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

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NATIONAL INSTITUTES OF HEALTH

### Dr. Bernard B. Brodie Receives Four Honors For Studies on Drugs

Dr. Bernard B. Brodie, chief of the Laboratory of Chemical Pharmacology in the National Heart and Lung Institute since 1950, received four honors last month.

Dr. Brodie, a distinguished pioneering pharmacologist, was honored by the New York Academy of Sciences, the New York Medical College, the American Therapeutic Society, and the American Academy of Achievement.

#### **Dedicate Conference**

A conference dedicated entirely to Dr. Brodie, sponsored by the New York Academy of Sciences, was held in New York City, June 29-July 1.

At this Conference on Drug Metabolism in Man, Dr. Brodie delivered a paper entitled "Drug Metabolism in Man: Past, Present and Future," describing tissue damage caused by drugs and raising the strong possibility that drug-induced diseases are mediated by "active" derivatives formed in the body.

Previously, it had generally been assumed that metabolites are less toxic than the parent compound, but Dr. Brodie and his group found that (See DR. BRODIE, Page 6)

### Notable Achievements of 35 Employees Cited at NIH Honor Awards Ceremony

Dr. Robert Q. Marston, NIH Director, presented DHEW awards to 35 employees at the Second Annual NIH Honor Awards Ceremony on Monday, June 29, in the Jack Masur Auditorium, Clinical Center.

Recipients included Civil Service staff members who had recently left NIH for other assignments, and employees who retired a short time ago.

employees, Commissioned Officers, tunity to reassert that excellence must be the hallmark—past, present and future—of an entity such

Richard L. Seggel, Associate Director for Administration, introduced the award winners and read their citations.

The Joint Armed Forces Color Guard and the U.S. Marine Drum and Bugle Corps performed before the awards presentation.

Following the ceremony a reception was held for the award recipients, their families, and NIH officials.

In his address, Dr. Marston noted that "the most precious, the most fragile, and the single most important ingredient in major fields of human endeavor such as science and health is outstanding achievements by talented individuals.

"This is a truth that should be a part of every decision we make, and a truth that is the total reason for holding these ceremonies today.

"As each year we publicly recognize such accomplishments, this ceremony also gives us the oppor-

tunity to reassert that excellence must be the hallmark—past, present, and future—of an entity such as the National Institutes of Health. If it is not, we have little to offer, but with it, all other problems shrink in magnitude.

The DHEW Superior Service Award, presented to Civil Service employees whose services and/or achievements deserve special recognition of a high order, was presented to the following employees:

#### Special Service Recognized

Dr. Benjamin T. Burton, associate director for Program Analysis and Scientific Communications, NIAMD, "For instituting outstanding programs in scientific communications and for astute management of programs supporting varied NIAMD missions, especially those in chronic kidney disease and nutrition."

Carl A. Fretts, formerly special assistant for Business Administration, Chemotherapy, NCI, "For his superb administrative skills in substantially accelerating the development of new drugs for the control of human cancer."

Dr. D. Carleton Gajdusek, supervisory medical officer, Collaborative and Field Research, NINDS, "In recognition of his unique research in exotic cultures and his contributions to the field of slow

(Continued on Page 4)

### Sterilized Maggots Used to Heal Wounds May Give Insight Into Human Metabolism

By Katie Broberg

The lowly maggot is commanding respect as evidence of its healing powers continues to interest the medical profession.

Although maggots were used briefly during both World Wars to help



Four stages in the metamorphosis of a blowfly are: bottom left, egg; top left, larva or maggot; bottom right, pupa, and top right, adult blowfly.

heal certain wounds, medical researchers are now taking a second look at beneficial effects. Sterilized maggots are being used to heal gangrenous wounds in a process called traumatic myiasis, or wound treatment by maggot infestation.

Unsavory as this may seem, scientifically it is sound practice, according to Dr. Leo Levenbook of the National Institute of Arthritis and Metabolic Diseases.

Dr. Levenbook has been raising blowflies—relative of the common housefly—to examine their development from maggot to adult fly. The eggs of the blowfly develop (See MAGGOTS, Page 8)

TV Program on July 19 Features NINDS Work

Four NIH staff members will participate in an HEW television program, "You and Your Nervous System," Sunday, July 19, from 2:30 to 3 p.m., on Channel 4, WRC-TV.

Following a 10-minute film, "Exploring the Human Nervous System," issued by the National Institute of Neurological Diseases and Stroke, Drs. John Sever, Ayub Ommaya, and Roscoe Brady, all of NINDS, will discuss their Institute's research work, particularly

### Dr. Baker Named Director of Nat'l Cancer Institute

Appointment of Dr. Carl G. Baker as Director of the National Cancer Institute has been announced by Dr. Robert Q. Marston, Director of NIH.

Dr. Baker, a physician and biochemist who has been on the NCI staff since 1949, becomes the Institute's sixth director in its 33-year history. He has been Acting Di-



Dr. Baker received the PHS Meritorious Service Medal in 1966 for developing research planning systems.

rector since last November.

He is a graduate of the University of Louisville in Kentucky and received his M.D. degree from the University's School of Medicine in

Dr. Baker served as a Medical Officer with the U.S. Navy in the Pacific Area in World War II, and after the war became a Childs Fellow at the University of California at Berkeley where he received the M.A. degree in Biochemistry in 1949.

Between 1949 and 1955, Dr. Baker worked in the NCI Laboratory of Biochemistry and the Research Grants and Fellowship Branch.

(See DR. BAKER, Page 7)

that undertaken in their laboratories.

Fredrica Santell, a biomedical technician in the National Institute of Child Health and Human Development, took part in the discussion and also explained how tissue cells are grown in her laboratory.



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John C. Schlag (r), ODA, receives the NIH Federal Credit Union's "Surprise of the Month," an electric ice cream maker, from Dr. Harley G. Sheffield, a member of the Board of Directors. A different gift is offered monthly—with winners selected by random drawings from active accounts. These numbers are then published in the CU monthly Newsletter.

#### Final Report Reveals Bond Drive Increased Allotments 3.5 Percent

A 3.5 percent increase in subscriptions as a result of the NIH U.S. Savings Bond Drive for 1970 was reported by Dr. Seymour J. Kreshover.

Dr. Kreshover, Chairman of the drive which ended June 19, is Director of the National Institute of Dental Research.

Edward B. Radden, bond canvasser for the Environmental Services Branch of the Division of Research Services, will receive a Minute Man citation from the Treasury Department for obtaining 100 percent participation in his branch.

"I wish to thank the individual Savings Bond Chairmen and those in the Institutes and Divisions who worked as canvassers for their fine

### Dr. George Fisher Joins Grants Asso. Program

Dr. George L. Fisher has jonied the NIH Grants Associates program for a year of specialized training in grants administration.

Dr. Fisher had been with the University of Maryland since 1965, first as assistant professor of psychology and, since 1967, as an associate professor.

He was also associated with Brown University for 4 years as assistant professor and research associate and lecturer, and spent 3 years at Boston University as a research and teaching assistant.

Dr. Fisher received his B.B.A. in Industrial Psychology from the City College of New York in 1956, his M.A. in General Psychology from Boston University in 1957, and his Ph.D. in Physiological Psychology from Boston University in 1962.

He is a member of many organizations which foster scientific research in the field of psychology, including the American Psychological Association and the Society for Psychophysiological Research.

Dr. Fisher also served on the Executive Council of the Maryland Psychological Association in 1967 and 1968.

Since 1965, Dr. Fisher has been engaged in studies of taste preferences in animals and men.

and dedicated performance," Dr. Kreshover said.

"Through their efforts a total of 369 new subscribers signed up, and 279 other NIH employees increased their allotments."

Dollar amount allotted per pay period for new subscribers reached \$6,040.67 at the Drive's end.

#### NIH Television, Radio Program Schedule

Television

#### NIH REPORTS

WRC, Channel 4 1 a.m. Wednesday—following the Johnny Carson Show.

July 8

Dr. Seymour Kreshover, Director, NIDR Subject: The Role of NIDR, Part 1 (R)

July 15

Dr. Seymour Kreshover Subject: The Role of NIDR, Part 2 (R)

Radio

#### DISCUSSION: NIH

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

July 10

Dr. Peter L. Frommer, chief, Myocardial Infarction Branch, NHLI

Subject: An Approach to Reducing Death and Disability from Heart Attack (R)

July 17

Dr. Kiffin J. Penry, head, Epilepsy Section, Collaborative and Field Research, NINDS

Subject: Incidence of Epilepsy: Its History and Con-

trol (R)

Interview takes place during the program, The Music Room.

### R&W Membership Elects Entire Incumbent Board

A 7 to 8 percent increase in voter turnout marked the 1970 NIH Recreation and Welfare Association elections.

Despite heavy campaigning by an opposition slate, members reelected the entire incumbent board.

"I'm pleased the entire board was re-elected," President Benjamin Fulton, NICHD, said. "It shows support for this past year's programs."

#### Opposition Seen as Beneficial

He regarded the opposition as beneficial, however, because it stimulated interest and gave the board an inkling of what others want.

First vice-president Dr. John Kalberer, NCI, explained that this year, for the first time, people at NIH became interested in the R&W elections. He attributed this to the strong publicity campaign.

Others elected to the Board of Directors are: John Land, NLM, second vice-president; Donald Cyphers, NIAMD, treasurer, and Joan Genau, NIDR, secretary.

NIH organizational units showing employee participation in excess of 50 percent are: DBS, DRG, BEMT, NIDR, FIC, and NIGMS.

### DCRT Computer Device, An Optical Page Reader, Will Increase Services

With the installation in the fall of a fast, versatile computer input device called an Optical Page Reader, the Division of Computer Research and Technology will significantly increase its services to NIH.

Because the Reader has many potential applications, DCRT established a task force to develop procedures. Members are requesting employees to submit memoranda to the Optical Page Reader Task Force, Bldg. 12A, Rm. 2230, outlining any project, large or small, that might lend itself to optical document processing.

#### **Details Requested**

The memorandum should give a brief description of the proposed application and include name, institute, building, room number, and telephone extension of the person to be contacted for discussion of requirements.

A seminar has been scheduled for next Wednesday, July 15, from 9:30 to 11 a.m. in Bldg. 12A, Rm. 1024. The optical processing system will be discussed from the users point of view, and task force personnel will be on hand for questions.

For reservations, contact the Technical Information Office, Ext. 65431.

The Optical Page Reader is considered versatile because it recognizes letters, numbers and most of the special symbols of a standard optical font whether it is typed or printed. It can also read handwritten numerals and certain handwritten letters.

#### Potential Is Great

The machine is able to handle a mixture of machine printing, hand printing, and pencil marks all located in the same document. Tabular formats within regular running text are also easily processed because the machine can scan both vertically and horizontally.

The reading and recognition operation of the device takes place at split second speeds, and is economical in projects where a great deal of keypunching would otherwise have to be done.

#### Rise in Cost of Living for May Increases Retirement Annuities

As a result of the 4.6 percent rise in the cost of living for May, employees who retire on or before July 31 will receive an annuity increase of 5.6 percent.

The increase, which becomes effective August 1, will be reflected in checks received in September.

Any questions on this benefit or other retirement information should be directed to the B/I/D personnel officer.

### Exec. Secretary of DRG Study Section, Retires

Dr. Margaret Towell Goldsmith recently retired as executive secretary of the Cardiovascular A Study Section in the Division of Research Grants.

Dr. Goldsmith, who has served in the Federal Government for 24 years, came to DRG in 1963 from the National Heart Institute.

She had been with NHI since 1959, first as a public health program analyst, and then as scientist-administrator (biological sci-

Dr. Goldsmith received her M.S. (1943) and Ph.D. (1944) degrees in Bacteriology from the University of Maryland.

An appointment as assistant in the Biology Department of Columbia University started her career as a bacteriologist in 1937. Two years later she became an in-structor in the Bacteriology Department at the University of Maryland.

Her first position as a Federal employee was in the Bacteriology Laboratory of the Department of Agriculture in Beltsville. When she left there to come to NIH in 1959 she was chief of the laboratory.

Dr. Goldsmith received a silver tray and laudatory scroll from her



Dr. Goldsmith is a member of several honorary fraternal organizations as well as professionel organizations.

friends and colleagues at a retirement luncheon held in her honor.

She will serve as a consultant for the Cardiovascular A Study Section's round of meetings during the remainder of this year.

#### 2 Donors Join Gallon Club

The Clinical Center Blood Bank reports that Sandra P. Hall, DRG, and Grant C. Riggle, DRS, have joined the Gallon Donor Club.

In more ways than one, it pays to give blood.

For additional information call the Blood Bank, Ext. 64508.

### Dr. Margaret Goldsmith, Federal Program For Youths Emphasizes Malek Discusses Changes 'Marketable' Job Skills Through Training In Concepts and Values



Following an orientation meeting, participants dispersed into smaller groups to discuss plans for the summer with supervisors.

#### By Bonnie Friedman

Public Information Aide

"The emphasis of the Federal Summer Employment Program for Youth is to train a young person for 8 to 10 weeks so he comes away with a marketable job skill," explained Stefanie Singer, associate coordinator of the project.

Mrs. Singer is an assistant to Floyd Swanson, FSEPY coordina-

The program recruits teenagers from the urban area and offers them responsible summer positions. "It is not a keep-the-kids-off-the-streets program," Mrs. Singer added.

Each Government agency is assigned a geographic area for recruitment. This year NIH concentrated on Cardoza, Upper Cardoza, and Roosevelt High School. Of the approximate 400 Summer Youth Aids at NIH, 220 hail from these sections of Washington.

Two recruiters canvassed the

#### 'Threshold' Film Receives Gold Medal at Festival

A gold medal was awarded at the Atlanta International Film Festival to a movie sponsored by the National Institute of General Medical Sciences.

The film "Threshold . . . search and the Care of People," was one of 920 entries from 20 countries. It illustrates the dependence of modern medical care on research.

M. Daniel Bailey, former NIGMS information officer, accepted the old medal for the Institute on June 27.

Helen Neal, deputy information officer of NIGMS, was project officer for the film, which was directed by Tracy Ward and produced by Audio Productions.

The NIGMS Information Office reports that since its release early this year, the film has been seen by some two and a half million television viewers as well as by thousands of members of professional and community groups.

area to interest teens in the program. Those who wished to participate could be certified at U.S. Employment Service Offices established in their high school counseling centers. Each prospective aid was then interviewed by two NIH employees before selected.

Summer aids work at a variety of positions from office and clerical work to lab and computer jobs.

"The program has come a long way since the early 60's," Mrs. Singer said. "It has evolved from keeping the kids off the streets to now actually teaching them something."

In addition to the two coordinators, FSEPY this year employs the services of two professional guidance counselors. Their first area of concentration is the summer aids who do not have career or school plans for the fall. They try to find professions, not just jobs, for these youths.

Every aid is also assigned an immediate supervisor who works with him all summer.

(See YOUTHS, Page 6)



Stefanie Singer, associate coordinator of FSEPY, explains the registration book to Summer Youth Aids at the orientation meeting.

# Of Public Administration

HEW Deputy Undersecretary Frederick V. Malek was the kickoff speaker at the first of a discussion series on "Changing Concepts and Values of Public Administration" held in the Jack Masur Auditorium last June 19.

In his talk, Mr. Malek discussed fundamental problems in the management and administration of Federal programs and attempts to improve their efficiency so as to "do a better job" and obtain "maximum mileage" from them.

#### Discusses 'New Federalism'

"The New Federalism," the subject of his talk is, he said, a broad concept aimed at bringing Government closer to the people by reversing the trend of power to Washington.

Mr. Malek also discussed briefly the Federal Assistance Streamlining Task Force (FAST) effort, which he described as a step-by-step analysis of HEW assistance

It is designed, he said, to streamline, simplify, and tighten their administration and to eliminate overlapping and duplication.

There are 260 such HEW programs, he noted, costing some \$19 billion, 90 percent of which goes out in grants-in-aid. The FAST project, he added, is only one-third complete.

#### **ASPA Sponsors Series**

The discussion series, sponsored by the American Society for Public Administration, is oriented towards the exchange of ideas between public administrators at various organizational and career levels. It was undertaken on the initiative of young interns in public administration.

Richard L. Seggel, NIH Associate Director for Administration. introduced Mr. Malek at the start of the program.

#### **Graduate Courses Listed** In New 1970-71 Catalog

The 1970-71 catalog of the NIH Graduate Program evening courses will be available July 15.

Biochemistry of the Visual Process, one of the new courses offered, will be taught by Dr. Hitoshi Shichi, National Eye Institute.

Other new courses include Regulation of Intermediary Metabolism, Problems and Mechanisms of Evolution, Advanced Topics in Computer Programming, Stochastic Processes, and Scientists and Social Responsibility.

The new catalog may be obtained from Bldg. 31, Rm. 2B-25, or by calling Ext. 66371.

#### **AWARDS CEREMONY HONORS 35 EMPLOYEES**

(Continued from Page 1)

virus studies."

Dr. Harry V. Gelboin, chief, Chemistry Branch, Etiology, NCI, "For the excellence of his research on the molecular biochemistry of carcinogenesis."

Dr. Clarence J. Gibbs, Jr., supervisory research microbiologist, Collaborative and Field Research, NINDS, "In recognition of his significant research on virus induced central nervous system degeneration."

Dr. William J. Hadlow, head, Comparative Pathology Section, and acting head, Arbo and Chronic Viral Diseases Section, Rocky Mountain Laboratory, NIAID, "For his pioneering research on slow viral infection in animals, leadership in comparative pathology, and influence on concepts about the etiology of human chronic degenerative diseases."

John W. Hambleton, chief, Financial Management Staff, BEMT, "For far-reaching accomplishments in financial policy and planning in support of the health manpower programs of the National Institutes of Health."

Thomas D. Hatch, Acting Director, Division of Allied Health Manpower, BEMT, "In recognition of his leadership in the development of a national program supporting education and training in the allied health professions."

David F. Kefauver, formerly as-

sociate director for Extramural Programs, NLM, "In recognition of his record in the broad field of biomedical communications, and for the leadership and program planning that he provided..."

Dr. Hilton B. Levy, head, Molecular Virology Section, Laboratory of Viral Diseases, NIAID, "For research on the biochemical mechanisms of interferon and demonstration of the anti-tumor effect of an interferon inducer, Poly I. Poly C, in tumor-bearing animals."

John C. McDougall, associate director for Program Services, NICHD, "For his contributions to the field of public health administration and for providing services of signal quality to the scientific programs of the National Institute of Child Health and Human Development."

#### Original Research Noted

Dr. Donald L. Morton, head, Tumor Immunology Section, Surgery Branch, NCI, "For his original research in the field of immunology of animal and human neoplasms."

Dr. Robert L. Ringler, deputy director, NHLI, "For his imaginative dynamic leadership in developing the Institute's program project granting mechanism and in implementing the NHLI's reorganization to emphasize programmatic interest and strengthen program planning and evaluation."

Dr. Griff Terry Ross, head, Endocrinology Service, and assistant chief, Endocrinology Branch, NCI, "For his pioneering studies of pituitary hormones and the clinical applications of these studies to the treatment of diseases of man."

Peyton Stapp, associate director for Analysis and Statistics, DRG, "In recognition of his major contributions to the development and operation of an effective system for the management of extramural data for the National Institutes of Health."

Dr. Thomas A. Waldmann, head, Immunophysiology Section, Metabolism Branch, NCI, "For his contribution to our knowledge of erythropoiesis and immunology."

Dr. George Weiss, chief, Physical Sciences Laboratory, DCRT, "For his leadership and acumen in developing, inspiring, and guiding the Physical Sciences Laboratory, DCRT, and in recognition of his prolific talents in applied mathematics."

Margaret D. West, formerly chief, Manpower Resources Staff, BEMT, "For her significant and continuing accomplishments in research and analysis related to the nation's health manpower supply and needs."

Dr. Marjorie P. Wilson, assistant director for Program Planning and Evaluation, OD, "In recognition of her important contributions to the mission of the National Institutes of Health in the areas of policy development, program design, institutional relations, and organiza-

tional planning."

The Meritorious Service Medal, presented to Commissioned Officers in recognition of a single, particularly important achievement, a career notable for accomplishment in technical or professional fields or unusually high quality and initiative in leadership, was awarded to the following officers:

Dr. Samuel Baron, head, Cellular Virology Section, Laboratory of Viral Diseases, NIAID, "In recognition of his contributions to the knowledge of interferon, his leadership in interferon research, and his initiation of a scientific information exchange program."

#### **Achievements Cited**

Dr. Frederic C. Bartter, chief, Endocrinology Branch, Intramural Research, NHLI, "For his significant achievements in medical research over a broad area and most specifically for discovery of the syndrome of juxtaglomerular hyperplasia."

Dr. Robert L. Bowman, chief, Laboratory of Technical Development, NHLI, "In recognition of his development of the spectrophotofluorometer which has revolutionized certain aspects of analytical chemistry, and of his continuing creative leadership of a unique combination of talents in the application of engineering to biomedical research that is regarded as a national resource."

Dr. Willard H. Eyestone, chief, Animal Resources Branch, BEMT,

(Continued on Page 5)



Dr. Burton



Mr. Fretts



Dr. Gajdusek



Dr. Gelboin



Dr. Gibbs

### Superior Service Honor Awards



Dr. Hadlow



Mr. Hambleton



Mr. Hatch



Mr. Kefauver



Dr. Levy



Mr. McDougall



Dr. Morton



Dr. Ringler



Dr. Ross



Mr. Stapp



Dr. Waldmann



Dr. Weiss



Mrs. West



Dr. Wilson

#### Meritorious Service Medals



Dr. Baron



Dr. Bartter



Dr. Bowman



Dr. Eyestone



Dr. Fahey





Dr. Frankel



Dr. Weisburger



Dr. Zinn



Dr. Kayhoe

(Continued from Page 4)

"In recognition of his contributions to national programs for primate research and leadership in animal resource projects in the NIH intramural and extramural activities."

Dr. John L. Fahey, chief, Immunology Branch, General Laboratories and Clinics, NCI, "For devising therapeutic procedures to alleviate the effect of diseases of protein synthesis and his leadership of large NCI programs to explore the relationship of the immune system to cancer in man."

Dr. John M. Frankel, dental director, Division of Dental Health. BEMT, "In recognition of his superior service to the public in furthering the cause of dental health in the United States and for his valuable assistance in support of progress of dental health in other countries."

#### Helps Check Cholera Epidemic

Dr. Robert S. Gordon, Jr., clinical director, NIAMD, "For his contributions to the understanding of the physiologic role of free fatty acids in the blood, for his services in helping to check a cholera epidemic in Pakistan, and for demonstrating outstanding leadership in clinical research administration."

#### Navy Band to Give Concert July 14 at CC East Patio

The United States Navy Band will present a concert for Clinical Center patients on Tuesday, July 14, at 7:30 p.m. on the patio east of the Jack Masur Auditorium, CC.

In case of rain, the concert will be held in the auditorium.

NIH employees, their families and friends, are invited, but patients will have priority in seating.

Dr. Donald E. Kayhoe, chief, Transplantation Immunology Branch, Collaborative Research Program, NIAID, "In recognition of his outstanding contributions in mobilizing and directing a collaborative research effort in the field of tranpslantation immunology."

#### Honored for Virology Research

Dr. Wallace P. Rowe, chief, Laboratory of Viral Diseases, NIAID, "For his distinguished research in virology including the discovery of the adenoviruses and cytomegaloviruses, characterization of the adenovirus-SV40 hybrid phenomenon and the defectiveness of mouse sarcoma viruses."

Dr. Herbert Tabor, chief, Laboratory of Biochemical Pharmacology, NIAMD, "In recognition of his studies of the metabolism of histidine which have been of fundamental importance in showing how this amino acid is metabolized in the animal and bacterial cell and for extensive information which he has contributed through studies of histamine and poly-amines."

#### Cancer Studies Noted

Dr. John H. Weisburger, head, Carcinogen Screening Section, Experimental Pathology Branch, NCI, "For his extensive research achievements in the study of metabolic pathways for chemical carcinogens and of biochemical mechanisms in carcinogenesis and for his dedicated efforts in identifying and defining environmental cancer hazards as a basis for cancer prevention."

Dr. Raymond D. Zinn, formerly chief, Laboratory Aids Branch, DRS, "For his meritorious service in the conception and successful development of the NIH's unique Canine Blood Donor Colony."

Forty - year length - of - service awards were presented to four NIH employees, two of whom have re-

### D. C. Health Department To Sponsor Free Tests

The D.C. Department of Public Health is sponsoring free health tests for anyone over 21 years of age at the Health Screening Clinic on the grounds of D.C. General Hospital.

They will be given in Area C, Room E-118, Old Psychiatry Build-

Examinations include tests for glaucoma, anemia, hearing, heart disease, diabetes, and TB and other chest diseases.

For an appointment call 626-

#### AFGE Local Announces **Annual Election Winners**

Local 2419 AFGE recently held its annual election of officers at a regular monthly meeting.

Those elected are: Rennie C. Vest, president; Lawrence E. Ingberg, first vice-president; Harry W. Womack, second vice-president; Harvey J. Bullock, third vice-president; Helen T. Reeves, secretary-treasurer, and Herbert D. Jackson, chief steward.

Employees are invited to attend meetings held on the fourth Wednesday of each month in Bldg. 31 at 5:30 p.m. Officers may be contacted for the exact location.

tired: Jordan Bryan, formerly with the Office of the Director, and Alice M. Laskey, who worked with the Division of Research Grants.

Thomas H. Loy, in the Office of Financial Management, Office of the Director, and Dr. Dean Burk, in the Laboratory of Biochemistry, National Cancer Institute, are still on duty here.

### Dr. Campbell to Direct **DDH Dental Manpower Development Center**

Dr. Edward Campbell, Division of Dental Health, BEMT, has been appointed Director of the Division's Dental Manpower Center in Louisville, Ky.

Dr. Campbell will direct a training program to expand the functions of dental assistants.

Under his leadership, the Centers activities will shift from experimental studies and research on the productivity of dentists to training members of the dental professionfaculties of the schools of dentistry and dental assistants, administrators of clinics and health directors -in the use of auxiliaries whose functions have been increased.

#### Training Begins Next Fall

Training in application of new concepts in group practice, public clinics, and neighborhood health centers will begin in the fall for selected groups.

Dr. Campbell is a graduate of the University of Tennessee School of Dentistry. He also holds a Master's Degree in Public Health from the University of North Carolina.

He entered the Public Health Service in 1955 and has had assign-



Dr. Campbell heads a program which will assist members of the dental profession to increase use of auxiliaries.

ments with DDH as regional dental consultant, HEW Region IV, Atlanta, Ga., and as chief of the Community Programs Branch.

In August 1969, Dr. Campbell was appointed special assistant for Manpower Development at the Manpower Development Center, serving in that capacity until his present appointment as Director.

#### Is ABPH Diplomate

Dr. Campbell is a Diplomate of the American Board of Public Health, a member of the American Dental Association and the American Association of Public Health Dentists, and immediate past president of the Southern Branch of the American Public Health Association.

#### DR. BRODIE

(Continued from Page 1)

a number of chemically "inert" compounds that are relatively specific in producing liver and kidney necrosis do so through formation of alkylating agents that destroy the very cells which form them.

The Golden Plate Award of the American Academy of Achievement was presented to Dr. Brodie during the ninth annual Salute to Excellence weekend June 25-27 in Dallas.

Dedicated to the inspiration of youth, the academy honored 50 leaders in the sciences, education, finance, politics, and the arts in "a salute to all men who give their best efforts to their daily tasks."

#### Students Honored

Also honored were some 200 honor students from high schools across the nation who participated in seminars and discussion groups with the national leaders.

The Oscar B. Hunter Memorial Award was presented to Dr. Brodie by the American Therapeutic Society June 20 in Chicago for his "outstanding achievement in experimental therapeutics."

He is the first non-M.D. honored with this award since it was established 15 years ago. At the presentation of the award, Dr. Brodie delivered a paper on "Biochemical Mechanisms of Drug Toxicity."

For "a lasting contribution to the health and welfare of mankind" and for his "inspiring and fruitful influence on students and colleagues," Dr. Brodie was given an Honorary Doctor of Science Degree from the New York Medical College at Com-



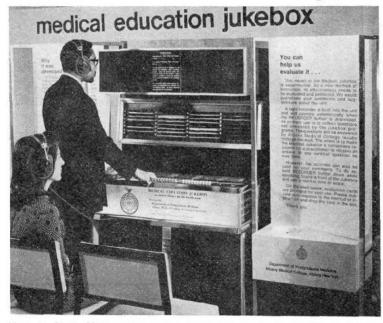
Dr. Brodie, in recent drug studies, has been concentrating on the way in which nerve impulses are transmitted in the central nervous system.

mencement Exercises on June 2.

Dr. Brodie's early work at NIH involved the application of chemistry to pharmacology especially in the study of the interaction of drugs with the bodies that ingest them.

Through these studies he learned that proper drug dosage depends upon the level a drug must reach in the blood if it is to be effective since different species of animals,

## Capable Medical Education Jukebox at NLM Instructs and Illustrates Programs



Mary B. Clark, NLM acting section head and James A. Keeling, Reference Library technician, show how to operate the somewhat formidable looking machine. Instructions are posted on the right, and reasons for the machine's development are explained on the left.

The pushbutton age has come up with a medical education jukebox that instructs, records questions, collects suggestions and illustrates medical programs.

including man, may have widely varying responses to the same drug because they break it down at different rates.

He showed that data such as weight and size can be useless in determining dosage if an investigator ignores the fact that the metabolic rates of two species may vary greatly.

#### Finding Aids Women, Newborns

In 1958 Dr. Brodie and his associates made a discovery of great practical value in prescribing drugs to pregnant women and newborn infants when they found that mammals do not acquire drug-destroying enzyme systems until sometime after birth.

More recently, Dr. Brodie's drug studies have concentrated on the way in which nerve impulses are transmitted in the central nervous system. His studies have shown almost unequivocally that nerve impulses in the central nervous system are transmitted from cell to cell through neurohumoral transmitters, including neurohormones, dopamine, norepinephrine and serotonin

This research suggests to Dr. Brodie that the causes of mental illness may be due to faults in this complex biochemical nerve transmission system.

Dr. Brodie is a graduate of McGill University and New York The jukebox has been installed in the Reading Room of the National Library of Medicine.

It was developed in the Department of Postgraduate Medicine, Albany Medical College, under the direction of Dr. Frank M. Woolsey. Funds from NLM's Extramural Programs were used to support the production of the machine.

There are over 60 programs on medical subjects that may be selected via a pushbutton. Many of the programs are illustrated by synchronized slide transparencies projected on a screen that is part of the unit. No program lasts longer than 6 minutes.

#### Suggestions Collected

A built-in recorder collects suggestions for future programs and evaluations of present programs. Medical questions are also recorded and later answered through the mail by the faculty of Albany Medical College.

The medical education jukeboxes will be used in Community Hospital Learning Centers.

These centers, developed by the Albany Regional Medical Program in New York State, disseminate medical knowledge and provide continuing education for members of health teams.

University Medical School. Before coming to NIH in 1950, he was a teacher and researcher at New York University.

#### YOUTHS

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The supervisors, all of whom are volunteers, submitted for consideration training profiles of duties, special programs, and marketable job skills. Because the aim of the project is to expose the participants to a profession, those jobs which did not offer developmental opportunities were eliminated from the program.

Seven young people, acting as the Youth Staff, assist with management duties and counseling. They visit supervisors and aids on the job to help cope with problems such as communications, transportation, lost checks, and schedules.

"One of the values of this," Mrs. Singer explained, "is that kids relate better to people their own age."

FSEPY participants are also given an option to take supplemental courses while at NIH. If interested, they may spend up to 4 hours a week in class.

Taught primarily by NIH staff members, the courses range from job skills and tutorial programs to social problems and special interest fields.

Legal Rights, How to Take Tests, Contemporary Community Health Issues, Poetry, Office Procedures, and Journalism are a few of the 20 courses offered.

"Most participants have a positive reaction to the classes," the Associate Coordinator reported. "It is the first time many of them are



Youth Aids in one group intently discuss their summer plans.

challenged in a class room situation," Mrs. Singer said.

Classes began the week of July 6, and about 300 of the teens are taking part.

At the end of the summer, an awards program will recognize participants for outstanding service. Cash benefits and certificates of merit will be awarded.

Analyzing the long-term effects of the project, Mrs. Singer labeled it a success. She cited aids who return for consecutive summers, those who are encouraged to return to school, and ones who find a life profession through their training.

"In the Inner City young people are limited in scope of what they can achieve, not in their abilities," she said. "NIH offers them an opportunity to realize their capabilities."

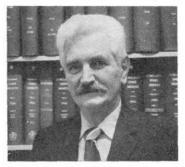
### Dr. Weisskopf Retires From NLM But Plans Return for Research

The young man who received his medical degree at the Masaryk University in Czechoslovakia in 1929 probably never thought that one day he would be retiring from the National Library of Medicine as a Medical Director in Public Health Service of the U.S.

Dr. Josef Jordan Weisskopf has been a Medical Literature Analyst at NLM since 1965. Along with his medical expertise, his knowledge of languages enabled him to index articles in Slavic, German, Czech, and Slovak journals.

He faced mandatory retirement in 1968 at age 64, but was twice granted a one-year extension.

From 1929 to 1932 Dr. Weisskopf was assistant professor for Social Medicine on the medical faculty of Masaryk University. For 6 years,



Dr. Weisskopf's varied medical experience helped to make his services at NLM so invaluable his mandatory retirement was twice extended.

until 1938, he was in private general practice and was an ambulatory physician for the Tuberculosis Clinic in Brno.

After his arrival in this country in 1939, he was tutor and college physician at St. John's College in Annapolis, Md.

Later he served as medical and information officer in the Czecho-slovakian Embassy in Washington, D.C., and from 1945 to 1948 worked with the United Relief and Rehabilitation Administration.

Since 1948 he has been with the PHS, including service with the Division of Foreign Quarantine in Boston and in New York.

Dr. Weisskopf was dubbed a "gentle" gentleman at his recent farewell luncheon. More than 50 friends and co-workers attended the luncheon to honor the genial linguist and Mrs. Weisskopf. They have two children and six grand-children.

Now that he has retired, officially, Dr. Weisskopf admits that his 5 years at NLM have sparked in him a special desire to do medical research at the Library. He may have retired, but now he will be busier than ever.

#### DR. BAKER

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For 2 years he served as assistant to the NIH Associate Director for Intramural Research, returning to NCI in 1958 as assistant director. From 1960 to 1961 he also served as acting scientific director of the Cancer Institute.

In 1961 Dr. Baker was appointed NCI associate director for Program, and was named scientific director for Etiology in 1967.

#### Served on Cancer Journal

During his career Dr. Baker has also been an associate editor of the Journal of the National Cancer Institute; secretary of the Division of Biological Chemistry, American Chemical Society; a member of the National Research Council Subcommittee on Amino Acids, Committee on Biological Chemistry, Division of Chemistry and Chemical Technology, and Councillor of the American Chemical Society.

He is Director-at-Large and until recently was a member of the Advisory Committee on Institutional Research Grants of the American Cancer Society; and a member of the Editorial Advisory Board of the journal Cancer.

Dr. Baker is a member of the American Society of Biological Chemists, American Association for Cancer Research, American Chemical Society (Division of Biological Chemistry), AMA, and Society for Experimental Biology and Medicine.

He has written a number of articles on cancer and biochemical research and on research planning and administration.

Dr. Baker holds the rank of Medical Director in the PHS Commissioned Corps.

### Dr. Ramming Receives Award for Research

Dr. Kenneth P. Ramming, who completed 3 years as a Clinical Associate here on June 30, recently received the Mead Johnson Excellence of Research Award.

The award, which includes \$500 and a plaque, was presented at the National Research Forum of the Student American Medical Association-University of Texas Medical Branch, in Galveston.

The honor was bestowed on Dr. Ramming because of his research on the transfer of tumor immunity with ribonucleic acid extracted from the lymphoid organs of specifically immunized animals.

Dr. Ramming's work on animal tumors while he was on the staff of the NCI Surgery Branch may lead to future applications in combatting tumor growth in humans by enhanching the body's immune defense mechanisms against tumor antigens.

He presented a paper on his re-

### Presterilized Disposable Envelope Kidney Proves Time-Saving, Economical in Trials

A disposable, presterilized, artificial kidney may soon replace types that take patients many hours to sterilize prior to use in home dialysis. The new "Envelope Kidney," which has already successfully passed ex-

tensive clinical trials, will make it possible to reduce blood-cleansing

The Envelope Kidney was devised by Dr. Yukihiko Nose and associates of the Cleveland Clinic Foundation with the aid of a contract from the Artificial Kidney Program of the National Institute of Arthritis and Metabolic Diseases.

It is essentially a sealed sandwich of Cuprophan PT-150 membranes (a special type of cellophane) supported externally by a fiber screen. Blood ports for attachment to the patient's circulation are included within each sealed package.

The new Envelope Kidney is designed for use with the conventional Kiil artificial kidney machine.

In dialysis, blood flows over a cellophane membrane and impurities pass from the blood through small pores in the membrane into a dialysis solution being circulated against the membrane by the apparatus.

Most patients require two to three treatments a week for periods of 6 to 14 hours; thus any preparation time saved becomes a great advantage.

Because the membranes of the Envelope Kidney are presterilized with ethylene oxide gas, the patient or his family no longer must begin assembly of the artificial



Dr. Henry M. Kissman, a former NHI employee, has been detailed from the Food and Drug Administration to head the Toxicology Information Program of the National Library of Medicine's Specialized Information Services.

search, "The Transfer of Tumor-Specific Immunity with Ribonucleic Acid," at the AMA annual meeting in Chicago on June 23.

Dr. Ramming is now a senior resident in General and Thoracic Surgery at Duke University Medical Center.



The "Envelope Kidney"—a presterilized sandwich of cellophane membranes developed through an NIAMD contract—is placed over the convenional Kill artificial kidney machine with which it is used. Prepackaged Envelope Kidney saves preparation time.

kidney 8 to 10 hours prior to dialysis to allow for sterilization with a strong-smelling formaldehyde solution.

With the new Envelope Kidney, assembly may begin only an hour prior to dialysis, and can be completed by one person alone. This is of significant value in facilitating dialysis in the home, a treatment method which is considerably less costly than extremely expensive hospital dialysis.

The cost of a pair of envelopes, presterilized and ready for use in a double layer Kiil artificial kidney is approximately \$6, as compared with \$17 for a prepackaged coil-type dialysis canister, the only other presterilized dialysis unit commercially available at the present time.

#### No Side Effects

Preliminary clinical results from trials of the Envelope Kidney—more than 200 dialyses with 14 patients—have been excellent, with no adverse reactions and with blood purification performance as good as or better than with standard cellophane membranes in the Kiil apparatus.

In the United States today an estimated 55,000 individuals die each year as a result of irreversible kidney failure. To many of these the artificial kidney is a permanent lifesaving treatment.

Kidney transplantation, too, depends for its success on the use of artificial kidneys. Transplant candidates must be maintained by dialysis until a suitable donor kidney can be found for them.

Dialysis also is used to support these patients postoperatively, and is essential for saving their lives if the transplanted kidney is eventually rejected by the body.

### Helmet Design That Allows For Rotation Of Head May Prevent Brain Injury

A helmeted motorcyclist, thrown from his bike, or a football player incurring violent impacts share a common hazard—brain injury.

This is because helmets, as presently designed, do not adequately pro-

tect the brain, according to Dr. Ayub K. Ommaya, associate neurosurgeon in the Surgical Neurology Branch, National Institute of Neurological Diseases and Stroke.

He made these comments during a recent meeting of the American Society of Mechanical Engineers in Washington, D. C.

Dr. Ommaya, who has been in charge of the Institute's Head Injury Program since its inception 6 years ago, was made an executive affiliate member of the Society.

#### Important Aspect Ignored

He is one of five medical doctors in the society's history invited to speak at its annual Biomechanics and Human Factors Symposium.

The design of motorcycle, football, and crash helmets, the padding of car interiors, and the design of car seats and head rests ignore an important aspect of brain injury—that of rotation of the head on the neck, he noted.

"All existing head protection standards set up by the American Standards Institute—on which design of helmets is based—center on the assumption that brain injury is related to linear forces," he said.

"They don't consider rotation of the head on the neck."

"We have found," he continued, "that rotation is actually more important than linear motion, and that the 'whiplash' type of head motions, if severe enough, can cause brain hemorrhages without the head being struck directly."

While existing helmets are good skull protectors, they do not pro-

#### Dr. Virginia J. Evans Reelected Vice President Of Tissue Culturn Ass'n

Dr. Virginia J. Evans, head of the Tissue Culture Section, National Cancer Institute, has been reelected vice-president of the Tissue Culture Association.

Dr. Evans was local committee chairman of the association's 21st annual meeting held June 15-18 in Washington, D.C.

Dr. Katherine Sanford, also of NCI, served as co-chairman.

The 175 papers presented by scientists, a number of whom were from NIH, covered such topics as viruses, hormones, oncology, and environmental biology in relation to tissue culture.

The Wilton Earle Award, established by the association in honor of the late head of NCI's Tissue Culture Section, will be given for the first time at next year's meeting to a graduate student presenting an outstanding paper.



Dr. Ommaya, a neurosurgeon, has been made an executive affiliate member of the American Society of Mechanical Engineers.

tect the brain. Although preventing skull bending or fracture, they cannot prevent subsequent head rotation caused by the blow, Dr. Ommaya added.

He presented a detailed summary of data collected in the Head Injury Program showing that severe brain damage could be produced in animals from rotation alone—such as in a whiplash situation.

#### Theory May Aid Design

His data also showed that wearing a stiff collar markedly reduces brain injuries resulting from a direct blow to the head by reducing resultant head rotation.

Adapting animal data to factors concerning man, Dr. Ommaya presented his theory for scaling from one to the other. He believes his theory can provide the basis for improved design of helmets and other brain protecting devices by engineers.

"Car head rests can actually be dangerous if not properly designed and positioned," he said. "Quite often such head rests only come up to a driver's or passenger's neck. They therefore fail to arrest head rotation and can cause trauma to the neck as well."

Inflatable air bags or collapsible seats which could absorb head and body motions after impact could help to alleviate rotation of the head and subsequent brain injury.

Stressing the importance of biomechanics as a tool for improved prevention, protection, and treatment of head and spinal cord injury, he emphasized its application to understanding the responses of the nervous system at the cellular level.

"In conjunction with physiopathology, it is providing us with a new

#### **MAGGOTS**

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into larvae, or maggots, which pupate and become adult flies.

During this metamorphosis dramatic transformations in structure and physiology occur, and Dr. Levenbook can examine these biochemical changes in tissue buildup and breakdown which may provide insight into changes in human metabolism.

Occasionally, and as a side-line to his scientific work with blowflies, he ships batches of sterilized maggets from his laboratory to hospitals for wound treatment.

When a physician at the Methodist Memorial Hospital, St. Joseph, Mo., called the Department of Agriculture to obtain maggots, he was referred to NIH and Dr. Levenbook, one of the few U. S. researchers who raises sterile blowfly maggots.

He sterilizes the eggs with sodium hypochlorite—the active ingredient in many commercial bleaches—and grows them on a sterile medium. Since humans have been known to contract lockjaw (tetanus) from maggot infestations, the maggots used in wound treatment must be sterile.

#### Healthy Tissue Not Attacked

It is the third-stage magget that is placed on the patient's gangrenous wounds. After 3 to 4 days they have thoroughly cleansed the bacteria-loaded wounds by ingesting bacteria and necrotic tissue. Healthy tissue is not attacked.

The larvae also aid in wound healing through excretion of a substance called allantoin, a compound

approach to nervous system response to injury—how shape and structure are altered by trauma.

"To accomplish this, we need closer collaboration between engineers and life scientists, and excellence in both fields," Dr. Ommaya said.

#### Senator Hill Sculpture Will Remain at NLM Until Center Is Ready

A sculptured head of Lister Hill, former United States Senator from Alabama, has been loaned to the National Library of Medicine by Mrs. Albert D. Lasker of New York City.

The sculpture by Robert Berks is in the Library's public catalog area, just off the main lobby.

Senator Hill was for many years a strong advocate of improved biomedical communications.

In a letter to Dr. Martin M. Cummings, NLM Director, Mrs. Lasker asked that the sculpture remain at the Library until the Lister Hill National Center for Biomedical Communications building is completed.

The new building is to be erected adjacent to NLM, according to present plans.

which promotes healthy tissue growth.

This method has also proved helpful in treating osteomyelitis, a bone inflammation caused by pusforming infectious organisms which have entered an open wound.

Since circulation is impaired in these patients, treatment with conventional oral and injected antibiotic drugs, which must be carried via the blood stream to the wound, is not always 100 percent successful. Maggot treatment skirts this obstacle through direct treatment of the wound.

The antibiotic regimen, sometimes a hardship for the seriously ill patient, is thus circumvented.

There are, however, barriers to wider use of this form of therapy. Maggots are impractical because they can never be stacked on the druggists' shelves.

Further, aesthetic reasons alone would deter most patients who might benefit most from their use. As a result, recurring new interest over the years in myiasis has not been long lasting.



CC practical nurses, at their recent annual conference on The Nursing Care of the Physically Dependent Patient, discussed trends in providing care to patients with various physical and mental disabilities. The Conference, which drew a large audience of professional and student visitors, included talks, demonstrations, slide presentations, and exhibits.