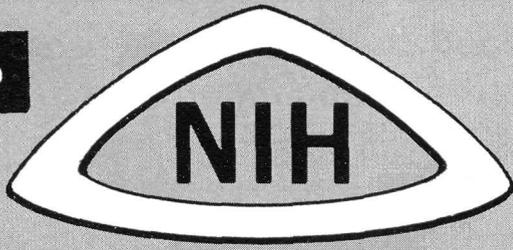


the



Record

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

March 3, 1970
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NATIONAL INSTITUTES OF HEALTH

NCI to Discuss Studies On Drug, Procarbazine, At Conference March 13

A conference to advise practicing physicians of research findings on procarbazine, Matulane (R), a new drug that has shown clinical activity against some forms of cancer, will be sponsored by the Chemotherapy Program of the National Cancer Institute starting at 9 a.m. on March 13.

Members of the medical community and the news media are invited to attend the meeting which will be held in the Jack Masur Auditorium, Clinical Center.

Procarbazine, which has demonstrated usefulness in advanced Hodgkin's disease, a cancer of the lymph system, was recently approved as a prescription drug by the Food and Drug Administration.

Originally called methyl hydrazine derivative or natulan, procarbazine is a close relative of a chemical developed for use as a rocket fuel. It is available commercially from Hoffman-LaRoche, Inc., Nutley, N.J. as Matulane (R).

Since 1963, procarbazine has un-

(See PROCARBAZINE, Page 3)

NIAMD Establishes Two New Sections Headed By Drs. Rodbell, Sober

The establishment of two new sections in the Laboratory of Nutrition and Endocrinology, National Institute of Arthritis and Metabolic Diseases, has been announced by Dr. G. Donald Whedon, NIAMD Director.

Named Section Chiefs

Dr. Martin Rodbell has been named chief of the Section on Membrane Regulation, and Dr. Herbert A. Sober was appointed chief of the Section on Developmental Biochemistry. Dr. Sober will also continue in his present position as chief of the laboratory.

Dr. Rodbell joined NIAMD in 1961. Previously, he has been with the National Heart and Lung Institute's Laboratory of Cellular Physiology and Metabolism.

During the last few years he has conducted insulin studies on the structure and function of the plas-

(See NIAMD SECTIONS, Page 4)

Games Adults Play With Babies May Give Scientists Clue to What Stimulates Mind

By Daniel G. Rice

Peek-a-boo, the age-old technique of adults for winning the friendship of babies, is being used by Dr. Albert Caron in the National Institute of Mental Health's Laboratory of Psychology to learn more about an infant's ability to discriminate and develop concepts about his environment.

Answers to a host of questions about the emerging minds of babies are being sought in a research project designed to discover the experiences most important to early intellectual development.

Learning Capacity Noted

Infants and young children, Dr. Caron points out, have a remarkable capacity for learning. Even under the random conditions of stimulation found in most homes, children are quick to grasp details of structured language and effective behavior patterns in the first few years of life.

The ability to speak and reason is not developed exclusively through the process of physical growth and maturation over time. Time, Dr. Caron notes, is merely an envelope in which critical experiences occur, and the ability to gain from new experience is dependent on past history.

Dr. Caron's hope is to discover which early experiences are most important in the formation of sub-

sequent intellectual capacities.

"When we know the critical antecedent experiences in their proper sequence, parents and others responsible for the care of children will presumably be able to arrange early learning more systematically, more efficiently, and with less frustration," according to Dr. Caron.

Just as the average child must crawl before he can walk, there are equally true but less understood parallels in growth of the capacity for intelligence. It is believed that environments can be improved to achieve the genetic intellectual potential of all children.

Babies participating in the present investigation will be studied in an apparatus designed and fabricated for Dr. Caron by the Institute's Section on Technical Development.

It has three major components: a head-turn sensing device, a chamber for delivering discrimination signals, and a chamber for delivering peek-a-boos.

The peek-a-boo chamber contains four face masks which may

(See GAMES, Page 4)

Dr. Lloyd Law to Give Annual Mider Lecture On Wednesday, March 11



Dr. Law will discuss the role of viral antigens in cancer control. The lecture will be given in the Jack Masur Auditorium, Clinical Center.

Dr. Lloyd W. Law, National Cancer Institute biologist, will present the 2nd Annual G. Burroughs Mider Lecture on March 11. Dr. Law was awarded the Lectureship for 1970 in recognition of his contributions to cancer research.

The Lecture will be given at 8:15 p.m. in the Jack Masur Auditorium, Clinical Center. Members of the scientific community and the press are invited to attend.

His address, "Tumor Antigens: Origins, Characteristics and Biologic Significance," will highlight the role and limitations of viral antigens in the control of cancer.

Dr. Law will report recent laboratory work on the use of these and other antigens to prevent and repress tumor growth.

Gives Reasons for Findings

He will also give possible reasons for these findings and their implications.

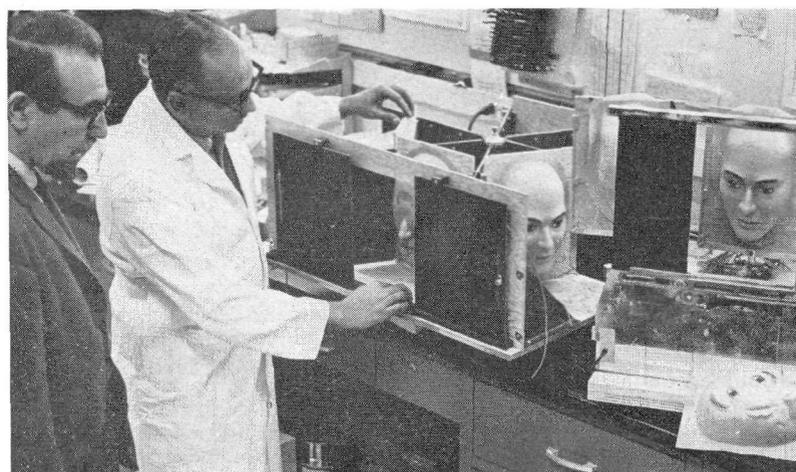
Dr. Law, head of the Carcinogenesis Section, Laboratory of Biology, has been with NCI since 1947.

He has received numerous honors in recognition of his work describing the biology, chemotherapy, and genetics of cancer.

His investigations into the role of the thymus in the induction of leukemia and related work, have made him a world authority on experimental leukemia.

Dr. Law's laboratory research on

(See DR. LAW, Page 4)



Dr. Albert Caron (left) of the Laboratory of Psychology, NIMH, conceived a technique for examining discriminatory and conceptual capacities of 3-month-old children through a peek-a-boo device. He is discussing problems in constructing the apparatus with Lawrence Sator, engineering technician of the Technical Development Section, NIMH-NINDS.

the NIH Record

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Thomas Boyd, Retired OES Architect, Dies

Thomas M. Boyd, an architect with the Office of Engineering Services until his retirement last October, died on Feb. 14 following surgery for a brain tumor.

Mr. Boyd, who had been with the Engineering Design Branch of OES, came to work at NIH in the Division of Research Services in January 1964.

He attended the Carnegie Institute of Technology, after which he opened an architectural office in Pittsburgh.

Mr. Boyd joined the Reconstruction Finance Corporation in 1943, and designed several airports in Brazil as part of an American aid program.

In 1946 he transferred to the Navy Department, serving as an architect in Puerto Rico. He moved to a naval weapons plant in Washington, D.C., in 1960.

Mr. Boyd was a member of the American Institute of Architects and the Washington Paint Technical Group.

He is survived by his wife, Sarah Bradley, of Rossmoor, Md., and a daughter, Mrs. George V. Kuck, of Woodbridge.

DDH Moves to Wiscon Building

The Division of Dental Health, BEMT, has moved from the Woodmont Building to the Wiscon Building, 7550 Wisconsin Ave., Bethesda.

Dr. Viron L. Diefenbach is DDH Director. His office is in Room 316, Ext. 61181.

The Information Office is in Room 3A-08, Ext. 61105.

NIH Television, Radio Program Schedule

Television

NIH REPORTS

March 8, 15

Preempted by NBC tax information programs

Radio

DISCUSSION: NIH

March 6

Dr. Ruth M. Davis, Director, Lister Hill National Center for Biomedical Communications, NLM

Subject: Function: Lister Hill Communication Network

March 13

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

Subject: Incidence of Epilepsy: Its History and Control

Interview takes place during intermission, Library of Congress Chamber Music Series.

Warm-Hearted Adults Needed for Tutoring

Volunteers are needed for tutoring elementary and junior high school students once a week, weekday evenings or Saturday mornings, for about an hour and a half each week.

Tutors are needed for both D.C. and Montgomery County children—there is room for volunteers who live in either location.

The children who require tutoring are having difficulty as a result

CC Blood Bank Invites Visitors to View Its Facilities on Donor Recognition Day

Twenty blood donors representing a cross section of NIH institutes and divisions will be honored on Blood Donor Recognition Day, Thursday, March 5, at 11:30 a.m. in the Clinical Center's Blood Bank, Bldg. 10A.

Also, guided tours of the Blood Bank Department will be conducted periodically from 11 a.m. to 2 p.m.

Dr. Thomas C. Chalmers, newly appointed NIH Associate Director for Clinical Care and Director of the Clinical Center, will present certificates to donors who have given a gallon or more of blood at the Clinical Center during the past 10 years. All NIH employees are invited to attend the ceremony and to meet members of the Blood Bank staff.

Donors Honored

Those to be honored include: Kirk Weaver and Dr. Micah I. Krichevsky, NIDR; Howard P. Drew, Jr., NLM; Howard M. Biggs, CPEHS; Dr. Robert C. Backus, DRG; Dr. David L. Aronson, DBS; Paul P. Becker, NCI; Dr. Lloyd Guth, Gene M. Bra-shears, and Dr. David L. Madden, NINDS; John Paul Jones, Carolyn B. Casper, Myron E. Thompson, Jr., Charles W. McKnight, Milford D. Myers, Jesse T. Sutton, Edmund E. Kaminski, Richard E. Koester, Albert W. Larkin, and Ernest J. Cheslosky, OD.

Theme of Blood Donor Recognition Day this year is LEARN ABOUT BLOOD POWER. Visitors will see some of the latest developments in blood banking techniques and blood research.

Demonstrations will include the new computerized retrieval system that enables quick access to names of eligible donors and specific blood types when needed in emergencies; automatic blood typing machine; an automated cell-washing apparatus, and some of the research tools now in use.

Questions Answered

Throughout the visiting period Blood Bank staff members will welcome questions from employees about the recently announced changes in the Blood Donor Reimbursement Program. Modifications in the cash payment plan were designed to provide increased benefits for every donor.

Employees may also learn more about all the other Blood Donor benefits available to them and mem-

bers of their families.

of boundary change transfers in D.C. and disparity of preparation in lower grades, or are handicapped by insufficient help at home.

The need is for non-specialists, simply warm-hearted adults, as well as science and math tutors for the older grades. The program includes both blacks and whites. Men are especially welcome.

If you can help once a week, please call Elizabeth Anderson, Ext. 64400.

bers of their families.

Dr. Paul J. Schmidt, chief of the Clinical Center's Blood Bank Department, expressed the hope that as many employees as possible would visit the bank this week. He promises "an interesting and enlightening experience that everyone will enjoy."

Three Blood Bank Donors Achieve Special Status

The Clinical Center Blood Bank reports that three donors achieved a special status. Dr. Richard B. Simpson, NIAMD, reached the 5-gallon mark.

Joining the Gallon Donor Club were Dorothea Dolan, NIMH, and Milton N. Gross, ODA.

Make an appointment to donate blood. Call Ext. 64508.

Versatile 1st Army Band To Give Concert at CC On Thursday, March 5

The First United States Army Band is presenting a concert for Clinical Center patients next Thursday, March 5, at 7:30 p.m. in the Jack Masur Auditorium.

The program has not been announced, but selections frequently range from pre-Bach masters to modern composers.

The versatile band is directed by Chief Warrant Officer Charles W. Woodman. It performs as a concert band, a marching band, an 18-piece stage band, or is often divided into combos for troop entertainment and official functions.

NIH employees, their families and friends are invited to attend. However, patients will have seating priority.



Chief Warrant Officer Charles W. Woodman will conduct the First United States Army Band here this Thursday.



Dr. Peter H. Bennett, appointed chief of the Epidemiology and Field Studies Branch, National Institute of Arthritis and Metabolic Diseases, will direct the Institute's research on environment and disease on selected populations. The branch's population studies include arthritis, diabetes, gastrointestinal disorders, and thyroid diseases.

Riccardo Malipiero Talks On Music and Society At CC on March 14

Riccardo Malipiero will speak on "Music as an Expression of Society" on Saturday, March 14, at 4 p.m. in the Jack Masur Auditorium, Clinical Center.

The lecture, which is open to the public, is sponsored by the Foundation for Advanced Education in the Sciences, Inc.

Mr. Malipiero, a distinguished composer and critic, is visiting the United States to attend the premier performance of his latest composition, a "Serenade for Alice Tully," in New York City.

Many of his compositions have premiered at international modern music festivals and at La Scala in Milan.

Mr. Malipiero has made several visits to the United States in connection with performances of his compositions, for lecture tours, and as a guest of the American Government.

'A Storm, a Strife' Film Portrays Effects Of Stress on Health

"A Storm, a Strife," a film portraying the effects of stress on a household where a mother is discovered to have Addison's Disease, is being presented by Employee Health Service in March.

The Health Education movie and accompanying hand-out literature clarify what stress is and how it can affect general health.

The recognition of the part stress plays in life may hold the key to better health and a longer, fuller life, according to the mental health

Dr. Pittman to Receive Federal Award, Cited for Pertussis Vaccine Research

Dr. Margaret Pittman, chief, Laboratory of Bacterial Products, Division of Biologics Standards, will receive one of the six 1970 Federal Woman's Awards tomorrow night (Wednesday, March 4) at a banquet at the Statler Hilton Hotel, Washington, D. C.

The winners were announced by Patricia Reilly Hitt, HEW Assistant Secretary of Health. She is Chairman of the Board of Trustees of the Federal Woman's Award.

Dr. Pittman was cited for her pioneering research in the development of sound principles of pertussis (whooping cough) vaccine standardization, and her studies on pertussis and other diseases including cholera, tetanus, and typhoid.

Authority on Pertussis

She is a world authority on pertussis, and has developed information relating to the standardization and control of pertussis vaccine, including surveillance of potency and toxicity—especially in the multiple antigen products such as diphtheria, pertussis and tetanus (DPT).

She has also conducted field studies of cholera vaccines in populations where the disease is endemic. She has served on the NIH Cholera Advisory Committee, and for 8 years was NIH project officer for the Pakistan-SEATO Cholera Research Laboratory in Dacca.

Dr. Pittman has participated in numerous World Health Organization Study Groups and served as WHO consultant for formulating international requirements for bacterial products, including pertussis, cholera, typhoid, and yellow fever vaccines, and tetanus and diphtheria toxoids.

She Remembers Father

Dr. Pittman became interested in medicine as a career at an early age. Her father was a physician in Arkansas and Dr. Pittman recalls that as children, she, her sister, and brother had gladly accepted the responsibility of helping in their father's office.

The brother and both sisters eventually entered into medical careers—Dr. Pittman as a medical bacteriologist, her sister as a nurse, and her brother as a surgeon.

Dr. Pittman graduated, magna cum laude, from Hendrix College, Conway, Ark. She received her M. S. and Ph.D. degrees from the University of Chicago.

In 1954, she was awarded an honorary Doctor of Laws degree film.

It will be shown at:

Jack Masur Auditorium, Clinical Center, Wednesday, March 11, at 11:30 a.m. and 12:15 p.m.

Westwood Building, Conference Room A, Thursday, March 12, 1:15 and 2 p.m.

by Hendrix College.

Her other honors include the DHEW Superior and Distinguished Service Awards, which she received in 1963 and 1967, respectively.

She is a Diplomate of the American Board of Microbiology. And is the only woman to serve as president of the Washington Academy of Sciences.

Dr. Pittman has encouraged and trained young people to follow science careers.

As president of the Washington Academy of Sciences, she was instrumental in establishing the Washington Joint Board on Science Education.

This board brings together area scientific and engineering societies for the promotion of science talent and education.

Dr. Pittman, the author of some



Dr. Pittman, who encourages young people to enter scientific fields, is the only woman to serve as president of the Washington Academy of Sciences.

70 scientific publications, has worked in biologics control research since 1928. At the time she worked for the Rockefeller Institute for Medical Research.

Her 34 years of Government service have been devoted to those studies in DBS and its antecedent organizations.

She is a member of twelve professional organizations including the American Academy of Microbiology, New York Academy of Sciences, and Sigma Delta Epsilon.

A devotee of horticulture, Dr. Pittman spends a few moments of each busy day to enjoy and care for her large collections of plants. Her African violet collection is her favorite.

She also enjoys observing and identifying trees by their scientific names that are within view of her many-windowed apartment which overlooks Rock Creek Park.

PROCARBAZINE

(Continued from Page 1)

dergone extensive tests in experimental animals and clinical evaluation both in the U.S. and abroad.

Results of many of the studies will be presented at the March 13 meeting, including those achieved with procarbazine used as a single agent, and in combination with other cancer drugs, in Hodgkin's disease and other forms of cancer.

300 Patients Evaluated

At present, more than 300 evaluable patients with Hodgkin's disease have been treated with procarbazine. Seventy percent have experienced some measurable improvement, and over 30 percent have achieved a complete disappearance of disease for significant periods of time.

This compares with the 56 to 68 percent objective response rate among patients treated with the standard agents against this disease.

In many of these beneficial instances, procarbazine was administered as treatment of last resort, after the patients had already become resistant to other drugs.

Among the combination chemotherapy studies to be reported will be a 4-drug treatment of advanced Hodgkin's disease developed by Dr. Vincent T. DeVita and colleagues at the NCI.

Disease-Free Period Noted

In that study, patients given procarbazine, vincristine, prednisone and an alkylating agent had approximately 4 times the rate of complete remission (total disappearance of all evidence of disease) usually achieved in this type of cancer. Moreover, the disease-free period averaged longer than 24 months.

In other studies, procarbazine has also been administered to small numbers of patients with reticulum cell sarcoma and lymphosarcoma, but appears less active against these cancers of the lymph system than against Hodgkin's disease.

It has demonstrated some usefulness in patients with malignant melanoma and multiple myeloma, and among small numbers of patients treated for embryonal cell carcinoma of the testis, cancer of the ovary, bladder cancer, and neuroblastoma.

Drug Use Cautioned

Like other cancer drugs, procarbazine may have serious toxic effects, especially to bone marrow, and should be used with caution, even by experienced investigators. However, its lack of cross resistance to other commonly used cancer drugs (alkylating agents, steroids, and vinca alkaloids) and to radiotherapy makes it an important addition to the cancer therapies now available.

GAMES

(Continued from Page 1)

be randomly presented to a baby for fixed intervals.

Two- to four-month-old infants will be taught to make a slight turn of the head to bring about the appearance of a peek-a-boo face above their cribs.

After mastering this contingency, babies will then learn to discriminate between different signals.

Head Turns at Signal

They will be taught to turn their heads to the *left* in the presence of one discrimination signal—such as a red light or a circle—in order to obtain the pleasing peek-a-boos, and to turn their heads *right* in the presence of a contrasting signal—a green light or a square—to obtain the peek-a-boos.

In this way, Dr. Caron will be able to teach infants to discriminate between colors and between



The small pouch placed on top of the baby's head contains an electromagnetic field in phase with that of the white cable shown at lower right. When the head is turned and the two fields no longer match, a signal is transmitted which activates the peek-a-boo device.

best way to train the child to discriminate the significant properties, events, and relationships of his world.

Dr. Caron wonders whether babies so tutored will be quicker to master new discriminations.

For example, once having learned that red and green signify different consequences, will they then learn the general rule that all features of the environment have signal value? Will such learning give them an advantage in confronting novel learning situations?

Glimpse Infant's World

Through these and similar experiments here and in other laboratories across the country there will be, for the first time, a definitive glimpse into the infant's perceptual and conceptual world.

Such insights will perhaps some day give rise to a new educational technology that will promote the intellectual development of future generations of children.



With mouth open and eyes fixed on the peek-a-boo face above him, the baby scans the image. The face disappears after 5 seconds, at which time the infant must make a head-turn to produce a new peek-a-boo.

shapes which they may not yet have mastered in their natural environment.

Through this process, moreover, it will be possible to determine the

DR. LAW

(Continued from Page 1)

the mechanisms of action of chemotherapeutic drugs has contributed to accepted techniques of combination drug therapy in human leukemia.

He has also made significant contributions to understanding the role of viruses and genetics in the induction of cancer.

Dr. Law received his Ph.D. in biology from Harvard University in 1937.

The G. Burroughs Mider Lectureship was established in 1968 by the Director of NIH to honor Dr. Mider for his distinguished service here, particularly as Director of NIH General Laboratories and Clinics.

The Lectureship is awarded annually to an NIH scientist who has made outstanding contributions to biomedical research at NIH.



President Nixon congratulates Dr. Robert J. Huebner, National Cancer Institute, after presenting the National Medal of Science to him on Feb. 16 in White House ceremonies. Dr. Huebner, chief of the Institute's Viral Carcinogenesis Branch, was cited for his "contribution to the modern understanding of the biology of viruses and their role in the induction of diverse diseases." Others honored for their work in science and engineering may be seen in the background.—White House Photo.

Dr. Thelma Dunn Retires; to Collaborate On Establishing Animal Tumor Collection

Dr. Thelma B. Dunn, one of the Nation's most distinguished experimental pathologists, retired last week as head of the Cancer Induction and Pathogenesis Section in the NCI Laboratory of Pathology.

She first came to the National Cancer Institute in 1942 as a Research Fellow, and joined the staff as a pathologist in 1947.

Much of Dr. Dunn's career has been devoted to the characterization of both cancerous and non-cancerous diseases of mice. She has studied the pathology of tumors induced in mice by viruses, spontaneously occurring tumors in wild mice, and various metabolic deficiencies in mice.

A graduate of Cornell University (named to Phi Beta Kappa), Dr. Dunn received her M.D. degree in 1926 from the Medical School of the University of Virginia. While there she was elected to Alpha Omega Alpha medical honor society.

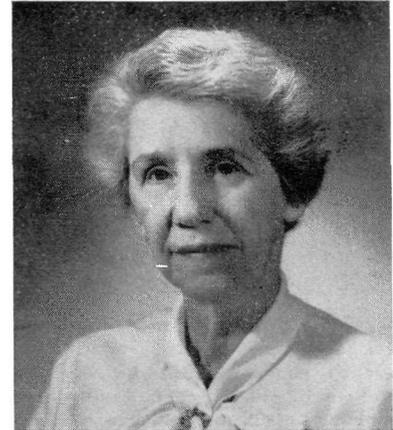
Background Given

Before coming to NCI, she held several positions at the University of Virginia between 1927 and 1930.

From 1936 to 1942 she was a research assistant in pathology at the George Washington University School of Medicine.

Dr. Dunn received the DHEW Distinguished Service Award in 1962.

She represented the NCI at the Centenary Celebration of the Chair of Morbid Anatomy of the University of Perugia, Italy, in 1961. During ceremonies dedicating an annex to the Institute for Cancer Research at the University, her name was engraved on a marble plaque in recognition of her outstanding



Dr. Dunn's classifications of breast cancer and cancer of the blood-forming tissues in mice are used as standards of reference by investigators

work on breast cancer in mice.

Other honors include the Federal Woman's Award in 1962, and the honorary degree of Doctor of Medical Science from the Women's Medical College of Pennsylvania.

She was President of the American Association for Cancer Research, 1961-62, and of the Washington Society of Pathologists, 1959-60. In 1958 she was a member of a delegation of six American women physicians who visited research institutions and hospitals in the Soviet Union.

Vacations in Blue Ridge

A favorite hobby is the study of nature—for many years she and her physician husband have vacationed in the Blue Ridge mountains each October, hiking and studying wildlife. Eventually she plans to spend much of her time on a farm in the Virginia hills.

In the meantime, she will continue to collaborate as a consultant with Dr. Harold L. Stewart, recently retired from his posts as chief, Pathologic Anatomy Branch, and chief, Laboratory of Pathology at NCI. They plan to establish an organized collection of animal tumors that will serve as a standard of reference.

NIAMD SECTIONS

(Continued from Page 1)

ma membrane.

Dr. Sober was formerly chief of the Laboratory of Biochemistry, National Cancer Institute, where he specialized in isolating protein molecules. In 1968 he was named head of the NIAMD Laboratory.

His new section will perform molecular research involved in cellular development, division and differentiation.