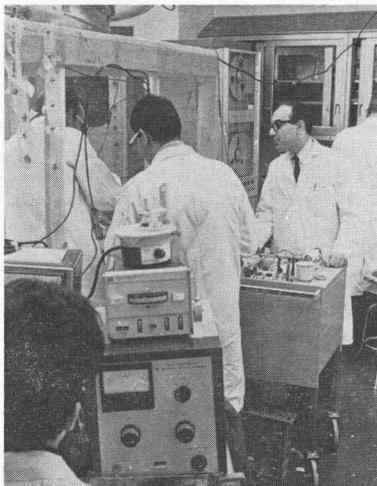


A baby chimpanzee in the nursery of the Yerkes Regional Primate Research Center is fed and has his reflexes tested at the same time. Food for infants is carefully prepared and measures are taken for sterilizing nursery equipment.

Through the Primate Research Centers Program, administered by the Animal Resources Branch, Division of Research Resources, seven primate research centers aid in developing solutions to human health problems.

The centers, strategically located and affiliated with universities, undertake studies which include reproductive biology, diseases of the newborn, mental retardation, cardiovascular diseases, and diseases of the central nervous system.

The research staffs number about 100 scientists working with collabor-



Scientists at the New England Regional Primate Research Center, perform a cardiac vector. Visiting scientists taking part in the research to aid human heart ailments are from Boston University Medical School and Maine Medical Center.

ating investigators, visiting scientists from all over the country, and graduate students. The centers' supporting personnel staff totals 725.

In one year—from December 1969 to December 1970—more than

550 scientific publications, including 21 books, were issued on studies conducted through the program.

One of the most recent books on the primate centers was written by Emily Hahn. The book, *On The Side of the Apes*, traces the history of primatology and the role of Dr. Robert Mearns Yerkes, the scientist who was the first to establish a controlled colony of primates for health science research. The primate center in Atlanta is named for Dr. Yerkes.

The 4th International Congress of Primatology will hold a 3-day symposium from Aug. 15-18 at the Oregon Regional Primate Research Center in Beaverton. Scientists from all over the world are expected to attend and report their primatology findings that may contribute to man's well-being.

The seven DRR primate centers and their affiliated universities are: Oregon Regional Primate Research Center, Beaverton, University of Oregon; Washington Regional Primate Research Center, Seattle, University of Washington; New England Regional Primate Research Center, Southborough, Mass., Harvard University, and the Yerkes Regional Primate Research Center, Atlanta, Emory University.

Also, Delta Regional Primate Center, Covington, La., Tulane University; National Center for Primate Biology, Davis, University of California, and the Wisconsin Regional Primate Research Center, Madison, University of Wisconsin.

First Class in Computer Training Program Holds Graduation Tomorrow

The first class from the Computer Operator's Training Program will graduate tomorrow (Wednesday, Aug. 4). Dr. Robert Q. Marston, NIH Director, and James Robinson, HEW Steering Committee on Upward Mobility Programs, will speak at the graduation ceremony.

The program, under the aegis of the Computer Center Branch, Division of Computer Research and Technology, started a year ago, and fosters the objectives of the Merit Promotion and EEO Plans.

Offers Opportunity

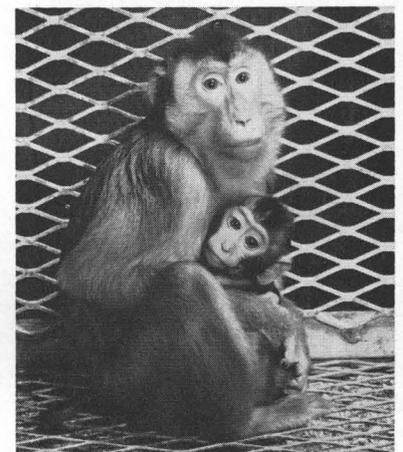
It gives NIH employees in Grades 3 to 5, with little chance to advance in their current jobs, an opportunity of studying computer operations through the DCRT program.

Because there is a need for well-trained computer operators throughout Federal agencies, the Computer Center Branch designed a new curriculum which combined on-the-job training with classroom lectures.

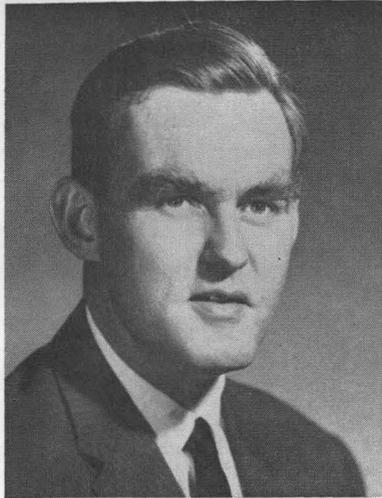
More than 100 applicants applied for the ten training positions that were advertised. Trainees, who came from many NIH Institutes and Divisions, were selected on the basis of their records and personal interviews. Among the occupations represented were guards, clerks, laboratory workers and animal caretakers.

The trainees worked with experienced NIH computer operators in the Computer Center. As the students gained knowledge they took on more responsibility, until they were ready to assume the full work load.

The successful candidates are now being interviewed for computer jobs throughout the Government.



Burnie, a pigtail macaque, at the Washington Regional Research Center, is the mother of the infant. She has "adopted" two other infant macaques, a highly unusual procedure for non-human primates.



Dr. John L. Decker, chief, Arthritis and Rheumatism Branch, NIAMD, was named president-elect of the Arthritis Foundation's American Rheumatism Association Section at its annual meeting held in New York.

DRG Issues Publication On Education Programs

A new brochure on the training and education programs of NIH has been issued by the Division of Research Grants.

The publication, *National Institutes of Health Grant Programs for Training and Education*, outlines the programs supported by the institutes and divisions including biomedical and health-related sciences, dental and public health, and research resources.

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

Larger quantities of this brochure, PHS Publication No. 1467, Revised 1970, can be purchased at 35 cents per copy from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

CENTERS

(Continued from Page 1)

to tackle all major problems or follow all promising lines of inquiry in its particular category.

However, taken together, the research programs in each disease category will treat in depth nearly every approach that promises solutions to clinical problems of that disease.

The universities and hospitals who have received the grants include Rockefeller University, Wake Forest University, Stanford University, Baylor College of Medicine, University of Iowa, and the Albany Medical College.

Also, Mayo Foundation, MIT Clinical Research Center, Beth Israel Hospital, Columbia University, Yale University, Vanderbilt University, and the Medical College of Virginia.

Viruses Fatal to Sheep May Cause Cancerous Transformation of Cells

Two viruses, known to cause fatal "slow virus diseases" in sheep, have now been shown to cause cancerous transformation of cells.

These findings have important implications for theories on the viral cause of cancer and the development of slow virus infections.

Research Published

The malignant potential of the two viruses—visna and progressive pneumonia (PPV)—was reported by Drs. Kenneth Takemoto and Lawrence Stone, National Institute of Allergy and Infectious Diseases, in the June issue of the *Journal of Virology*.

The investigators began their search for a connection between the two viruses and cancer after they discovered that the viruses contained an enzyme which has been found in many tumor-causing viruses.

The transforming capacity of visna and PPV, they theorize, is associated with the presence of the enzyme known as RNA-dependent DNA polymerase.

NIAID scientists' discovery that these two slow viruses contain this enzyme adds strong support to the Temin "provirus" theory that cell transformation by RNA tumor viruses involves a DNA intermediate, which then becomes integrated with the host cell's genetic material.

Cells Become Altered

The viral polymerase is presumed responsible for synthesis of this DNA copy.

The investigators report that mouse cells infected with either visna or PPV become altered in their form and structure. Within two cell culture passages, the virus-infected material consisted entirely of transformed cells.

Although infectious virus could not be detected at that time, both visna and PPV were recovered from all cell lines when they were cocultivated with normal sheep testis cells.

This indicates that virus genetic material was associated with transformed cells.

Mice Inoculated

When the investigators inoculated mice with visna and PPV transformed cells, small fibrosarcoma tumors appeared 2 months later in newborns at the site of inoculation and after only one month in x-irradiated young adult animals.

Newly-weaned animals inoculated with the transformed cells had not developed tumors after one month.

The researchers' findings also shed light on the possible mecha-

HEW Leads in Federal Grants to Med. Schools, Awards \$770 Million

Federal support to the Nation's medical schools now approaches \$800 million, according to an NIH report.

HEW has been the leader among the granting agencies, awarding \$770 million to 102 of these institutions in 1969.

The support provided accounts for well over nine-tenths of the Federal total and constitutes more than half of the medical schools' expenditures.

The NIH report, *DHEW Obligations to Medical Schools* (June 1971), was released at a time of great financial uncertainty for the Nation's medical colleges.

Support Growth Steady

The publication shows that HEW support to these institutions has grown steadily since 1963.

In recent years, Department efforts were increasingly aimed at problems of augmenting national health care resources—primarily physician manpower—and in improving arrangements for health care delivery.

The report also stresses the need for concerted action to strengthen the medical schools to assure their continued growth and development.

Dr. Bucher Named Dean Of New Med. School

Dr. Robert M. Bucher, deputy director, Bureau of Health Manpower Education, has accepted the post of dean of the Medical School at the University of South Alabama—a new school which plans to have its first students in 1973.

Before coming to BHME, Dr. Bucher served for 10 years as dean of the School of Medicine at Temple University. Prior to that appointment he served there as associate professor of Surgery and associate dean.

nism of certain slow virus infections.

They suggest that infection of animal hosts by visna and PPV may result in "integration" of a DNA copy of part of the viral genetic material into the host cell's genetic material and subsequent virus reproduction occurs by way of the DNA template.

Drs. Takemoto and Stone theorize that new cellular antigens are produced in slow virus infections (as in the case with tumor viruses).

Further, they believe that the resultant host cellular defense response to these antigens could cause (1) migration of white blood cells into the lungs and (2) progressive destruction of the fatty sheath surrounding nerve fibers. Both are characteristic of the two slow virus infections.

NERVE DISORDERS

(Continued from Page 1)

several of their offspring.

The guilty gene in Huntington's disease is an autosomal dominant, that is, if either parent carries the HD gene, every son and daughter has a 50:50 chance of inheriting the disorder.

Some HD patients, however, die before they reach the age when symptoms would appear, giving the false impression that the disorder skipped a generation.

Each child born to a parent with HD has the same 50:50 probability of inheriting the disorder. By chance, however, all children in one HD family might have the disease, and, by chance, all offspring in another HD family might be free of the defect.

When investigators succeed in developing a test to detect the HD gene early, those found carrying the trait can decide whether or not to risk having children.

If a biochemical test is developed to discover a child with the HD gene while still in the uterus—pregnancy monitoring—practiced in several other genetic disorders, could eliminate the disease.

Often, physicians must wait until pronounced symptoms appear in order to diagnose the disorder because the HD family foolishly concealed the existence of the disease in the family history.

The pamphlet is available on request by writing to: Huntington's Disease, Information Office, NINDS, Bldg. 31, Room 8A-16, Bethesda, Md. 20014.



At a ceremony in New Delhi, V. V. Giri, President of India (l), presents the first Amrut Mody Award for Medicine to Dr. Ranjit Roy Chaudhury, for his studies on reproductive endocrinology. This research, funded by NICHD, is considered the most outstanding done in that country in the past 7 years. Dr. Chaudhury, professor and head, Department of Pharmacology, Post Graduate Institute of Medical Education and Research in Chandigarh, is on leave with WHO at Geneva. The award is named for Dr. Mody, one of India's most prestigious scientists.—Capital News Photos.

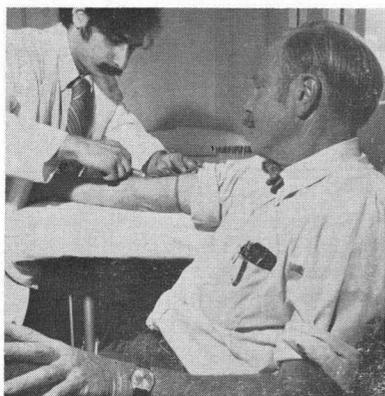
Viral Hepatitis Research May Help Define Role Of Antigen in Disease

The Clinical Center and the National Institute of Allergy and Infectious Diseases are conducting a joint study on liver disease among hospital personnel. The disease is viral hepatitis.

This research is under the direction of CC Director Dr. Thomas C. Chalmers. The study will help determine whether employees exposed frequently to patients and blood products more often have Australia (Au) or hepatitis-associated antigen or antibody in their bloodstream than other employees.

Members of the NIH community are asked to participate in the survey. Approximately 2,000 employees will be needed.

Each year, in the U.S., an estimated 30,000 patients develop hepatitis from transfusions of infected blood donated by apparently heal-



Dr. Chalmers is first to contribute blood in the joint NIAID-CC study. Neal Friedman, a medical student, draws the sample.

thy people.

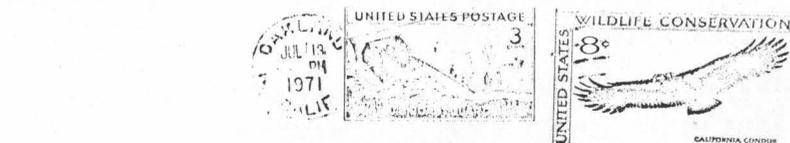
In an attempt to prevent such infection, blood banks refuse to take blood from people with a medical history of hepatitis. However, investigators believe some people may unknowingly have subclinical cases of the disease, or they may be carrying the hepatitis-causing organism in their blood.

Recently, a virus-like particle—the Au antigen—has been suspected of playing a role in the hepatitis (serum or type B) that is primarily spread by blood products. Investigators anticipate the antigen may be used routinely in the future to screen blood donors.

They estimate that as many as 7,500 overt cases of hepatitis and 750 deaths a year could be prevented if such a method were available to detect subclinical hepatitis or carriers of the disease among donors.

Investigators suspect that serum hepatitis may also be spread by close person-to-person contact.

Employees suspected of being at "high risk" of having the antigen are those who work with the blood



A department of the Government (Health), supplying Diabetes Information (Feet)

Bethesda, Maryland.

Headr a "Spot" on Radio from San Francisco, Calif. Monday, July 12th.

Was in car and do not know Radio Station. Was an offer on care of the Diabetic feet.



The man who mailed this envelope from Oakland, Calif., after a radio broadcast offering information on the care of diabetic feet, couldn't remember the address. But with a bit of ingenuity and a clever postman, the letter, mailed July 13, reached NIH quickly and the publication was on its way by July 15.

of patients or animals that have the antigen.

These include operating room nurses, chronic hemodialysis unit nurses and technicians, ward nurses and physicians having direct contact with patients, dentists and dental technicians, and handlers of chimpanzees.

Rates of antigen-positive tests among those groups will be compared with rates among "low risk" employees, including office workers, who have no contact with patients, blood, or other material from patients or animals.

Blood Samples Needed

Surveys in this country have revealed that one to five apparently healthy individuals per thousand have the antigen.

In order to have an accurate survey, a cross section of employees is being asked to donate a blood sample.

Participants will be asked to fill out a questionnaire for possible previous hepatitis exposure. In accordance with NIH procedures, each person will receive \$2 per sample.

Employees with abnormal test results as well as some with normal results will undergo a follow-up blood sample for verification.

Information concerning abnormal laboratory results will be given only to the employee and/or his personal physician. The Employee Health Service will consult with any employees who are found to have the antigen, or abnormal liver function tests.

At present, there is no evidence that chronic carriers of the antigen can infect others by any way other than donation of blood.

PHS Sponsors Defense Course

A 5-day course in public health, medical, chemical, and biological defense will be given by the Division of Emergency Health Services, PHS.

For further information call Dr. W. F. Abercrombie, (301) 443-2010.

Data Shows New Trend In Birth Control Choice

Results of a survey on methods used to prevent conception, were recently reported by National Institute of Child Health and Human Development contractors.

The methods included surgical sterilization. Data was furnished by white married persons living in a suburban area near San Francisco, in an economic and educational level that is slightly above the national average.

Sterilizing operations were divided into two categories—remedial and contraceptive. Remedial operations were intended to correct a pathological disorder; contraceptive operations were intended to prevent further pregnancies.

Among couples with the wife's age ranging from 20-54 years, 23 percent had had contraceptive operations. Over two-thirds of the operations were vasectomies performed on the husband.

The number of children the wife had borne, the couple's religion, and their education, influenced the prevalence of sterilizing operations.

The percentage of couples with contraceptive operations increased with the number of children they had.

Hence, voluntarily sterile couples have had, on the average, a slightly larger number of children than others, but rarely more than four.

Remedial operations, usually hysterectomies, were reported by 12 percent of the wives. Of these women, one-fourth were also counted among those with contraceptive operations.

After allowing for this overlap, the prevalence of surgical sterilization in this population is 31 percent.

Six years ago, a National Fertility Survey, supported by NICHD, had shown that both vasectomies and tubal ligations were more prevalent in the West than in other parts of the country. Vasectomies

Alaska University Tests Health Care Information Delivered by Satellite

The Lister Hill National Center for Biomedical Communications, a part of the National Library of Medicine, recently awarded a contract to the University of Alaska for an experiment in disseminating health care information via satellite voice communications.

This system will be tested in remote areas of Alaska where reliable telecommunication facilities do not exist.

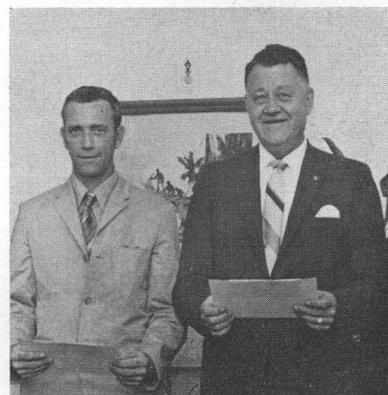
Dr. Barry Beattie, a PHS medical officer, has been assigned to that state to act as liaison and to evaluate the project.

The National Aeronautics and Space Administration's Applications Technology Satellite (ATS-1), in orbit over the Pacific Ocean, will provide the voice communication channels between remote villages and service unit hospitals, and between those hospitals and the Alaska native medical centers.

A part of the system may be used for the education of native children, in cooperation with HEW's Office of Education.

The Universities of Wisconsin and Washington, and Stanford University, have been given contracts to evaluate medical information for transmission via the ATS-1 satellite.

The information will be considered for the University of Alaska's health care project.



Clyde E. Gregg (l) and Walter Chakwin, Office of the Assistant Director for Materiel Management, OAS, were recently given cash awards for beneficial suggestions. Mr. Gregg received \$240 for designing a cart incorporating safety features. Mr. Chakwin received \$150 for developing a system using dated pressure-sensitized labels for the return of compressed gas cylinders to Chemical Stores, Bldg. 25.

are as much as 3 to 5 times as common in the West as in the rest of the nation.

This recent research is part of a Contraceptive Drug Study undertaken by the Kaiser-Permanente Medical Care Program.