the NIH Record

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

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NATIONAL INSTITUTES OF HEALTH

Mgmt. Intern Program Is Accepting Applications From Qualified NIH'ers

Applications are being accepted for the 1974-1975 NIH Management Intern Program. This program is designed to help employees qualify for administrative positions which may lead to upper level management appointments.

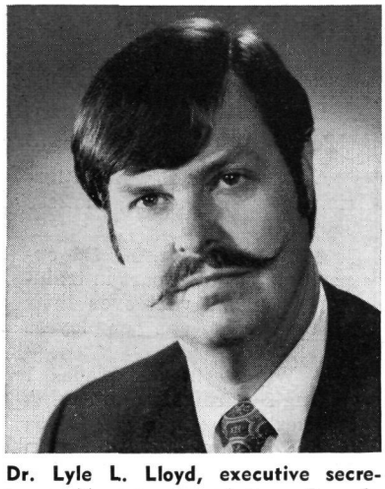
Those selected are given 12 months of on-the-job training in one of the administrative specialties, such as contracts or finance.

Requirements Noted

Interns are encouraged to take part in the college or graduate level education and training courses, and management seminars. Graduates who have successfully completed the program are eligible for permanent assignments at GS 9 and GS 11 levels.

In order to apply, NIH employees must have a full-time permanent position with the following

(See INTERN, Page 4)



Dr. Lyle L. Lloyd, executive secretary, Mental Retardation Branch, NICHD, was recently named a Fellow of the American Speech and Hearing Association. ASHA awards the fellowship to outstanding speech pathologists and audiologists who are active in the profession for at least 5 years and who have made significant contributions in at least three of the following areas: clinical service, academic teaching, research, administrative services, and service to ASHA, to regional organizations, or to state associations.

NIH Scientists to Speak And Moderate Sessions At Annual PHS Meeting

Many NIH scientists will appear as speakers and moderators at the Ninth Annual Meeting of the U.S. Public Health Service Professional Associations, to be held April 8-11 at the Washington Hilton.

Dr. Charles Edwards, HEW Assistant Secretary for Health, will address the opening luncheon on April 9, and Mark Russell, political satirist, will be the banquet speaker on the following evening.

Dr. Theodore Cooper, Director, National Heart and Lung Institute, will deliver the annual Luther Terry lecture on High Blood Pressure: Obstacles and Opportunities for Control, at an afternoon session on Hypertension, on April 10. The moderator will be Dr. Jerome C. Green, NHLI.

In a morning session on that date, Dr. R. W. Lamont-Havers, deputy director, National Institute of Arthritis, Metabolism, and Digestive Diseases, will be the moderator for discussions on the Ethics of Studies in Human Subjects.

Other NIH participants include Dr. Robert N. Hoover, NCI; Drs. Peter H. Wiernik and Michael D. Walker, Baltimore Cancer Research Center; Dr. Harvey J. Alter, chief, Immunology Section, CC Blood Bank, and Vernice Ferguson, chief, Nursing Service, CC.

Nearly 300 scientific papers will be presented on all the major disciplines, including medicine, surgery, dentistry, pharmacy, nursing, psychiatry, pediatrics, public health, ophthalmology, physical therapy, dermatology, and environmental health.

There will also be an art and photography exhibit by members.

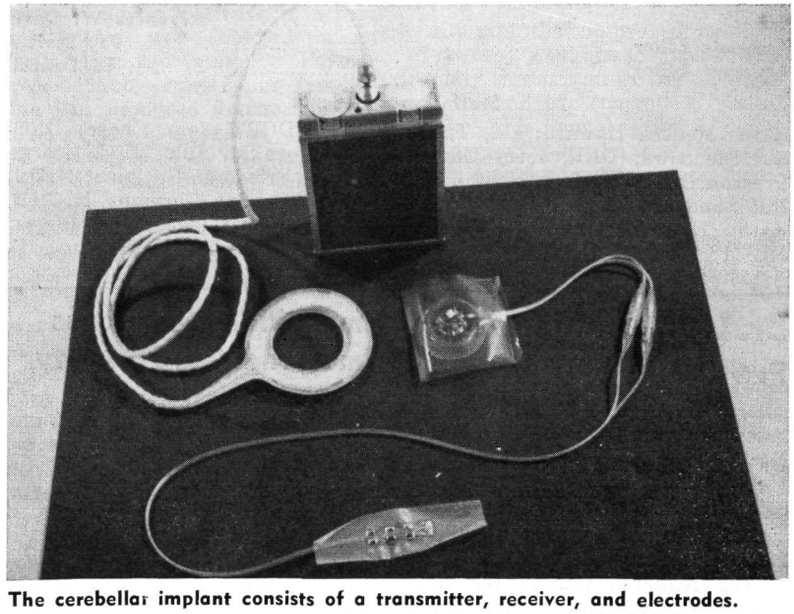
For further information, call William Lucca, USPHS Commissioned Officers Association, (202) 298-8680.

Next Time, Be Wary When Your Fingers Do the Walking

A recent survey conducted in Washington, D.C. has revealed that 10 percent of all names listed in the *Yellow Pages* list of M.D.'s are *not* licensed medical doctors.

Medical World News reports that the telephone company has now agreed to screen all applicants for M.D. *Yellow Pages* listings.

Spinal Cord Injury Patients May Regain Vital Functions With Implanted Devices



The cerebellar implant consists of a transmitter, receiver, and electrodes.

By Carolyn Holstein

Spinal cord-injured patients participating in research studies have shown that they can regain the functions of breathing, urinating and grasping objects by using implanted devices which electrically stimulate appropriate nerves. Scientists predict that these techniques may soon be ready for widespread clinical use.

Electrical stimulation through electrodes implanted in the brain's cerebellum is also under study to prevent epileptic attacks which are not adequately controlled by anticonvulsant drugs.

But scientists are less optimistic about successfully using electrical stimulation by implantable aids for the deaf and the blind.

These facts were discussed at a 2-day Neural Prosthesis Workshop held here recently by the Laboratory of Neural Control, National Institute of Neurological Diseases and Stroke. The laboratory is headed by Dr. Karl Frank.

The device to restore breathing is already in clinical use. Its developer, Dr. William Glenn, Yale University Medical School, said it has freed 25 patients from using a mechanical respirator—some for more than 4 years—by electrically stimulating the phrenic nerves.

These two nerves contract the diaphragm to begin each breath. The electrodes, which are implanted around the phrenic nerves, were developed by Avery Laboratories of Farmingdale, N.Y.

Device Being Perfected

A device to produce bladder evacuation in spinal cord patients is not yet ready for widespread clinical use. When it is perfected it may eliminate the sometimes fatal problem of infection which often occurs in patients using a catheter.

(See SPINAL CORD, Page 4)

Dr. John B. Moloney Receives G.W.U. Achievement Award

Dr. John B. Moloney was one of four George Washington University alumni who received achievement awards at recent ceremonies held at the DAR Constitution Hall.

Dr. Moloney is associate director for Viral Oncology in the National Cancer Institute.

His discovery of the mouse leukemia virus, now known as the "Moloney virus," was an important link in the chain of evidence demonstrating that certain animal cancers are caused by viruses.

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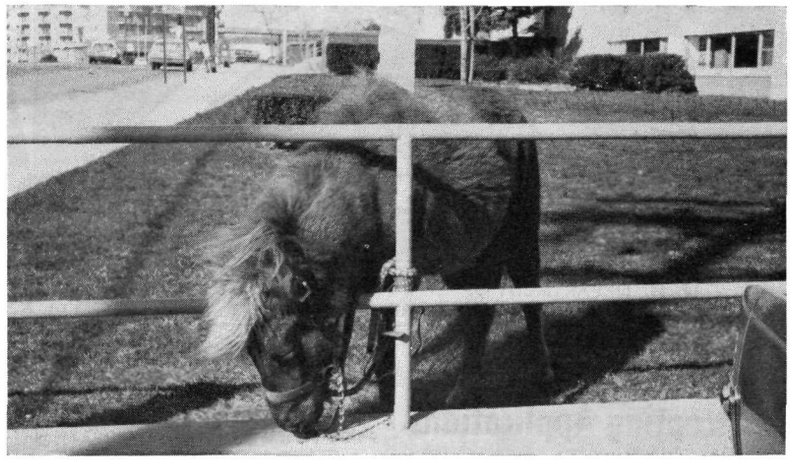


FUEL SHORTAGE woes! Has a Westwooder switched from horsepower to pony-power in the fight against the gas crunch?

Dr. L. F. Remmert Dies; Prog. Dir., NIAMDD

Dr. LeMar F. Remmert, 58, Diabetes Program director for the National Institute of Arthritis, Metabolism, and Digestive Diseases, died March 13 at his home.

Dr. Remmert came to NIH in 1966 as a scientist administrator in the National Cancer Institute where he served as program director of the Tumor Host Relation Section.

Administers Grants

Two years later, he joined NIAMDD's Extramural Programs to administer grants in diabetes and such related areas as lipid and carbohydrate metabolism.

A native of Neillville, Wis., Dr. Remmert attended schools in Iowa and North Carolina, and received his M.S. degree from Oregon State University.

He earned his Ph.D. in physiological chemistry in 1948 from the University of Wisconsin, Madison.

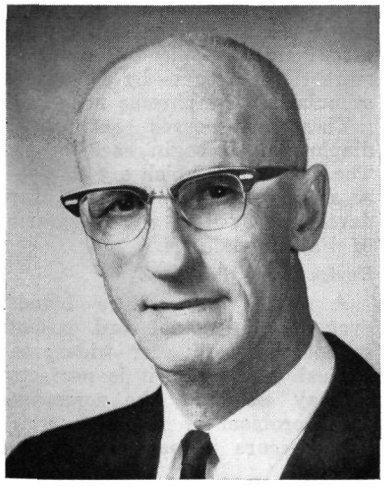
Dr. Remmert taught and performed research in agricultural chemistry at Oregon State and was the author of more than 30 papers in his field.

During World War II he was a member of the Food and Nutrition Corps of the U.S. Army and served in the Pacific Theater as a major.

Dr. Remmert was a member of several organizations including the American Society of Biological Chemists, American Chemical Society, and the American Association for the Advancement of Science.

He is survived by his wife, Artise, two sons, David and William, of the home, 12028 Coldstream Drive, Potomac, Md., and a daughter, Mrs. Glenn Urquhart of McLean, Va.

Memorial services were held at Saint Mark United Presbyterian Church, 10701 Old Georgetown Road, on March 16.



Dr. LeMar F. Remmert

Emma Plank to Discuss Emotional Care Priority

Emma Plank, author of *Working with Children in Hospitals*, will discuss Emotional Care as a Priority: Approach to Implementation, on Thursday, April 11, at 9 a.m. in the Masur Auditorium.

CC Sponsors Lecture

The lecture is being sponsored by the Clinical Center Nursing and Social Work Departments.

Ms. Plank is professor emeritus at Case Western Reserve University and consultant to the Child Life and Education Programs at the Cleveland Metropolitan General Hospital.

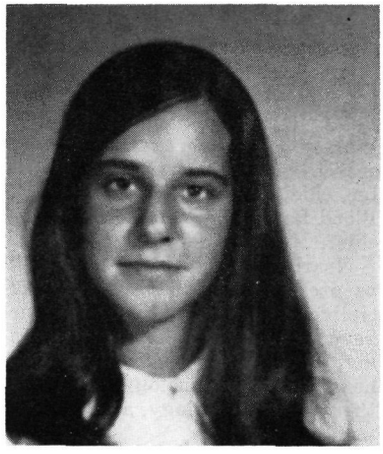
Medical Explorers Group To Visit NIH Next Week

Next Wednesday afternoon (April 3), 225 members of the National Association of Medical Explorers will visit NIH.

Following a general session held in the Masur Auditorium, the Explorers will divide into eight interest-group workshops on such areas as population research, hypertension, and veterinary research.

The Medical Explorers program is sponsored by the Boy Scouts of America. More than one-third of the participants are girls.

Most of the Explorers are students in junior colleges and universities, and all plan to pursue health-related careers.



Julia Ford, Vanderbilt U. freshman, is presiding officer of the National Association of Medical Explorers.

Concert Features a Contralto In Music by Britten and Berlioz

Maureen Forrester, contralto, will perform in the final concert of the 1973-74 Chamber Music Series sponsored by the Foundation for Advanced Education in the Sciences on Sunday, March 31, at 4 p.m. in the Masur Auditorium.

The program will include music by Hadyn, Schumann, Britten, and Berlioz. Admission is by ticket only.

Drivers Should Register New D.C. License Tags

By April 1 some 3,000 employees residing in the District of Columbia will be getting new license plates with distinctive colors commemorating the U.S. bicentennial.

All NIH drivers who live in D.C. should register these licenses with the Parking Office as soon as the tags are on their cars so that the office can aid owners by notifying them when vehicles' lights are left on, gas is leaking, accidents occur, etc.

Employees can register their cars in Bldg. 31, Room B1C15.

Soon after April 1, forms will be obtainable from timekeepers for registering tags. These forms, which may be mailed in, will enable those who have not done so to report their new numbers.

After a reasonable time, NIH police officers will begin checking permits with tag numbers.

For information call Ext. 65050.

Federal Women's Program

A study of NIH women participating in training courses shows that:

- Women are using the opportunity to take part in training programs well over their representation as employees here.
- Women in GS grades 1 through 4 are active in taking courses.
- The number of women in higher grades — GS 13-15 — participating in these programs has greatly increased.
- Technical courses are selected over scientific subjects.

Despite these facts, in the past year the total participation of men and women in training courses has declined; the number of women has decreased eight times that of men.

Copies of the NIH Federal Women's Program study may be had by calling Ext. 61551.

Dr. Anthony M. Bruno Is Assigned to Special Pan American Posts

Dr. Anthony M. Bruno, assistant director of the National Cancer Institute, has been assigned as associate deputy director and special assistant to the Director of the Pan American Health Organization, WHO.

Dr. Bruno joined NCI in June 1971 and the following year was appointed coordinator for the U.S.-U.S.S.R. Bilateral Health Agreement in Cancer under which the two countries formed collaborative research programs.

Expands Internat'l Studies

NCI has expanded its international activities—under mandate of the National Cancer Act — and there is increasing concern for the apparent rise in cancer and other chronic diseases in Latin America.

Dr. Bruno is co-editor of a monograph on "International Aspects of Cancer Research."

The Pan American Health Organization serves as the focal point for the support of health-related programs which affect the quality of life and environment, Dr. Bruno noted.

In addition to his administrative duties, Dr. Bruno is an associate clinical professor at Georgetown University where he teaches surgical diagnosis and is on the staff of the D.C. General Hospital.

Dr. Richard Naeye to Discuss Hypoventilation in SIDS Series

Dr. Richard Naeye will speak on Hypoventilation: A Possible Cause for the Sudden Infant Death Syndrome on Friday, April 5, at 3 p.m. in the Masur Auditorium.

Dr. Naeye is professor and chairman of the department of pathology at the Pennsylvania State University School of Medicine.

This is the second lecture in a SIDS series sponsored by the National Institute of Child Health and Human Development.

The best smell is bread, the best savour salt, the best love that of children.—*Proverb.*

Cancer Control With 3 Methods—Drugs, Surgery, Radiation—Told at Meeting

By Robert M. Hadsell

Teams of physicians are controlling several advanced, fatal forms of cancer through combinations of surgery, radiation and drugs. This knowledge was presented at a National Cancer Institute symposium on methods of cancer therapy held recently in Denver.

Dr. Ralph E. Johnson, chief of the NCI Radiation Branch and co-chairman of the symposium, stressed the importance of decisions on the treatment being made by multidisciplinary teams.

He said that effective cancer therapy requires an integrated approach involving the clinical oncologist, surgeon, radiotherapist and pathologist.

Dr. Joseph V. Simone, St. Jude Children's Research Hospital, Memphis, told those attending the symposium that 51 percent of children with acute lymphocytic leukemia treated with radiation and a combination of anti-cancer drugs have been completely free of the disease for at least 5 years.

No Treatment for 2-3 Years

The children have also gone without any form of treatment for the last 2 to 3 of those years.

Before the discovery of anti-leukemia drugs, Dr. Simone noted, most children with this disease died within a few months of diagnosis. Early drug studies at St. Jude produced a disease-free survival rate that now stands at 17 percent survival after 8 years.

The critical improvement in therapy, however, came through irradiation of the central nervous system, where leukemia cells can "hide" from anti-cancer drugs.

In new studies recently started at that hospital, Dr. Simone and his colleagues are varying the combination of drugs used to keep acute leukemia patients free of disease after the initial drug and radiation treatments.

Therapy Combinations Help

Combinations of surgery, radiation, and drugs have greatly improved the outlook for two other childhood cancers: Wilms' tumor and rhabdomyosarcoma.

Dr. Audrey E. Evans, director of oncology, Children's Hospital of Philadelphia and co-chairman of the symposium, said that drugs added to surgery and postoperative irradiation have increased 2-year survival rates from about 45 percent to a present rate of 80 percent in children with Wilms' tumor, a cancer of the kidney.

In children with rhabdomyosarcoma, a cancer of muscle tissue, the three modes of treatment have produced a 2-year survival rate of 61 percent, compared to rates of 10 to 20 percent before the addition of drugs.

Dr. Thomas C. Pomeroy, collaborating with Dr. Johnson at NCI, reported that radiation and a combination of drugs have produced a projected overall 5-year survival rate of 35 percent in children and young adults with Ewing's sarcoma, a form of bone cancer.

The scientists estimate that the 5-year survival rate will be 52 percent among patients in whom the disease was detected in an early, localized stage. Former treatment by surgery or irradiation had produced 5-year survival rates of only 10 percent.

Dr. Vincent T. DeVita, Jr., chief, NCI Medicine Branch, told the symposium that a four-drug combination has produced at least a partial response in 17 of 25 patients with advanced breast cancer, including a complete disappearance of cancer in seven patients.

Most of the patients had suffered a relapse of the disease after initial treatment by surgery, and the majority had also been treated previously with radiation, hormones or removal of hormone-secreting glands.

Although the NCI study is still at an early stage, Dr. DeVita said it is already apparent that the median survival time for the 17 women responding to treatment will be at least 15 months.

The eight non-responders have had a median survival time of only 6 months.

Dr. Alfred S. Ketcham, chief, NCI Surgery Branch, discussed drugs that may block the spread of cancer in the body. Some drugs may limit the ability of cancer cells to break off from tumors and enter the blood or lymph systems.

Other compounds, anticoagulants, may prevent circulating cancer cells from lodging in body tissues. Whatever the mechanism, these drugs offer a possible way to enhance the effectiveness of other modes of therapy.

Dr. Marvin A. Schneiderman, NCI associate director for Field Studies and Statistics, recommended changes in the way new treatments are evaluated.

He said that improved methods of therapy would be identified more rapidly through an earlier adoption of randomized, controlled clinical trials. This would give a direct comparison between a new treatment and a conventional method.

Dr. Fink Explains Program

Dr. Diane J. Fink, associate director for Cancer Control, told the symposium that seven regional networks of hospitals and physicians have been established by the Cancer Control Program to demonstrate the most effective therapies for childhood leukemia and adult Hodgkin's disease and other non-Hodgkin's lymphomas.

Treatment demonstration programs for other forms of cancer are being planned, she said.

The symposium was sponsored by the Clinical Investigations Branch and the Cancer Clinical Investigation Review Committee. These NCI components oversee research in cancer treatment by networks of institutions in cooperative clinical groups.

The National Library of Medicine is holding an exhibit on Witchcraft and Medicine between 1484-1793. It will be shown through July 19 in NLM's lobby. Devices for torturing people, rare books—including the "Malleus Maleficarum," a text on witchcraft written by two monks in the late 15th century—and portraits of scientists and witch hunters who lived during that era will be on display. Left: Paracelsus, the Swiss physician and alchemist born in the late 15th century, was one of the few who attributed witchcraft to mental disorders. He said the ailment has nothing to do with spirits or devils, and suggested studying how to cure the insane instead of how to exorcise the devil. The engraving, from a book on withcraft by Matthew Hopkins, depicts the judge (I) with the "witch"-defendant and her "familiars" who were said to be spirits in animal form acting as servants to witches.

FAREWELL CEREMONIES were held for Dr. John F. Sherman, NIH Deputy Director, on March 12 in the Masur Auditorium. From left: He receives from NIH Director Robert S. Stone (r) an expression of appreciation from Inter-Council Seminar members for Dr. Sherman's "enlightened, dedicated, and sterling qualities of leadership . . . under a most difficult transitional period."

At an informal reception in the CC lobby, Dr. and Mrs. Sherman and daughter Betsy greet well-wishers. Later, Dr. Sherman chats with NIH EEO officer Raymond J. Jackson (l) and deputy EEO officer Otis D. Watts. Dr. Sherman assumed his new post as vice president of the Association of American Medical Colleges on March 18.

SPINAL CORD

(Continued from Page 1)

Duke University scientists under Dr. Blaine Nashold, are activating bladder-emptying muscles by stimulating them with electrodes implanted in the spinal cord.

Dr. Nashold reported on eight patients now using the device. But it will not be generally available until scientists can simultaneously relax another muscle which retains fluid in the bladder.

The Duke medical team and scientists under Dr. Emil Tanagho, U. of Calif. School of Medicine, San Francisco, are working on this.

A system to enable quadraplegic patients—both arms and legs paralyzed—to grasp and use objects such as a pencil or a glass, is also almost ready for clinical use. It was developed by a group headed by Dr. Thomas Mortimer at Case Western Reserve University.

Shoulder Muscles Often Useable

Most spinal cord injury patients still have usable shoulder muscles. A patient's voluntary shoulder movements control signals which activate a stimulator placed near his body.

This stimulator then activates electrodes implanted in his forearm, producing movement of his finger muscles.

"But," stated Dr. Terry Hambrecht, "until the system becomes totally implantable, its application will remain quite limited." Dr. Hambrecht is director of the neural prosthesis project.

He also added that "Other sources of control and feedback signals which don't require the patient's full attention still need to be developed."

Far more serious problems plague the development of successful implantable aids for the deaf and blind. Scientists can not yet selectively and independently stimulate enough groups of nerve cells to produce a potentially useful prosthesis.

Dr. Blair Simmons, an NINDS grantee at Stanford University, spoke of his work on an implantable hearing aid for the totally deaf. Electrodes are inserted directly into an animal's auditory nerve which connects the inner ear's cochlea with the brain.

He also described efforts by others to place electrodes into the cochlea, the actual organ of hearing—an approach which enables a patient to hear low frequency tones which aid in lip-reading.

Dots of Light Seen

William Dobelle, University of Utah, reported on his recent efforts enabling two blind volunteers to see dots of light in an identifiable pattern by stimulating points on the surface of the brain's visual cortex.

However, to limit interactions between dots, Dr. Hambrecht considered that it may be necessary to place electrodes within, rather than on, the cortex's surface.

"An important question is how much information can be transferred into the visual system and how fast," he said, adding "the evidence so far indicates that surface stimulation will not be practical for a useful prosthesis."

A device proposed for the control of epileptic seizures called the "cerebellar implant" uses electrodes surgically implanted on the surface of the brain's cerebellum.

It was first implanted in patients by Dr. Irving Cooper, a neurosurgeon at St. Barnabas Hospital in New York City.

Dr. Sid Gilman, a neurologist at Columbia University College of Physicians and Surgeons who has worked with Dr. Cooper, reported that patients appeared to have significantly fewer seizures with the device.

"But because the patients are still receiving some anticonvulsants, we need studies to determine the effectiveness of the implant alone," he said.

Dr. Frank stated that NINDS plans to award a contract for animal studies of the implant to "provide information on the types of seizures which can be affected, the neural mechanisms involved, and on the optimum methods of stimulation."

Dr. Frank (r) and Dr. Hambrecht discuss progress on implanted devices.

INTERN

(Continued from Page 1)

qualifications:

- GS 9 or below with 4 years of responsible nonclerical experience, or
- A bachelor's degree and 1 year of responsible nonclerical experience or a combination of college and nonclerical experience.
- Have taken the Federal Service Entrance Examination (FSEE).

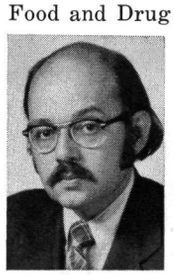
Arrangements to take this examination may be made through the employee's personnel office. It will be given on April 9 and May 14.

It is necessary for those who wish to apply for the program to submit a Standard Form 171, FSEE score, and statements on both the outside activities of the employee, and his motivation and interest in the MI program.

Applications must be received by May 31. For further information, call Ext. 66211.

Dr. Carl M. Leventhal Named to FDA Post

Dr. Carl M. Leventhal, assistant to the NIH Deputy Director for Science, has been named deputy director of the Bureau of Drugs, Food and Drug Administration. He will assume his new post April 1.



Dr. Leventhal

Dr. Leventhal joined NIH in 1964 as an associate neuropathologist in the Perinatal Research Branch, National Institute of Neurological Diseases and Blindness (now NINDS).

Two years later, he transferred to the National Cancer Institute's chemotherapy program as a neurologist and neuropathologist. He was responsible for the development of the NCI collaborative program in chemotherapy of brain tumors.

In 1968 Dr. Leventhal was selected as assistant to Dr. Robert W. Berliner, then NIH Director of Laboratories and Clinics. He worked closely with Dr. Berliner for the next 5 years with particular responsibility for intramural research administration.

Dept. of Agriculture Grad School Offers New Spring Courses

Three new courses in behavioral sciences are being offered by the Graduate School, U.S. Department of Agriculture this spring.

The new offerings are: Behavior Modification, The Psychology of Successful Retirement—The Challenge of Later Life, and Counseling and Placement.

Registration is March 21-29. Classes begin March 30.

For information and catalogs, call the USDA Graduate School at 447-4419.

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