Department of Virology Established

Dr. R. Lee Clark, Director and Surgeon-in-Chief of MDAH, has announced the establishment of a department of virology for the study of the role of viruses in cancer. Dr. Leon Dmochowski, chief of the former section of virology and electron microscopy, department of biology, has been appointed acting head of the newly created department.

For nearly 30 years, Dr. Dmochowski has investigated the relationship between viruses and cancer, and has made many outstanding contributions to cancer research. Dr. Dmochowski is perhaps best known for his 1957 discovery, when he became the first scientist in the world to show virus-like particles in lymphoid tissue from a human being affected by acute lymphatic leukemia.

The activities of Dr. Dmochowski and his departmental staff focus mainly on the relationship of viruses to the initiation of cancer in animals and man. Sufficient evidence has been accumulated to implicate viruses in the origin of many types of animal cancer, and the role of viruses in the origin of human cancer is being studied intensely.

Electron microscopes are used in much of the research in this department. Pictures can be taken in the microscope of tissue samples magnified up to 120,000 times their actual size; these photographs can then be enlarged to one million times the original size of the samples. MDAH has eight electron microscopes; four of these are located in the department of virology.

Electron microscope studies of lymph node tissue from patients with different types of leukemia have now demonstrated virus particles in all types of leukemia and in most leukemic patients. These viruses are similar in structure, appearance, and mode of development in all the leukemias examined, and, further, are similar to those viruses known to cause leukemia in mice. These findings have now been confirmed by a number of investigators.

H. C. Wiess Chair for Cancer Research

The Harry Carothers Wiess Foundation of Houston has made a monetary gift to MDAH for the establishment of the first endowed academic chair to be established at this institution. The gift was accepted by The University of Texas Board of Regents, as was a similar gift to establish a chair in otolaryngology at The University of Texas Medical Branch in Galveston.

Board of Regents Chairman W. W. Heath announced that the new position at MDAH will be known as the Harry Carothers Wiess Chair for Cancer Research. The gift for the Medical Branch will create the Harry Carothers Wiess Chair in Otolaryngology, replacing a professorship in that field established in 1961 by Mrs. Wiess in memory of her husband.

In reference to the gift, Dr. R. Lee Clark, MDAH Director and Surgeon-in-Chief, said the Wiess chair would “allow us immediately to proceed in the recruitment of a person of national stature to increase our research efforts in depth. The addition of this gift as a living memorial to a great citizen of our city and state increases the potential of excellence of our total research effort in solving the mysteries of cancer and adding to the sum total of our scientific knowledge in the life sciences.”

Appreciation was also expressed to the foundation, to Mrs. Wiess, and to her daughters, Mrs. Lloyd H. Smith, Mrs. Theodore Law, and Mrs. James A. Elkins, Jr., all of Houston, by the Board of Regents and by the Chancellor of the University, Dr. Harry H. Ransom.

The late Harry C. Wiess, in whose honor the new chairs are named, was chairman of the board of Humble Oil and Refining Company at the time of his death in 1948. A distinguished citizen of Houston and leader in the oil industry, he was a founder of the Humble Company and served as its president from 1937 to 1948.
Mr. Wiess, a chemical engineering graduate from Princeton University, had a life-long interest in scientific research and education and was responsible for establishing Humble's research organization.

The Wiess family is responsible for a number of other gifts to MDAH, all of which have enhanced and enriched the various programs of the hospital to which they were directed. One of the projects made possible by a gift from Mrs. Wiess is this News Letter, which is sent free of charge to all the physicians of Texas.

**Common Research Computer Facility**

The National Institutes of Health of the U.S. Department of Health, Education and Welfare has announced the awarding of funds to MDAH, to Texas Medical Center, Inc., and to Baylor University College of Medicine for the establishment of a regional computer facility in the Texas Medical Center. The total support for the first year of the grant, which will be in effect for a period of three years beginning May 1, 1965, and continuing through April 30, 1968, will be $862,201.

The computer facility is intended to serve as a major research resource for the academic and affiliated institutions conducting health research in the Texas Medical Center. The facilities will be accessible to the medical units of The University of Texas located at Dallas and Galveston as well as to other academic institutions in the Houston area.

Dr. Lee D. Cady, Jr., head of the bio-mathematics department at MDAH, is the principal investigator for the Texas component of the program. Mr. Lynn C. Hayward, chief of the section of computer science at MDAH, is acting operations manager and associate director of the facility. Dr. William A. Spencer of Baylor University College of Medicine is acting director of the Common Research Computer Facility, and Mr. William Blose of Baylor is an associate director.

The Common Research Computer Facility is under the direction of an executive committee consisting of Dr. R. Lee Clark, MDAH Director and Surgeon-in-Chief; Dr. Richard T. Eastwood, Director of Texas Medical Center, Inc.; and Dr. Stanley W. Olson, Dean of Baylor University College of Medicine.

The establishment of the regional computer facility in the medical center is the culmination of two years of careful study of existing health research activities requiring the use of computers and of consultation with respect to the feasibility, need, and suitable plan for a common medical research computer resource. The funds will implement a variety of existing academic research activities which depend upon the availability of complex computer programming and of high-speed equipment.

Operational plans are designed to provide scientists from the sponsoring institutions an opportunity to further important medical research by more effective computation; to enhance application of mathematics and relevant computing science technology to the biomedical area; and to bridge medical research computer usage with current technological developments.

The Texas Medical Center, Inc., has contributed funds for remodeling the lower floor of the Texas Medical Center garage where the computer facility will be located. The facility will have a total of 7,500 square feet of space.

**ACS Scientific Session**

The American Cancer Society held its 1965 Scientific Session in Philadelphia on June 16. This session replaced the Scientific Session formerly held in October during the society's annual meeting. The change in scheduling gives physicians a better opportunity to attend the Scientific Sessions.

The topic of this symposium was "Hormones and Chemotherapy for Cancer—A Critical Appraisal." MDAH staff members who participated on the program were Dr. W. W. Sutow, who spoke on chemotherapy in children with cancer (except leukemia), and Dr. Emil Frei, III, who spoke on chemotherapy for lymphomas and leukemias.

Dr. Murray M. Copeland, MDAH associate director (education) and President of the American Cancer Society, gave the opening address.
New Staff

Newly appointed staff members at MDAH include the following:

Frances E. Arrighi has joined the MDAH staff as junior assistant in biology, section of cytology, department of biology. Dr. Arrighi received her Ph.D. degree from The University of Texas. A portion of her predoctoral study was done at MDAH in the section of cytology.

Lee D. Cady, Jr., has accepted the position of head of the department of biomathematics. Dr. Cady received his M.D. degree from Washington University, St. Louis, and the M.P.H. and Dr. P.H. degrees from Yale University. His previous appointments include senior assistant surgeon and poliomyelitis epidemiologist, Communicable Disease Center, U. S. Public Health Service, and surgeon (lieutenant commander) and A.I.D. state health administrator in Iran. Prior to joining the MDAH staff, Dr. Cady was associate professor of physical medicine and rehabilitation, and associate research scientist, all-university mathematics department, research division, school of engineering and science, New York University.

Luis Delclos has been appointed to the position of associate radiotherapist in the department of radiology. Dr. Delclos received his M.D. degree from the Barcelona University, Catalonia, Spain. He has served as clinical radiologist, Military Hospital, Tarragona, Spain; as house surgeon, Bolton Royal Infirmary, Bolton, England; and in several positions at the Christie Hospital and Holt Radium Institute, Manchester, England. Dr. Delclos was associated with MDAH from 1960 through 1963. Recently he has been with the Upstate Medical Center in Syracuse, New York, where he was an associate professor of radiology and an associate radiotherapist.

William V. Leary has been appointed to the position of internist in the department of medicine. Dr. Leary received his M.D. degree from the University of Minnesota Medical School at Minneapolis and his M.S. degree from the University of Minnesota Graduate School at Rochester. He was a consultant in medicine and broncho-esophagology at the Mayo Clinic, Rochester, Minnesota. Prior to joining the MDAH staff, Dr. Leary has been associated with the Kelsey-Leary-Seybold Clinic in Houston.

J. William Poppell has been appointed associate clinical physiologist, cardiology laboratory, department of medicine. Dr. Poppell received his M.D. degree from Northwestern University Medical School, Chicago. His previous appointments include clinical assistant, medicine, Memorial Hospital; head, cardiac physiology section, division of experimental surgery and clinical physiology, Sloan-Kettering Institute; and assistant professor of medicine, Cornell University Medical College, all in New York. Most recently, Dr. Poppell was director of research and chief, radioisotope section at the Centro de Educación Médica e Investigaciones Clínicas, Buenos Aires, Argentina, at the invitation of the A.I.D. program.

Paul E. Shutts has accepted the appointment of associate anestesiologist in the section of anesthesiology, department of surgery, Dr. Shutts received his M.D. degree from the Medical College of Virginia. For the last 10 years, he has been director of obstetrical anesthesia at St. Joseph's Hospital in Houston.

Earl F. Walborg, Jr., has been appointed assistant biochemist in the department of biochemistry. Dr. Walborg received his Ph.D. degree from the Baylor University College of Medicine, Houston, Texas, and trained in cancer research at MDAH from 1962–1963. Prior to joining the MDAH staff, Dr. Walborg studied at the University of Lund, Lund, Sweden, on a U.S.P.H.S. fellowship (research).

William J. Wylie, Jr., has been appointed clinical assistant internist (part-time) in the department of medicine. He received his M.D. degree from the Louisiana State University School of Medicine, New Orleans. Dr. Wylie was previously associated with the V.A. Hospital, Houston, Texas.

MDAH Staff Members Receive James Ewing Awards

R. Lee Clark, M.D., Director and Surgeon-in-Chief of MDAH, and William S. MacComb, M.D., chief of the section of head and neck surgery at MDAH, were recipients of two of the four awards presented this year by the James Ewing Society during its annual Scientific Session held in Houston.

Before the actual symposium began, a pre-symposium program was held in the auditorium of MDAH on Monday morning, April 5. At this meeting, members of the MDAH staff presented résumés of their clinical work. On the two succeeding days, the scientific sessions were held at the Hotel America. The awards were presented at the Society's annual banquet, held on Tuesday night, April 6.

Lucy Wortham James Award

Dr. R. Lee Clark was presented the Lucy Wortham James Award for service in the clinical aspects of cancer and its control. The award is a recognition of Dr. Clark's many contributions to the improvement of surgical care for cancer patients and of his achievement in organizing and directing MDAH.

Two Lucy Wortham James Awards are given yearly by the James Ewing Society as reward and recognition for outstanding work done by individuals working in the field of cancer. One is given to a person engaged in basic research relevant to cancer, and the other to a practitioner of clinical medicine who has contributed to cancer control.

Before receiving his award, Dr. Clark delivered a lecture on the legal and ethical aspects of human experimentation in cancer.

James Ewing Medal

Dr. William S. MacComb was awarded the James Ewing Medal, the highest honor given by the society. Dr. MacComb also delivered the James Ewing Lecture, which is annually given by the recipient of this medal; his topic was "Cancer of the Larynx."

As one of six founders and original members of the society, Dr. MacComb served as the society's first president. He served a second term in 1960–1961, and is one of two individuals to have served two terms as president.
Staff Members Speak Abroad

Several members of the MDAH staff traveled abroad during the first part of the summer and delivered lectures at international scientific conferences and meetings in Europe. Among the countries visited were Portugal, Italy, England, and Bulgaria.

Cancer Week, sponsored by the Instituto de Portugues Oncologia, in Lisbon, Portugal, was held June 5 through June 12 in Portugal. Dr. R. Lee Clark, Director and Surgeon-in-Chief; Dr. Gilbert H. Fletcher, head of the department of radiology; and Dr. George T. Pack, Pack Medical Group of New York, were featured speakers. Dr. Clark spoke on mammography, carcinoma of the thyroid, perfusion, and viruses and cancer. Dr. Fletcher's topics were carcinoma of the uterine cervix, radiotherapy for carcinoma of the breast, and carcinoma of the larynx.

On May 23 through May 27, Dr. Clark attended the Fifth International Thyroid Conference in Rome and presented a paper on thyroidectomy. Also at this conference, Dr. Carey Stratton Hill, assistant internist, participated in a round table discussion concerning the effects of subsequent pregnancy on thyroid carcinoma.

Dr. Fletcher presented lectures on radiotherapy in oropharyngeal cancer at the British Institute of Radiology and the Institute of Laryngology and Otology in London.

Dr. Leon Dmochowski, head of the department of virology, visited the Imperial Cancer Research Fund, Middlesex Hospital Medical School and the Cancer Department of the London Hospital, London, on June 3 and 4, where he held discussions with staff members of these institutions.

On June 5, 6, and 7, Dr. Dmochowski participated in the Riunioni Medico-Chirurgiche Internazionali in Turin, Italy. He served as chairman of the first session of the meeting, and presented a paper on the possible part played by viruses in the etiology of human leukemia. Dr. Dmochowski also visited the State Institute of Health in Rome and presented a lecture on recent developments in leukemia studies.

Miss Eleanor Macdonald, head of the department of epidemiology, chaired the session on epidemiology of melanoma at the International Union Against Cancer, held May 25 and 26 in Sophia, Bulgaria.

1965 Symposium on Fundamental Cancer Research

The Nineteenth Annual Symposium on Fundamental Cancer Research, sponsored by MDAH, was held in Houston on March 4, 5, and 6, 1965. Scientists from the U.S. and abroad presented papers on "Developmental and Metabolic Control Mechanisms and Neoplasia."

Darrell N. Ward, Ph.D., head of the biochemistry department at MDAH, was chairman of the symposium, which was co-sponsored by The University of Texas Graduate School of Biomedical Sciences at Houston; the American Cancer Society, Texas Division; and the National Cancer Institute.

The intent of this symposium was to present in orderly fashion the recent accumulation of information which has laid the basis for investigation of control mechanisms and to present recent findings concerning developmental and metabolic control mechanisms as they relate to neoplasia.

The two sessions held on the first day of the symposium were on Biosynthesis and Control Mechanisms. Session I was chaired by Dr. Marshall Nirenberg of the National Institutes of Health. For the second session, Dr. Gerard Buttin, visiting Professor at Stanford University, served as chairman. During these two sessions, basic concepts were discussed to review participants in research done in this area and to provide a foundation for later presentations.

Two sessions were also held on the Molecular Basis of Early Development. The first of these was chaired by Dr. W. Gordon Whaley of the Cell Research Institute at The University of Texas. Dr. Paul Weiss of The University of Texas Graduate School of Biomedical Sciences at Houston was chairman for the second session.

Dr. Val W. Woodward of Rice University served as chairman for the symposium session on the Molecular Basis of Later Development and Control. The final session of the symposium was presided over by Dr. Darrell N. Ward. This session was entitled Comparative Studies of Control Mechanisms in Normal and Neoplastic Tissues.

Bertner Foundation Award

The high point of the symposium was the presentation of the Fifteenth Bertner Foundation Award to Dr. Erwin Chargaff of Columbia University. This award, presented annually at the symposium to a basic researcher who has made outstanding contributions to the field of cancer research, honored Dr. Chargaff for his many advances in nucleic acid chemistry, and especially for his establishment of adenine-thymine and guanine-cytosine regularities in the base composition of deoxyribonucleic acid.

Following the award presentation, Dr. Chargaff presented the Bertner Foundation Lecture, which was on the biological consequences of base-pairing in nucleic acids. He described some of his recent sequence studies on DNA and discussed random and nonrandom arrangements in DNA. Dr. Chargaff also presented direct chemical evidence for antiparallelism between the two helices of the DNA molecule. Antiparallelism has so far been demonstrated in calf thymus DNA; studies on the parallelism of bacterial DNA's will be undertaken later.

The Twentieth Annual Symposium on Fundamental Cancer Research, sponsored by MDAH, will be held on March 7, 8, and 9, 1966. The subject will be "Carcinogenesis: A Broad Critique," and the chairman will be Dr. Manley Mandel, chief of the section of molecular biology at MDAH.

Film Dedicated

The Texas Division of the American Cancer Society is dedicating one of two new professional education films to MDAH's associate director for education, Dr. Murray M. Copeland. Dr. Copeland is president of the national division of the American Cancer Society for 1964-1965. The films are being developed by the Texas Division of the ACS.

The film to be dedicated to Dr. Copeland is on tumors of bone. This dedication is particularly fitting, since Dr. Copeland has long been a recognized authority on the subject of bone tumors. He is co-author of a book entitled Tumors of Bone with Dr. Charles F. Geschickter.

Dr. Erwin Chargaff, Bertner Foundation Award recipient, at the podium to deliver the annual Bertner Foundation Lecture.
Grants

Grants have recently been awarded to MDAH investigators to support research and education activities.

U.S. Public Health Service Awards

The U.S. Public Health Service has made awards to the following researchers:

Dr. R. Lee Clark, Director and Surgeon-in-Chief, accepted a grant which will augment the research activities conducted at MDAH. Funds will be used for salary support for key personnel in expanding or newly developed research sections; for interim support of research projects either in the initial developmental stages or during the period prior to a grant award; for support of central resources used by various research departments and sections; for unanticipated and immediate equipment needs in currently active projects; and for the expanding research training program of this institution. Dr. Clark will administer the funds with the advice of established institutional committees.

Dr. Clark also accepted a grant for support of the biomathematics program at MDAH. This grant will provide for the continuation and balanced expansion of a program which focuses the complex abilities of applied mathematics, mathematical statistics, and computer science on a variety of basic science and clinical research problems relating to malignant disease.

Dr. William C. Dewey, chief, section of isotopes, department of physics, was awarded a grant to continue study on the radiosensitivity of normal and malignant cells. Experiments are in progress on chromosomal damage and cell death induced by radiation during different phases of the cell cycle with and without prior BUdR treatment. Whenever possible, BUdR sensitization will be related to per cent of thymine replacement, considering both single- and double-strand labeling of the DNA. Variation in sensitivity during the cell cycle is being studied with three techniques: pulse-labeling with H^3TdT of cells in S phase; suicide labeling with H^3TdT, leaving unlabelled surviving cells in the G1 or G2 phases; and synchrony techniques based on the selection of mitotic cells. The electron gun will be used for irradiating cells to different depths with low-energy electrons in order to determine the sensitive sites. It is also proposed to study how the location of this site varies during the cell cycle and to determine if there is a correlation between the location of the sensitive site and the distribution of DNA in the nucleus during the cell cycle.

Dr. Leon Dmochowski, head of the department of virology, was awarded a grant for continuation of in vitro and in vivo studies on the Gross mouse leukemia virus. Study of multiplication of the Friend and Rauscher leukemia viruses in in vitro culture systems will be continued. These tissue culture studies will be evaluated both by electron microscopy and bioassays. Biophysical studies on the purification and characterization of the Gross, Moloney, Friend, and Rauscher murine leukemia viruses will be continued. These studies will make use of electron microscopy and negative staining procedures as well as of bioassays in different strains of mice. Preparations obtained by biophysical means will be subjected to enzymatic and biochemical studies in an attempt to characterize the virus(es) of murine leukemia. Attempts to explain the differences between Friend and Rauscher virus-induced disease with that induced with Gross or Moloney viruses will be extended to the substructure and mode of action of the viruses concerned.

Dr. Gilbert H. Fletcher, head of the department of radiology, has received a grant to support further study on the relationship between the activity of cervical cancer to leukemia. MDAH is one of 30 clinical centers collaborating in a study designed to determine the incidence of leukemia following exposure to ionizing radiation given for carcinoma of the uterine cervix. To date, MDAH has enrolled 1,390 patients in this study. All enrolled patients have semianual peripheral blood studies during the study years or until death, and if leukemia is suspected or diagnosed, complete hematologic evaluation will be done. Only one case of primary hematologic disease has been noted to date.

Dr. Fletcher has also received continuing support for initiation and development of further radiotherapy studies. This project will give support to those facets of clinical or scientific activity essential to therapeutic radiology and will provide assistance to and coordinate with other medical specialty groups responsible for the design and execution of clinical trials which involve ionizing radiation.

Renewal of a third grant received by Dr. Fletcher is for the evaluation of supervoltage therapy. Supervoltage roentgenotherapy represents one of the most

Postdoctoral Research Fellow Studies at MDAH

At the highly specialized level at which research into the basic elements of the cancer problem is conducted, the learning process never stops.

Last November, Dr. Gabriel Seman from the Centre de Recherches Carcinologiques et Radio-pathologiques in Paris, France, came to MDAH from his home institution to study the principles of virology and electron microscopy under Dr. Leon Dmochowski, head of the department of virology at MDAH.

Dr. Seman is being sponsored by a postdoctoral research fellowship granted by the Eli Lilly Foundation, and will continue his studies here for one year. Although his former specialized training was in classical cytology and hematology, Dr. Seman also practiced general medicine before joining the staff of the Centre de Recherches in Paris. Through the experience gained here, he hopes to be able to further apply the principles of electron microscopy to the hematological aspects of leukemia in man.

In the picture, Dr. Seman (left) and Dr. Dmochowski are discussing a Bittner virus particle as it appears when magnified 1,200,000 times.
outstanding advances in the treatment of cancer. At MDAH, approximately 7,500 patients have been treated with several modalities of megavoltage equipment; approximately 1,200 patients are added to this total each year. The treatment experience of patients receiving supervoltage therapy is abstracted to special codes for IBM tabulation and statistical analysis, and survival rates are prepared for each variable under study. Survival curves and standard errors are calculated by the Berkson-Gage and Greenwood methods by total groups and by stage, histology, and/or other pertinent factors.

Dr. N. Burr Furlong, assistant biochemist, received a grant renewal for the study of inhibitors of DNA polymerase. Dr. Furlong plans to investigate the inhibition of polycations on the DNA polymerase reaction and to measure the levels of DNA polymerase and DNase and activities which inhibit these enzymes in a variety of tissues from normal and tumor-bearing animals. Also, the role of oligonucleotides in stimulating or initiating DNA synthesis will be re-examined, and procedures for histochemical demonstration of polynucleotide synthetic activity will be further developed.

Dr. Clifton F. Mountain, associate general surgeon, was awarded a grant for continuing support of a cooperative lung study program. The study, now in its third year, is a part of a national program to assess the value of supervoltage radiation as an adjunct to surgical procedures in the management of bronchogenic carcinoma.

Dr. Robert S. Nelson, chief of the gastroenterology service, department of medicine, received support for the third year of a four-year award for the small bowel biopsy study of neoplasia and chemotherapy. Biopsy specimens of the human small intestine will be taken to determine the histology of the small intestine associated with malignant neoplasia, the mechanism of absorption of radioactive material from the lumen of the small bowel, and the amount and type of changes associated with various types of chemotherapy. Most biopsy material will be obtained with a hydraulic-type capsule which delivers multiple specimens at the time of the procedure, although single specimens may be taken with the Crosby capsule. Preliminary experience with the Crosby tube has shown that acute changes do occur in the intestines of patients given 5-fluorouracil. More specific study in a greater number of patients will be necessary to determine how often such changes occur with this or other therapeutic agents.

Dr. George G. Rose, assistant biologist in the section of experimental cytology, department of biology, was awarded a continuation of a grant to study helical and related megamolecules produced in vitro. Unusually large (up to 300 μ) molecules have been observed in embryo chick tissue cultures established under sheets of dialysis cellophane. These molecules are tubular, helical, ribbonlike, hexagonal, rhomboidal, or filamentous. Provisionally, they are considered to be proteins induced to spectacular growth by the cellophane-isolated compartment technique of cultivation. This project will investigate the origin, content, and usefulness of these molecules.

Dr. William O. Russell, head of the department of pathology, received a continuation of a grant for a comprehensive program of research in the clinical pathology of cancer aimed at accelerating clinical application of the findings of the basic as well as the medical sciences. The program is organized into three sections—biochemistry, hematology/immunology, and microbiology. Clinically oriented studies will attempt to develop new or improved laboratory tests and procedures. Molecular and cellular studies will investigate rates of cell division in reticuloendothelial diseases; structure of abnormal proteins seen in various neoplastic conditions; and the significance of alterations in intracellular phosphatase of blood cells in leukemia and related disorders. Chromosomal studies of normal and abnormal bone marrow cells are on the chemical structure and genetics of human immunoglobulins and the cyogenetic aspects of neoplasia.

Dr. Russell has also been awarded a grant to conclude his study on trace metal patterns in normal and malignant tissue. Extensive tissue analysis projects, electrode composition and design improvement, and literature monitoring activities have been done. Analysis of 50 samples of human breast carcinoma and control tissues revealed no significant relationship between trace element values in these tissues and age. Metal content of hair was found to vary with sex, race, and neoplastic disease. Results also indicated that distinct differences in metal content exist between Negro and Caucasian races and between Caucasian males and females. Samples of hair from Caucasian cancer patients were consistently lower in metal content than were those from normal subjects, with the exception of magnesium. Literature retrieval activities consist of the design of a computer-oriented information retrieval system, analysis of literature and construction of a thesaurus, comparison of this thesaurus with those of three national systems, and current awareness service.

Dr. Grant Taylor, chief, section of pediatrics, and chairman of the Southwest Cancer Chemotherapy Study Group, received a grant for the eighth year of support of the Southwest Cancer Chemotherapy Study. The Group Headquarters office, which is located at MDAH, provides many services to the 18 member institutions, including statistical assistance for planning and analyzing the results of treatment. The headquarters maintains records of all drugs and patient studies, thus meeting requirements of the Federal Drug Administration, coordinating the studies, promoting optimal utilization of the clinical material, and transmitting uniform data for consideration at the national level. The Group Headquarters orders all drugs used by members and maintains a drug control and accounting system. During a recent calendar year, 1,183 drug trials were initiated by the Southwest Cancer Chemotherapy Study Group; 84 patients were entered in Phase I studies; 748 patients in Phase II studies; 173 in Phase III studies; and 176 in individual drug trials.

Dr. Taylor received another grant to continue a program of investigative clinical chemotherapy of acute leukemias and other malignant neoplastic diseases in children.

Two MDAH staff members have received training grants. Dr. John P. McGraw, chief of the section of diagnostic radiology, department of radiology, received additional funds to train radiologists and their technicians in the Egan technique of mammography and in thermography. Dr. Suk Chul Chang, associate pathologist, received supplementary support to expand the capacity of the school of cytotechnology.

Other Awards

Dr. A. Clark Griffin, biochemist, was awarded a grant from the American Cancer Society to study the effect of carcinogenic agents on protein biosynthesis. The study of in vitro protein synthesis in normal livers, in precancerous livers of animals exposed to hepato-carcinogens, and in liver tumors will be continued. Further purification of the amino acid synthetases, transfer amino acids, transfer factors, and ribosomal fractions will be attempted. Tissue and species specificity will be studied by substitution of the above fractions in in vitro assays.


(Grants, Continued from Page 6) systems. The objective of this study is to ascertain if there are changes at any stage of the assembly of amino acids into protein, during malignant transformation, or within the malignant cell.

Dr. Charles O. Doudney, chief of the section of genetics, department of biology, received a grant from the Atomic Energy Commission for the study of nucleic acid formation and genetic events in bacteria. This study is a comparison of the recoverable and nonrecoverable blocks to DNA synthesis induced in the bacterial cell by UV exposure. Recent studies suggest the possibility that the recoverable block to DNA synthesis may involve the induction of thymine dimers in the DNA, and that the enzymatic excision of these dimers is followed by a repair step requiring RNA and protein synthesis. This study will emphasize the nature of the recoverable and nonrecoverable UV-induced lesions blocking DNA synthesis and their involvement in such genetic phenomena as mutation, recombination, and survival. The effects of acriflavine, caffeine, and certain dyes on DNA, RNA, and protein synthesis, survival, and mutation induced with UV-exposed bacteria will also be studied.

Dr. John E. Healey, Jr., chief of the section of experimental surgery, department of surgery, has received a grant from Ethicon, Inc. to continue his studies on the nonsuture repair of body tissues using a plastic adhesive.

Three MDAH staff members in the department of biochemistry received grants from the Robert A. Welch Foundation. Dr. N. Burr Furlong, assistant biochemist, received support for his study of oligonucleotide chemistry; Dr. A. Clark Griffin, biochemist, was awarded a grant to study the isolation of amino acid synthetases and transfer ribonucleic acids; and Dr. Bruno Jirgensons, biochemist and chief of the section of protein structure, received a grant for his structural studies on globular proteins.


Haas, F. L.: The University of Texas Graduate School of Biomedical Sciences at Houston. Bulletin of the County Medical Society, 5:12, August, 1964.


10th Annual Clinical Conference November 5 and 6, 1965

CANCER OF THE GASTROINTESTINAL TRACT

Dr. Richard G. Martin, Chairman Dr. Robert S. Nelson, Co-chairman
Report '64
MDAH Film for General Distribution

The new film on the history and activities of MDAH is now available for general distribution.

"Report '64," a 15-minute, 16-mm, color and sound production, was produced in its entirety by members of the MDAH medical communications department working under the direction of Mr. Robert A. Kolvoord, head of the department.

The film is a particularly effective historical documentation of the life of the institution. Film sequences shot when the institution was still housed in the old mansion on Baldwin Street show the activities of the hospital and clinic in its earliest days. Footage taken during construction of the permanent quarters gives a "you-are-there" feeling of participation in the building project.

It is the aim of the planners and directors of this institution to have movies produced at regular intervals, thus giving continuous documentation of the institution's growth and development. More important, however, is the opportunity which films have for informing others about the institution and the work being done here. The film brings its message to members of many communities and many institutions.

The impact of "Report '64" on one other institution was immediate and striking. Roswell Park Memorial Institute, the cancer center in Rochester, New York, requested aid from this department of medical communications in producing just such a motion picture about that institution.

Accordingly, members of this staff developed a script concerning the New York institution, and served as consultants for filming techniques for the Roswell Park workers. The result is that now Roswell Park has a similar film to inform the public about the activities of that cancer center, just as "Report '64" is doing for MDAH.

Seven prints of "Report '64" are available for general distribution. A service charge of $4.00 plus return postage is the only cost for obtaining the film. For further information, contact:

Mr. Robert A. Kolvoord
Department of Medical Communications
The University of Texas
M. D. Anderson Hospital and Tumor Institute
Texas Medical Center
Houston, Texas 77025

Staff Members Are Society Officers

Three MDAH staff members have been elected officers of national and regional medical societies and associations.

At the last joint annual meeting of the American Society of Clinical Pathologists and College of American Pathologists in Bal Harbour, Florida, Dr. William O. Russell, head of the department of pathology and chief of the section of anatomical pathology, was elected president of the Society. Dr. John A. Shively, chief of the section of clinical pathology in the department of pathology was elected a member of the Society's Council on Hematology, and Academic Section Assemblyman for the College of American Pathologists.

The Section on Anesthesiology of the Southern Medical Association announced on January 11, 1965, the election of Dr. William S. Derrick, chief of the section of anesthesiology, department of surgery, as secretary for the coming year. Dr. Derrick and the chairman and vice-chairman of the Section will be responsible for arranging the program for the Section on Anesthesiology for the 59th Annual Meeting of the Association, which will be held in Houston, November 1-4, 1965.

Pharmacist is Chairman

On November 15, 1964, at the special session of its House of Delegates, the Texas Pharmaceutical Association announced the appointment of James D. McKinley, MDAH pharmacist, as the chairman of the Committee on Civil Defense and as a member of the Council of Public Service.

The Committee on Civil Defense is a standing committee of the Council of Public Service. This committee cooperates with state, local, and federal organizations and agencies and with other members of the health profession to provide a medical care program which can function effectively in disaster or post-nuclear attack situations.

Mr. McKinley is head of the department of pharmacy at MDAH.