Paraguay Survey
By ICNND Team
To Begin June 1

A 17-member team from the Interdepartmental Committee on Nutrition for National Development will leave for Paraguay the first of June to conduct an extensive nutritional health survey at the official request of the Government of Paraguay.

Each ICNND team member will work with one or more Paraguayan scientists in his special field of study.

Watkins Directs Team

The survey team will be directed by Dr. Donald M. Watkins, Medical Consultant to ICNND, with Dr. William N. Pearson of the Vanderbilt University School of Medicine as deputy director.

Dr. Carl J. Witkop, Chief of the Human Genetics Branch, National Institute of Dental Research, will participate as a member of the team.

A briefing conference was held here in April, at which representatives of all varieties of cleft palate which have been described in humans have been seen in dogs, Josh Jurkiewicz, M.D., D.D.S., of the College of Medicine, University of Florida, told a seminar group at the National Institute of Dental Research recently.

Dr. Jurkiewicz, Chief of the Section of Plastic Surgery at the university, is raising a colony of dogs to serve as an animal population for research on cleft palate in the canine, which may lead to a better understanding of hereditary factors involved in this malformation.

'Control Through Research'

"Control of this malformation will be achieved only through research," he said, "and a better understanding of the mechanism of action of environmental agents against a specific genetic background."

Dr. Jurkiewicz reported that the defect has been described in a wide variety of animals—the Anaconda snake, lizard, rat, mouse, horse, sheep, short-horned cattle, fox, lion, dog, pig, and porpoise. Despite this, the condition has been extensively studied only in mice.

First Collection in 1926

The first large collection of human cases dealing particularly with the hereditary manifestations of cleft lip and palate was reported in 1926. Investigators felt that the malformation was largely controlled by recessive genes but, on occasion, behaved as a dominant. Later studies showed cleft lip

(See CLEFT PALATE, Page 6)

Data on Hereditary Factors Sought in Study of Dogs Born With Cleft Palate

By Bob Callahan

By ICNND team, Dr. Albert L. Russell, Chief of the Epidemiology and Biometry Branch, National Institute of Dental Research, recently reported on the study findings at an NIDR seminar here.

"Nigeria," he said, "has a climate in which research can flourish."

He explained that various medical problems and paradoxes "project new dimensions for scientific inquiry and emphasize the opportunities for investigation."

In addition, he said, the country has good research facilities and welcomes trained investigators from other nations. These diseases, he said, are present in Nigeria: endemic malaria, yellow fever, smallpox, leprosy, sleeping sickness, yaws, malignant lymphomas, and tropical ulcer.

Perhaps the most critical problem, Dr. Russell said, is malnutrition. Most of the inhabitants subsist on a high starch diet, low in

(See NIGERIA, Page 7)

Live Oral Vaccine Protects Against Adenovirus Type 4

A successful field trial of a new live oral vaccine against adenovirus type 4, the main cause of severe acute respiratory disease in military recruits, was announced recently by Surgeon General Luther L. Terry of the Public Health Service and Rear Adm. Robert B. Brown, Surgeon General of the U.S. Navy.

Taken in the form of a capsule, the vaccine was 100 percent effective in preventing acute respiratory illness in Marine recruit volunteers at a training camp where adenovirus 4 was epidemic.

Placebo Patients Hospitalized

By contrast, almost 25 percent of a control group which had been fed a placebo—a capsule not containing vaccine—were hospitalized with severe adenovirus respiratory disease during the same epidemic.

The vaccine represents a new concept in immunization against respiratory disease. A special coating on the capsule prevents the vaccine from being released until it reaches the intestinal tract.

Thus the live vaccine bypasses the normal site of adenovirus infection, the respiratory tract. In the intestinal tract the vaccine causes a symptom-free infection that stimulates the production of protective antibodies.

The vaccine is the product of a

(See ORAL VACCINE, Page 5)

Low Level of Pesticides Reported in Food Supply

Pesticide residues are detectable in the American food supply by today's highly sensitive analytical methods, but the amounts of such residue are insignificant from a health standpoint, according to recent findings announced by the Food and Drug Administration.

Pesticide levels found in the test samples were generally less than one percent of the safe legal tolerance. Many of the most commonly used pesticides were not found at all.
Official NIH Address to Use ‘Rockville Pike’ Designation

The NIH Record has been notified that to conform with street signs erected by Montgomery County, the official NIH address now is:

National Institutes of Health, 9000 Rockville Pike, Md., 20014

Some advance planning and early initiation of the required request for a promotion certification can ease the time burden associated with this formal promotion plan.

2.—This directly concerns NIH staff members who regard themselves as eligible candidates for GS-13 positions in any of the listed series. To insure that they are not overlooked in operation of the PHS promotion program, such personnel should submit an up-to-date SF 57 to the OSG Office of Personnel.

PMB Furnishes Copies

Employees known to be qualified for the positions covered have been furnished by PMB with a copy of the Plan and an SF 57.

Other employees who believe that they also should be considered are encouraged to consult their personnel offices to determine if they are qualified.

No one may be considered for a promotion to GS-13 in any of these listed position groups unless he has submitted an up-to-date SF 57 to the OSG Office of Personnel.

ADVANCE APPROVAL OF LEAVE

Employees are reminded of the requirement to apply in advance for approval of anticipated annual leave whenever possible. This allows supervisors to schedule leave in relation to workload requirements, staffing patterns, and other management considerations.

At times a leave-approving officer may not be able to grant a request for annual leave if the work of the Department requires such action. However, rarely will this be necessary, and as far as practicable, leave will be granted when requested by employees.

Clinical Center Facility Speeds Up Scheduling Of Employee X-Rays

A new facility of the Clinical Center’s Diagnostic X-ray Department, located in Rm. B2N102, is credited with speeding up the scheduling of chest radiographs for NIH employees.

Since employee chest X-rays constitute a lower priority than X-rays of patients, NIH personnel have had to wait their turn in the Diagnostic X-ray Department on the 6th floor. With the new facility on the B2 level, routine chest X-rays for employees can now be accomplished in 3 to 5 minutes.

Films Are Tubed

A further bit of inventiveness lends additional ease to the arrangement by eliminating a traffic obstacle in having these X-rays developed.

James G. Hawkes, Head of the Communications Section, Office Services Branch, OD, in cooperation with John P. Daly of the Diagnostic X-ray Department, has worked out a special device for holding undeveloped X-ray films so that they may be sent by pneumatic tube to the developing station on the 6th floor of the Clinical Center.

In addition to these new arrangements for NIH employees, a room adjacent to the department’s 6th floor reception desk has been modified for chest radiography for CC patients.

U.S. Bonds Offer Plan For ‘Painless’ Savings

This year’s U.S. Savings Bond Drive at NIH, headed by Dr. Frederick L. Stone, Acting Chief of DRFR, as chairman, is out to help personnel “put it away in a painless way.”

Keymen have been appointed and are now contacting employees with bond information and application forms.

By painless payroll deduction, employees not only save to fulfill their dreams but help to keep this country strong.

Series E Bonds may be purchased in small and large denominations ranging from $25 to $1,000 face value. Purchase price of the bond is one-quarter less than the face value.

Employees can build up the amount for a savings bond with deductions of $.75 each payday, or larger amounts, provided the amount divides evenly into the price of the bond with no remaining fractions.

Bonds are not subject to taxation, and interest need not be reported until they are cashed.

“Look to a bright future with a packet of bonds!”

1927 Hitchcock Thriller Next in R&W Series

Next Saturday and Sunday, May 8 and 9, the NIH Recreation and Welfare Association’s classic film series will present Alfred Hitchcock’s 1927 production of “The Lodger.” Also on the program will be Harold Lloyd’s famous short subject entitled “High and Dizzy.”

The two showings are scheduled for 8 p.m. in the Clinical Center auditorium. All NIH employees, guests, and CC patients are invited to attend.

Knutti Named to Board

Dr. Ralph E. Knutti, Director of the National Heart Institute, has been named a member of the Board of Trustees of the American College of Cardiology. His term of office began last February and will run for five years.
**New NHI-Produced Film Available on Loan Basis**

A new heart research film produced by the National Heart Institute for professional audiences is now available on loan without cost from the Medical Audiovisual Branch of the Communicable Disease Center, Public Health Service, Atlanta, Ga., 30333.

Titled "Chronic Extrinsic Cardiac Denervation by Regional Neural Ablation," the 16 mm film in color, with sound, lasts 20 minutes. It depicts an operative technique whereby the nerves which regulate heart function are removed.

Using this experimental procedure, surgeons have been able to achieve long-term survivals of animals, even to the point where the severed nerves grow back to once again regulate heart function.

The surgical preparation described in the film allows for the first time the study of heart function independent of direct nervous (reflex) influences in an otherwise healthy animal.

**Serves as Model**

It also represents in many ways a model for the transplanted heart and therefore is suitable for the study of physiologic, pharmacologic and metabolic responses which may play a role in the rejection of transplanted hearts.

The procedure, however, is an experimental method for research studies and has not been used in humans.

The film is based on the work of Dr. Willard Daggett, formerly of NIH and now with Massachusetts General Hospital in Boston; Dr. Theodore Cooper of the St. Louis University School of Medicine; and Dr. Stephen Potkay of the Division of Research Services.

It should be of particular interest to cardiovascular physiologists, pharmacologists, surgeons, and cardiologists; and to participants of anatomy and physiology in medical schools, for teaching and research purposes.

**Papers Published**

During the past two years Dr. Braunwald and his group have published a series of papers indicating the importance of the sympathetic nervous system in regulating cardiac performance.

**Digitalis Research Described**

He and his co-workers showed that digitalis is beneficial to both normal heart patients and those with congestive heart failure. Some researchers previously felt that digitalis had no appreciable effect on the normal heart.

Dr. Braunwald's work showed that the drug does increase the vigor of the heartbeat, though it causes constriction of the blood vessels.

Patients with congestive heart failure gain a double benefit from digitalis, according to Dr. Braunwald's findings. Under these circumstances, digitalis does not cause the blood vessels to constrict but rather to dilate. The patient's condition is improved both by the increase in the heart's output of blood and the reduction of abnormally elevated pressures in the heart.

**Council on Medical TV To Meet in Ann Arbor**

The Council on Medical Television will hold its 7th Annual Meeting May 17-19 at the University of Michigan Horace H. Rackham School of Graduate Studies and the University Medical Center in Ann Arbor.

The 3-day meeting will have as its general theme “The Present Status of Television in the Health Sciences.”

Special features of this year's program include lectures, reports, presentations of technical exhibits and papers, manned photographic exhibits, and an informal workshop session.

**Dr. Schaefer Elected to Nutrition Institute Office**

Dr. Arnold E. Schaefer, Executive Director of the Interdepartmental Committee on Nutrition for National Development, Office of International Research, was chosen President-Elect of the American Institute of Nutrition at the 49th meeting of the Federation of American Societies for Experimental Biology in Atlantic City. He will take office on July 1.

**DRFR Supports Model Research Units In 81 Centers in 5th Year of Program**

By Ruth Silbey

A patient who splashed violent primary colors on a canvas 24 hours before being linked to a kidney dialysis machine, painted with a gentle pastel palette on the following day.

The artist is a research patient at the Georgetown University Hospital Clinical Study Unit. Physicians there conjecture that the startling change in the selection of colors may be due to the influence of toxins in the blood immediately before the kidney dialysis.

After the blood had been cleaned and the impurities removed by the dialysis machine—a function of the artificial kidney that normal kidneys perform—the patient chose more serene and calm colors.

At Georgetown physician-scientists are studying the effects of long-term hemodialysis on patients with chronic kidney disease. They are investigating the medical and psychological effect of hemodialysis on the patient, as well as different methods and mechanical devices used in dialysis.

These various aspects of hemodialysis and its potential in clinical units numbered among the 81 active or proposed general clinical research centers in 66 medical institutions, in 30 States, the District of Columbia, and Puerto Rico.

**Administered by DRFR**

Administered by the Division of Research Facilities and Resources, this program of general clinical research centers makes possible a wide range of basic and applied scientific studies of man, his normal life processes and diseases. The ultimate goal of the centers is the application of this new knowledge to the improvement of medical care.

Launched five years ago as an experimental program, its grants support small, model research units where scientist-physicians can conduct controlled studies on carefully screened patients.

Marking the fifth anniversary of a start with fewer than 100 beds, the program now counts nearly 1,000 beds in operation or preparation.

**Centers Are Self-Contained**

Each center has patients' rooms, laboratories, kitchens, and other facilities, as well as the modern equipment enabling it to function as a separate, self-contained unit devoted exclusively to clinical research.

Since the program began, more than $102 million has been awarded in grants that pay renovation and equipment costs, the salaries of the director, nurses, dieticians, and other supportive staff, as well as patients' hospitalization, and maintenance costs. The annual cost of operation of the centers averages a half-million dollars.

As the director of one clinical research center has said, "The greatest contribution of the clinical research center . . . has been to provide both physicians and trainees with the facilities to do better clinical research. Both the quality of hospital services and of teaching have improved as a direct outgrowth of having the center."

---

**Dr. Eugene Braunwald Wins ’65 Abel Award For Heart Research**

Dr. Eugene Braunwald, Chief of the National Heart Institute's Cardiology Branch, recently received the 1965 John J. Abel Award for his significant contributions concerning the action of certain drugs and their effects on the heart.

Dr. Braunwald received the Abel medal and a check for $1,000 at the 49th Annual Meeting of the Federation of American Societies for Experimental Biology in Atlantic City. The award is made by The American Society for Pharmacology and Experimental Therapeutics.

On February 11 Dr. Braunwald was one of 10 outstanding young men in the Federal Government to receive the 1965 Arthur S. Fleming Award.

For the Abel award he was cited for his research on digitalis, the most widely prescribed drug for improving the pumping action of the heart, and for his studies on the role of the sympathetic nervous system in regulating cardiac performance.

---

**Corrections**

1. **Ablation** - The word is misspelled in the text. The correct spelling is "Ablation."
New Edition of Manual For Nutrition Surveys Published by ICNND

A new Manual for Nutrition Surveys was recently published by the Interdepartmental Committee on Nutrition for National Development (formerly known as the Interdepartmental Committee on Nutrition for National Defense).

This edition of the ICNND manual revises and updates material contained in the first edition published in 1957. Much new material has been added, based on experience gained from nutrition surveys of population groups in 26 developing countries.

The manual is designed to establish uniformity in methods, techniques, procedures and guidelines for conducting surveys in order to make meaningful comparisons within and between countries.

When first published, the manual was intended as a guide for conducting nutrition surveys of military personnel. Since then it has increasingly been used as a guide for surveys of civilian population groups, which now constitute the majority studied in surveys.

Other terms included are those for the benefit of the world's English-speaking rheumatologists. At the same time, the thesaurus has initiated a means of standardizing rheumatologic terms, an essential move if specialists in this field are to communicate in the same scientific language.

The thesaurus was published in the February issue of Arthritis and Rheumatism, official journal of the ARA, and reprints may be obtained from the association at cost.

Rheumatology Thesaurus Is Published by ARA

An unusual "Thesaurus of Rheumatology," expected to be a boon to specialists in this particular field of medicine, has been prepared by the American Rheumatism Association (ARA) with grant support from the National Institute of Arthritis and Metabolic Diseases.

Cataloguing more than 1100 rheumatologic terms, the thesaurus is a product of the ARA's Literature Analysis Project.

Dr. Leon Sokoloff, Chief of the Section on Rheumatic Diseases, Laboratory of Experimental Pathology, NIAMD, provided supervision for the project which is designed to improve the dissemination and retrieval of information on rheumatic diseases.

Foreign Terms Included

The new thesaurus is a comprehensive guide to varying terms used by rheumatologists around the world. It provides a codified index of all technical terminology used by foreign rheumatologists in their original papers.

Rheumatologic terms are translated from the native tongue of the author into equivalent English terms for the benefit of the world's English-speaking rheumatologists.

At the same time, the thesaurus has initiated a means of standardizing rheumatologic terms, an essential move if specialists in this field are to communicate in the same scientific language.

The thesaurus was published in the February issue of Arthritis and Rheumatism, official journal of the ARA, and reprints may be obtained from the association at cost.
Dr. Edmund Sonnenblick Receives Meltzer Award

Dr. Edmund H. Sonnenblick, a senior investigator in the Cardiology Branch of the National Heart Institute, was named winner of the 1965 Meltzer Award at the recent 49th Annual Meeting of the Federation of American Societies for Experimental Biology and Medicine. Dr. Sonnenblick received a medal and a $500 check.

Dr. Sonnenblick was cited for his work on the mechanics of the heart muscle. His electron microscope studies have provided an explanation of how the heart muscle can alter its strength of contraction.

Dr. Sonnenblick and his associates have been studying the mechanics of human heart muscle outside the body under controlled conditions. They are investigating these factors both in normal and failing hearts.

Future Value Cited

This study permits scientists to sort out the variables which control contraction of the heart under managed conditions. Such studies are only now becoming possible in intact man by extending these views. Hopefully, the results will provide further insight into the causes of heart failure.

A native of New Haven, Conn., Dr. Sonnenblick joined NIH as an investigator in 1960. He graduated from Wesleyan University, Middletown, Conn., in 1954 with a B.A. degree.

In 1958 he received an M.D. degree (cum laude) from Harvard Medical School and took his postgraduate training at Columbia-Presbyterian Medical Center in New York.

Three paintings (left to right) capture top prizes in the category at the 7th Annual NIH Art Exhibit: “Still Life with Foliage” by Naomi Bossom, “Horse” by Dr. J. Arthur Weinberg, and “Plant and Animal” by Ann Zahn. Shown arriving at their decision (from left) are judges Alexander Giampietro, Samuel Bookats and Jacob Kainen.—Photo by Ed Hubbard.

Nine entries in three general categories were judged “superior” in the 7th Annual NIH Art Exhibit, on view until May 21 in the Clinical Center lobby.

In a departure from tradition, prizes in the show sponsored by the Recreation and Welfare Association of NIH. This year no “best of show” award was given. Participants included NIH employees, their immediate families, and Clinical Center patients.

Winners Listed

Winners in the category of oil painting included two winners: Naomi Bossom, wife of Dr. Joseph Bossom, Laboratory of Psychology, NIMH, for “Still Life with Foliage,” and Ann Zahn, wife of Theodore Zahn, also of the Laboratory of Psychology, NIMH, for her entry, “Plant and Animal.” The third winner was Dr. J. Arthur Weinberg, clinical associate in the Laboratory of Clinical Science, NIMH, for his painting, “Horse.”

Nine entries in three general categories were judged “superior” in the 7th Annual NIH Art Exhibit, on view until May 21 in the Clinical Center lobby.

In a departure from tradition, prizes in the show sponsored by the Recreation and Welfare Association of NIH. This year no “best of show” award was given. Participants included NIH employees, their immediate families, and Clinical Center patients.

Winners Listed

Winners in the category of oil painting included two winners: Naomi Bossom, wife of Dr. Joseph Bossom, Laboratory of Psychology, NIMH, for “Still Life with Foliage,” and Ann Zahn, wife of Theodore Zahn, also of the Laboratory of Psychology, NIMH, for her entry, “Plant and Animal.” The third winner was Dr. J. Arthur Weinberg, clinical associate in the Laboratory of Clinical Science, NIMH, for his painting, “Horse.”

Phyllis Hoffman, wife of Dr. Harold Hoffman, Laboratory of Biology, NCI, another former winner, this year won recognition in graphics for “Girl with a Guitar.” Other winners in this category were Sandra Levine, wife of Dr. Jerome Levine, Research Grants Branch, NIMH, for “Spring Grass”; and Kathryn Giberman, daughter of Mrs. Marcella Giberman, Office of the Director of Clinical Investigation, NIMH, for her print, “Untitled.”

2 Win Sculpture Awards

Last year’s grand prize winner, Saide Fishman, Laboratory of Psychology, NIMH, again was a winner for her sculpture, “In God We Trust.” Sharing the honors in sculpture for the second year was Jenny Lea Knight, Laboratory of Psychology, NIMH, for her entries, “Little Green Owl” and “Earthbound.”

Fifty-four entries of the 225 submitted were selected for exhibit by judges Jacob Kainen, Director of Graphics, Smithsonian Institution; Alexander Giampietro, Head of the Ceramics Department, Catholic University; and Samuel Bookats, artist and owner of the Bookats Gallery in Alexandria, Va.

PHS Establishes New Outpatient Branch

The Public Health Service recently announced the establishment of an Outpatient Branch in the Division of Hospitals because of the growing importance of ambulatory care and preventive medicine for some half-million beneficiaries. Dr.

Grant to Support Study Of Cell Membranes at University of Chicago

One of the most challenging problems of basic biomedical research—the role played by cell membranes in determining structure and function of individual cells—will be studied at the University of Chicago with grant support from the Public Health Service, shared in the initial year by the National Institute of General Medical Sciences and the National Institute of Neurological Diseases and Blindness.

The grant of $164,429 for the first year of a 5-year project was made to Dr. Humberto Fernandez-Moran, Professor of Biophysics.

In the past decade striking contributions to biological knowledge have come from this field, which is now regarded as a central and unifying discipline in the biomedical sciences.

'Scope' Plays Vital Role

In a program of comprehensive long-term research and training in molecular biology at the University of Chicago, Dr. Fernandez-Moran and his associates will investigate the molecular organization of cell membranes and associated systems.

The development of the electron microscope has given scientists an analytical tool of unparalleled power, permitting them to see parts of cells formerly invisible, to study the arrangements of the molecules in these structures, and to make visual observations of some of their functions.

Improved preparation techniques for electron microscopy, some of which were developed in Dr. Fernandez-Moran’s laboratory, have been used in the past few years to study isolated mitochondria.

Researcher Optimistic

With the new techniques, Dr. Fernandez-Moran believes that substantial headway can be made, not only in learning about mitochondria but other systems as well.

Dr. Fernandez-Moran, strongly interested in the improvement of the techniques of electron microscopy, is now developing an instrument which operates at the temperature of liquid helium (approximately -270 °C.) at which electric currents continue to flow, and the magnetic fields which serve as lenses are maintained in very stable condition even when the microscope is unplugged from the conventional source of current.

Contamination of specimens is reduced and specimens can be observed which cannot be studied under usual conditions.

William C. Larsen has been appointed Chief of the branch.

ORAL VACCINE

(Continued from Page 1)

comprehensive effort of the Vaccine Development Program of the National Institute of Allergy and Infectious Diseases. The idea originated in the Institute’s Laboratory of Infectious Diseases.

Wyeth Laboratories, Inc., manufactured the capsule under a contract with NIAID. In collaboration, existing, in cooperation with staff members of the District of Columbia Department of Corrections, tested the capsule for safety in volunteers at the Lorton Reformatory, Lorton, Va.

The field trial at the Parris Island and Camp Lejeune Training Centers was conducted by physicians of NIAID, of the Parris Island Marine Recruit Training Center, the Naval Medical Field Research Laboratory at Camp Lejeune, and the Epidemic Intelligence Service of the Communicable Disease Center, PHS.

Acute respiratory disease is the leading cause of hospitalization and treatment at outpatient clinics among recruits in all branches of the Armed Forces.

Ten percent of these illnesses result in pneumonia. Yearly adenovirus epidemics at military training camps throughout the country in fall, winter and spring rank second only to accidents as a cause of lost manpower.

The cost is staggering. Loss of training time and increased medical care during one adenovirus type 4 epidemic at a single military recruit installation were estimated to have cost $10 million.

The Public Health Service recently announced the establishment of an Outpatient Branch in the Division of Hospitals because of the growing importance of ambulatory care and preventive medicine for some half-million beneficiaries. Dr.

PHS Establishes New Outpatient Branch

The Public Health Service recently announced the establishment of an Outpatient Branch in the Division of Hospitals because of the growing importance of ambulatory care and preventive medicine for some half-million beneficiaries. Dr.
and palate to be genetically distinct from isolated cleft palate alone.

Most researchers now feel that some form of recessivity is involved, Dr. Jurkiewicz said, and that cleft lip and palate cannot be fully dominant with full manifestation, nor are they simply sex-linked.

Dr. Jurkiewicz became interested in the problem in dogs in 1959 when he acquired two English bulldog and a Scotch terrier. He was able to begin cleft breeding.

From breedings of animals with cleft of the primary palate, Dr. Jurkiewicz has seen in eight animals all varieties of cleft described in humans. Some of the puppies have crooked tails, but whether this is linked with the oral malformation is not known.

Painstaking efforts are required to maintain the dog colony. Affected dogs must be removed from the environment of the dog farm, and nurses by hand for at least three weeks before solds can be introduced. Mortality is high, often caused by trauma inflicted by the mother or by inflammation caused by foreign material entering the lungs.

Dr. Jurkiewicz now has sufficient dogs to begin experiments to determine the number of factors, or the genetic modifiers, involved in the hereditary condition.

Cites Possibilities

“One of the exciting things about this whole thing to me as a clinician,” he said, “is that we have the distinct possibility of being able to breed large numbers of cleft palate animals because we are no longer restricted to the inbred animals.”

“We can use our inbred males to inseminate mongrel females and retrieve the defect in the backcross. Thus, we will have animals available for certain teratologic, embryologic, or surgical experiments if we wish.

“We will also have the opportunity of breeding animals with all varieties of cleft lip and palate,” he concluded. “Hopefully, we should be able to accumulate data to get some notion of the numbers of cumulative genes or genetic modifiers involved.”

Trying to cope with the complexity of life is one of the responsibilities of growth.—Jack Levine from Conversations With Artists.

NIH Machine Operator Paul W. Brown Serves as Ordained Baptist Minister

By Martha Kovacic

Each weekday, machine operator Paul W. Brown of Arlington, Va., joins the army of civil servants commuting to work at NIH. Each weekend, the Rev. Paul W. Brown joins the clerical corps and commutes 30 miles to minister to his congregation at the Zion Baptist Church in Berryville, Va.

He finds no conflict in serving in two roles. Instead, he says, they complement each other. Many experiences of his Government job provide examples of Christian experience for his sermon, the Rev. Mr. Brown points out, and his training in theology helps him in his relations with people on the job.

Mr. Brown was ordained in 1957 after attending the Washington Baptist Theological Seminary for four and a half years. During that time he worked for the Arlington County Maintenance Department, often a 10-hour day, and attended classes two and a half hours in the evening.

Plays Preacher

His interest in the ministry began as a lad in his hometown of Evington, Va. After services on Sunday he would remember the minister’s sermon, get a box and a book, and “be preacher” to his brothers and sisters.

The suffering he saw during his Army service from 1942 to 1946 as a technician corporal in the Pacific area strengthened his desire to “teach the gospel.”

His hope is, “If the word of God could be displayed to all mankind, perhaps a lot of suffering through the help of Mrs. Brown, we have not only paid the debt but have made many improvements.”

For these accomplishments and for assistance in counseling work, Mr. Brown gives credit to his wife, whom he calls his assistant pastor.

“He is always pleasant and approachable,” she says. “He is always pleasant and accommodating.”

The Rev. Paul W. Brown stands beside the church bulletin board.

The Zion Baptist Church, of which Mr. Brown is pastor, is located at 10 Josephine St., Berryville, Va.

2 Employee Groups Win Exclusive Recognition

As a result of the elections held April 29, exclusive recognition has been granted to two employee organizations for two separate units.

Lodge 2419, AFGE, AFL-CIO has been accorded exclusive recognition for a unit comprised of nonsupervisory wage board employees in the Nutrition Department, Clinical Center.

The Washington Area Metal Trades Council and its affiliated locals, AFL-CIO, was given exclusive recognition for a unit comprised of the non-supervisory wage board employees in the Ground Maintenance and Landscaping Section, DRS.

In the third election held for the unit of all non-supervisory wage board employees exclusive of those in the above mentioned two units, a representative vote was not cast. In order to be representative, at least 50 percent of the eligible employees must have participated, or more than 50 percent of those eligible must have supported one choice.

Since neither requirement was met, this election was inconclusive and employees in this unit will not be represented exclusively by any employee organization.

Dr. Martin A. Kramer Named to NIMH Post

Dr. Martin A. Kramer has been appointed Acting Assistant Chief of the Community Mental Health Facilities Branch, National Institute of Mental Health, Dr. Stanley F. Yolles, Institute Director, announced recently.

He replaces Robert H. Atwell who left NIMH last January to become Assistant to the Provost at the University of Wisconsin.

The branch is involved in the administration of the new community mental health centers program and is principally responsible for the review of both State plans for centers and center construction grant applications.
The importance of the NIH blood donor was evident recently, when some 35 employees were immediately on hand to save a man from bleeding to death.

Following surgery (a splenectomy) at the Clinical Center, the 60-year-old patient, because of a bleeding tendency, lost so much blood in 24 hours that he needed the help of 75 people whose relatively rare A-Rh-negative blood matched his.

Dr. Paul J. Schmidt, Chief of the CC Blood Bank, was the first to answer the call. Meanwhile, other staff members quickly identified other NIH donors having A-Rh-negative blood and contacted them by phone.

Employees Enthusiastic

Some regular donors had to be discounted because they had given blood recently or because of present health conditions, but the response of NIH employees was enthusiastic; and what they could not supply, the Red Cross was able to obtain from emergency sources.

Dr. Schmidt says this incident points up the importance of the NIH donor, who serves as a “minuteman” for that minute when blood will help and his blood is the only type needed.

Dr. Schmidt, who has given a gallon of blood for Clinical Center patients, says: “There’s only one answer to the unanticipated need for blood: to have a ready panel of donors who don’t mind being called on at a time of critical shortage.”

2 Reach Gallon Mark

Two other members of the NIH donor panel recently brought their total donations to the gallon mark. They are Leonard Aberbach, Electronic Instrument Technician in the Biomedical Engineering and Instrument Branch, DRS; and Howard F. Brubach, Biologist in the Laboratory of Physical Biology, NIAMD.

Those who wish to join these “minutemen” in guarding the health of patients at the Clinical Center may do so by dialing Ext. 64500 for a donor appointment.

DRS Announces Change In Name of Branch

The Division of Research Services has announced that the name of the Instrument Engineering and Development Branch has been changed to Biomedical Engineering and Instrumentation Branch.

This change reflects the increased scope of the Branch activities in designing and fabricating unique non-commercial instrumentation systems and in its advisory capacity to NIH investigators.

The ideal place for a picnic is usually a little farther on.—The Washington Post.
Adoption Studies Reveal Personalized Care Aids Offspring of Retarded

Studies conducted by the National Institute of Mental Health show that children adopted from institutions achieve far higher than their own deprived or retarded parents.

Followup studies of experimental groups also revealed fresh evidence that a warm, stimulating environment early in life is a key factor in the growth of children into productive adults.

To determine the adult status of children who were under study in Iowa institutions, a life span of 30 years was covered in the followup.

Personalized Care Vital

Preliminary findings are that the child's performance as an adult is close to the level of his adoptive parents, and that both normal and mentally retarded children can thrive under stimulating personalized care.

All of the children were physically healthy and reared away from their own parents. The experimental group who received personalized care showed achievement as adults strikingly superior to those who were left to the traditional type of institutional care.

The followup involved three studies. The IQ's of the children were compared with the IQ's of their adoptive parents.

After an interval of 16 years, 100 subjects were found achieving as adults consistently higher than would be expected from their background from the intellectual, educational or socioeconomic level of the biological parents.

Offspring Compare Favorably

After an interval of 21 years, 87 adopted offspring whose mothers were mentally retarded were found to compare favorably in occupational status and intelligence with the general Iowa population.

In the followup of a unique experiment with mentally retarded children, the effects of differential stimulation were found to be dramatic.

A group of 13 mentally retarded infants and toddlers had been taken from the orphanage, "adopted" for several months to two years by workers in an institution for the mentally retarded, and then placed in adoptive homes. A contrast group of 12 children remained in the orphanage.

After 21 years, the experimental group was found to be faring far better as adults. All 13 are self-supporting, show average or better IQ's and educational attainment, many are raising families, and none is a ward of any institution.

In contrast, the surviving institutional subjects are still in institutions as adults.

The preliminary findings were reported in Children, journal of the Children's Bureau, by Dr. Harold M. Skeels, Community Research and Services Branch, NIMH.

NIDR Hosts Students Attending Conference

The National Institute of Dental Research played host to 70 of the Nation's top dental students on April 22.

The students were in Washington for the annual Dental Student Conference on Research, a 3-day meeting which was initiated to stimulate student interest in research. Participating were freshmen and sophomores representing dental schools throughout the United States and Canada.

Dr. Francis A. Arnold Jr., Director of NIDR, welcomed the students. Other NIDR staff members spoke about the Institute's program. The group spent most of the afternoon touring NIDR laboratories. The following day Dr. Arnold spoke to the group at the International Inn on the role of NIDR in dental research.

During the course of the conference the students also visited laboratories at the National Bureau of Standards and attended lectures on current research activities.

Martin Shoffner, RML, And His Wife Die in Automobile Accident

Martin E. Shoffner, a supply assistant at NIAID's Rocky Mountain Laboratory in Hamilton, Mont., and his wife, Thelma, were killed March 28 in an automobile accident near Seattle. The Shoffners were on their way to the funeral of Mrs. Shoffner's father.

Mr. Shoffner, a native of Montana, had been employed by the Public Health Service since 1944. He went to work for the Rocky Mountain Laboratory as a laboratory technician and served there as a packer, supply clerk, photographer, and mail clerk.

Praised by Stoenner

Dr. Herbert Stoenner, Director of RML, said, "Everybody around the laboratory will miss Martin. He was a dedicated man, always looking for things to do and always doing his work well."

Born in Miles City in 1919, Mr. Shoffner spent most of his life in Montana. He had many hobbies, including photography, raising pigeons, and rock-collecting.

Mr. and Mrs. Shoffner are survived by two children, Mrs. Roger of Darby, Mont., and Gary, a U.S. Navy seaman.

SMB Staff Commended For New NIH Catalog on Animal Care Equipment

James B. Davis, Chief of the Supply Management Branch, OAM, and his staff were recently commended by Dr. James A. Shannon for their work in compiling a new NIH standard animal care equipment catalog.

In his memorandum of commendation, Dr. Shannon said, "I know from experience that this catalog represents years of painstaking and dedicated work with the sole aim of helping our intramural scientific and technical staffs."

Shannon Lauds Service

"It also reflects," he added, "the high level of service being rendered by the Supply Management Branch and your insistence on providing the best possible supply and procurement assistance to the scientific staff."

The catalog contains a composite listing of standard animal care equipment of proven quality at economical prices, available to NIH laboratories.

One important feature is the interchangeability of certain items such as cage lids and other accessory equipment designed for use with a variety of cages. As a convenient ready reference, the catalog's use by the Institutes and Divisions to estimate, plan, budget and requisition animal care equipment is expected to result in increased efficiency and economy.

EHS Schedules Films on Safety During Vacations

With vacation season approaching, the Employee Health Service has scheduled two films this month to remind NIH employees that although it is a time for relaxation and pleasure, a vacation is no time to relax on safety.

"Vacation Safety," a 10-minute black and white film, is directed to the head of the house, pointing out his responsibilities when taking his family on a vacation.

Water Hazards Shown

"You are the Lifeguard," an 11-minute color film, is directed to alert parents and other adults to swimming hazards by chronicling as they progress from shallow swimming techniques.

The film will be shown at the Clinical Center auditorium Monday, May 17, at 11:30 a.m. and 1:00 p.m.; on Thursday, May 20, at NBOC #2 Conference Room 113 at 1:30 p.m.; at NBOC #1 Conference Room 202 at 2:30 p.m.; and on Friday, May 21, at the Westwood Building Conference Room A at 1, 1:45 and 2:00 p.m.

New Observations Made of Ultrastructure of Exosporium of Spores

Important new observations of the ultrastructure of the exosporium of certain bacterial spores, such as those of Bacillus cereus and B. anthracis, were made recently by a National Institute of Arthritis and Metabolic Diseases investigator and grantees.

Using electron microscopy and X-ray diffraction analysis, as well as procedures they developed for isolating homogeneous fragments of the exosporium, the investigators found that the fine structure of exosporium appears to embody two primary layers.

These layers consist of a surface layer of hairlike projections that arise in an irregular fashion from an intermediate covering, and an underlying basal layer that seems to be hexagonally perforate and comprised of four closely packed lamellae which may fragment into crystal-like elements.

Microscopic observations of the crystal-like nature of the exosporium basal membrane were confirmed by X-ray diffraction analysis.

Pattern Described

The pattern of reflection lines in powder diagrams of exosporium fragments or paracrystals, or intact spores, corresponds to a hexagonal, close-packed crystal structure.

The exosporium, the filmy membrane that loosely envelopes certain bacterial spores, is now recognized as the primary physiological barrier, contact spore and protective covering, and as a specific spore component rather than a sporangial remnant.

Further knowledge of the structure and its function may throw more light not only on the structure of bacteria in general but also on the problem of resistance.

The investigators, Dr. Philip Gerardi of the Department of Microbiology, The University of Michigan, and Dr. Edgar Ribi, of NIAID's Rocky Mountain Laboratory, reported their findings in the Journal of Bacteriology.

NIH Stamp Club Heals

James Canlon May 13

James A. Canlon, Chief of the Bureau of Engraving and Printing, will address the NIH Stamp Club at 7:30 p.m. on Thursday, May 13, in Conference Room 6, Building 31.

Mr. Canlon will discuss the printing of stamps. His talk will be complemented by the Giori press and will be highlighted with a series of color slides.