Cancer Meeting
On Chemotherapy
Begins Nov. 2

The Second Conference on Experimental Clinical Cancer Chemotherapy will be held on November 2 and 3 at the Statler-Hilton Hotel in Washington. The conference is sponsored by the National Cancer Institute's Cancer Chemotherapy National Service Center.

This meeting, like its predecessor in November 1959, will bring together most of the Nation's leaders in the cancer chemotherapy field.

80 Subjects Included

The program will include some 80 presentations on subjects ranging from synthesis and testing of new agents to evaluation of large-scale studies of the chemotherapy of all types of malignancy.

On Thursday, November 2, there will be a general session covering the broad chemotherapy field. Clinical predictability of laboratory testing will be discussed and reviewed.

Research Equipment Exhibit
Opens With 134 Displays

An extensive and intriguing array of the latest research instrumentation and other scientific apparatus, numbering 134 exhibits, went on display here today with the opening of the Eleventh Annual Research Equipment Exhibit.

The display is documented in Building 22 and trailers lined up on the adjacent parking lot to accommodate the overflow.

Sponsored by the Nation's leading manufacturers of laboratory and clinical research tools, the exhibit program is featuring a series of special instrumentation clinics. These consist of demonstrations of their newest products by six of the exhibiting firms.

Developments Discussed

Running concurrently with the exhibit is the Symposium on Recent Developments in Research Methods and Instrumentation, which began last night in the Clinical Center Auditorium.

The symposium is held under the auspices of local chapters of national scientific societies.

The 4-day scientific meeting opened with a session on "Applied Gas Chromatography," presided over by Dr. Alton Meister, Chairman of the Department of Biochemistry, Tufts University School of Medicine.

Among the topics discussed were "Analysis of the statistical tables contained in the report reveals that the rate of NIH employee growth was greatest during the first seven years of the 1961-62 decade."

During that period the yearly rate of employee increase varied from 11 percent to a high of 27 percent. Not until 1959, when the total number of employees exceeded 7,000, did the yearly rate of growth increase to 8 percent.

NIH Growth Reflects Interest in Research

By John Buckley
DHEW Management Trainee

Reflecting the Federal Government's growing support of medical research, the number of NIH full-time employees has increased during the past decade from 2,581 to 8,783.

These and a wealth of NIH employee statistics covering the past 10 fiscal years are contained in the NIH Quarterly Employment Report recently issued by the Personnel Management Branch, OAM.

Analysis of the statistical tables contained in the report reveals that the rate of NIH employee growth was greatest during the first seven years of the 1961-62 decade.

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New Electronic System
At NLM to Accelerate Storage and Retrieval

PHS Surgeon General Terry recently announced that a contract has been signed with the General Electric Company for development of an electronic information storage and retrieval system at the National Library of Medicine. The new Library is located on the southeast corner of the NIH reservation and will be ready for occupancy late this year.

The new computer-based system, to be known as MEDLARS (Medical Literature Analysis and Retrieval System), will enable the National Library of Medicine to broaden and accelerate its services to medical education, research, and practice.

The Library, which this year observes its 125th anniversary, is re-

Institute's Cancer Chemotherapy
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CC Cafeteria Inaugurates New Deal
With More Services, Food Selection

Beginning tomorrow (Wed-

The 1961 United Givers Fund
campaign was launched here Octo-

Mr. Hansen said he is confident
that NIH will reach or exceed this year's quota, despite the fact that it is $8,445 above last year's goal.

"In this respect," he said, "we at NIH are fortunate. Not only has the number of individuals in our organization increased, but each member of the staff is personally concerned in his day-to-day work with promoting the welfare of his fellow man."

As a result, he said, "we are

Predicts Success

The quota for the National Capital Area is $7.8 million, of which the Federal Government agencies are being asked to contribute $5.4 million.

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that NIH will reach or exceed this year's quota, despite the fact that it is $8,445 above last year's goal.

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President Urges Equal Opportunity for Employment of Physically Handicapped

In designating October 1-7 as National Employ the Physically Handicapped Week, President Kennedy called upon the people of this Nation to further the equality of opportunity for employment of the handicapped.

The U.S. Public Health Service estimates that one in every 10 Americans has an impairment which limits his normal activities. Each year approximately 270,000 Americans become disabled to an extent which requires special job placement. This figure must be added to the backlog of 2,250,000 handicapped persons who need training and job opportunities.

From 1942 to 1961, the Federal Government hired nearly 180,000 handicapped persons. These employees have been placed in positions of responsibility and trust, and their performance records indicate that they do their jobs as well as or better than able-bodied workers performing similar tasks.
Surprise Drills Mark Fire Prevention Week; TV, Movies Scheduled

National Fire Prevention Week, which began last Sunday and will continue throughout Monday, has been observed at NIH with daily movies, TV shows, and unannounced fire drills.

According to Fire Marshal Kenneth J. Gertler of the Protection and Investigation Section Plant Safety Branch, surprise drills will be held this week in the Clinical Center and several unspecified buildings, both on and off the reservation. The NIH Fire Department will participate in all practice alarms on the reservation.

Film on TV

A taped show on fire prevention, Use of Fire Extinguishers and How to Extinguish Fires, is being televised through Friday morning from 11:30 to 12:30 in the first-floor auditorium. The film is broadcast via the Walter Reed Army Medical Center's closed circuit TV. It can be picked up on Channel 2 on television sets in the CC patients' areas.

In addition to the movie, Stop Fires and Save Your Job, is being shown at the same hours daily in the shop areas of Buildings 11 and 16, and in Building 16.

CHEMOTHERAPY

(Continued from Page 1)

A small, unpretentious structure, in a fence-enclosed area at the corner of South and Center Drives, is a focal point for the elimination of one of the greatest fire potentials on the NIH reservation—the accumulation of flammable chemical waste.

This small structure which performs such a big function is the Chemical Waste Disposal Plant, an important unit of the NIH Fire Department.

At the plant—the only one of its kind in the United States, according to Fire Chief Norman C. Anders—members of the Fire Department daily destroy the many hundreds of kinds of flammable waste solvents, organic materials, acids, poisonous compounds, and compressed gases that comprise a major threat to physical safety in NIH laboratories.

Procedure Is Hazardous

The destruction of these wastes is a hazardous procedure from the time they are collected from the various laboratories until they are rendered harmless at the plant. Each category of waste requires a different method of handling, and much that is non-combustible in its natural state may violently explode when exposed to incompatible compounds.

Chemical waste for disposal is transported by members of the Fire Department from NIH laboratories to the plant in a specially equipped two-part, steel-plated truck. The roof of the truck is designed to slide open so that an unstable chemical should explode in transit, the impact would be diverted upward without damage to the truck or the occupants of the cab.

Whenever such unstable material is transported, the truck's dome light is flashing, and in some cases the siren is used as a warning to the drivers of other vehicles.

Mr. Mullican checks the wind direction before destroying waste chemicals.

W. Ray Mullican, a Fire Inspector with the Service Unit of the NIH Fire Department (left), pours waste acid into the acid sink at the Chemical Waste Disposal Plant. W. J. Coleman, Service Unit Firefighter, stands by in case of accident.—Photo by Jerry Hocht.

Chemicals are destroyed in accordance with accepted disposal procedures. Acids are poured into a specially constructed acid sink from which they drain through a 35-foot glass pipe to a neutralizing tank. They are treated with lime until completely neutralized under pH control, then committed to the sanitary sewer.

Other chemicals, and especially those of unknown composition, are fed in unopened bottles or cans through a drop-slit in an 18 inch concrete wall, into a "bottle crusher."

Operated Hydraulically

This is a unique mechanism consisting of a steel angle-iron frame, five feet high and two feet square, operated hydraulically. As bottles are crushed they are sprayed with water to dilute the chemicals and minimize fumes.

Solvents and known hazardous solids are burned in a special pit, and flames are discharged into a combustion chamber designed to reduce smoke and disagreeable odors.

One of the most important features of the disposal plant is an everyday weather vane. Because of noxious odors the hour of waste disposal is determined at all times by the direction of the wind. If the wind is blowing toward occupied buildings, disposal is delayed until it shifts to another direction.

All of the firefighters on the reservation have been thoroughly trained in the handling of waste chemicals and every precaution is taken for their safety.

Small Unit Is Big Performer

In Fire Prevention at NIH

By Mary-Helen Emmons

From the time the wastes are collected from the laboratories until destruction is completed, the men work in teams of two. When engaged in actual destruction, they wear protective clothing consisting of coveralls, heavy rubber boots, protective clothing consisting of coveralls, heavy rubber boots, and face shields. They are also equipped with oxygen tanks to avoid the danger of breathing contaminated air.

So far this year the Fire Department has destroyed 10 tons of solid chemical waste and 4,000 gallons of liquid waste. This is almost as much as all the waste destroyed during 1960.

Chief Anders says that he is highly gratified with the success of the disposal operation. He particularly emphasizes the value of fire-preventive measures such as this one, because of the violent and unpredictable nature of many of the chemicals and the intensive physical and property damage that could result from improper handling.

PHS Surgeon General Terrey recently announced the award of 48 grants, totaling $14,575,628, to help build and equip additional health research facilities in 40 institutions in 23 States.

Administered by the Division of Research Grants, the Health Research Facilities construction program is designed to expand and improve the Nation's facilities for medical research.

Grants are made to both public and private nonprofit hospitals, medical schools, universities, schools of public health and other research institutions and are awarded on a matching basis.

Congress Extends Program

Approval of the awards by the Surgeon General upon the recommendation of the National Advisory Council on Health Research Facilities initiates the sixth phase of the $180 million program, established in 1956 and extended by the 85th Congress in 1958.

"The grants," Dr. Terry said, "include awards for new construction and funds needed for renovations and remodeling of antiquated and inadequate facilities, as well as essential research equipment for previously awarded construction projects now nearing completion."

Including the recently announced grants, 832 awards totaling $164,282,772 have been made to eligible institutions since the inception of the Health Research Facilities program.

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Double Jeopardy Seen in Allergies From Parasites

The "double jeopardy" to man of parasitic infections which also cause serious allergy problems demands parasitologists whose knowledge and training in immunology equals their competence in parasitology, Dr. Justin M. Andrews, Director of the National Institute of Allergy and Infectious Diseases declared recently.

He characterized hypersensitivity stemming from an invasion of parasites as "a supremely cruel jest of nature."

Dr. Andrews presented these views in his Presidential Address to the 36th annual meeting of the American Society of Parasitologists at Purdue University.

Possibilities Indicated

He indicated some of the possibilities, as well as realities, of allergic illness and disability due to hypersensitivity to worm parasites.

Dr. Andrews pointed out that the "protozoan pathology" of elephantiasis, a potential complication of filariasis, is due to lymphatic obstruction which is believed to be caused or augmented by sensitivity to filarial or microfilarial proteins.

He cited hypersensitivity to Ascariis, a worm which parasitizes many animals, because of the special occupational risk it holds for physicians, nurses, and laboratory workers, and persons engaged in the slaughter and meat-processing industry who have been sensitized by the parasite.

Knowledge Scanty

"Little is known about the actual incidence of allergic morbidity and mortality due to hypersensitivity to helminth (worm) parasites," Dr. Andrews said, "but certainly some of these possibilities are of more than academic interest."

Dr. Andrews outlined the history and medical literature of the two disciplines of parasitology and immunology and explained procedural devises for indicating the existence of allergic states in parasitic diseases.

One such device consists of demonstrating the passive transfer of skin-sensitizing antibodies generated by specific para site antigens. The technique has been employed for this purpose to a limited extent by parasitologists.

Study Suggests Enzyme May Control Staphylococcus Resistance to Penicillin

Continuing basic biochemical studies on the mechanism of action of new synthetic penicillins were reported by Dr. Harry G. Steinman, Laboratory of Clinical Investigation, National Institute of Allergy and Infectious Diseases, at the Fifth International Biochemical Congress held in Moscow.

Dr. Steinman indicated that the resistance to benzylpenicillin (Penicillin G) displayed by certain naturally occurring strains of the staphylococcus (a grave problem in the treatment of some staphylococcal infections has been created by the resistance of these strains to penicillin) and their production of the enzyme penicillinase suggests a fundamental cause-and-effect relationship.

Role Uncertain

Dr. Steinman said that there is some uncertainty as to the exact role of penicillinase since previous investigations have shown that there also exists in staphylococci an entirely different mechanism of resistance which is not based on penicillinase.

Since the problem of resistant staphylococci and its clinical management is vitally important, understanding of this basic mechanism of resistance may have important practical application.

Furnishes Evidence

By the use of graded series of inocula of strains of staphylococci containing different basal amounts of enzyme, Dr. Steinman obtained results which furnish evidence that the degree of resistance of a given concentration of staphylococci was a function of the natural basal content of the enzyme.

The quantitative effects of the enzyme were reflected not only in the tremendous divergences in minimal inhibitory concentrations for small and for large inocula, but also in the difference in minimal inhibitory concentrations for equally large numbers of two strains of staphylococci with different capacities to produce enzyme.

The role of penicillinase in penicillin-resistance was further examined by the use of modified penicillins which were poor substrates for the enzyme.

Dr. Steinman said that the subject of his address had originated in the desire to "stimulate members of the Society to more and better adjunctive research in the hypersensitivity aspects of our own discipline."

He added that he was encouraged by having "both in original research reports and in our parasitological texts...unmistakable evidence of keen interest and able competence in immunology on the part of our parasitologists."

NIHUGF61

NCI Scientists 'Isolate' Tumors, Will Study Growth Requirements

Scientists of the Public Health Service's National Cancer Institute have developed a technique for growing 'isolated' tumors in laboratory animals. The tumors are isolated from surrounding organs and connected with the host animal by only a single artery and vein from which blood can be drawn.

Use of this technique will permit more accurate study of tumor-host relationships and growth requirements of tumors than has hitherto been possible, according to Dr. Pietro M. Gullino and Flora H. Grantham, of the Institute's Laboratory of Biochemistry, who described the work in the current issue of the Journal of the National Cancer Institute.

The Institute scientists reported the use of the method in growing 13 different types of transplanted tumors (which increased through surgery, a kidney is isolated from the surrounding tissue and pulled out through the muscle layers into the subcutaneous space, leaving only a vascular connection with the host animal.

Grows in Paraffin Bag

A tumor is implanted in the kidney, which is enveloped in a bag of paraffin. The tumor grows in this bag and destroys the kidney; the kidney blood vessels remain as the only connection between the tumor and host. An ovary may be used instead of a kidney with equal success.

The procedure can be applied to all tumors normally grown in a similar fashion in rats, hamsters, and mice. Amounts of tumor obtained are very large; ovarian implants are as much as 400 times larger than the host ovary.

Samples of blood drawn at intervals from the connecting artery and vein can be analyzed quantitatively in studies of the exchange of fluids between tumor and host.

A high degree of resistance was achieved.

This resistance mechanism appears to be superimposed upon the penicillinase mechanism since the change in penicillinase content of penicillin-producing organisms (which increased through induced enzyme formation) did not parallel the increase in resistance. This type of resistance does not appear to be of clinical importance since no resistant organisms have been found and such resistant mutants to be less virulent, as well as culturally different, than the parent pathogenic strains.
New Flexibility of Lab Design Noted
In Research Facilities Seminar Here

Pictured while participating here recently in the first of a proposed series of research facilities design seminars are several of the 14 PHS design engineers who attended. Left to right: Murray A. Getz and Robert A. Cohen, BMJ; Wilbur Taylor and C. J. Arcilesi, BSS; a stenographic reporter; and RFPB Development Chief John A. Confrancose, who arranged the meeting.—Photos by Sam Silverman.

Research laboratories are being designed with maximum flexibility to meet the needs of future research requirements.

This trend, which is reflected in planning for new facilities at NIH, at the Communicable Disease Center, and in Food and Drug Administration's new buildings, was noted during the Research Facilities Design Seminar held at NIH September 7-8, sponsored by the Research Facilities Planning Branch, Division of Research Services.

Hanson Opens Seminar

Attended by DRS representatives and by design engineers from the Bureau of Medical Services, Bureau of State Services, Food and Drug Administration, and the National Academy of Sciences, the seminar was opened by Chris A. Hansen, DRS Chief, and moderated by A. E. Williamson, Chief of the Research Facilities Planning Branch, and Donald L. Snow, Chief of the Laboratory Design Documentation Project.

It was the first meeting of a group of design engineers to exchange information about the planning problems they share in common.

Robert M. Dillon and Robert W. Spangler, both members of the Building Research Advisory Board, represented the National Academy of Sciences, and the Food and Drug Administration was represented by William H. Allen.


Mr. Confrancose, Acting Chief of the RFPB Development Section, was responsible for arranging the seminar.—J.T.T.

Preparation of Cultures Is 'Big Business' Here

Over 28 million ml. of culture media were prepared by the Medical and Glassware Section of the Laboratory Aide Branch, DRS, during the first six months of 1961.

These figures were revealed in a joint survey by LAB and the Financial Management Branch.

The study showed that 4,500 individual requests for over 400 different types of bacteriological and tissue culture media accounted for the vast quantity produced. NIAID was the largest consumer, with 5 million ml., while NIH used only 12,000 ml.

As an indirect but related outgrowth of media preparation, the Glassware Preparation Unit of the Section washes and sterilizes over 5 million pieces of laboratory glassware annually for this and other research uses.

Negotiators Visit Poland to Discuss Joint Research

An eight-man team of negotiators, including four from NIH, were scheduled to arrive in Warsaw, Poland, October 8 to discuss proposed collaborative research projects with representatives of the Polish Ministry of Health and Polish scientists. The team planned to remain in Poland for 10 days.

The proposed studies would be supported by U.S.-owned Polish currencies and would be administered by the Office of International Research.

Members Listed

NIH members of the team are Dr. Richard L. Masland, Director of the National Institute of Neurological Diseases and Blindness; Joseph S. Marturano, Chief of the Office of Program Planning, Office of the Director; Dr. Igor Klatzo, Head of the Section on Clinical Neuropathology, NINDB; and Dr. Margaret Sloan, Special Assistant to the Director of the National Cancer Institute.

Other members of the team, all of the Public Health Service, are Scott Adams, Deputy Director of the National Library of Medicine; Ralph C. Gruber, Assistant Chief, Division of Air Pollution; Dr. Richard L. Woodward, Chief of Water Supply, Sanitary Engineering Center, Cincinnati, Ohio; and Dr. James H. Steele, Veterinary Director, Communicable Disease Center, Atlanta, Ga.

Discussion Areas Named

Proposed areas of discussion include studies of the perinatal causes of central nervous system diseases, cerebrovascular diseases, encephalitis, the geographical distribution of cancer, brain lesions in dogs and monkeys, and animal brain function.

It is anticipated that the discussions will involve selection of Polish institutions and investigators representative of the several areas of mutual interest. After initial discussions the team plans to divide into groups for visits to these institutions.

Funds to be used to support the proposed collaborative studies are U.S.-owned foreign currencies resulting from the overseas sale of surplus U.S. agricultural commodities under Public Law 480.

The 1962 appropriations for NIH include $5,059,000 for research projects in Burma, India, Egypt, Pakistan, Yugoslavia, and Israel, as well as Poland.

NIHUGF'61
NIH Investigators Clarify Glucose Role in Maintenance of Stored Body Fats

The vital role of glucose in maintaining stored fat as well as the sequence of reactions by which adipose tissue converts foodstuffs to triglycerides—the major chemical form in which fats are stored in the body—has been determined by investigators at the National Heart Institute.

Investigations of the chemical processes involved in the conversion of foodstuffs to stored fat by adipose tissue were made by Dr. Daniel Steinberg, Head of the Section on Metabolism, Laboratory of Cellular Physiology and Metabolism, National Heart Institute, and his associates, Drs. Martha Vaughan and Simon Margolis.

Their studies, which also revealed in ways in which hormones may influence the balance of fat deposition and fat mobilization, were reported to the Fifth International Congress on Biochemistry in Moscow, last year. One part of the food eaten at any meal is burned immediately for energy. Much of it is converted into fats (triglycerides) and stored in adipose tissue which serves as the major storehouse of energy available to the body.

Fats are then released from adipose tissue either slowly, to supply energy needed between meals or during sleep, or quickly, to supply the large amounts of energy required in emergencies or during vigorous exercise.

Difference Revealed

The NIH investigators' work revealed one major difference between the process of conversion of foodstuffs to fat carried out by adipose tissue and that demonstrated in other body tissues. This difference is the role of glucose and has major implications with regard to the mechanisms that control fat deposition in the body.

When fats are broken down in the usual way, the products evolved are free glycerol and the component fatty acids from the parent molecule. Stored triglycerides are composed of three fatty acid molecules linked chemically to one glycerol molecule.

Before glycerol can be linked to the fatty acid molecules, it must be coupled with phosphate. The coupling is done by an enzyme present in most tissues but not in adipose tissue.

Since adipose tissue does store triglycerides and yet lacks the enzyme to perform the necessary glycerol-phosphate coupling action, the glycerol-phosphate complex must be supplied to it.

Glucose Necessary

Apparently the complex is derived from glucose which is brought to the adipose tissue in the bloodstream, and a constant supply of glucose is necessary for adipose tissue to maintain its stored fat.

Work by Dr. Robert S. Gordon, another NIH investigator, has established that when a person is fasting and has very limited resources of glucose available, the fatty acids are mobilized from adipose tissue and used as sources of energy.

On the other hand, when plenty of glucose is available, such as just after eating, fatty acids are not mobilized.

The present work shows that the rate at which triglycerides are mobilized becomes increased under the same circumstances that halt fat mobilization.

Insulin decreases fat mobilization from adipose tissue, presumably by its action in increasing glucose metabolism in the tissue. Epinephrine, on the other hand, greatly stimulates the release of fatty acids from the depots.

This action of epinephrine is shared to a varying degree by several other hormones. The effect is not produced by altering the availability of glucose, but may result from acceleration of the rate of breakdown of the triglycerides.

Studies done in collaboration with Dr. Philip R. Eaton, also of NIH, have shown that the rate at which muscle tissue burns fatty acids is controlled in an important way by the concentration of the fatty acids in the blood.

The investigators pointed out that in two conditions associated with hypothyroidism—hyperthyroidism and overactivity of the adrenal medulla—there is an excessively rapid mobilization of fat and an elevated level of fatty acids in the blood.

They suggested that the high overall metabolic rate associated with these two conditions could be linked to the more rapid burning of fatty acids by muscle cells exposed to high concentrations of them in the blood. More work is needed to evaluate this hypothesis.

Mr. Rusten in the Lab.

Photo by Ed Hubbard.

A three-month stint as an unskilled laborer while he waited for another job was all young George Rusten wanted when he came to NIH in 1941.

But the other job never opened, and George Rusten came to like NIH. Today he's still here, but not as a laborer.

Twenty years, many promotions, and a strong devotion to medical research have made him a research technician—a job normally held by college graduates.

Supervises Testing

He is now supervising attenuated polio virus testing in monkeys in the Laboratory of Viral Immunology, Division of Biologies Standards.

"My first job at NIH was to clean out an office in Building 1," he said. "I did everything back then—cut grass, dug ditches, drove trucks—you name it, I did it!"

In 1942 George Rusten took a physical examination for permanent appointment as a laborer. The doctors found a slight heart murmur and told him he would need a lab technician—a job normally held by college graduates.

Mr. Rusten further justified Dr. Taylor's judgment the following year, when he won a superior accomplishment award for devising three pieces of equipment that simplified handling of animals in laboratory procedures.

In 1955, when the Division of Biologies Standards was established, Mr. Rusten became a research technician at DBS, supervising animal testing in the Laboratory of Viral Immunology.

Today he is busy supervising attenuated viruses tests on as many as 100 rhesus monkeys at a time.

The monkey-testing program is required in emergencies or during sleep, or quickly, to supply the large amounts of energy required in emergencies or during vigorous exercise.

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Small Car Spaces Ready

For Use on Parking Lots

The Plant Safety Branch has announced that over 150 parking spaces for small cars are now ready for use on NIH parking lots. Previously only six small-car spaces were available here.

The Central Parking Lot (Lane 4) now has spaces for 42 small cars. Lots 29-B (Lane 1) and 30-B (Lane 3) have spaces for 27 small cars. Lots 4-A (Lane 1) and 5-A (Lane 4), 37 spaces; Lot 21-B, 20 spaces along the fence; and Lot 10-F (Lane 2), 50 spaces, and more will be provided if needed.

New separating lines have been painted to decrease the 8-foot-wide spaces for large cars to 4½ feet for small cars. Six small-car spaces are approximately equal to five larger spaces.
**EXHIBIT**
(Continued from Page 1)

"Recent Advances in the Analysis of Lipids by Gas Chromatography," "Gas Chromatographic Separations of Steroids and Related Compounds," and "Application of Gas Chromatography to Amino Acids." The symposium sessions are scheduled daily at 11 a.m. and 2 p.m. Today's sessions deal with "Factors Influencing the Interpretation of Spectra" and "Optical Rotatory Dispersion."

The Wednesday and Thursday sessions will consider thermogravimetric analysis, electron probe analysis, the application of physiological instrumentation to clinical problems, and electron magnetic resonance.

**Chairmen Listed**
Chairmen of these sessions include: Dr. Ellis R. Lippincott, University of Maryland; Dr. Ulrich Weiss, National Institute of Arthritis and Metabolic Diseases; Dr. Saul Gordon, Fairleigh Dickinson University; Dr. Isidore Adler, U.S. Geological Survey; Gerald S. Cohen, Division of Research Services, NIH; and Dr. Walter Becker, National Institute of Arthritis and Metabolic Diseases.

The research equipment exhibit will be open daily from 11 a.m. to 5 p.m., except tomorrow (Wed.), when it will remain open until 8 p.m.

Last year's exhibit and symposium set an attendance record with a total of 6,507 visitors. They came as representatives of hospitals, universities and colleges, research institutions, government agencies, and other organizations devoted to public health and medical research. Included were visitors from 21 countries of Europe, Latin America, the Middle East, and the Far East.

**Heart Ass’n Executives Attend Seminar at NIH**
A two-day seminar for staff executives of State affiliates and local chapters of the American Heart Association will terminate this afternoon at NIH.

The discussion today included a session on cardiovascular diseases, research reporting, and grants and training. Yesterday's session, which included a briefing on control program plans, was held at the downtown offices of the Heart Disease Control Program, Division of Chronic Diseases, BSS.

**National Gallery Strings Will Play Here Oct. 19**
The National Gallery Strings, with Richard Bales, conductor, will be heard in the Clinical Center auditorium Thursday, October 19, at 8:30 p.m. This will be the first program of the 1961-2 season, sponsored by the NIH Recreation and Welfare Association.

Mr. Bales will direct the entire string section of the National Gallery Orchestra in the "Don Quixote" Suite of Telemann; Concerto for Two Violins in D minor, Bach, with Mark and Nancy Ellsworth as soloists; Round for Strings, Diamond; and Simple Symphony for Strings, Britten.

Because of the expense involved in producing concerts, there will be a charge for admission to this series this year. The fee will be $1 for adults and children 12 or over. Free tickets will be issued for children under 12, and for Clinical Center patients and their attendants. Tickets must be obtained in advance from the CC Film Desk.

**Five NIH Employees Win Cash Awards For Suggestions, Work Performance**
Cash awards totaling $705 for superior work performance and adopted suggestions were presented to five NIH employees at individual ceremonies held here recently.

Thelma L. Gardner, a statistical coding clerk in the Laboratory of Socio-Environmental Studies, NIMH, received a check for $170 for her suggestion for a new method of statistical treatment of data processed on electronic equipment.

Katherine P. Lashmit, Executive Secretary of the Cardiovascular Study Section, DRG, and Arline Ludwig, a clerk in the Center for Aging Research, DGMS, received checks for $170 and $140, respectively, for sustained superior performance. Mrs. Ludwig received her cash award at the DGMS quarterly luncheon in honor of employees' birthdays, held September 22 at Thompson's restaurant in Bethesda.

A cash award of $75 was presented to William L. Addinck, a laborer, Office Services Branch, OD, for devising an inexpensive cleaning tool which has become part of the standard cleaning equipment of the Night Cleaning Unit. Specific uses of the tool, consisting of a roll of steel wool attached to a mop head, are removal of wax from the edges of baseboards, in corners, under desks, and in congested areas where a floor machine cannot be used.

John J. Babchak, Shops Section welder, Plant Engineering Branch, DRS, received a $25 incentive award for his suggestion for the design and installation of a device which significantly extends the service-free period on animal cages.

Katherine P. Lashmit, Executive Secretary of the Cardiovascular Study Section, DRG, receives her cash award for sustained superior performance from Dr. G. Halsey Hunt, Division Chief, at an employees' birthday luncheon.—Photo by Jerry Hecht.

Arline Ludwig, a clerk in the Center for Aging Research, DGMS, receives a check for sustained superior performance from Dr. G. Halsey Hunt, Division Chief, at an employees' birthday luncheon.—Photo by Jerry Hecht.

An adopted suggestion earns a cash award for Thelma L. Gardner, an NIMH statistical coding clerk. Dr. Joseph M. Bobbitt, Associate Director for Program Development, makes the presentation. Photo by N. MacVicer.

ISA Requests Dr. Alt To Organize Division Of Biomedical Sciences
Dr. Frederick Alt, Chief of the Instrument Engineering and Development Branch, Division of Research Services, has been requested by the Instrument Society of America to organize and serve as Director of a new division of the Biomedical Sciences Division within the society.

The request is the result of the growing national importance of biomedical instrumentation engineering.

At the present time biomedical engineering is recognized as a distinct discipline by the Institute of Radio Engineers and the International Federation of Medical Electronics but only in the field of medical electronics.

The proposed new ISA division is planned to represent the professional engineer in all important areas of biomedical instrumentation engineering: electronics, optics, thermodynamics, and mechanical, sanitary, and chemical engineering.

In the past, biomedical engineering sessions at ISA conventions were presented under the auspices of the society's Physical and Mechanical Measurements Division.

**12 YEARS AGO—**
These items appeared in the 1949 July and September issues of the NIH Record, then in its first year of publication:
Wisconsin Avenue will be widened from Five Points, north to Chelsea Lane; thus eliminating the "bottle-neck" that has become increasingly worse as Bethesda and the areas north of the community have grown in population.

Two free tickets to their first show will be presented by "The Hamsters" to the person submitting "the best new name" for their organization.—July 29.

"The Hamsters" have resigned themselves to being called "The Hamsters." No more appropriate name was submitted in the recent title contest conducted by the NIH drama group.—September 16.

"Resolved, that the membership of the Southern Branch of the American Public Health Association endorses the fine research program carried forward by the National Institutes of Health." This resolution was passed by the Southern Branch at its annual meeting held recently in Dallas, Tex.
increase drop below 10 percent.

Within the past three fiscal

years, 1959-61, the rate of increase

has leveled off, varying from 7.5

to 8.5 percent.

The statistical tables also reveal

that approximately half of NIH

personnel (as of June 30, 1961) are

employed within the seven Insti-

tutes. These employees total

4,387, as compared with a total

of 1,858 within the four Divisions,

1,573 in the Clinical Center, and

985 under the Office of the Direc-

tor.

The number of full-time em-

ployees, by Institutes, was reported

as follows: NCI, 1,166; NIMH, 576;

NIAMD, 545; NINDS, 510; and

NIAID, 591; NHI, 576; and

NIHUGF, 4,387, as compared with a total

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