THE UNIVERSITY OF TEXAS M. D. ANDERSON HOSPITAL AND TUMOR INSTITUTE

NEWS ETTER

For the Physicians of Texas

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Director Heads Local UT Committees

Dr. Harry H. Ransom, Chancellor of The University of Texas, has named Dr. R. Lee Clark, MDAH Director and Surgeon-in-Chief, as chairman of two administrative committees which will direct, co-ordinate, and conduct joint activities for the branches of The University of Texas located in Houston.

Both of the new committees will be comprised of the heads of the branches of the University located in Houston and of selected supportive personnel. These include Dr. Clark; Dr. John V. Olson, Dean of The University of Texas Dental Branch; Dr. Paul Weiss, Dean of The University of Texas Graduate School of Biomedical Sciences at Houston; and . H. Grant Taylor, Dean of the Diision of Continuing Education of the Graduate School of Biochemical Sci-

Administrative Council

ences.

The Administrative Council, which will be set up in a manner similar to that of the Administrative Council at the Main University, will consider such matters as space planning, joint applications to foundations and agencies, joint faculty recruitment, appointment, and advancement, and other administrative policies and programs. Chancellor Ransom will be an ex officio member of the council.

Development Committee

The Development Committee will be similar to the Deans Council at the Austin campus, which considers budget and academic development. This committee will be responsible for transactions with agencies, foundations, private donors, and other sources of support. It is believed that with this joint fort useless duplications will be oided and The University of Texas developmental program in Houston will be clarified.

Associate Director Named

Dr. R. Lee Clark, Director and Surgeon-in-Chief of The University of Texas M. D. Anderson Hospital and Tumor Institute, has announced the appointment of Dr. Walter J. Burdette as Associate Director (Research), Surgeon (Thoracic Surgery) and Professor of Surgery (1965-1966), Department of Surgery, at MDAH.

Dr. Burdette, a native Texan, received his Ph.D. degree from The University of Texas, and his M.D. degree from Yale University. He has been a visiting investigator at the Chester Beatty Institute for Cancer Research, London, England, and at Max-Planck Institut für Biochemie, Tübingen. Germany. In 1958, he toured the Soviet Union, Czechoslovakia, and Poland on a Rockefeller Travel Fellowship, Dr. Burdette is a diplomate of the American Board of Surgery and of the American Board of Thoracic Surgery.

Dr. Burdette's former academic appointments include the following: assistant in anatomy, Yale University; instructor in surgery, assistant professor of surgery, associate professor of surgery, Louisiana State University; professor and chairman, department of surgery, University of Missouri; professor of clinical surgery, St. Louis University; and, since 1957, professor and head, department of surgery, University of Utah.

Dr. Burdette has also served as surgeon-in-chief, University Hospitals. University of Missouri, Columbia, Missouri; chief of surgery, St. Louis University Surgical Service, Veterans Hospital. St. Louis; and surgeon-in-chief, General Hospital, and chief surgical consultant, Veterans Hospital, Salt Lake City.

Dr. Burdette currently is Chairman of the Research Advisory Council of the American Cancer Society and a member of the National Advisory Heart Council, and Transplantation Committee of the National Academy of Sciences. He is treasurer of the Society of

(Associate Director, continued on Page 2)

Associate Director Chairs New Cancer Commission

During the Clinical Congress of the American College of Surgeons held in October in Atlantic City, New Jersey, Dr. M. M. Copeland, associate director (education) at MDAH, chaired the first annual meeting of the new Commission on Cancer, successor to the Committee on Cancer. The Cancer Committee was made a commission by the American College of Surgeons' Board of Regents because of the increased complexity and expansion of its national activities. One of the projects of the Commission on Cancer was the Postgraduate Course on Gastrointestinal Cancer which was held during the morning sessions of the Clinical Con-

Dr. Copeland is the first physician to simultaneously hold the presidency of the American Cancer Society and chair the American College of Surgeons' Cancer Committee and Commission.



DR. WALTER J. BURDETTE

(Associate Director, continued from Page 1)

Clinical Surgery and has been vicepresident of the American Association for Cancer Research. Dr. Burdette has been chairman of the Genetics Study Section of the National Institutes of Health and of the Committee on Carcinogenesis of the National Advisory Cancer Council. He was also a member of the Surgeon General's Committee on Smoking and Health.

In addition to clinical research, Dr. Burdette's activities have included studies of the alteration of genetic replication, calculous and neoplastic disease, fine structure of human tissue, invertebrate hormones, mechanism of tumorigenesis, metabolism of cardiac muscle, survival of hemopoietic transplant, and isolation and characterization of ecdy-

Dr. Burdette holds membership in more than 20 scientific societies. He has been the editor of seven books and coauthor of one book. More than 90 of Dr. Burdette's articles have been published in scientific journals.

Visiting Professorship

Dr. John S. Stehlin, Jr., Associate Surgeon at The University of Texas M. D. Anderson Hospital and Tumor Institute in Houston, has received an invitation from the Faculty of Medicine of the University of the Republic of Uruguay, Montevideo, to spend two weeks as a visiting professor at that institution. His trip will be made possible by a travel grant from the Bureau of Educational and Cultural Affairs of the United States Department of State, under the provisions of the Fulbright-Hays Act. On a previous trip to South America, which was sponsored by the International Union Against Cancer, Dr. Stehlin lectured in Peru, Chile, and Argentina, as well as in Uruguay.

Dr. Stehlin will spend the first two weeks in December in Montevideo. While there, he will be affiliated with the Faculty of Medicine of the University of the Republic, and will attend the

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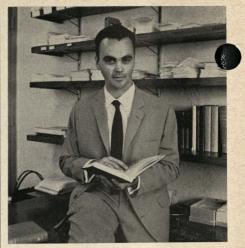
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Jesse H. Jones Fellow

The 1965 Jesse H. Jones Fellow in Cancer Education Honoring Dr. E. W. Bertner is Dr. Manuel-Nicolas Fernandez.

The Jesse H. Jones Fellowship in Cancer Education is awarded annually in honor of the late Dr. E. W. Bertner, the first acting Director of MDAH and the first president of the Texas Medical Center. The fellowship was established in 1950 by Houston Endowment, Inc., a philanthropic organization chartered in 1937 by the late Mr. and Mrs. Jesse H. Jones for the support of charitable, educational, and religious endeavors. The awards are made annually to physicians and scientists to enable them to receive advanced training in caring for the cancer patient, in preparing for teaching related to neoplastic and allied diseases, and in carrying out research work in the area of malignant disease. The objectives of the fellowship are threefold: to encourage better patient care, teaching, and research activities.

Dr. Fernandez, a native of the Canary Islands, received his medical training in Spain. He was awarded his M.D. degree from the Faculty of Medicine, University of Madrid, Madrid, Spain, in 1962. Because of his high scholastic record, Dr. Fernandez has been the recipient of a number of scholarships and honors including two prizes given by the Dean of the Faculty of Medicine, University of Madrid, in 1961 and 1962, and the prize given to the Best Graduates of Spain in 1962.



Dr. Manuel-Nicolas Fernandez

Dr. Fernandez was encouraged by the director of the new Clinica Puerta de Hierro Institute in Madrid, where he was studying, to come to the United States for advanced training in hematology and chemotherapy. He is participating in the MDAH Exchange Visitor Program for this comprehensive study with a view to his return to Spain to further that country's cancer research and graduate studies in clinical hematology.

During his training at MDAH, Dr. Fernandez will be working under the direction of Dr. C. C. Shullenberger, chie of the section of hematology, in that se tion of the department of medicine.

Dr. Fernandez has recently married Pilar-Nieves Vidal-Pelaez, a former Iberian Air Lines hostess.

Sixteenth Uruguayan Congress of Surgery and the Eighth Annual Meeting of the Rioplata Dermatology Society. At the University Hospital he will hold clinics, perform surgical procedures, participate in conferences, and lecture on various phases of cancer. At the Congress of Surgery he will participate in a panel discussion on antitumor chemotherapy in surgery and in a round table session sponsored by the Executive Committee of the Congress. He will lecture before the Rioplata Dermatology Society on regional chemotherapy for malignant melanoma and other cancers of the skin.

After receiving his degree in medicine from Marquette University, Dr. Stehlin completed residencies in surgical pathology at the Baptist Memorial Hospital in Memphis, Tennessee, and in surgery at the Milwaukee Hospital, Milwaukee, Wisconsin. He then held Fellowships in Surgery at the Lahey Clinic in Boston and at The University of

Texas M. D. Anderson Hospital and Tumor Institute.

Grants made under the Mutual Educational and Cultural Exchange Act of 1961 (known as the Fulbright-Hays Act) are awarded for university lecturing, advanced research, graduate study, teaching in elementary and secondary schools, practical experience in technical and specialized fields, and consultation and observation. The program is administered by binational commissions in about 50 countries. Approximately 2,300 United States citizens annually receive grants for foreign travel and about 5,600 foreign nationals are granted funds to come to this country. The purposes of the Act are "to increase mutual understanding. . . by means of educational and cultural exchange. . . and thus to assist in the development of friendly, sympathetic, and peaceful relations between the United States and the other cour tries of the world".

Human Leukemia-Lymphoma Virus Study Section

Dr. R. Lee Clark, Director and urgeon-in-Chief, has announced the establishment of a Human Leukemia-Lymphoma Virus Study Section at MDAH. The section will coordinate the institution's efforts pertaining to studies of human leukemia and allied diseases by cutting across departmental organization and scientific disciplines.

Dr. Leon Dmochowski, head of the department of virology, was appointed

chairman of the study section.

To carry out the work of this section, the institution received the following awards from the National Cancer Institute of the U.S. Public Health Service:

A contract for \$245,522 for "Studies on the Relationship of Viruses to Human Leukemia and Lymphoma" with Dr. Dmochowski as principal investigator.

A contract for \$99,629 for "Studies on the Association of Mycoplasma with Animal and Human Leukemic Materials" under the direction of Drs. C. F. Tessmer and J. G. Sinkovics.

A contract for \$84,734 for "Tissue Culture and Immunofluorescence Studies" to be directed by Dr. J. A. Sykes and

Dr. D. A. Dreyer.

A contract for \$133,000 to support Plasmapheresis and Platelet Studies" under the direction of Dr. J. A. Shively.

In addition to Dr. Dmochowski, members of the new study section include the following MDAH staff members: Dr. Allen T. Ansevin, assistant physicist; Dr. James M. Bowen, assistant virologist; Dr. Murray M. Copeland, associate director (education), an ex officio member; and Dr. Donald A. Dreyer, assistant virologist.

Other members are Dr. Emil Frei, III, associate director for clinical research and head of the department of developmental therapeutics; Dr. N. Burr Furlong, assistant biochemist; Dr. Clifton D. Howe, head of the department of medicine; Miss Eleanor Macdonald, head of the department of epidemiology; and Dr. John A. Shively, pathologist and chief of the section of

clinical pathology.

Additional members include Dr. C. C. Shullenberger, internist and chief of the section of hematology; Dr. Joseph G. Sinkovics, assistant internist; Dr. Margaret P. Sullivan, associate pediatrician; Dr. John A. Sykes, associate virologist; Dr. Grant Taylor, pediatrician and hairman of the Southwest Cancer Chemotherapy Headquarters; and Dr.

New Staff

Newly appointed staff members at MDAH include:

Maybelle E. Adams-Mayne was named assistant biochemist in the section of biochemistry, research clinical pathology, department of pathology. Dr. Adams-Mayne received her Ph.D. from Baylor University College of Medicine, Houston. She has also attended the University College, University of London, London, England. Dr. Adams-Mayne has been associated with M. D. Anderson Hospital as a fellow since 1963.

Peter R. Almond was appointed assistant physicist in the department of physics. Dr. Almond received his B.S. degree from Nottingham University, Nottingham, England, and his Ph.D. degree from Rice University. Prior to his staff appointment, Dr. Almond was a Postdoctoral Fellow in Biophysics at

Brian W. Davis was appointed assistant administrator in the department of patient care activities. Mr. Davis received his M.H.A. degree from the University of Minnesota, Minneapolis. Prior to joining the MDAH staff, he served at the Abbott Hospital, Minneapolis, Minnesota. as an administrative resident.

Emil J. Freireich has accepted the position of assistant head of the department of developmental therapeutics and chief of the section of experimental hematology. Dr. Freireich received his M.D. degree from the University of Illinois College of Medicine. He has been associated with the National Cancer Institute, Bethesda, Maryland, as head of the leukemia service in the medicine branch. His research was devoted to a study of acute leukemia, encompassing the natural history, drug treatment, and platelet and white cell transfusion.

Jess F. Gamble has been appointed an associate internist in the department of medicine. He received his M.D. degree from the University of Nebraska. Dr. Gamble was in private practice in Houston and has been associated with MDAH on a part-time basis since 1954.

Charles W. Gibley has accepted the

Carl Tessmer, pathologist and chief of the section of experimental pathology.

Consultants for the study section are Mr. Lynn Hayward, assistant biomathematician, and chief of the section of computer science; Dr. John H. Jardine, assistant veterinarian and chief of the section of experimental animals; and Dr. Reimut Wette, associate biomathematician and chief of the section of mathematical biology.

appointment as research associate in the section of experimental pathology, department of pathology. He received his Ph.D. degree from Iowa State University, Ames, Iowa. Prior to joining the MDAH staff, he was associated with Villanova University.

Thomas Stanley Harle has been appointed assistant radiologist (part-time) in the section of diagnostic radiology, department of radiology. Dr. Harle received his M.D. degree from the Northwestern University Medical School in Chicago. Before joining the MDAH staff, he served with the U.S. Army Medical Corps at Brooke General Hos-

pital in San Antonio.

Thomas P. Haynie has accepted the position of associate internist in the section of nuclear medicine, department of medicine. He received his M.D. degree from Baylor University College of Medicine. He has held appointments as Assistant Coordinator of the Nuclear Medicine Unit, Instructor, and Assistant Professor of Medicine at the University of Michigan Medical School, Ann Arbor, Michigan. Dr. Haynie previously was Assistant Professor of Internal Medicine and Director of the Nuclear Medicine Service at The University of Texas Medical Branch in Galveston. Since 1963, he has been associated with MDAH as a consultant in medicine.

Ti Li Loo was appointed associate biochemist in the department of developmental therapeutics. Dr. Loo received his B.S. degree from the Tsing Hua University, Peking, China, and his Ph.D. degree from Oxford University, Oxford, England. He has held appointments as a research fellow at the University of Maryland and as a research associate at Christ Hospital Institute of Medical Research, Cincinnati, Ohio. Prior to joining the MDAH staff, Dr. Loo was a senior investigator in the Laboratory of Chemical Pharmacology at the National Cancer Institute, Bethesda, Maryland.

Mario Armando Luna has been appointed assistant pathologist (parttime) in the section of anatomical pathology, department of pathology. Dr. Luna received his M.D. degree from the Universidad Autonoma in Guadalajara, Mexico. He has been associated with MDAH as a fellow since 1964. Dr. Luna also holds a part-time staff appointment at The University of Texas Dental Branch.

Roger William Metz has accepted the appointment as assistant administrator in the department of patient care activity. Mr. Metz received his M.H.A. from the University of Minnesota, Minneapolis. Prior to joining the MDAH

staff, he was the assistant administrator at the Menorah Medical Center, Kansas City, Missouri.

Tate M. Minckler has been appointed assistant pathologist in the section of experimental pathology in the department of pathology, and medical systems analyst in the department of biomathematics. He was awarded his M.D. degree from the University of Oregon Medical School, Portland, Oregon. Prior to joining the staff of MDAH, Dr. Minckler was associated with the U.S. Public Health Service at the National Cancer Institute, National Institutes of Health, Bethesda, Maryland.

Joseph R. Shaeffer has been appointed assistant physicist in the department of physics. Dr. Shaeffer received his Ph.D. degree from the University of Rochester in Rochester, New York. Prior to joining the staff of MDAH, Dr. Shaeffer served as a postdoctoral fellow at the University of Kentucky.

Louis Recher was appointed an assistant virologist in the department of

virology. Dr. Recher received his M.D. degree from the University of Basel, Switzerland. He has been an assistant professor of pathology at the University of Miami School of Medicine and a fellow in pathology at MDAH since 1964. Dr. Recher will be a fellow in virology, sponsored by the Leukemia Society, Inc.

A. A. van Soestbergen has accepted the position of microbiologist and chief of the section of microbiology, research clinical pathology, department of pathology. Dr. van Soestbergen received his M.D. and Ph.D. degrees from the Levden University in The Netherlands. Formerly, he was associated with the Radiobiological Laboratory of Health Organization T.N.O. and the Medical Biological Laboratory of the National Defense Research Organization T.N.O., Rijswijk, The Netherlands, and more recently, with the Brookhaven National Laboratory, Upton, New York, as an associate scientist and an assistant attending physician.

1965 Summer Program

Eight students completed the 1965 Summer Program in the Biomedical Sciences sponsored by MDAH, which was held June 14 through August 6, 1965. The eight-week program under the administrative supervision of Dr. Murray M. Copeland, associate director (education), head of the Office of Education, consisted of experimental work carried out under the individual supervision of full-time members of MDAH's scientific staff. The training was designed to encourage interest in scientific research and to provide an opportunity for the students to enhance their scientific ability. Emphasis was placed on learning a working vocabulary and on the importance of the basic principles which are the foundation of scientific work. These summer science trainees included the following:

Arthur E. Frankel of Austin was assigned to work under Dr. Allen T. Ansevin in the department of physics.

David Grant, San Antonio, worked under Dr. Joseph Sinkovics in the section of experimental medicine.

John Hager, Hurst, worked in the section of research clinical pathology under Dr. Robert F. McGregor.

Michael J. Higgins, Houston, was assigned to work in the section of experimental anethesiology under Dr. William Boyd.

Jon T. Pitts, Austin, worked in the department of biomathematics under Dr. Reimut Wette and Dr. George W. Bat-



Judith Eileen Smith and Dr. Raymond Alexanian inspect mice whose tails have been shielded from X-irradiation in order to study repopulation of bone marrow cells.

ten, Ir.

Jane Ann Smith, Longview, worked in the section of experimental radiotherapy under Dr. Herman Suit.

Judith Eileen Smith, Bryan, was assigned to work under Dr. Raymond Alexanian in the section of experimental medicine.

Peggy Mae Tyler, Beaumont, worked in the department of biochemistry under Dr. N. Burr Furlong.

The summer science program at MDAH is in its sixth year. Formerly cosponsored by the National Science

Health Research Facilities Funds

The Health Research Facilities I vision of the U.S. Public Health Service awarded \$90,043 to MDAH to purchase movable equipment for use in the new wings now under construction for the Texas cancer institution.

Dr. R. Lee Clark, MDAH Director and Surgeon-in-Chief, was notified of the award in a wire from Dr. Thomas J. Kennedy, Jr.. Chief of the Division of Research Facilities and Resources of the National Institutes of Health. The award was one of 32 which the U.S. Surgeon General announced on July 30, 1965.

In 1964, a Health Research Facilities grant for \$1,799,706 was received for use in constructing new research and treatment areas in MDAH. This grant was added to other funds to reach a total sum of more than \$7.5 million which is being spent on the areas now under construction. At that time, the additional \$90,043 was promised to the institution for future use in purchasing movable equipment.

The 32 grants announced on July 30 totaled \$20,370,974 and were awarded to institutions in 13 states. These matching funds may pay up to half the cost of building and equipping health research facilities. Since 1956, the health research facilities program, administered by the Division of Research Facilities and Resources, has made 1,315 awards totaling more than \$355,000.000.

The Surgeon General makes the awards on the recommendation of the National Advisory Council on Health Research Facilities, which is comprised of leading governmental scientists, research administrators, and others experienced in assessing health facilities needs of institutions throughout the nation.

Foundation and MDAH, the program is now entirely sponsored by this hospital. Students participating in the program must have completed their junior or senior year in a Texas high school and must have had at least one year of science. Participants were selected from a list of students recommended by directors of summer science programs at The University of Texas and Texas Agricultural and Mechanical University. They were chosen by a committee at MDAH according to scholastic ability and scientific motivation based on the candidates' written expression of their interest in certain fields and on the research project proposals submitted by MDAH staff members.

Assistant to Director Named

Dr. R. Lee Clark, the Director and Surgeon-in-Chief of MDAH has announced the appointment of Dr. Robert D. Moreton, former Fort Worth radiologist, to the position of assistant to the director and vice president of the University Cancer Foundation.

Dr. Moreton had been a senior partner in the Bond Radiological Group in Fort Worth since 1950, and clinical professor of radiology at The University of Texas Southwestern Medical School in

Dallas since 1958.

In announcing Dr. Moreton's appointment, Dr. Clark said, "We are extremely pleased that a physician and radiologist of the stature of Dr. Moreton has consented to join the administrative staff of our institution. We are confident that his association with MDAH will result in many profitable endeavors."

In his capacity as assistant to the director, Dr. Moreton will serve in the administration of the hospital and tumor institute. As vice president of the University Cancer Foundation, he will cooperate in directing this nonprofit organization dedicated to the support of educational and scientific investigation concerning neoplastic and related diseases.

Dr. Moreton was awarded the M.D. degree by the University of Tennessee in 1938. Following an internship at the Lloyd Noland Memorial Hospital in Fairfield, Alabama, he served as instructor of physiology at the University of Mississippi School of Medicine from 1939 to 1940. From 1940 through 1942, he was a fellow in radiology at the Mayo Foundation in Rochester, Minnesota.

Dr. Moreton moved to Texas in 1942, and served as staff radiologist at the Scott and White Clinic in Temple until 1950. In 1950, he became a senior partner in the Bond Radiological Group

in Fort Worth, Texas.

Dr. Moreton has held office in many medical organizations, including the following: the Radiological Society of North America, of which he is currently President; Trustee and Past President of the Southern Medical Association, the second largest general medical society in the nation; Past President of both the Texas Radiological Society and the Dallas-Fort Worth Radiology Society; and former Secretary of the Texas Medical Association.

Dr. Moreton was a founder and has been a member of the Board of Trustees of the Fort Worth Academy of Medicine. For seven years he was Secretary for the Northwest Texas Medical Society and was President of that Society in 1963. The Texas Medical Association has used his talents as Chairman of the section on radiology, and as Alternate Delegate to the American Medical Association. For five years, he was Chairman of the Council of Medical Jurisprudence of the Texas Medical Association.

For eight years, Dr. Moreton served as a member of the Board of Trustees of the American Registry of X-Ray Technicians, and for two terms was President of the Board. In the American College of Radiology, he was a member of the Board of Chancellors from 1956 to 1959, and a member of the Executive Committee from 1957 to 1959. He was a founding member of the Sears-Roebuck Foundation's Medical Advisory Board, on which he served from 1943 to 1959.



DR. ROBERT D. MORETON

Grants for Research

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

U.S. Public Health Service Awards

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

Dr. David E. Anderson, chief of the section of human genetics, has been awarded a grant to study the genetics of skin tumors, particularly of the basal cell nevus syndrome. The genetic aspects of the syndrome and other skin tumors will be investigated with regard to the mode of inheritance; frequency, relative fitness, and mutation rate of affected individuals; linkage with genetic marker loci; and associations with blood groups and other genetic entities segregating in kindreds affected with the symdrome. Dr. Anderson's proposed program also includes continued collaboration with investigators conducting kinetic metabolic studies of bone formation and resorption and determination of trace metal patterns in the basal cell nevus kindred. Hopefully, such collaboration may provide insight into the metabolic defect(s) associated with the syndrome.

Dr. Lee D. Cady, Jr., head of the department of biomathematics, has received a grant to establish support for the continuation and balanced expansion, development, and implementation of The University of Texas biomedical computation research activities in the Texas Medical Center. This is part two of a three-part award which will also aid in strengthening both the professional and technical staff and in creating an interdisciplinary research capability that meets specific computational and mathematical requirements.

Social Work Institute

Mrs. Edna Wagner, director of medical social service at MDAH, attended the National Association of Social Workers' Southern Regional Postgraduate Institute held at Vanderbilt University, June 13 through 18.

Mrs. Wagner was elected chairman of the next Southern Regional Postgraduate Institute which will be held in Houston on June 26 to July 1, 1966.

This proposed program has been designed to implement a variety of existing academic research activities which utilize computation and to stimulate the establishing of similar endeavors at The University of Texas units conducting biomedical research where they do not already exist.

Dr. Gilbert H. Fletcher, head of the department of radiology, has received continued support for radiotherapy research. In addition to other studies, the grant provides for the investigation of radiation techniques, particularly supervoltage techniques, in the management of various malignant diseases. Emphasis will be maintained on the use of radiation in combination with chemotherapy

and surgical management.

Dr. Eugene P. Goldschmidt, associate biologist in the department of biology, has been awarded a grant to study the mechanism of action of suppressor mutations. Dr. Goldschmidt plans to isolate allele-specific supressor mutations in male strains of the bacterium Escherichia coli K12 which can support the multiplication of amber mutants of bacterial viruses. Also these mutations will be located on the chromosome map. An attempt will be made to determine how many different types of such suppressor

mutations can be obtained. Studies on the mechanism of suppression will be directed toward proving that the suppressor mutations affect protein synthesis and toward determining the site of

Dr. John E. Healy, Jr., chief of the sections of experimental surgery and physical medicine, has received support for studies on the nonsuture repair of body tissue. This study will evaluate the use of Eastman 910 Homologue (isobutyl cyanoacrylate) in the repair of various body tissues and determine tissues which are suitable for repair, the rapidity of healing, the tissue reaction to the plastic, and the fate of the plastic. Ten groups of mongrel dogs will be used in this initial phase of the study. Specimens of tissue which have been repaired using nonsuture technique will be studied and compared with specimens of tissue which have been repaired using conventional suture techniques.

Dr. Bruno Jirgensons, chief of the section of protein structure, has been awarded a grant to study the characterization of plasma and urinary proteins. The structure of normal serum gamma globulins, specific antibodies, myeloma globulins, and the urinary Bence Jones proteins will be studied by physical, chemical, and immunochemical methods. The polypeptide chains of the macromolecules will be separated by cleaving the disulfide bridges, and the fragments will be isolated. An attempt will be made to recombine the fragments and reform the macromolecules. The structure and conformation of the globulins, their separated chains, and reconstituted macromolecules will be studied by chemical methods, absorption spectroscopy, and optical rotatory dispersion in the near and far ultraviolet spectral regions. Dr. Jirgensons also plans to use sedimentation rates, viscosity, gel electrophoresis, and immunodiffusion in characterization. Other proteins and polyamino acids of known structure will be used as model systems for comparison.

Dr. Martha R. Sheek, research associate in the section of radiation biology, has been awarded a grant to study the regulation of DNA viruses on DNA polymerase. DNA polymerase will be investigated in mammalian cells grown in suspension cultures, in cultures infected with DNA virus, and in cultures exposed to irradiation. Normal tissues and tumors of hamsters induced with oncogenic adenovirus will also be studied. The features to be investigated include methods for fractionating cells to determine the localization of DNA polymerase, synchronization of suspension cultures to study the localization of polymerase activity during the cell cycle, production of new polymerase for replication periods, influence of DNA virus upon DNA polymerase and the cell cycle, and influence of irradiation upon DNA polmerase activity.

Dr. John S. Stehlin, Jr., associate general surgeon, received continued support for his research on chemotherapy for malignant melanoma and other cancers. The proposed research program includes clinical investigations, biochemical investigations, and cooperative study. Clinical investigations will around systemic chemotherapy, regional chemotherapy, intra-arterial infusion techniques, and lymphatics in the metastasis of melanoma. Phenylalanine mustard will be studied in the biochemical investigations. The feasibility of a cooperative study of malignant melanoma will be further explored. Another meeting of investigators from several medical centers in this country will be held within several months.

Dr. Herman D. Suit, chief of the section of experimental radiotherapy, has been awarded continued support for his research on the modification of tumor response to local irradiation. Dr. Suit plans to quantitatively evaluate the response of cells of tumor tissue to local irradiation given under strictly controlled conditions and to analyze the cell lethal effectiveness of normal and modified immunological reaction by the host against cells of tumor tissue.

Dr. Darrell N. Ward, head of the department of biochemistry, has been awarded a grant to study the chemistry of luteinizing hormone. Chemical studies of luteinizing hormone from the pituitary glands of sheep, pigs, cattle, and horses are in progress. Chemical composition, peptide mapping after partial degradation, and physical properties are the basis of comparison. Incidental purification studies on the hormones or degradation products are being carried out.

American Cancer Society Awards

The American Cancer Society has made awards to the following MDAH researchers:

Dr. Manley Mandel, chief of the section of molecular biology, received support for the Twentieth Annual Symposium on Fundamental Cancer Research. The topic will be "Carcinogensis: A Broad Critique." The symposium has as its objective the provision of a current appraisal and critique of the status of research of the mechanisms of carcinogenesis. Biological, chemical, and physical agents involved in carcinogen-

esis are to be examined with respect to their interactions with each other and with the tissues and cells in which the alterations are observed.

Dr. Richard G. Martin, associate general surgeon, and Dr. Robert S. Nelson, chief of the gastroenterology service, were awarded funds for the Tenth Annual Clinical Conference. The topic was "Cancer of the Gastrointestinal Tract" (November 5 and 6, 1965). The annual clinical conferences sponsored by MDAH are designed for physicians of the local medical community, Texas, and the surrounding states, as well as those interested physicians throughout the United States. It is the purpose of these conferences to coordinate, prepare, and present the unusually large quantity and range of clinical material available at MDAH. A monograph of the papers presented at the conference will be published. There were 305 in attendance.

Staff Publications

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5522-525, July, 1965.
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