

the NIH Record

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NATIONAL INSTITUTES OF HEALTH
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National Academy Elects Dr. Brodie For Achievements

Dr. Bernard B. Brodie, Chief of the Laboratory of Chemical Pharmacology, National Heart Institute, was one of 42 new members elected to the National Academy of Sciences on April 26 "in recognition of their distinguished and continuing achievements in original research."



Dr. Brodie

Election to membership in the Academy is considered one of the highest honors that can be accorded to an American scientist or engineer. Not more than 42 members may be elected each year. Last year Dr. James A. Shannon, Director of NIH, was elected.

The National Academy of Sciences, a private organization of scientists and engineers dedicated to the furtherance of science and its use for the general welfare, was established in 1863 by a Congressional Act of Incorporation signed by Abraham Lincoln. It calls upon the Academy to act as an official adviser to the Federal Government, when requested, in matters of science or technology.

Dr. Brodie was born in Liverpool, England.
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First Effective Vaccine Against Rubella Promises Control of Infection, Defects



At a ceremony May 5 in the office of John Gardner, Secretary of the DHEW, Dr. Harry M. Meyer Jr. (left) and Dr. Paul W. Parkman received awards for developing a safe and effective rubella vaccine. They are pictured discussing their joint research prior to the awards ceremony.—Photo by Thomas Joy.

Development of the first effective experimental vaccine against rubella (German measles) by Drs. Harry M. Meyer Jr. and Paul D. Parkman, both of the Division of Biologics Standards, was announced recently.

The announcement followed a joint report by the scientists at a meeting of the American Pediatrics Society in Atlantic City.

Commenting on the discovery Surg. Gen. William H. Stewart of the Public Health Service said:

"The clinical data obtained to date are very encouraging. The results with this newly developed

experimental vaccine make it possible to predict that rubella and its associated birth defects can be brought under control in the not too distant future. Until now, experimental live rubella preparations have caused typical rubella, and the infection was communicable to uninoculated contacts."

The two pediatrician-virologists gave the vaccine first to eight rubella-susceptible children. These children developed immunity with no accompanying fever or rash.

8 Not Infected

Of equal importance, none of their eight playmates, also rubella-susceptible, were infected.

On the basis of these encouraging findings 26 more children were then inoculated with the attenuated vaccine and were in contact with 22 uninoculated susceptible playmates. Again the same satisfactory results were obtained.

The results obtained on these 34 vaccinated children pave the way for further developmental studies. The attenuated rubella HPV-77 virus strain will be made

(See RUBELLA VACCINE, Page 8)

Bond Rally Urges Personnel to Save With U.S. Bonds

Urging all NIH employees to participate in this year's bond drive by enlisting in the payroll deduction plan, Dr. Eugene A. Confrey stressed that "U.S. savings bonds are the most important investment that anyone can make."

Dr. Confrey, Chairman of the NIH Savings Bond Campaign and Chief of the Division of Research Grants, spoke at the Bond Rally in the Clinical Center auditorium May 5 and introduced Dr. James A. Shannon, Director of NIH, and Wilbur J. Cohen, Under Secretary of Health, Education, and Welfare.

In his introductory remarks Dr. Confrey mentioned four distinguishing characteristics of the savings bond campaign this year.

- The deep interest of President Johnson in the drive.
- The real involvement of this



Speakers at the May 5 Savings Bond Rally were (from left) Dr. James A. Shannon, Director of NIH; Wilbur J. Cohen, Under Secretary of HEW, and Dr. Eugene A. Confrey, Campaign Chairman and Chief of DRG.—Photo by Thomas Joy.

country in Viet Nam.

- The manner in which savings provide a break in an inflationary trend.

• The hope that NIH's exceptionally low participation rate will be raised.

Noting that this week is the 25th anniversary of the introduction of the Series E Savings Bonds, Dr. Shannon said that the payroll savings system "comes as close to being painless as any savings can be."

He also emphasized the importance of recognizing our national commitments which are broad, seri-

(See BOND RALLY, Page 8)

Study Shows Mental Health Problems Affect Married People Least of All

The risk of needing psychiatric treatment is much higher for the single or the formerly married than for the married person, according to a new National Institute of Mental Health study.

An extensive statistical review by Dr. Morton Kramer, Chief of the Institute's Office of Biometry, highlights this conclusion.

Dr. Kramer presented the report in Baltimore April 21 to a group of psychiatric leaders planning new services for the mentally ill.

Dr. Kramer found that first admission rates of the unmarried to State and County mental hospitals are "excessively high" when compared to rates for married persons. Those who have been separated, divorced, widowed or have never married are four to five times more likely to become patients than married people, Dr. Kramer found.

Nearly half of the public mental hospital's population is made up of those who have never married, he said.

Dr. Kramer pointed out that two groups of individuals outside the married state seem to be particularly vulnerable to serious mental illness: the single male and the once-married woman who is raising a large family and probably

(See MARRIED, Page 8)

the NIH Record

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NEWS from PERSONNEL

INJURIES AT WORK

All Civil Service personnel are reminded of their entitlement and obligation to seek immediate medical attention from the Employee Health Service when they are injured at work or contract a work-connected illness.

Under the Federal Employees Compensation Act the Government is responsible for all medical care needed for job related injuries or illness, as well as for rehabilitation service and compensation in the event of disability or death.

To obtain these benefits the employee must:

- Report the injury immediately to his supervisor.
- Obtain first aid from one of the Employee Health Units (Clinical Center, Bldg. 10; North Health Unit Bldg. 31, or Westwood Bldg. Health Unit).
- If further medical treatment is needed, obtain an order from the Employee Health Unit for treatment by an authorized physician or hospital.
- Make a written report of the injury or illness on a form furnished by the Health Unit, and give it to his supervisor within 24 hours.

If needed, further information is available from I/D personnel offices.

REGISTER NOW

Primary elections are coming in September and General elections in November. In order to vote in these elections NIH employees must be

Library Returns to 8 a.m. Opening Wednesday, June 1

After a 6-month trial period of opening at 7 a.m., Monday to Friday, the NIH Library on June 1 will return to its former opening hour of 8 a.m.

Attendance records kept since last October for the 7-8 a.m. period indicate that the Library can be more responsive to the needs of the users by resuming the former schedule.

The opening hour of 8:30 a.m. for Saturday and Sunday will remain the same.

registered.

To find out who may register, when you may register and where, call your county's Board of Supervisors of Elections.

PAYROLL NOTES

Inquiries from employees about direct mailing of salary checks to banks or other financial organizations prompted the Financial Management Branch to provide the following information:

As a result of the enactment of PL 89-145, approved August 28, 1965, many banks are encouraging Government employee depositors to have their agencies mail salary checks direct to the bank for credit to the individual's account. A number of employees have requested that we provide this service.

One of the requirements of the legislation is that the agency head—Secretary, the DHEW, in case of NIH—must determine that the best interests of the Government would be served, both from an economy standpoint and otherwise, before any arrangements are made to

Jake, NIH Goodwill Ambassador, Proves 'To Make Friends You Must Be One'

By Margaret Suter

To Clarence Blondy happiness is being outdoors. And his job at NIH, with the DRS Grounds Maintenance and Landscaping Section, gives him lots of time to be happy.

"Jake," as he is known to the countless friends he's made since coming to NIH 17 years ago, helps keep the NIH reservation neat, clean and litter-free.

With spear in hand, a catch-all slung over his shoulder, he starts his tour of the grounds early each morning.

As Jake picks up trash he also spreads cheer—and not only among NIH employees.

One of Jake's friends, Harry B. Lee of Bethesda, in a recent letter

to the *NIH Record*, says:

"May I bring to your attention that NIH has an excellent goodwill ambassador in a gentleman by the name of Jake.

Meet at Bus Stop

"About a year ago I met Jake when we were waiting at a bus stop. I was immediately impressed by his friendly personality and cheerful outlook on life. From that day we have greeted each other only by first names. And every time the *NIH Record* is issued Jake has a copy for me. My wife and I read it with keen interest.

"He never fails to give his friendly 'thumbs-up' greeting to people on the sidewalks of Bethesda or to those who pass through in autos or on foot.

"I think," Mr. Lee concludes, "the world is a happier place because of Jake."

Why is Jake so happy?

Jake Explains

He says it's because he spends most of every day close to Nature. His office has a ceiling of blue and is carpeted in lush, plush green. The air he breathes has a dewy freshness or is frosty clear, depending on the season.

That's what Jake says.

But perhaps this rapport with the world and its inhabitants dates back to his early years. Jake lost his parents while still a youngster. He grew up in a Catholic orphanage outside Buffalo, N.Y.

Forced to make his own way from the start, Jake turned outward for the love and companionship normally found within the family circle. And because Jake loves people—and shows it—people love Jake.

Dr. Karl Mason to Head Anatomist Assn. in '67

Dr. Karl E. Mason, Gastroenterology Program Director of the Scientific Programs Branch, Extramural Programs, National Institute of Arthritis and Metabolic Diseases, was named President-Elect of the American Association of Anatomists at its annual meeting in San Francisco, Calif., recently.

Dr. Mason will be installed as president of the association at its April 1967 meeting.



Clarence ("Jake") Blondy, an employee of the Grounds Maintenance and Landscaping Section, is known to the Bethesda community as a "goodwill ambassador for NIH."—Photo by Jerry Hecht.

History Society to Meet On May 20 for Dinner

The Washington Society for the History of Medicine will hold an election of officers at a dinner meeting on Friday, May 20, at Blair Mansion Inn, Silver Spring.

Cocktails (open bar) will be served at 6:30 p.m.; dinner, \$4.50, at 7:15 p.m.

Dr. Oswei Temkin will speak on "Between Medicine's Ambiguous Past and Unknown Future."

Dr. Temkin is Professor of the History of Medicine and Director of the Institute of the History of Medicine at Johns Hopkins University, Baltimore. He is also Editor of the *Bulletin of the History of Medicine*.

mail employees' checks direct to banks.

As of this date, the Secretary has not made the required determination. Should he later determine that such an arrangement is to the Government's advantage, employees will be advised of the procedural steps involved.

BETTER BUY U.S. BONDS TODAY!

RUBELLA VACCINE

(Continued from Page 1)

available to scientists interested in rubella research.

Drs. Parkman and Meyer tamed the rubella virus by subjecting it over a 2-year period to 77 passages in primary African green monkey kidney cell cultures. The high-passage virus (HPV-77), modified to the point where it effectively immunized rhesus monkeys with no spread to the controls was then considered ready for clinical trial.

Although other investigators have been unable to prevent experimental infection from being communicated to uninoculated contacts, the DBS research group believed that manipulation and passage of the rubella virus might furnish a strain capable of producing a modified, non-transmissible infection that would confer long-term immunity.

Research Described

They first concentrated on the development of laboratory methods that could be employed to detect changes in the virus induced by protracted cell culture passage. They subjected several rubella virus strains to repeated passage in primary African green monkey cell cultures. As the progressively higher virus passage levels were obtained, their biological characteristics were carefully studied.

High passage virus was found by *in vitro* techniques to be distinctly different from low passage "virulent" virus. The high-passage material caused a rapid cytopathic effect and other distinctive changes in certain types of tissue cultures relatively unaffected by the "virulent" virus. Also, the high-passage virus induced the production of increased amount of interferon when propagated in tissue cultures.

Of primary importance, however, was the finding that the high-passage virus of the 77th passage level (HPV-77 strain), when inoculated into rhesus monkeys, resulted in the development of immunity without viremia or spread to uninoculated contacts.

Success Achieved

Laboratory observations clearly indicated that the HPV-77 rubella virus strain had been sufficiently modified by tissue culture passage to use in an experimental vaccine.

The vaccine was prepared under the same rigorous standards and safety tests that apply to the production of the live attenuated vaccines for measles and poliomyelitis. The next step was a clinical trial of the vaccine.

The Meyer-Parkman team conducted the pilot studies at the Arkansas Children's Colony, a State educational institution for mentally retarded children.

Scientists of NINDB Perinatal Project Give Variables Affecting Birth Defects

By Jim Rice

The patient who doesn't talk about his illness, hides from view, and could be weeks late in keeping his doctor's appointment is the description a physician once gave for the unborn baby.

Scientists of the National Institute of Neurological Diseases and Blindness' Collaborative Perinatal Research Project, nevertheless are collecting comprehensive case histories about this patient—the fetus—and his mother, in the search for clues to neurological disorders such as cerebral palsy and mental retardation.



It is clear from her expression that this winsome little miss, a participant in the collaborative project at the University of Tennessee, would like to own the toy dog used in one of the psychological tests.—Photos by Providence Journal-Bulletin.

Dr. Meyer, Dr. Parkman Honored for Developing Vaccine Against Rubella

Dr. Harry M. Meyer Jr. and Dr. Paul D. Parkman, the two Public Health Service scientists who developed the first effective vaccine against rubella, were honored May 5 in a special awards ceremony held in the office of Secretary John Gardner of Health, Education, and Welfare.

Prior to the presentation of the awards by Acting Surg. Gen. Leo J. Gehrig, the two pediatrician-virologists received from Secretary Gardner personal letters of congratulation from President Johnson.

Awards Presented

Dr. Meyer, who is Chief of the Division of Biologics Standards' Laboratory of Viral Immunology, received the Meritorious Service Medal, one of the highest honors awarded by the Department to a member of the Public Health Service Commissioned Corps.

The Service's comparable award for civil servants, the Superior Service Medal, was presented to Dr. Parkman, Chief of the Laboratory's Section on General Virology.

The Meyer-Parkman research team was cited for developing the first attenuated rubella virus strain, and for using this strain to produce a live rubella virus vaccine, which, in their clinical trials, demonstrated attenuation, immunogenicity, and non-communicability, considered the prime requisites for a safe and effective rubella vaccine.

Investigators from the 14 institutions collaborating with NINDB in this study reported some of their findings recently at the Second Scientific Meeting of the Project, March 24-25, at the Statler-Hilton Hotel, Washington, D.C.

Others Helped

Others participating in the study include the National Heart Institute, National Institute of Child Health and Human Development, and the Naval Medical Center.

These investigators now can take an early look at birth-related events and predict, with more accuracy than ever before, how much the newborn likely will weigh.

For example, a pack of cigarettes smoked daily by the mother becomes an average loss of nearly half a pound in her infant.

Among 36 other variables, including infections of pregnancy, age of mother and weight of pre-



This young participant walks the "straight and narrow" in a psychological test given children during research conducted at the University of Tennessee as part of the NINDB collaborative project.

vous children, second trimester bleeding was most strongly associated with birthweight—representing an average decrease of 139 grams in white infants, 76 grams in Negro infants.

"Birthweight," said the authors of the report, "is the best predictor by far of neonatal mortality and many indices of infant morbidity."

This presentation was by Dr. Heinz Berendes, Chief of NINDB's Perinatal Research Branch, and

(See PERINATAL, Page 7)

'Bunim Room' Dedication Is Occasion to Review Dr. Bunim's Attainments

The late Dr. Joseph J. Bunim, noted physician and rheumatologist, was honored recently by his NIH colleagues in the dedication of the Bunim Room on the ninth floor of the Clinical Center.



Dr. Bunim

Dr. Bunim was Clinical Director of the National Institute of Arthritis and Metabolic Diseases from 1952 until his death in July of 1964. The Bunim Room will be used as a conference and study area by his Institute.

The dedication ceremony was held in the presence of a small group which included Mrs. Bunim, now of Yorktown Heights, N.Y.

Dr. G. Donald Whedon, NIAMD Director, and Dr. Ronald W. Lamont-Havers, Associate Director for Extramural Programs, talked about Dr. Bunim's work at NIH, with the American Rheumatism Association and the Arthritis Foundation, and his many other activities.

Bunim Lauded

Dr. Lamont-Havers, former Medical Director of the Arthritis Foundation, spoke of the many interests of Dr. Bunim, who was founder and Editor of the Bulletin on Rheumatic Diseases, a monthly medical publication with a wide circulation.

Dr. Bunim had been active in the American Rheumatism Association, an organization of physicians and scientists dedicated to clinical and basic research and patient care in the rheumatic diseases, and had been its president.

Along with his numerous other contributions while at NIAMD, Dr. Bunim pioneered in the use of synthetic cortisone-like drugs for arthritis and introduced into medicine the first effective synthetic anti-rheumatic cortico-steroid, prednisone, thus marking a milestone in rheumatoid arthritis therapy.

Whedon Gives Praise

Dr. Whedon described Dr. Bunim as a man of highly intensive effort who kept himself extremely well informed about research and clinical developments and collaborated effectively with other investigators throughout the world.

Dr. Whedon said, "It is evident that Dr. Bunim lives on in this life in our hearts and minds, and it is fitting that evidence of our continuing memory should be here in the Clinical Center among his clinical and research associates."

Joint Commission Receives \$500,000 For Study of Children's Mental Health



Wilbur J. Cohen (left), Under Secretary of Health, Education, and Welfare, presents a grant for \$500,000 for a 2-year study by the Joint Commission on Mental Health of Children to Dr. Reginald Lourie (right), Commission President. Also participating in the ceremony, (l to r): Sen. Abraham Ribicoff of Connecticut; Dr. Joseph H. Bobbitt, Commission Executive Director, and Dr. Stanley F. Yolles, Director of the National Institute of Mental Health.—Photo by Jerry Hecht.

A \$500,000 grant for the first year of a 2-year study of the mental health of children in the U. S. has been announced by the Public Health Service.

The study will be carried out by the Joint Commission on Mental Health of Children, which was awarded the grant by the National Institute of Mental Health. Twelve major national organizations have joined with the American Psychiatric Association to organize the commission.

The commission will carry out a program of research and study of resources, methods and practices for diagnosing or preventing emotional illness in children and of treating, caring for and rehabilitating children with emotional illness.

Study Vital

Importance of such a study has been stressed by action following the 1961 final report of the Joint Commission on Mental Illness and Health. That report led to a new involvement of communities in the care and treatment of the mentally ill. The report, however, excluded any consideration of mentally ill children.

The initial year's grant of \$500,000 is expected to be matched for a second year, and the commission's report of its activities and findings will be made within 2½ years of the study's beginning.

Although it has been estimated that as many as 500,000 children in the U.S. have psychoses and borderline conditions, and that another million children suffer from various other serious mental disorders, there are only about 400

child psychiatrists in the country.

In discussing the grant and the importance of the study, Dr. Stanley F. Yolles, NIMH Director, said:

"Specialized facilities for children are either non-existent or so expensive that a majority of families cannot afford them. The mental health workers who are available have often found the mentally ill child difficult to work with.

"Better treatment methods must be devised because it is in the improvement of the mental health of our children that we can make the greatest impact on preventing mental disorders in later life. We know that the longer the wait the more intractable is the illness to treatment."

Problems Frequent

He also pointed out that problems of childhood are becoming more frequent. More than 500 children commit suicide each year, and the increase in the incidence of juvenile delinquency has been described as alarming.

"The number of children in State and county mental hospitals—often the only facilities available for children—is also growing," Dr. Yolles said.

"If the present trend continues, the number of children between 10 and 14 years of age admitted to State mental hospitals will double

Lab Seeks New Volunteers With Colds Who Disbelieve 'Cold Cure' Medical Myths

In spite of modern medical miracles, folk myths about colds persist. For example, "To cure a cold, soak both feet in a tub of hot water and drink a glass of port wine." While the "cure" is useless, at least it's pleasant for those who like spirits.

In striking contrast to folklore, NIAID's Laboratory of Infectious Diseases has been conducting a "common cold" study since 1962. A continuing supply of volunteers is needed.

Employees with colds are requested to contribute samplings of nasal secretions plus two blood samples. Participants receive \$2 for each blood sample.

Please call Mrs. Sara Kelly or Harvey James, Ext. 65811, for appointments. It is best to do so within the first three days of infection.

If possible, employees are urged to schedule appointments in the morning to give researchers ample time for processing.

R&W Sponsoring Annual Jazz Concert May 27

The Recreation and Welfare Association will sponsor the second annual "Evening of Jazz at NIH," May 27, at 8:30 p.m. in the Clinical Center auditorium.

The concert will feature special guests and lively arrangements of melodies old and new.

Playing in the jazz group will be Dr. Gordon Tomkins, NIAMD, alto saxophone; Dr. Burton Sobel, NHI, piano; Dr. Edward Harris, NHI, bass horn; Dr. Robert Resnik, NIAMD, drums, and Richard Shrager, a new member, DCRT, baritone saxophone and oboe.

All NIH personnel and their guests are invited to attend. Admission is free.

between 1960 and 1970, although the number of children in this age group nationally will increase by only 20 percent."

But, he added, these figures tell only part of the story. In 1963, approximately 23,000 youngsters under 18 received treatment in hospitals, while another 115,000 were seen by outpatient clinics.

In the same year, about 6,500 young people were in resident public institutions for the mentally retarded with a diagnosis of "uncertain or presumed psychologic cause."

Full-time Federal physicians now account for more than 10 percent of all practicing physicians in the United States.—*U.S. Medicine.*

Book-Binding Suggestion Wins Award for Weber

David Weber, clerk in the Public Information Office of the Office of Research Information, received a cash award recently for his time- and money-saving suggestion for preparation of books of material used by the Director of NIH and his staff during appropriations hearings.

The presentation was made by Jane Stafford, Assistant Chief, ORI, in the presence of Clifford F. Johnson, ORI Chief, members of his staff and members of the Pub-



David Weber of the Public Information Section, Office of Research Information, receives his cash award from Jane Stafford, Assistant Chief of ORI, who recommended him for it.—Photo by Jerry Hecht.

lic Information Section of ORI, headed by Guy W. Moore.

The adoption of Mr. Weber's suggestion to preserve reports and statements in easy-to-handle, paper-back spiral binders rather than in the cumbersome hard cover ring notebooks used in the past cuts insertion time.

The final result of Mr. Weber's suggestion is a neater, more readily usable, handier set of books.

Dr. Joseph Kaiser Joins DRG, Formerly at FDA

Dr. Joseph A. Kaiser has been appointed Executive Secretary of the Pharmacology and Endocrinology Fellowship Review Committee, Career Development Review Branch, DRG.

He was formerly an administrative and research pharmacologist with the Food and Drug Administration. While with FDA Dr. Kaiser conducted research on pesticides and was active in the evaluation of pharmacological-toxicological-biochemical data submitted on the safety and efficacy of potential new drugs.

The results of Dr. Kaiser's research in pharmacology and toxicology have been published in numerous scientific journals and presented before several national scientific societies.

African Malaria Occurs More Often in the U.S. Than Formerly Thought

A relatively rare African form of malaria may not be as rare in the United States as current reports indicate, according to scientists of the National Institute of Allergy and Infectious Diseases.

Instead, the malariologists say, the nature of ovale malaria—generally a rather mild, self-terminating disease—and its varying effect on individual victims, plus a delay in some cases of 1 to 4 years between infection and primary attack, may result in the disease's dismissal as "a cold," "flu," or "fever of unknown origin."

Drs. William Chin and Peter G. Contacos of NIAID recently reported in the American Journal of Tropical Medicine and Hygiene a case of ovale malaria acquired by Dr. Chin in West Africa which became evident 1 to 3 years later.

Both scientists, of the Institute's Laboratory of Parasite Chemotherapy, are currently working with the Malaria Project at the Atlanta (Ga.) Federal Penitentiary.

Reaction Delayed

Dr. Chin, who served as a Peace Corps physician to Ghana and Togo from September 1961 to July 1963, first became ill on October 17, 1964, more than a year after his return to this country and more than 3 years after his first possible exposure in Africa.

At first, he did not himself consider the possibility of malaria. Rather, he suspected an acute upper respiratory infection. The attacks of malaise, headache and fever recurred, however, and 4 days later a volunteer was inoculated with blood from Dr. Chin.

The volunteer developed ovale malaria. After 2 days of treatment with chloroquine hydrochloride, Dr. Chin's blood was free of the parasite *Plasmodium ovale* and remained so 4 months later.

The scientists reported that relapses in ovale malaria are rare and attributed that in part to rapidly developing acquired immunity, shown by the short course of the natural infection. The delayed primary attacks (other scientists have reported cases with latent periods of 1.8 years, 3.5 years, and 4 years) represent late tissue parasite activity, the scientists concluded.

Dr. Ferster, IBR, to Speak on Treatment of Autistic Children

Dr. Charles B. Ferster of the Institute for Behavioral Research will speak on the Linwood project at the IBR Colloquium to be held on Friday, May 27, at 3:45 p.m. at 2426 Linden Lane, Forest Glen.

His topic is "Laboratory Techniques with Autistic Children in a Treatment Center."

DRS Space Utilization Speeds Delivery Of 'Tools of the Trade' to Scientists

By Tony Anastasi

Two significant elements of basic medical research—bacteriological and tissue culture media, and glassware—are now increasingly available to NIH scientists.

The improved service is due to renovations in the Media and Glassware Preparation Section, Laboratory Aids Branch, Division of Research Services.

"We haven't gained any extra space in footage," says George



To gain increased sterility in dispensing tissue culture media, the Media & Glassware Preparation Section separates the filtration and dispensing processes in the newly renovated area. Delores Delauder (left), assisted by Hortentia Harris, dispenses media through a porthole.—Photos by Ed Hubbard.

Gardner, M&GP Section Chief, "but our existing space has been redesigned and renovated to allow us more efficient use of what we already have."

The renovations were recommended in a DRS space utilization report and achieved primarily through the efforts of DRS Plant Engineering Branch engineers.

"The completed areas are now being checked out for proper air balance," Mr. Gardner said. "Several new concepts in clean room design have been incorporated, and preliminary results indicate an increased capacity for producing media in adequate sterile production areas."

Service Improved

By consolidating some operations and separating others, the Section will be better able to serve the hundreds of NIH investigators who daily require glassware and media. Culture media is defined as any substance or preparation used to cultivate living organisms.

To gain improved sterility with media, the filtration and dispensing areas have been separated. Previously, this operation was carried out in one room.

Now there are three dispensing cubicles and one weighing and filtration area. Aside from this new arrangement, increased productivity should also be realized from the creation of an employee night shift.

Production of media has jumped 10 percent thus far in FY 1966 as compared to FY 1965. In terms of volume of media produced, figures show 43,000 liters of bacteriological media and 39,000 liters of tissue culture media for a total of 82,000 liters projected for FY 1966.

Not all of the media purchased and produced by the section is delivered to scientists. Media not delivered to scientists is used in an expanded quality control program, utilizing tissue culture cell lines.

This year, at the request of some investigators, a limited program of maintaining samples of frozen cell lines of various types has been started. The investigator supplies a sample of the desired cell line, which is then multiplied several times to increase the volume of cells. These cells are then frozen or stored in liquid nitrogen until requested.

Please Return Containers

The biggest problem in both the media and glassware areas is the shortage of delivery containers. NIH scientists could significantly help improve media and glassware services and strengthen their own research efforts by promptly returning these containers.

For NIH investigators who would like to obtain media or glassware from the M&GP Section, the procedure is to fill out request forms available from the stockroom. For media, the form is NIH No. 599; for glassware, NIH No. 205.



Michael Kirkley, Supervisor of the Tissue Culture Media Unit, dispenses a small volume of media by using a semi-automatic pipettor.

Dr. Shock Ends Teaching Stint

Dr. Nathan W. Shock, Chief, Gerontology Branch, NICHD, served as Visiting Professor of Gerontology at the University of Manitoba Medical School, March 20-26.

Clinical Center Program In Pastoral Education Receives Accreditation

The residency training program in clinical pastoral education, offered by the Clinical Center's Department of Spiritual Ministry, recently received accreditation from the Council for Clinical Training, Inc.

Four students from the Virginia Theological Seminary in Alexandria will participate in the program this summer. They will spend 11 weeks working with CC Chaplain Robert B. Robey on a full-time basis.

At first the students will make dual visits to patients with Chaplains Robey and LeRoy G. Kerney, Chief of the Department of Spiritual Ministry. Following this orientation, they will be assigned to selected patients for individual consultation.

Understanding Develops

Chaplain Kerney explained that "the clinical situation provides a first-hand experience with people who are in a period of personal crisis. After being exposed to the problems of these patients, the students will be better able to understand the reactions of their future parishioners."

The Council for Clinical Training is responsible for national coordination of pastoral training in clinical situations. After participating in approved programs, students receive academic credit at their home institutions.

Chaplains Kerney and Robey also have arranged similar programs with the Wesley Theological Seminary in Washington, D.C. (See *NIH Record*, March 23, 1966).

R&W Offering Courses In Consumer Education

The popularity of the consumer education courses sponsored by the Recreation & Welfare Association of NIH has brought an unexpected demand for another series. The courses are conducted by Mrs. Catherine Rhoads, a home economics specialist of the University of Maryland.

Consumer education is simply how to get the most for your money when buying appliances, automobiles, food or even obtaining credit.

In addition to a regularly scheduled course in September, R&W will sponsor a special summer session, provided enough people wish to join. Each course is limited to 30 persons.

The summer classes will be held on the evenings of July 18 and 25, and Aug. 1 and 8. Enrollment is restricted to those who will be able to attend all four meetings. If you are interested, call the R&W office, Ext. 63597 to sign up.

Dr. Coatney, Noted for Malaria Research Here, Will Retire on May 31

"In 1940 the Surgeon General said to me, 'Come on up here (Washington) and work on drugs.' That's what I've been doing ever since."

With that statement Dr. G. Robert Coatney modestly sums up more than a quarter of a century of malaria research in the National Institute of Allergy and Infectious Diseases, a span of time in which he:



Dr. Coatney

- Established the largest program in the country to develop and evaluate antimalarial drugs;
- Initiated the first large-scale prisoner-volunteer program for drug trials;
- Demonstrated the first experimental development of resistance of human malaria to pyrimethamine, and
- Accomplished the first experimental transmission of monkey malaria to man.

Retires to Teach

Dr. Coatney will retire from the NIAID on May 31. A month later he will join the faculty of the Louisiana State University School of Medicine as Professor of Pharmacology.

He has been on the NIH staff since 1938, when he joined the Division of Infectious Diseases (now NIAID) as a protozoologist in its Epidemiology Section, then located at Columbia, S.C.

He has been Chief of the Laboratory of Parasite Chemotherapy since its establishment in 1960. Dr. Coatney was commissioned in the PHS Officers Corps in 1945.

In 1942 Dr. Coatney established the drug development and evaluation program, and his work with chloroquine and primaquine led to the use of those drugs in World War II and Korea.

Research Cited

All the effective synthetic drugs used in malaria treatment and prevention today were subjected to primary or confirmatory trials in the Malaria Studies Project which he established in 1944 at the Atlanta Federal Penitentiary.

Of the prisoner-volunteers Dr. Coatney says, "These men have made an outstanding contribution (to malaria research). I feel strongly about that . . . They know they can quit at any time, but it happens very seldom."

Dr. Coatney and his co-workers showed for the first time in 1960 that monkey malaria could be transmitted to man under experimental conditions. Five years later

Entries in Art Exhibit to Be Accepted, Judged May 26; Prizes Total \$300

NIH personnel who have a flair for painting, sculpturing or the graphic arts are invited to enter the 8th Annual NIH Art Exhibit to compete for some \$300 in prize money.

Entries will be accepted in Stone House (Bldg. 16) on Thursday, May 26, between 4 and 6 p.m. Judging will take place the same evening.

The judges are James McLaughlin, Director of the Phillips Gallery; Frank Wright, a distinguished Washington graphic artist, and a noted area sculptor yet to be named.

The accepted art work will be exhibited simultaneously from May 27 through June 17 in the West Bay of the Clinical Center lobby, the lobby of Building 31, and in the Westwood Building lobby.

Art not accepted for showing must be picked up at Stone House between 4 and 6 p.m. on Friday, May 27.

Background Given

He has been Visiting Professor in Preventive Medicine and Public Health at Howard University Medical School since 1955, Visiting Lecturer in Tropical Public Health at Harvard University since 1955, and a member of the World Health Organization List of Experts on Malaria since 1949. He is a former President of the American Society of Tropical Medicine and Hygiene and of the Tropical Medicine Association of Washington.

A native of Falls City, Neb., Dr. Coatney graduated from Grand Island Nebraska College and received an M.A. degree from the University of Nebraska and a Ph.D. degree from Iowa State University.

He has also received honorary Sc.D. degrees from Bowling Green (Ohio) State University and the University of Nebraska. Before joining the NIH staff Dr. Coatney taught biology at Grand Island College, Nebraska Wesleyan College, and Nebraska State College.



Dr. Stanley F. Yolles, Director of the National Institute of Mental Health since 1964, was awarded the PHS Meritorious Service Medal April 13 by Dr. James A. Shannon, Director of NIH. The citation recognized Dr. Yolles for "his outstanding leadership in planning, developing and administering the national mental health program."—Photo by Jerry Hecht.



"What do you think this will be?" Emmett Kelly Jr. asks children patients at the Clinical Center. The two eyes on the blackboard turned into a car and then to a face as Kelly's audience eagerly anticipated the clown's next trick. Kelly, son of the renowned circus performer, visited the Clinical Center on May 4 as part of a children's hospital tour sponsored by Kodak.—Photo by Jerry Hecht.

Sec'y Gardner Awarded Public Welfare Medal

Secretary of Health, Education, and Welfare John W. Gardner recently received the Public Welfare Medal of the National Academy of Sciences "for eminence in the application of science to the public welfare."

Dr. Frederick Seitz, President of the National Academy of Sciences, made the presentation.

The Public Welfare Medal is unique among the Academy Medals in that it is awarded for outstanding achievement in the uses of science for human welfare rather than in the advancement of scientific knowledge in a particular discipline.

Holders of the Medal are also given further special recognition in the form of certain privileges of Academy membership, including the right to present papers at meetings of the Academy.

Dr. James A. Shannon, Director of the National Institutes of Health, is a past recipient of the Academy's Public Welfare Medal.



Mr. Gardner

Lt. Bankard Will Retire On Birthday, May 23

May 23 is going to be a red letter day for Paul H. Bankard, Senior Lieutenant of the NIH Guard Force.

Lt. Bankard will celebrate his birthday, retire from Civil Service and start pulling up stakes for a move with his family to St. Petersburg, Fla., all on the same day.

One of the few remaining old-timers at NIH, Lt. Bankard joined the Guard Force Dec. 23, 1941. Between May 1944 and November 1945 he served in the U.S. Navy, returning here following discharge.

In 1946 he was promoted to sergeant and in 1956 to lieutenant. An outstanding guard, Lt. Bankard is rated as having a "can do" approach to every job. He will be given a retirement party on May 23 in Building 31.



Lt. Bankard

Movie on Mental Health Of Adolescent Scheduled

"Borderline," a film on the mental health of an adolescent, will be presented by the NIH Employee Health Service this week.

Showings are scheduled for the Clinical Center auditorium, Wed., May 18 at 11:30 a.m. and 1 p.m.; NBOC No. 2, Conf. Rm. 113, Thurs., May 19 at 1:30 and 2:30 p.m.; and Westwood, Conf. Rm. A, Fri., May 20 at 1:30 and 2:30 p.m.

Admission is free.

Dr. Banta Heads OIR's Special Program Section Replacing Dr. Leavitt

Dr. James E. Banta has been assigned to head the Special International Programs Section, Office of International Research.

The Section has been headed by Dr. Milo D. Leavitt Jr., who was named to the recently established post of Deputy Assistant Secretary for Science and Population. Dr. Leavitt will work with Dr. Philip R. Lee, Assistant Secretary for Health and Scientific Affairs, who has overall responsibility for HEW's family planning programs.

In his new position Dr. Banta will be in charge of the Special Foreign Currency Program (P.L. 480) and the United States-Japan Cooperative Medical Sciences Program.

Dr. Banta came to NIH from the Peace Corps where he was Medical Director of the Medical Program Division.

Prior to his present assignment, Dr. Banta was Assistant Chief of the Foreign Grants and Awards Section of OIR (see *NIH Record*, Dec. 14, 1965).



Dr. Banta

Second 'Know Your Heart' Radio Series Elicits Unusual, World-Wide Response

The second of the "Know Your Heart" radio series, produced by the Information Office of the National Heart Institute, has topped 1,300 requests.

Two hundred Armed Forces radio stations around the world helped swell the number of requests for this second series of ten 2-minute spot announcements recorded on 12-inch platters.

Credit for the phenomenal response to these programs has been attributed to the story in the July 14, 1965 issue of the *NIH Record* that fully described the content and purpose of the series.

Both series were written and produced by Louis Cook of the Heart Information Center, with narration and medical consultation by Dr. John D. Turner, formerly of NHI, now Assistant Professor of Medicine at Baylor University Medical School.

'Records' Mailed

Facsimiles of the *Record* story were mailed to more than 2,000 radio stations throughout the U.S. and Canada. With replies still coming in, it is expected that requests for the second series may reach 1,500.

Requests for the first series total 1,239. Replies from station program directors have come from all 50 states and island territories.

Many letters were postmarked from Canada (especially British Columbia), Puerto Rico, Guam, the Virgin Islands—even distant Sa-

weighing less than 5½ pounds. But the neonatal death rate for this birthweight group was lower in the Negro than in the white.

Drs. Toshio Fujikura and Luz A. Froehlich, of the NINDB Perinatal Research Branch, reported these and other findings of their study of influence of race and other factors on pulmonary hyaline membranes.

Findings Given

Among 40 maternal deaths observed during the period 1959-1965 among Project women, 28 involved mothers who could be diagnosed, even before conception, as high-risk individuals. The records showed that the great majority of these women had not wished to become pregnant.

All of the 16 deaths due to direct obstetrical causes were of Negro mothers. "It is in the group of high-risk women that a major reduction in maternal mortality can be achieved through adequate family planning," commented Drs. Jose Marmol and Rudolph Vollman of the Perinatal Research Branch.

A total of 50 reports were presented on preliminary findings from the Collaborative Project, which now has reached its goal of registering 50,000 mothers in or-



Pictured here are Louis Cook, NHI (left), as he prepares to send out record number 1,300. Gary Goldsmith, also of the Heart Information Center, posts the total.

der to follow at least 40,000 of their infants through the first years of life.

Perhaps a hundred important variables may contribute to birth defects. The NINDB Project has the vast mission of looking at most of these variables at the same time in relation to one another. Correlations of data are being provided by modern electronic computers.

Plans are underway for a third series and for revision of the available script material. The information can then be presented in a booklet aimed at the secondary school level.

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At the Second Scientific meeting some of the reports commented on:

- A relationship observed between maternal infection with mumps and chickenpox and birth defects.

Factors Outlined

- The correlation of fine-motor dexterity in 8-month-old infants and their higher scores in the 4-year psychological examination.

- Various factors, such as older age of mother, associated with increase of heart defects in newborn.

- Spacing of electroencephalograms to give better pictures of brain development.

- The possibility that male youngsters do not respond as well as females to some of the psychological tests may be due to preconditioning at home. Mothers often insist upon more conformity by little girls.

Dr. Wm. I. Gay Assumes New Post With NIGMS

Dr. William I. Gay has been named Program Director, Comparative Medicine, in the Office of the Director, National Institute of General Medical Sciences, by Dr. Frederick L. Stone, Institute Director.

In this newly established position, Dr. Gay's prime responsibility will be to stimulate, guide and develop research and training in the basic and general biomedical sciences in schools of veterinary medicine, departments of animal science, veterinary research institutes and other centers of comparative medicine.

Dr. Gay will also be responsible for development of a program of research in the therapy of trauma. This program will encompass ongoing projects in shock, burns and wound healing, and will seek to develop multi-disciplinary research units in a coordinated laboratory-clinical program for studying new methods of treating people afflicted with the nation's fourth largest health problem—trauma.

Dr. Gay has served as Senior Program Official and Assistant Chief of Animal Resources Branch, Division of Research Facilities and Resources, since 1963.

He first came to NIH in 1954 when he joined the Laboratory Aids Branch of DRS. In 1955 he was appointed Chief of the Animal Hospital Section of that Branch, and in 1962 he was named Assistant Chief of the Branch, with primary responsibility for planning and developing facilities at the NIH Animal Center in Poolesville, Md.

Cpl. Matthews Retires With 38 Years Service

After 38 years with the Federal Government, Cpl. Jesse Matthews of the NIH Guard Force is retiring on May 20.

A native of Buxton, Iowa, he retired from the Navy after 20 years of service and went to work for the Post Office Department.

Mr. Matthews came to work for the Office Services Branch of NIH in 1950 and transferred to the Guard Force in 1953. He was promoted to Corporal in 1956.

Ordnained a deacon in 1965, Mr. Matthews plans to pursue his work in the Bibleway Church and spend more time reading the Bible.

A retirement party will be held in Building 31 on May 20.



Dr. Gay

PERINATAL

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his associates, William Weiss, Jerome Deutschberger, Dr. Zekin Shakhshiri and Esther Jackson.

"The diagnosis of incompetent cervix (Ed. Note: faulty 'valve' that may release fetus too early) is not easily made. . . Indeed, there are many obstetricians who doubt the existence of this entity," Dr. Luke Gillespie said. He is the principal author of a collaborative report on this topic.

If untreated, incompetent cervix results in a prematurity rate in excess of 50 percent and a perinatal mortality rate of between 55 and 70 percent. Among the first 25,000 pregnancies recorded in the Project, 154 cases of incompetent cervix were diagnosed.

Risks Cited

Hyaline membrane disease, usually classified as respiratory distress syndrome, is one of the premature's greatest risks. Yet premature Negro infants (under 5½ lbs.) were found much more resistant to this disease than white babies of similar low birthweight.

The Project data suggests that this may be due to the Negro infant's actually being more mature than the white at any specific birthweight.

In a study of 27,000 Project infants, more than twice as many Negro as white infants were born



Cpl. Matthews

Study Supports Theory That Nocturnal Angina Is Triggered by Dreams

Dreams are now seen as a trigger factor in nocturnal angina. This view is supported by a recent study of rapid eye movements indicative of dreaming observed in 32 of 39 episodes of chest pain arising during sleep in patients with a history of this disease.

Since some individuals with angina pectoris are frequently aroused from sleep with chest pains similar to those occurring with exertion during their waking hours, it was decided to test the possibility that such episodes might be triggered by dreaming.

Ten patients with a history of exertional and nocturnal angina were studied throughout several nights of sleep. Monitoring included continuous recording of electroencephalographic patterns, electrocardiogram, eye movements, and respiratory patterns.

Changes Observed

Four of the 10 experienced a total of 39 episodes of nocturnal angina; physiological changes indicative of dreaming were observed with 32 of these episodes.

The following sequence was typical: The sleeping patient is quiescent, his heart rate slow, respiration regular, and his EEG pattern characteristic of moderately deep sleep (stage C). With the onset of rapid eye movements (REM), the EEG pattern indicates a shift to lighter sleep (stage B).

As REM activity increases in intensity, heart rate increases, respiration becomes more rapid and irregular, and ECG changes (depression of the ST segment) are evident. Shortly thereafter, the patient awakens with chest pain.

Other investigators have found that rapid eye movements are seen only during stage B of sleep and are accompanied by dreaming more than 80 percent of the time. During deeper stages of sleep, dreams are much less common; and the subject's recollection of these dreams is usually fragmentary because they lack the vivid and immediate quality of dreams reported from REM periods.

REM Activity Noted

In this study, patients who had experienced nocturnal angina in conjunction with REM activity commonly recalled dreams involving strenuous physical activity or strong emotions of fear, anger or frustration, frequently accompanied by chest pain.

REM activity always preceded the EKG changes, indicating that the dreams were probably a cause, not a result, of nocturnal angina.

How dreaming might trigger angina is unknown, but the au-



NIH played host recently to 35 high school counselors, representing all high schools in northern Virginia. Similar programs were held previously for nearby Maryland school systems. NIH tries to accomplish three things with this type of program: Introduce the counselors to NIH mission, tradition and physical facilities; explain the kinds of jobs it has and the skills necessary to fill them and provide some intellectually stimulating activity that will help the counselors grow professionally. Dr. John R. Smith, Medical Officer (Psychiatry), Section on Family Studies, Adult Psychiatry Branch, NIMH, addresses the visitors on "The Adolescent and His Family."—Photo by Thomas Joy.

BOND RALLY

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ous and important.

Under Secretary Cohen alerted the rally audience to the necessity of our full participation in the campaign as citizens of the world and the Nation.

He also emphasized the significance President Johnson attached to the program when he said, "A successful savings bond program is of utmost importance at this time."

Other factors pointed out by Mr. Cohen were the guaranteed rate of interest of the bonds, their security as a form of investment, and the ease with which the deductions may be made from paychecks. He further indicated how useful such savings may be when future obligations arise.

Three out of every four HEW employees participating in the payroll savings plan is the minimum goal for the Department.

In addition to three speakers the audience was entertained by a five-man jazz combo composed of NIH scientists who are giving a concert here May 27, a barbershop quartet, and a color film entitled "The Land We Love."

thors state that minute-to-minute changes in blood pressure, heart rate, and respiration were often striking during REM periods and might have been sufficient to compromise an already borderline coronary circulation.

These findings were reported in Annals of Internal Medicine by Drs. J. B. Nowlin, W. G. Troyer Jr., W. S. Collins, G. Silverman, C. R. Nichols, H. D. McIntosh, E. H. Estes Jr., and M. D. Bogdonoff, all of Duke University and all NIH grantees.

Donors Give 121 Units; Five Join 'Gallon Club'

The Clinical Center Blood Bank reports that 121 units of blood were received from NIH donors in April. During the same period CC patients received 1,691 units of blood.

Five NIH staff members joined the "gallon-donor club." They are Dr. Robert H. Alford, NIAID; Erwin R. Bogenrieder, OD; John P. Jones, OD; Edwin Moskowitz, DRG, and Thomas Murphy, DRS.

DR. BRODIE

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pool, England, took his bachelors degree at McGill University in 1931 and his Ph.D. in chemistry at New York University in 1935, and became a U.S. citizen in 1939.

In 1950, after spending several years teaching pharmacology and biochemistry at NYU, he entered Government service as head of the Heart Institute's Laboratory of Chemical Pharmacology.

Dr. Brodie and his group have gained renown in various aspects of biochemical pharmacology. His group has studied mechanisms through which drugs penetrate biological membranes, distribute into various body tissues, become changed to active or inactive metabolites and are eliminated.

Dr. Brodie and associates have also studied how drugs alter physiological and biochemical systems which control the release and metabolism of biogenic amines, the mobilization and transport of fatty acids, and the activity of diverse enzyme systems. In these studies, he and his group have aided in developing a variety of drugs and in elucidating reasons for species and individual variation in drug action.

Dr. Francis Arnold Wins Dental Research Prize

Dr. Francis A. Arnold Jr., Chief Dental Officer of the Public Health Service, received the first World Prize in Dental Research given by the Massachusetts State Dental Society.

Formerly Director of the National Institute of Dental Research, Dr. Arnold was honored for meritorious service performed in the promotion of dental research that has been a deciding factor in the growth and development of dental science. The Prize, which is to be an annual award, also symbolizes the society's belief in the inseparable relationship between dental research and dental practice.

Dr. Arnold's involvement in dental research dates back to 1937. He is an internationally recognized authority on the relation of water fluoridation to dental caries.



Dr. Arnold

MARRIED

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working at the same time.

While men are 36 percent more likely to enter a public mental hospital than women, it is the single rather than the married man who contributes to this high rate. Of the never-married patients, the men outnumber the women two to one.

As for the woman who heads a large family, a study of mental patients in Maryland shows she is more susceptible to mental illness than the male family head. The larger the family she heads, the greater risk she runs of becoming a mental patient.

Doris J. Curley Is Dead; With NHI in Framingham

Mrs. Doris J. Curley, 55, a staff member of the National Heart Institute's Framingham Heart Study since 1963, died unexpectedly on March 28 following a brief illness.

She came to the Public Health Service in 1963 from the U.S. Army Laboratories at Natick, Mass., and had been with the Statistical Section of the Framingham Heart Study until her death.

Mrs. Curley was an active member of the Framingham Catholic Women's Club and had traveled widely with Civil Service groups. A native of Boston, she had resided in Framingham for the past 25 years.

She is survived by a son, James Michael Curley of Framingham; two daughters, Miss Mary G. Curley, also of Framingham, and Mrs. Thomas E. Oden of Alexandria, Va., a sister and five grandchildren. Her husband died in 1953.