Fifth National Cancer Conference

MDAH Staff Members Participate

Eight MDAH staff members participated on the program of the Fifth National Cancer Conference held in Philadelphia, Pennsylvania, on September 17, 18, and 19, 1964.

Dr. R. Lee Clark, Director and Surgeon-in-Chief, and Dr. Murray M. Copeland, associate director for education, served on the Program Committee as well as participating in the conference. The meeting was sponsored by the American Cancer Society and the National Cancer Institute of the U. S. Public Health Service.

The National Cancer Conferences bring together clinicians, basic research investigators, and others interested in the cancer problem for discussion and evaluation of the various methods used for the diagnosis, treatment, and control of cancer. The material presented usually concerns both clinical and research aspects of cancer progress.

MDAH staff members who participated in the Conference and the topics about which they spoke include the following:

Dr. R. Lee Clark chaired the conference's opening plenary session on "The Epidemiology and Biology of Cancer." Dr. Clark pointed out that recently incidence rates for some cancers have risen sharply; however, proper study of the etiology of these incidence increases rests on having true (natural) incidence figures. Arriving at true incidence figures is, therefore, the first responsibility of the epidemiologist.

The coordinating efforts of the epidemiologist are even more important because of the advances which have been made within the past decade in molecular biology. We now can see how very simple mistakes which occur

(Conference, continued on Page 2)
of offices and departments will be relocated to give more space and to locate all personnel next to their primary work areas.

MacKie and Kamrath, who designed the present building, are associate architects for the expansion. Jessen, Millhouse, and Greer of Austin are consulting architects.

Pathologist is National Officer

Dr. John A. Shively, MDAH pathologist and chief of the section of clinical pathology, was elected a director of the American Association of Blood Banks during their national meeting in Washington, D. C., on August 26, 1964.

Dr. Shively has been a member of the MDAH staff since 1963. He received his M.D. degree at Indiana University School of Medicine and did further study at the Taylor-Nickel Clinic and Hospital in Bluffton, Indiana, and at the South Bend Medical Foundation. Before coming to MDAH, Dr. Shively was director of the University Hospital Blood Bank and associate professor of pathology at the University of Kentucky College of Medicine.

National Cancer Conference (continued from Page 1)

during the replication of genetic materials and which involve only one or two small molecules can result in complete disruption of cell functions. Some of these mistakes could well lead to initiation of cancerous lines of cells. Also, Dr. Clark noted, recent discoveries in molecular biology of protein and enzyme synthesis and the role of ribonucleic acids in this synthesis represent a major step forward in our efforts to conquer cancer.

Dr. Murray M. Copeland chaired the conference session entitled "Tumors of the Bone." Dr. Copeland emphasized the problems encountered in the diagnosis and treatment of benign as well as malignant bone lesions and pointed out the following classification plans for differentiating benign and malignant lesions: etiological classification; regional classification; histological classification; histogenetic classification. Histogenetic is the most significant classification, since tumor behavior is mainly determined by the tissue of origin. When the tissue of origin is known, the causation of the disease can often be traced and the course predicted.

In conclusion, Dr. Copeland stressed the importance of correct diagnosis between benign and malignant bone lesions. A common cause of misdiagnosis is the reluctance of doctors to explore bone tumors surgically, fearing dissemination of disease; however, adequate surgical precautions offset the possible disadvantages, and if adequate surgical exploration is not carried out, serious errors may occur.

Dr. Leon Dmochowski, chief of the section of virology and electron microscopy, spoke on "Viruses as Related to Cancer." Dr. Dmochowski explained that viruses are nucleoprotein entities which contain a type of nucleic acid, either DNA or RNA, capable of infection, or entry into susceptible cells in which they reproduce from their own genetic material by utilizing various nuclear and/or cytoplasmic constituents of the infected cells. Infection is not always associated with symptoms of disease. Any virus may produce an inapparent or overt, an acute or chronic, a destructive or proliferative infection.

Dr. Dmochowski described the cancer cell as an abnormal cell with an unusual, heritable property which escapes usual body control because of functional, structural, antigenic, and other changes which are the result of changes in the cell genome. The unrestricted behavior of tumor cells depends not only on their own properties, but also on those of the host.

Dr. Dmochowski presented results of recent electron microscopic studies on blood from patients with different types of leukemia; virus particles and PPLO (mycoplasma) were present in the blood of the majority of these patients. He also described recent studies in which virus particles were observed in the nuclei of cells from patients with laryngeal papilloma.

Dr. Gilbert H. Fletcher, head of the department of radiology, spoke on...
New Staff

Newly appointed staff members at MDAH include the following:

Allen T. Ansevin has been appointed assistant physicist in the department of physics. Dr. Ansevin received his Ph.D. degree from the University of Pittsburgh, Pittsburgh, Pennsylvania. Before joining the staff of MDAH, he was associated with the Rockefeller Institute in New York.

Werner E. Kahle, exchange visitor, has been named a research associate in the section of nuclear medicine, department of medicine. Dr. Kahle received his M.D. degree from the University of Heidelberg, Heidelberg, Germany. He is an associate professor of neurology and neuropathology and assistant director of the department of neurology at the University of Wurzburg, Wurzburg, Germany.

John W. Loftis has been appointed to the position of assistant pathologist, section of clinical pathology, department of pathology. Dr. Loftis received his M.D. degree from the University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania. Before joining the staff of MDAH, he served as a teaching fellow in surgery and pathology at the University of Pittsburgh and was associated with St. Francis Hospital, Pittsburgh.

Max Schlamowitz has joined the MDAH staff as associate biologist in the section of immunology, department of biology. Dr. Schlamowitz received the B.S. degree from City College, New York, and the M.S. and Ph.D. degrees from the University of Michigan, Ann Arbor, Michigan. Previously, he held research positions at Sloan-Kettering Institute and Cornell University Medical College in New York City, and at Roswell Park Memorial Institute, Buffalo, New York. Immediately before joining the MDAH staff, Dr. Schlamowitz was associated with Baylor University College of Medicine in Houston.

Developments, Dr. Russell discussed histochemical studies, tissue culture of tumors, karyosome typing, electron microscopy, cryostat processing, and fluorescent microscopy. According to Dr. Russell, these methods will provide the pathologist with almost infallible means of diagnosing cancer.

Dr. John S. Stehlin, Jr., associate general surgeon, described a study on "Perfusion for Melanoma of the Extremities: Six and One-Half Years' Experience with 221 Cases" which he conducted with Dr. Clark. Dr. Stehlin drew two conclusions from the study: perfusion is definitely of value for treating patients with recurrences of melanoma in the extremities; and the morbidity, mortality, and complications which followed perfusion were reasonable and acceptable. However, Dr. Stehlin cautioned, unless perfusion is performed by a qualified surgeon with experience in chemotherapy, the procedure carries serious hazards.

The following trends seem to be clear: (1) perfusion reduces the incidence of recurrences in the extremities, especially the lower extremity; (2) although recurrences may develop in an extremity following lymphadenectomy and perfusion, chemotherapy seems to forestall their appearance until overwhelming systemic disease is manifest; and (3) perfusion reduces the necessity for radical amputation.
Associate Director is
American Cancer Society
President

Dr. Murray M. Copeland, MDAH associate director for education, was installed October 30 as President of the American Cancer Society. The Society held its annual meeting in New York City on October 26 through 30.

The American Society for the Control of Cancer was founded in 1912; in 1945 it became the American Cancer Society. Today the Society consists of more than 2,000,000 volunteers working on county, state, regional, and national levels to provide support for cancer research, for education for better cancer control, and for service for stricken cancer patients.

Dr. Copeland has been a national Director-at-Large of the American Cancer Society since 1957 and has served on a number of national committees. He is also a Director-at-Large and member of the Executive Committee of the state division of the Society.

Before joining the staff of MDAH in 1960, Dr. Copeland was professor and chairman of the department of oncology at the Georgetown University Medical Center in Washington, D. C. At present, he is professor emeritus, Georgetown University Medical Center.

Dr. Copeland has long been active in the cancer control effort. He is chairman of the American College of Surgeons’ Committee on Cancer and of the American Joint Committee for Cancer Staging and End Results Reporting. He is a member of the Advisory Committee of the Cancer Control Program, U. S. Public Health Service, and of the Committee on Clinical Stage Classification and Applied Statistics of the International Union Against Cancer. He is past president of the Southeastern Surgical Congress, the Southern Surgeons Club, and the District of Columbia Division of the American Cancer Society.

Dr. Copeland, a diplomate of the American Board of Surgery, is author of more than 100 articles on cancer and co-author of the book, *Tumors of Bone*.

1965 Symposium on
Fundamental Cancer Research
March 4, 5, and 6

“Developmental and Metabolic Control Mechanisms and Neoplasia” will be the subject of the 19th Annual Symposium on Fundamental Cancer Research, to be held at MDAH on March 4, 5, and 6, 1965. Scientists from the United States and abroad will present papers on the latest developments in this aspect of basic cancer research.

Dr. Darrell N. Ward, chairman of the Symposium Committee and head of the MDAH biochemistry department, has announced that the topics under discussion at the symposium will be: Biosynthesis and Control Mechanisms; Molecular Basis of Early Development; Molecular Basis of Later Development and Control; and Comparative Studies and Control Mechanisms in Normal and Neoplastic Tissues.

In addition to Dr. Ward, other members of the Symposium Committee include the following MDAH staff members: Dr. N. Burr Furlong, assistant biochemist; Dr. A. Clark Griffin, biochemist; Dr. Lubomir S. Hnilica, assistant biochemist; Dr. Robert B. Hurlbert, biochemist; Dr. David Marrack, associate pathologist; Dr. Thomas Matney, associate biologist; Dr. Robert J. Shalek, physicist; and Dr. Joan C. Suit, associate biologist.

Assisting Dr. Ward and the Symposium Committee is an external Advisory Committee, which has the following members: Dr. Francois Jacob, from the Institut Pasteur in Paris, France; Dr. Marshall Nirenberg, of the National Heart Institute, Bethesda, Maryland; Dr. James D. Ebert, from the embryology department at the Carnegie Institution of Washington, Baltimore, Maryland; and Dr. Robert E. Eakin, professor of chemistry at the University of Texas in Austin.

Other members of the Advisory Committee are Dr. Val W. Woodward, department of biology, Rice University, Houston; Dr. James B. Walker, department of biology, Rice University, Houston; and Dr. Van R. Potter, McArdle Memorial Laboratory, University of Wisconsin Medical School, Madison, Wisconsin.

The purpose of the annual symposia is to bring together scientists from the United States and other countries to review and exchange newly formulated ideas on one facet of scientific knowledge related to cancer. A highlight of the meeting will be the presentation of the Bertner Foundation Lecture, to be delivered by the recipient of the Bertner Foundation Award, an award given annually to a scientist who has made an outstanding contribution to the field of cancer research.

Co-sponsors of the symposium are The University of Texas Graduate School of Biomedical Sciences at Houston, Division of Continuing Education; the American Cancer Society, Texas Division; and the National Cancer Institute.

Inquiries may be addressed to:

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Virologist On Leukemia Board

Dr. Leon Dmochowski, chief of the MDAH section of virology and electron microscopy, has been appointed a member of the Acute Human Leukemia Task Force of the National Cancer Institute by Dr. C. Gordon Zubrod, Director for Research of the National Cancer Institute, National Institutes of Health, U. S. Public Health Service.

Also, while Dr. Dmochowski was in Philadelphia attending the Fifth National Cancer Conference (see page 1), he appeared by invitation on the television program “Question for the Doctor.” The program, arranged by the Philadelphia County Medical Society, concerned the relationship between viruses and cancer.
**Grants Support MDAH Research**

A number of grants have recently been awarded to MDAH researchers to support basic and clinical medical investigations.

The United States Public Health Service has made awards to the following staff members:

**Dr. Daniel E. Bergsagel**, associate internist, department of medicine, will attempt to demonstrate protein transformation by DNA in in vitro and in vivo mammalian systems. For in vitro transformation, Dr. Bergsagel will attempt to transform a transplantable mouse myeloma which synthesizes only gamma globulin (PC-γ) into one which produces both gamma and beta globulin. This will be done by implanting in BALB/c mice PC-γ cells which have been incubated in tissue culture with DNA prepared from a beta globulin-producing tumor (PC-β). In the in vivo studies, Dr. Bergsagel will try to induce the synthesis of Factor IX (Christmas factor) in dogs with hemo philia B by the infusion of DNA prepared from a normal female canine liver during the liver regenerative phase following carbon tetrachloride intoxication.

Dr. Bergsagel also received a grant to study chemotherapy for chronic lymphocytic leukemia and myeloma. Data on 196 myeloma patients treated with melphalan are being analyzed to determine the effect of this therapy on survival. Since much higher melphalan response rates are obtained in myeloma patients producing Type I L-chain myeloma proteins, the plasma clearance rate and urinary excretion pattern will be studied in patients producing Types I and II L-chain myeloma proteins.

**Dr. R. Lee Clark**, Director and Surgeon-in-Chief, accepted an award for the institution's cancer clinical research unit, which contains 20 beds. Clinical research is now in progress on: Pharmacologic, toxicologic, and clinical studies of new cancer chemotherapeutic agents; the effect of thio-TEPA and Cytoxan on the endocrine system in patients with metastatic breast cancer; evaluation of the effects of a progestin on adenocarcinoma of the endometrium; radiation response of anoxic human tissue, normal and malignant; evaluation of radiation sensitizing agents; chemotherapeutic perfusion of extremities and organs by vascular isolation; chemotherapy of advanced melanoma; evaluation of combination chemotherapy in advanced malignant disease; the possible etiologic relationship of viruses to human leukemia and lymphoma; endocrine evaluation of lung cancer; and hormonal evaluation of pituitary tumors.

**Dr. Nylene Eckles** and **Dr. Mary Sears**, internists in the department of medicine, received a grant to study the relationship between pituitary stalk section and breast cancer. Patients with advanced breast cancer will be sequentially treated with steroid hormones, chemotherapeutic drugs, and ablative glandular surgical procedures. Special study is being made of endocrine changes, effect on tumor, and certain biological aspects (lactation and a salt-losing syndrome of cerebral origin) of pituitary stalk section. Effects of chemotherapeutic drugs on ovarian function are being studied. Experimental methods of treating metastases in special sites (i.e., eye, mediastinum, femur, brain, chest wall) are being evaluated.

**Board of Visitors Gains New Member**

Mrs. Julia Matthews, Abilene civic leader, was recently invited to become a member of the MDAH University Cancer Foundation's Board of Visitors following action of The University of Texas Board of Regents to approve her appointment.

The University Cancer Foundation, a nonprofit organization dedicated to the support of educational and scientific investigation concerning neoplastic and related diseases, was established in October, 1955, by the Board of Regents. The Foundation's purposes revolve around a central theme of medical education and research.

The fundamental activities of the Foundation involve the following: to promote and support beneficial investigation in medicine and allied sciences related to neoplastic diseases; to pursue educational activities leading to the creation and dissemination of health knowledge; and to foster the development of research and graduate study in the medical sciences and related basic sciences.

The Board of Visitors is an integral part of the University Cancer Foundation and operates under the same outline of purpose. Board members become lay partners in the development of MDAH as a center for cancer treatment, research, and education, and devote their interests and influence to this purpose.

Julia Jones Matthews, in private life Mrs. John A. Matthews, was born in Abilene, Texas. She attended the Abilene Public Schools, the Madeira School in Greenway, Virginia, and Smith College in Northampton, Massachusetts.

In Abilene, Mrs. Matthews is very active in civic affairs. Among other activities, she is a member of the Junior League, a director of St. John's Episcopal School in Abilene, and a director of the West Texas Rehabilitation Center in Abilene.

Mrs. Matthews is the daughter of Mrs. Percy Jones of Abilene who is also a member of the University Cancer Foundation's Board of Visitors. Mrs. Jones has been a member since 1962.

Dr. John E. Healey, Jr., associate experimental surgeon, department of surgery, received a grant to support further study on the nonsuture repair of body tissues. Dr. Healey is evaluating the use of a plastic glue (iso-butyl cyanoacrylate) for repair of various body tissues and determining the tissues amiable to repair, healing time, tissue reaction to the plastic, and the fate of the plastic. Ten groups of dogs will be used; in each group, different tissue will be tested. At regular intervals, the repaired tissue will be removed by biopsy procedures. Stained histological preparations will be studied to determine rate of healing and tissue reaction, and compared to that occurring in animals who received tissue repair by conventional suture techniques.

**Dr. Clifton D. Howe**, internist and head of the department of medicine,
has been awarded a grant to study new antitumor agents. Dr. Howe will carry out preliminary pharmacologic studies (Phases I and II) on new antitumor agents cleared for clinical use by the CCNSC. The work will be done in conjunction with the Southwest Cancer Chemotherapy Study Group. Phase I studies of alpha sarcom, terophthalanilide, actinogen, and phenazine are in progress. Narangomyein study has been discontinued in the Phase I group. Phase II study is being carried out with hydroxyurea and 1-sarcolysin. The immediate goal of the studies is to determine safe and effective doses for the agents preliminary to systematic definitive studies of the drug's antitumor effect in a wide variety of human tumors.

Dr. Martha Sheek, research associate, section of radiation biology, received a grant to study the regulatory influence of DNA viruses on DNA polymerase from mammalian cells. KB cells grown in suspension will be synchronized by thymidine feedback and studied for the distribution of DNA polymerase during the G1, S, and G2 periods. The cells will be fractionated into their nuclear and cytoplasmic components by the aqueous sucrose and organic solvent methods to determine whether the means of preparation causes the distribution of polymerase to vary within stated growth periods. DNA polymerase activity will be determined by the uptake of isotopic precursors into acid insoluble product and by isolating subcellular fractions in a sucrose gradient. Information will be obtained on whether DNA polymerase is made de novo for each round of DNA synthesis. The effect of infection with nuclear and cytoplasmic DNA viruses on cells during the various growth phases will be studied.

Dr. Joseph G. Sinkovics, assistant internist, department of medicine, was awarded a grant to conduct a comparison of murine and human leukemia. Aspects of the viral etiology, immunology, and epidemiology of mouse leukemia will be studied to obtain data which can be used for devising research in human leukemia. The understanding of mouse leukemia itself is of importance, for mice associate with household animals and thus, in an indirect way, may contribute to etiology and immunology in human leukemia. Virus-neutralizing and cytotoxic antibodies, immunologic activity of lymphocytes, and interferon production will be studied in both in vivo and in vitro systems.

Dr. Darrell N. Ward, biochemist and head of the department of biochemistry, was awarded a grant to study the chemistry of luteinizing hormone. Chemical studies of luteinizing hormone from pituitary glands of sheep, pork, beef, and horse are in progress. Chemical composition, peptide mapping after particle degradation, and physical properties are the bases of comparison. Incidental purification studies on the hormones or degradation products are being carried out.

The American Cancer Society made awards to the following investigators:

Dr. T. C. Hsu, biologist and chief of the section of experimental cytology, will study the cytology of cell strains. Autoradiographic methods will be used to study DNA replication and RNA synthesis of mammalian cells in vitro. RNA synthesis in various types of somatic cells will also be studied. The whereabouts of the nucleoli in metaphase and anaphase will be investigated with histochemical and autoradiographic techniques. The virus-chromosome relationship will be studied, with special reference given to the herpes group, and attention will be given to cytological phenomena other than chromosome damage induced by viral infection.

Dr. Robert B. Hurlbert, biochemist and chief of the section of nucleotide metabolism, will study the biosynthesis of nucleotide and polynucleotide pyrimidines in rat tumor tissue. This project is part of a program designed to describe the metabolism of pyrimidines during the formation of nucleic acids in animal tissues. Various labeled precursors are incubated with metabolizing cell suspension, enzyme fractions, or subcellular particles of the tissue; pyrimidine intermediates and nucleic acid pyrimidines are then isolated and analyzed. To be studied are the characterization of RNA formed in nuclei isolated from the Novikoff ascites tumor and from rat liver, and the synthesis of RNA in nucleoli isolated from rat tumor and rat liver.

The National Award, which consists of a gold medal with an accompanying citation, is the highest honor given by the American Cancer Society. Since 1949, it has been presented to an individual who has offered distinguished service in the cause of cancer control. The award recognizes distinction and accomplishment in an individual whose professional career is characterized by greatness, originality, or outstanding importance and whose contributions have broad significance to cancer control.

Dr. Scott presented Dr. Clark with a plaque which reads: "National Award of the American Cancer Society to Dr. R. Lee Clark, distinguished surgeon whose exceptional clinical skills, imaginative leadership in research and administration and extraordinary dedication to the welfare of the cancer patient have contributed profoundly to progress in cancer control."

The Lasker award was given by the Albert and Mary Lasker Foundation to honor Dr. Clark for his contributions to cancer control. The award recognized Dr. Clark for the promotion of investigations which have provided techniques, information, and concepts vital to the control of cancer. Mrs. Lasker also presented Dr. Clark with an honorarium of $5,000.
MDAH Closed-Circuit Television

Pediatric Performances

Children love television, and children in the MDAH pediatric unit not only love to watch, they love to perform for the TV camera.

New wiring, installed by members of the television unit of the medical communications department, enables closed-circuit television to be broadcast from and to an expanded number of locations within the institution, including all the patient rooms in the pediatric unit.

Since 1956, the closed-circuit system had linked the auditorium, conference rooms, the Director's office, the operating suites, and the patients' solariums. It had been used primarily for educational purposes, e.g., operations were televised to conference rooms or the auditorium, enabling students to obtain close-up views of surgical procedures not possible in ordinary operating theaters.

Originally, new lines were to be wired into the pediatrics unit to allow better reception from the outside. However, it was decided to go ahead and complete wiring for the closed circuit as well.

This innovation inspired Dr. Grant Taylor, chief of the section of pediatrics, to make a suggestion to Mr. Robert A. Kolvoord, head of the department of medical communications. Since the closed circuit could be received in all the patients' rooms in the pediatric unit, could not the children who were well enough perform on television occasionally?

The idea was worked with until it emerged in usable form. As a pilot operation, three children were selected to take part in a pantomime. The mother of one of the children wrote a fairy tale especially for these children using the props that were available. The play was broadcast from the Little Theater in the television section, and was followed by a short comedy about a dancing horse. The children loved it.

Plans were begun for other television programs which could utilize more of the pediatric patients. On the day before Halloween, another mother and six children gathered before the camera to transform an ordinary pumpkin into a laughing jack-o'-lantern. A similar skit was planned to celebrate the Christmas season.

Dr. Taylor takes great pride in the accomplishments of his patients. The philosophy of his ward is based on warmth, love, and, above all, understanding by doctors, nurses, and others who work with the children.

All projects, such as the TV skits, are pursued with the same faith and hope that would be experienced during normal family life. It is of immeasurable value to the parents' peace of mind to see their children happy and taking part in constructive activities. For those too ill to actively participate, it provides an incentive, not only to become well enough to join the activities, but to give themselves by encouraging and helping others.

Unfortunately, although all of the rooms in the pediatric unit are wired for television, they are not all equipped with television sets. Of the 15 patient rooms, less than one half have sets. All have been gifts from individuals or organizations.

The aim of the medical communications department and the pediatric personnel is to have one television set in each single patient room, and two sets in the two- and four-bed wards.

Members of the television unit responsible for developing the idea of the children's television programs were Mr. Harry Macmillan, electronic engineer; Mr. Kenneth Wiedower, supervisor of motion pictures and television; Mr. Mike Bossler, writer; and Mr. Mike Allred, assistant electronic engineer.

HALLOWEEN FESTIVITIES—As the mother for cutting the pumpkin arrives, the costumed children draw close. This was the high point in an unrehearsed television skit presented on closed circuit to patients in the pediatrics unit not well enough to take part in the skit themselves.

Associate Biologist Receives Award

Dr. Joan Countryman Suit, associate biologist in the section of genetics, department of biology, has been awarded a Faculty Research Associate Award by the American Cancer Society. This is the first such award to be given to an MDAH investigator.

Faculty Research Associate Awards provide salaries for young scientists who have sufficient training to pursue useful careers in teaching and/or research with opportunities to demonstrate their capacity for conducting meaningful research of their own design. It is required that the nominee be at least two years beyond his initial doctorate and have demonstrated unusual promise of academic eminence in teaching and research.

The duration of the award may be for any period of time up to five years. Payments for the second and subsequent years are made if the research is proceeding satisfactorily and according to schedule.

Dr. Suit will investigate the metabolic events which occur during microbial genome interactions, i.e., DNA, RNA, and protein synthesis and activities. In the Escherichia coli K12 mating system, she will study the macromolecular activities involved in initiating transfer of the genome from donor to recipient bacterium; the amount and nature of material transferred during two hours of uninterrupted mating; and metabolic events which occur in the recipient after entrance of donor DNA.

Dr. Suit will also study the newly isolated bacteriophage M-1 and its interactions with its host E. coli 15 T-A-U-. She has received a grant from the U. S. Public Health Service to help support this research.

Joan Countryman Suit received her B.S. degree from Oregon State University, and her M.A. and Ph.D. degrees from Stanford University. Before coming to MDAH, she was a research associate in the biology division of the Oak Ridge National Laboratories in Oak Ridge, Tennessee. She joined the staff of MDAH in 1959, where she held the position of research associate until 1965, and the position of assistant biologist during 1963-1964, after which she became associate biologist.

Dr. Suit is a member of the American Society for Microbiology, the American Society for Cell Biology, the American Association for the Advancement of Science, and Sigma Xi.
Dean Appointed for Graduate School of Biomedical Sciences

Dr. Paul A. Weiss, world-renowned scientist and educator, has been appointed University Professor and Dean of the University of Texas Graduate School of Biomedical Sciences at Houston. Dr. Weiss was appointed to the deanship by the Board of Regents of The University of Texas in May of this year and assumed the duties of his position on October 1.

Dr. Weiss came to Houston from the Rockefeller Institute in New York City where he had headed the laboratory of developmental biology since 1954. He succeeded Dr. Grant Taylor who had been acting dean of the Graduate School of Biomedical Sciences since it was authorized by the Texas Legislature in 1963. Dr. Taylor has now assumed the deanship of the Division of Continuing Education of the Graduate School; he is also chief of the section of pediatrics at MDAH.

Born in Vienna, Austria, Dr. Weiss studied engineering and biology in his native country. After receiving his Ph.D. degree in biology from the University of Vienna, he became assistant director of the Biological Research Institute of the Austrian Academy of Sciences.

Dr. and Mrs. Weiss have made their home in the United States since 1931, when Dr. Weiss became a Sterling Fellow at Yale University. From 1933 to 1954, he was professor of zoology at the University of Chicago and served as chairman of the master's program in biology. He is currently a consultant and member of many governmental scientific committees and agencies.

Dr. Weiss is internationally known for his contributions in the biological sciences to basic problems of growth, differentiation, regeneration, and the submicroscopic organization of tissues, especially the nervous system. During World War II, some of his work helped improve techniques to promote the regeneration of shattered nerve and muscle tissue. Many young men owe their recoveries from crippling war wounds to his work.

Natrona County, Wyoming Award Presented

The Natrona County, Wyoming Fellowship in Cancer Research has been awarded for the second time to a native of Iceland who is now engaged in cancer research in pathology at MDAH.

Dr. Hrafn Tulinius, senior fellow in pathology, will be sponsored under the fellowship for the period of October 1, 1964, through September 30, 1965. His previous year of sponsorship terminated on September 30, 1964.

The Natrona County, Wyoming Fellowship in Cancer Research is supported by the Natrona County Health Fund. It was established in 1963 with the purpose of providing support for a fellow doing postdoctoral work in some area of basic cancer research.

During the past year, Dr. Tulinius has been engaged in research on the localization of antihuman fibrin antibodies in human tumors.

Staff Publications


