FASEB to Meet In Atlantic City April 10 to 14

An estimated 12,000 scientists from the United States and 35 foreign countries are expected to attend the 45th annual meeting of the Federation of American Societies for Experimental Biology in Atlantic City April 10-14.

Two thousand, eight hundred and fifteen papers, including about 150 from NIH, will be presented by approximately 5,200 authors. In this respect, it will be the largest scientific meeting ever held, according to the Federation's announcement.

Will Report Findings

Findings reported at the meeting will represent the latest information in the fields of heart disease, radiation protection and recovery, cancer, organ transplantation, human and domestic animal nutrition, and drugs affecting human behavior.

A feature of the Federation meeting will be a joint session of the six member societies on Tuesday, April 11 at 8 o'clock for the 32 parts in "The Skin of Our Teeth," a Thornton Wilder play that will be presented here late in June.

The NIH Hamsters are holding tryouts tonight and tomorrow night at 8 o'clock for the 32 parts in "The Skin of Our Teeth," a Thornton Wilder play that will be presented here late in June. The tryouts tonight will be held in Wilson Hall and tomorrow in the CC auditorium.

The play is one of three selected by the State Department as representative of modern American drama, and is currently touring the capitals of the world with a company headed by Helen Hayes. Paul Blank, CC, is the director of the NIH production. Assistant director is Jack Robinson, NIAMD; Ozzie Grabiner, OAM, is producer. Others handling important functions of the show will be Betsy Slay, OIR, makeup; George Marsden, DBS, set design; Sarah Raskin, National Academy of Sciences, costumes; and George Bragaw, NIAMD, publicity.

Kennedy Requests April Conference On Heart, Cancer

Dr. James Watt, Director of the National Heart Institute, and Dr. Kenneth M. Endicott, Director of the National Cancer Institute, have been requested by President Kennedy to participate in the President's Conference on Heart Disease and Cancer, which will present its report to the President at the White House April 22.

President Sends Wire

A wire from President Kennedy asked their assistance "in charting the Government's further role in a national attack on the two major causes of death in our country—heart disease and cancer."

The two Institute Directors will also assist in making arrangements for the conference. Chairman of the conference is Bolsfeuillet Jones, recently appointed Special Assistant for Health and Medical Affairs, DHEW.

President Kennedy's announce ment of the Conference, on March 15, included the statement that "...the Department of Health, Education, and Welfare will then invite a number of distinguished scientists, statesmen during three-hour ceremonies marking the Institute's first decade of operation.

Ten years of accomplishment by the National Institute of Arthritis and Metabolic Diseases were commended by scientists and statesmen during three-hour ceremonies marking the Institute's first decade of operation.

The program, held March 9 in the Clinical Center auditorium, included a comprehensive "Report to the Nation" on the progress made against arthritis and metabolic diseases since the Institute began operation in the fall of 1950.

Ribicoff, Terry Speak

A group of approximately 500, including past and present members of the NIAMD Advisory and Intramural Councils, representatives of scientific societies and voluntary health agencies, and scientific attaches of foreign embassies, heard talks by Secretary Ribicoff and Surgeon General Terry.

The occasion marked Secretary Ribicoff's first visit to NIH and Surgeon General Terry's first return here since leaving the Heart Institute to head the PHS.

Senator Hill of Alabama, Dr. James A. Shannon, NIH Director; Dr. Luther L. Terry, PHS Surgeon General; Dr. Janet Travell, the President's physician; Abraham Ribicoff, DHEW Secretary; and Dr. Floyd S. Doft, NIAMD Director.
DBS Invites NIH Employees to Become Members of Typed Blood Donors Panel

For the fourth time in five years, the Division of Biologics Standards extends an invitation to NIH personnel to become members of the Employee Panel of Typed Donors.

Panel members are called upon periodically to donate small samples of blood used in control testing procedures by the DBS Laboratory of Blood and Blood Products.

Needs Rare Types

In its continuous search for rare blood types, the Laboratory has typed the blood of 1,515 NIH employees. At present, however, only 750 donors are listed on the panel. New members are needed now to extend the panel and to replace donors who have left NIH.

The panel currently supplies 90 percent of the Laboratory's reagent blood cells, which are generally considered laboratory reagent blood cells, panel members may be called upon from one to 12 times a year for additional donations.

The small amount of blood required for this purpose will not affect the status of donors who may want to provide blood for transfusions.

After the initial blood sample is given, panel members receive a minimum payment of $2 for each subsequent donation. They are also urged, insofar as possible, to remain accessible to the future needs of the panel.

Further information and application blanks are being distributed to each NIH employee.

###blood type table

<table>
<thead>
<tr>
<th>Group</th>
<th>Rh Type</th>
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<td>A, B</td>
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ARE YOU ONE IN 5,000? This card, similar to those issued to all members of the Panel of Typed Donors, illustrates a rare combination of Rh factors found in the blood of about one out of every 5,000 persons.

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###CONFERENCE

(Continued from Page 1)

Council on Medical TV, Dental TV Institute Meet Here in April

The Council on Medical Television will hold its Third Annual Meeting here April 6 and 7. On the preceding day, April 5, the Council will conduct a Dental TV Teaching Institute. Both meetings will be held in the Clinical Center.

The one-day Institute will include discussions on the use and technical aspects of television in dental education, and a "do-it-yourself" clinic.

On April 6, after a welcome by Drs. Murray C. Brown, Chief, Clinical and Professional Education, NIH, and Chairman of the Council's Program Committee, the Council members will hear talks on various uses of television in the health-science professions.

Fletcher to Attend

Following the Council business meeting and elections on the evening of April 6, a seminar will be held on "Problems and Techniques of Health-Science TV Programming for the Lay Public," John E. Fletcher, formerly Chief, ORI, will be one of the discussion leaders.

The second day's sessions of the Council meeting will include reports on the use of television at four U.S. medical schools.

No advance registration for the meeting is necessary. Personnel of NIH and other areas of the Public Health Service are not required to pay the registration fee.

Dr. Kennedy Appointed Award Board Chairman

Dr. Thomas J. Kennedy, Jr., Assistant to the Director of Laboratories and Clinics, OD, has been appointed by Dr. Shannon as Chairman of the seven-member NIH Board on Employee Awards.

Chosen to represent varied interests of the Division and Institutes in scientific and administrative areas, the six additional members of the current Board are Dr. Heinz Specht, Chief of the Laboratory of Physical Biology, NIAMD; Dr. Mildred Pattie, Assistant Chief for Primate and Veterinary Grant Programs, NIH; Zelda Schifferman, Assistant Chief, Management Policy Branch, OD; Ellen Walsh, Assistant Chief, Social Service Department, CC; Joseph Albrecht, Head of the Pathological Technology Section, Laboratory of Pathology, NCI; and Glemore Wilbur, Assistant Chief, Personnel Management Branch, OD.

The new Board held its first meeting February 28 to consider proposals for awards for adopted suggestions, superior performance, and special acts of service. Review meetings will be held the first Wednesday of each month.
NCI Scientists Report Further Work With Moloney-Isolated Virus

Dr. John B. Moloney of the National Cancer Institute's Laboratory of Viral Oncology, and Thelma B. Dunn of the Laboratory of Pathology, and their associates.

Crosses Species Barrier

The disease has been reproduced in an inbred strain of rats inoculated with a virus derived from extracts of leukemic organs from mice, thus demonstrating that the virus crosses a species barrier. (Moloney.)

Inactivation of the virus in a test tube by immune serum from rabbits has provided evidence that the virus stimulates production of neutralizing antibodies in a nonsusceptible host. This finding suggests the possibility of employing the techniques of serology in studies of the virus in human cancer.

This report summarizes some of the findings published in three recent papers by Drs. Moloney and Robert A. Manaker of the Laboratory of Viral Oncology, and Thelma B. Dunn of the Laboratory of Pathology, and their associates.

Gross Tumors were evident in 28 of the 47 guinea pigs examined when the virus was given either subcutaneously or intramuscularly, but proportionally more tumors developed when the animals were inoculated by the intramuscular route.

The virus isolated from tumor tissue of one guinea pig was found to be identical in all respects with the SE polyoma virus used to infect the guinea pigs.

Effect Varies

The tumor-inducing effect of the SE polyoma virus varies in the different species of animals which have been tested. Neoplasms were found to develop more slowly in the guinea pig than in the hamster, mouse, rat, and rabbit. Gross tumors occurred at the site of inoculation, but histologic examination showed tumors in the liver, lung, spleen, adrenal, and kidney of some of the guinea pigs.

In the other animal species studied, neoplasms may occur at the site of inoculation, although they are usually found in selected tissues. Lesions most frequently occur in the parotid glands of mice; in the heart, kidneys, liver or subcutaneous tissues of hamsters; in the kidneys or subcutaneous tissues of rats; and in the subcutaneous tissues of rabbits.

Manaker, whose coauthors are Pat. Moloney, Robert A. Miller, and Chester V. Piezak, appears in a recent issue of the Journal of the National Cancer Institute. The report by Dr. Dunn, in collaboration with Dr. Moloney, Arleigh W. Green, and Betty Arnold, appears in another recent issue of the Journal of the National Cancer Institute.

Guinea Pigs Are Hosts To SE Polyoma Virus

It has been earlier shown that the production of tumors by the SE polyoma virus (isolated in 1957 by Drs. Sarah E. Stewart, National Cancer Institute, and Bernice E. Eddy, Division of Biologies Standards) was not restricted to its original host, the mouse. Other animal species—the hamster, guinea pig, and rat—have all been found to develop various forms of neoplasms when infected with the virus.

Recent investigation now extends the host range to the guinea pig. Drs. Bernice Eddy, Gerald Borman, Ruth Kirschstein, and Mr. Robert Touchette, of DBS, have found that the guinea pig, when infected with SE polyoma virus, also develops neoplasms, considered to be sarcomas. (Journal of Infection)(1)

Gross tumors were evident in 28 of 47 guinea pigs examined when the virus was given either subcutaneously or intramuscularly, but proportionally more tumors developed when the animals were inoculated by the intramuscular route.

The virus isolated from tumor tissue of one guinea pig was found to be identical in all respects with the SE polyoma virus used to infect the guinea pigs.

An investigation of the biochemical nature of the virus has indicated that the nucleic acid component, which carries genetic information, is ribonucleic acid (RNA). (Moloney.)

Passes Serially

The virus has been maintained in cultures of normal mouse spleen cells. If the cultures are incubated for two weeks, the virus can be passed serially for extended periods. This work has furnished a convenient tool for further studies of virus-host cell interactions. (Mann.)

The sequence of histologic changes observed in mice receiving the virus has been reported in detail. The most clearly neoplastic changes occur in the thymus, from which neoplasms have been transplanted to other organs. This finding is consistent with reports that the thymus plays an important role in development of leukemia. (Dunn.)

Dr. Moloney's report appears in the National Cancer Institute Monograph No. 4. The report by Dr.
PROGRESS
(Continued from Page 4)

search in arthritis and rheumatism, and, indeed, was an important factor in the upsurge of public interest in these diseases which led to the founding of this Institute.

During the decade which we are celebrating, the early hope that cortisone was the solution to rheumatoid arthritis has proved unfounded, but advances of great significance have nevertheless resulted. As is often the case in science, this discovery has resulted in benefits unsuspected at the outset and, as Dr. O. W. F. Hopkinson has said, it is at the time with his characteristic wisdom, one of the greatest values to come from his discovery has derived from its use as a research tool. Better understanding of the process of inflammation has resulted in new teriationships of growth and repair, and of the structure and chemical nature of connective tissues has been gained; and at the clinical level, the corticosteroids have been found to be life-saving in diseases quite beyond the realm of arthritis and rheumatism.

Advances Knowledge
Since 1951, application of advanced methods such as those made possible by the electron microscope, X-ray defraction and the ultracentrifuge have further increased knowledge of the molecular structure of connective tissue components. The fibroblast, the basic cell of connective tissue, has received much study. Great strides have been made in exploration of the chemistry nature, structure, and interest in this material which comprises the largest part of the human body has advanced remarkably.

Identifies Enzymes
Turning to advances in individual diseases, let us first consider gout. This has been known to be a characteristic of the body's ability to deal with uric acid. Now, largely through the contributions of scientists working at the National Institute of Arthritis and Metabolic Diseases, the entire metabolic pathway of urate has been elucidated and each of a complex series of enzymes involved has been identified. The demonstration that urates can be derived from the simplest building block of the foods we eat has resulted in an eagerness to gouty subjects had to follow. The discovery of three new drugs—probenecid, oxazolamine and sulfinpyrazone—which increase the elimination of uric acid from the body has completely changed the outlook in this formerly extremely serious disease and has made it a relatively benign affliction.

The most important of our crippling diseases, rheumatoid arthri-

Sympathetic Nerve Terminal Recharge
Effected by Catechol Amine Storage

National Heart Institute scientists have found that continued storage of these amines partially depletes the heart of the catechol amines—epinephrine and norepinephrine—stored in the heart muscle. They have also found that the heart can re-stores its supply of these amines by extracting them from the blood.

The studies, carried out by Drs. J. H. Siegel, J. P. Gilmore, and S. J. Sarnoff of NIH's Laboratory of Cardiovascular Physiology, indicate that this might well be an important mode of the heart continuously recharges its sympathetic nerve endings.

Increases Heart Output
Epinephrine and norepinephrine, which increase heart output by accelerating heart rate and by enhancing the vigor of cardiac contraction, are released from the nerve terminal in response to stress, exercise, and other stimuli, and reach the heart via its blood supply. They are also liberated from stores within the heart muscle itself when the heart's sympathetic nerves are stimulated. In either case, their effects on heart performance are the same.

The NHI studies showed that the extraction of catechol amines by the heart was primarily depend-

tum upon the quantities presented to it in the coronary blood supply and upon the amounts already stored in the heart.

Extraction apparently does not depend upon the ability of the heart to use the amines, since it continued after the main sympathetic nerve trunks had been cut. The daily block of degeneration of these amines had been administered. However, undegenerated nerve endings do appear essential.

Cannnot Store Amines
Other NHI studies have shown that a completely denervated heart cannot store catechol amines, even though the neural response to stress is actually intensified. It appears likely that the nerve endings are the chief amine storage sites, and they may also play some important role in the absorptive ability of the heart.

The liberation of stored catechol amines by sympathetic stimulation was found to be proportional to the intensity of the stimulus. The hemodynamic response of the heart, in turn, was directly proportional to the quantity of amines released. These findings were reported at the American Physiological Society Meetings in Chicago and Palo Alto.

Methods Are Improved
For the clinician, various improved methods for detecting rheumatoid factors have been of great value in diagnosis and in the more precise definition of rheumatoid arthritis and of a number of diseases which resemble it. During the past decade, also, the physician has been aided in his care of patients with this disease. It has been learned that this material belongs to the gamma globulin component of the serum—that part which contains the antibodies which protect the body against infections. In this case, however, the gamma globulin is of much larger molecular size than the customary form.

Challenges Imagination
The discovery of this substance in the blood of patients with rheumatoid arthritis has been a most stimulating challenge to the imagination. Its exact role is not certain but there is considerable evidence that it is an antibody. That its presence is not essential to the development of the disease appears to be established because rheumatoid arthritis can develop in patients with a congenital gamma globulin deficiency. Hence it probably is a "byproduct" of the disease rather than the cause of it. Nevertheless, its unique occurrence in rheumatoid arthritis has great theoretical and practical importance. One of the most interesting developments has been the finding of rheumatoid factor in the serum of asymptomatic blood relatives of rheumatoid arthritis patients. This indicates that heredity is involved in this disease, although other evidence shows that heredity is not the sole cause.

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lupus erythematosus, polyarteritis nodosa, dermatomyositis and scleroderma. These baffling and serious diseases have received particular attention during the past 10 years as a result of which extremely significant advances have been made. Among these has been the demonstration that each of them can present clinical, pathological and serological features which overlap with others of the group and with rheumatoid arthritis. This has been especially clear in the case of systemic lupus, which we may take as the prototype of the group for the purposes of this review.

Only a relatively few years ago, systemic lupus was considered a uniformly and rapidly fatal disease. Today this concept is completely changed. One reason for this change has been the wide use of a test for a lupus factor, somewhat analogous to the rheumatoid factor, by means of which mild cases are recognized today which formerly would have been undiagnosed.

**Lives Are Normal**

The second reason is that patients with the acute fulminating type of disease, which formerly was quickly fatal can now be saved by means of the corticosteroids, and these patients live relatively normal lives for many years. In addition to the corticosteroids, two drugs originally synthesized for the treatment of malaria have been found to be of benefit in lupus; and still more recent observations indicate that they also may prove helpful in rheumatoid arthritis.

Together with these diagnostic and therapeutic advances have gone theoretical and conceptual ones of great current interest. It has been discovered, for example, that the lupus factors have a capacity to react with various constituents of cells, or in other words that they behave like antibodies against proteins within the host.

**Theory Is Provocative**

This has led to a most provocative theory to explain the causation of the disease. It has been known for a great many years that if a protein foreign to a given animal species is injected into that animal his antibody forming cells will produce antibodies against it which will lead to his destruction. This, of course, is an important part of the body's defense against harmful agents. If, on the other hand, an animal is injected with its own tissue protein no antibodies are formed.

The currently exciting theory to which I have just referred suggests that for some as yet unknown reason, certain tissue proteins of lupus patients become so altered that the body no longer recognizes them as its own, and forms antibodies against them. The antibody then reacts with specific proteins in the patient's own tissues, causing damage and death of cells. This is the theory of autoimmunity or autosensitivity. Certainly this theory has not yet been proven, but there is much evidence which supports it. By analogy because of the overlapping features common to both systemic lupus and rheumatoid arthritis, as well as similarities between the lupus and rheumatoid factors, the same theory has recently been advanced to explain the causation of rheumatoid arthritis.

Theories alone are not enough, and this one may prove wrong as have others in the past, but at the moment there is reason to hope that we may be getting closer to the breakthrough which has so long been sought.

**Monkey Lesions Identify Virus Fatal to Man**

Virus-B is one of the 40-odd simian viruses that have been encountered in monkeys and monkeys' kidney tissue cultures. Little is known of the pathogenicity of these animal viruses, except Virus-B which, although it generally causes only a mild illness in monkeys, is capable of producing fatal encephalitis in humans. Sixteen such infections, 14 of them fatal, have occurred since 1957 in laboratories in England, Canada, and the U.S. Among laboratory personnel engaged in research involving monkeys and monkey tissue material. It is therefore essential that extreme caution be exercised when handling this potentially infected material.

**Requires Isolation**

In the Division of Biologics Standards laboratories, virus isolation procedures are required on the central nervous system (CNS) tissues of all monkeys showing histologic lesions, that are used for safety testing of virus vaccines.

In a study recently reported in the *American Journal of Pathology*, DBS Drs. Ruth L. Kirschstein, Gerald L. van Hoosier, and C. P. Li have described the lesions found in cortisone-treated monkeys after intraspinal, intrathalamic, and intramuscular inoculation of inactivated poliomyelitis vaccine. In contrast to the lesions in naturally occurring Virus-B infection in monkeys, these lesions are severe and extensive throughout the CNS and bear a marked similarity to those found in fatal human cases of Virus-B infection.

**Supports Belief**

The DBS investigators believe that the lesions are related to reactivation of latent Virus-B by the intraspinal inoculation of vaccine and the use of cortisone. The presence of neutralizing antibodies to Virus-B in the sera of two of the monkeys under study by the investigators before inoculation of the vaccine supports this belief, and confirms the findings of Sabin and others that apparently healthy monkeys may have variable levels of neutralizing antibodies to Virus-B. Moreover, isolation of this virus from normal kidney cell cultures has occurred on several occasions, indicating that this virus can remain latent in monkey tissues for long periods of time.

The recognition by pathologists of these lesions as Virus-B infection will make it possible to warn virologists of the danger so that every precaution can be used in handling the infected tissues during attempts at virus isolation.
Chromium Seen Active In Normal Utilization Of Glucose in Rats

Previous work by Drs. Klaus Schwarz and Walter Mertz of the Laboratory of Nutrition and Endocrinology, National Institute of Arthritis and Metabolic Diseases, identified chromium (III) as the active ingredient of the glucose tolerance factor (GTF), a dietary agent necessary in rats for the normal utilization of glucose. Rates raised on GTF-deficient diets were found to have a reduced rate of removal of intravenously injected glucose. However, when exceedingly low in the presence of insulin, a chromium's role in glucose metabolism, the NIAMD scientists have now completed in vitro studies with epididymal fat tissue to define the site of action of GTF more closely. These tissue preparations, of approximately 100 mg. each, were taken from animals on GTF-deficient and supplemented diets respectively.

The NIAMD studies have shown that chromium causes an 80-100 percent increase of glucose uptake by fat tissue from GTF-deficient rats. This increase was seen only in the presence of insulin. A chromium effect was obtained when as little as 1/100 microgram of chromium was supplied, along with minute amounts of insulin.

Identical conclusions could be reached from studies in which radioactive chromium was used for measuring the amount of glucose converted into fat. (A major metabolic pathway for the excess glucose administered during the course of a diet is conversion into fat.) Amounts of chromium found to be effective are of an order of magnitude similar to those present in nutrients and in body tissues.

Opens Questions

This direct evidence of chromium's role in glucose utilization opens up a number of interesting questions, the authors observed. One of these questions is a site action of chromium in the metabolic process, but they show that the chromium effect depends on the presence of insulin. The investigators believe that it is possible, mutatis mutandis, that insulin depends for its action on the presence of very small amounts of chromium. The in vitro work was reported by Drs. Mertz, Edward E. Roginski, and Schwarz in the Journal of Biological Chemistry.

Eaton Agent Seen Associated With Nonbacterial Pneumonia

The etiology of nonbacterial pneumonia has been a subject of considerable controversy among microbiologists for the past 20 years. Much interest has centered on the detection of Eaton's agent (tuberculosis, still undetermined) recovered by Dr. Monroe D. Eaton and his colleagues in 1944 from patients with atypical pneumonia.

Cooperates With Navy

A cooperative epidemiologic investigation, completed recently by Dr. Robert M. Chanock of the National Institute of Allergy and Infectious Diseases and a group of Naval scientists, among recruits at the Parris Island Marine Training Center, offers the most complete evidence to date associating the Eaton agent with atypical pneumonia. The report appears in the Journal of the American Medical Association.

Over a six-month period the investigators detected Eaton's infection in 161 of 238 (68 percent) patients with atypical pneumonia. The scientists were able to recover the agent from 14 of 17 pneumonia patients who developed fluorescent-stainable antibody during convalescence.

Infections Asymptomatic

From these data, it would appear that one in 30 infections resulted in a clinically apparent pneumonia. Although Eaton infection was also associated with febrile respiratory illness in which pneumonia was not evident, the majority of infections appeared to be asymptomatic.

Although infection with this agent is not rapidly transmitted as is influenza, the Eaton agent was found to be widely disseminated throughout the camp. In certain of the platoons it remained for at least eight to nine weeks, as evidenced by the occurrence of serologically positive pneumonia.

Conclusions Cited

The scientists concluded that the combined attributes of poor spreading ability, together with a long incubation period, are ideally suited to maintain such an agent for a long interval in an ever-changing recruit population.

Strain of Human Cells Grows for First Time In Serum-Free Medium

Human cell lines growing in serum-free media are expected to be particularly useful in studies of the role of viruses in human neoplasms, since even small amounts of animal or human serum may contain inhibitors that make it impossible to demonstrate the presence of a virus.

A collaborative study of the growth of human skin in tissue culture was inaugurated about eight years ago by scientists now of the National Cancer Institute's Laboratory of Viral Oncology and the present report was prepared by the National Naval Medical Center. These investigators reported in 1956 that a strain of human epithelial cells had been isolated and maintained in a medium consisting of human serum, filtered chick embryo extract, and saline.

Adapts to Medium

They now report that cells from this culture system have been adapted to grow rapidly in an entirely chemically defined, protein-free medium. This is the first time human cells have been adapted to grow in this type medium, known as NCTC 109.

The task of adapting cells to the medium required a period of two years, in which the amount of human serum added to the nutrient was gradually reduced. At the time the present report was prepared, monolayer cultures of cells, designated strain NCTC 3075, had been maintained in NCTC 109 for 22 months. Fluids were changed three times a week, and subcultures were made at weekly intervals.

Multiply Rapidly

The authors report that cells of the same strain also multiplied rapidly while growing suspended in the synthetic nutrient fluid in shaking flasks. After some modifications had been made in the original procedure, these constantly agitated cultures yielded larger numbers of cells than the static type.

The present report appears in a recent issue of the American Journal of Hygiene. The authors are Drs. Paul C. Bakken and Robert M. Marston of the Naval Medical Research Center, and Drs. Virginia J. Evans and Wilton R. Earle of the NCI. Dr. Earle heads the group which developed medium NCTC 109 and the agitated fluid culture method.

Permits Analysis

These fractions permit analysis for any of a variety of properties, including enzymatic activity, radioactivity, or chemical properties. Thus, a particular biological material in a crude multi-component mixture may be localized by one of its physical properties.

The accuracy of the simple ultracentrifugation method is within 5 percent of the standard analytical techniques and has the advantage of utilizing much smaller volumes of material and may be used for enzyme purification.

In addition, it may be a valuable research tool for studying the properties of enzymes, and is now being used in an attempt to establish whether there is a correlation between the size of a gene and the size of a protein synthesized by the gene. Details of the new analytical technique were reported in the Journal of Biological Chemistry.
'PERSONNEL TO PERSON'

FOR THE PAST YEAR, the Personnel Management Branch has studied its organization in an attempt to improve personnel services to the program areas.

This study has resulted in a reorganization of the Branch and the establishment of a Personnel Operations Section. This section, headed by Charles H. Jenkins, Jr., replaces the former Operations Unit.

In addition to Mr. Jenkins, the section includes eleven Personnel Operations Officers and their assistants. The Operations Officers have been assigned to the various Institutes and Divisions.

Services Are Varied

The Personnel Operations Office will provide a full range of services, including recruitment, placement, position classification, employee counseling, training, and management advisory functions on personnel matters.

Also, he will direct the work of the Personnel Representatives assigned to his staff. In essence, the Personnel Operations Officer will assume many of the responsibilities of a personnel director for the Institute or Division which he serves.

Ready to Assist

Your Personnel Operations Officer and his staff are anxious to assist you with your personnel problems. The Officers and the Institutes and Divisions to which they are assigned are as follows: Michael Wienczek, CC; Rosemary Williams, NCI; Phyllis Hamann, NIMH (temporarily detailed from Employment Section); Herbert Sticney, NINDB (acting); June Ardizzone, NIAMD; William Moon, NIH; Donald Smith, DBS-NIDR; Jane Sundelof, OAM, OD (acting); Ruby Nienaber, DRS (acting); Addie Molster, DRG-DGMS.

PERFORMANCE RATINGS

The Employee Relations and Services Section points out that the annual performance ratings for NIH employees are due March 31.

This year, the reporting and recording of performance ratings will be simplified by relieving supervisors of the necessity for submitting separate rating reports for each employee.

Supervisors will complete a form certifying the performance level of the entire group. Employees will be notified of the rating. Only individual Outstanding and Unsatisfactory ratings will require special reports.

Further details are available from your Personnel Representative.

Cafeteria Clientele Discover Machines Provide Hot Food, Cold Food and Cash

An impressive array of automatic food dispensers recently installed in the CC cafeteria are attracting widespread consumer interest and increased patronage.

The self-service equipment supplements the service provided by the cafeteria staff and makes food available around the clock seven days a week.

As evident from the accompanying candid camera sequence taken on "opening day," March 7, everybody enjoyed the "Las Vegas" atmosphere as coins clicked into the 15 machines.

Best of all, the patrons found a well-balanced menu offered by these mechanical waitresses.

Specialty machines provide hot chili con carne, beef stew, lasagna, and ravioli. Cold items include fresh fruit cup, fruit salad, and assorted flavors of jello, pastry, and ice cream.

Prices Are Reasonable

For 20c you can have ready-to-eat hot soup with a package of crackers. Two hot-sandwich machines dispense roast beef, cheeseburgers, hamburgers, ham and egg, hot dogs, and "hoagies," otherwise known as "submarines." The prices of these range from 25c to 35c.

Cold sandwiches are also available in a surprising variety.

Hot drink machines offer coffee, tea, and chocolate for 10c. The coffee is freshly brewed and served with cream from the machine's miniature refrigerator. Extra cream and sugar are forthcoming at the press of a button.

Cold drinks include milk, coke, grape, orange. The fruit drinks are served in a 9-oz. cup with crushed ice, and come carbonated or plain.

One of the most popular machines, however, serves neither food nor drink. It is a $1 bill-changer. Insert a bill, push the plunger, and out pop two quarters, six nickels, and two dimes.
ANNIVERSARY
(Continued from Page 1)

R. W. Lamont-Havers of the Ar-
Kornberg, Nobel prize winner and
niation, and a panel of five distin-
guished scientists including Arthur
Kornberg, Nobel prize winner and
former Chief of the Enzyme and
Metabolism Section, NIAMD, also
addressed the gathering.

Secretary Ribicoff called research
“the pacemaker of progress” and
remarked that it was most appro-
priate that the speaking program
joined the “leading representatives
of two interlocking worlds: the
worlds of biological science and
public service.

“The state of the nation’s health
at any given time,” he said, “is a
result of interaction between these
forces; those who seek new know-
edge, and those who make possible
its effective application.”

“The nation’s health,” he said,
“can advance no faster than the
knowledge on which it depends. As
a nation, it is imperative that we
narrow the gap between what is
known and what is done to serve
the health of our people . . .

Dr. Terry, who said he felt much
like a recent graduate returning to
his old alma mater, spoke of the
importance of reviewing for the
public the accomplishments of the
past ten years.

“It is important because the
public, which has so great a share
in all that we are doing and hope
to do, now has the opportunity to
hear directly what has been accom-
plished in the fight against disease
and to preview the prospects for the
future,” he said.

Dr. Lamont-Havers cited the im-
portance of the mobilization of
public opinion “favorable to the
control and conquest of any dis-
eases” and praised the NIAMD for
its policies and actions which have
established the considerable ties with
both voluntary and professional organi-
izations concerned with the Insti-
tute’s particular areas of interest.

Senator Hill cited examples of
accomplishments of the Institute and
institute grantees in the last
decade and stressed basic research.

May I say that while these ac-
complishments are indeed consid-
erable,” he told the group, “I think
it’s important to emphasize that
one of the greatest contributions
has been the development and ac-
cumulation of basic knowledge of
human metabolism.”

In the “Report to the Nation”
segment of the program, Drs. Cur-
rrier McEwen, George W. Thor, Franj
J. Ingelfinger, DeWitt Stetten, Jr., and
Dr. Kornberg reviewed advances in
arthritis, diabetes and endocrine
diseases, gastroenterology, metab-
olic and molecular diseases, metab-
olism and enzymology.

At a formal dinner which capped
the day’s festivities, Dr. Jay S.
Daft, Director of NIAMD, was

Mobile X-ray Unit to Return to NIH March 30-31

The Mobile Unit of the Mont-
gomery County Tuberculosis and
Heart Association will be at NIH
again on Thursday and Friday,
March 30 and 31, for the purpose
of completing chest X-ray exami-
nations of NIH employees.

In preparation for this and the
prior visit of the Mobile Unit here
on March 2 and 3, cards were dis-
tributed to employees by the Em-
ployee Health Service with the re-
quest that they be returned by
those wishing the examination.

These cards were returned by ap-
proximately 2,000 employees who
were then notified of the day of
their scheduled examination.

Of the 1,000 scheduled for exami-
nation on March 2 and 3, approxi-
mately 400 did not appear, the
Health Service reports, and many
of these have phoned to ask if they
may return on March 30 and 31.

The answer to this, EHS says, is
yes. All they have to do is visit the
Mobile Unit on March 30 or 31.

The Unit is equipped with the
Mobile Unit on March 30 or 31.
The Unit is prepared to X-ray the
1,000 scheduled for those days, plus
the 400 or so who failed to get
there earlier this month.

The Mobile Unit will be centrally
parked, as before, near the load-

3rd Annual Art Exhibit
For NIH and Families
To Open on May 14

The Third Annual NIH Art Ex-
hibit, sponsored by R&W, will open
here May 14 and continue through
June 11.

Entries will be accepted and
prizes awarded in each of three
media—paintings, sculpture, and
graphic arts. The exhibit will be
shown in a prominent lobby of the
Clinical Center.

Judges of the art works will be
William Calfee, Lecturer in the Art
Department of American Univer-
sity; Robert Gates, Associate Pro-
fessor of Art, American University;
and Don Turano, a sculptor affili-
ated with the Corcoran Gallery of
Art.

Limit Is 3 Entries

The exhibit is open to NIH em-
ployees and their immediate fami-
lies. Applicants must be over 16
years of age and may enter as many
as three original works of art. The
fee is one dollar per entry.

Exhibit entries will be received
in the auditorium of the Clinical
Center on May 4 from 4:30 to 7:00 p.m.

Entry blanks may be obtained
from the R&W office, Bldg. 16-A,
Rm. 502, Ext. 3597.

The R&W exhibit committee in-
cudes John Reeder, OD; Sadie
Fishman, NIMH; Inez Demonet,
DHS; and Lynn Meyer, NINDB.

Reorganization of ORI
Adds a Third Section

Dr. Shannon has approved a re-
organization of the Office of Re-
search Information, establishing a
third section and changing the
name of one of the two existing
sections.

The new section has been design-
ated the Program Development
Section. Its chief has not yet been
appointed.

Name Changed

The name of the Scientific Infor-
mation Section, headed by Jane
Stafford, has been changed to
Scientific Reports Section.

The Public Information Section,
headed by Clifford F. Johnson prior
to his appointment as Chief of the
Office of Research Information, is
now the Office of Research Informa-

The Office of Research Informa-
tion is a staff organization within
the Office of the Director, NIH. Its
reorganization was approved March
3.

Functions of the three sections
were set forth in a statement ac-
companying the reorganization an-
nouncement.