



A REPORT TO THE PHYSICIANS OF TEXAS

newsletter



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Henderson Highlights Recent Research in Cancer Etiology and Prevention

Brian E. Henderson, MD, professor and chairman of the Department of Family and Preventive Medicine at the University of Southern California (USC) School of Medicine, gave Texas Medical Center personnel a glimpse into what some of the most recent etiologic studies of cancer seem to be saying about the causes and means of preventing various forms of the disease. He offered no conclusions in his speech but did convey recent epidemiologic findings, offer suggestions about what these findings might mean, and identify promising avenues of study for the future.

Dr Henderson's speech, "New Approaches to Cancer Etiology and Prevention," was part of UT MDAH's Division of Cancer Prevention and The University of Texas Health Science Center School of Public Health at Houston's Cancer Prevention Lecture Series 1981. The lecture series, now in its second year, brings key speakers on prevention-related topics to the Texas Medical Center. Dr Henderson is part of a USC cancer research group that is conducting many case-control studies on cancer etiology. His lecture, given May 21 in the UT School of Public Health—Houston auditorium, drew primarily from these ongoing studies in a broad overview of current research on various cancers.

He began his lecture with the general observation that most cancers have a relatively stable mortality rate today and that, with the exception of lung and stomach cancer, little has changed in the last few decades. This fact, he said, leads investigators to believe that what is causing cancer is "something that has been around for a while," rather than something new in the environment. The exceptions to this are the increase in lung cancer in women, which has been linked to the increased number of women who smoke cigarettes, and the dramatic decline in the incidence of stomach cancer since the turn of the century.

"Stomach cancer is our greatest success," Dr Henderson said, "except that we have no idea why it is declining. We're short on good hypotheses on why stomach cancer is going away."

According to Dr Henderson, this type of cancer was the first leading cause of cancer death in men and the second in women early in this century, but now it is rapidly declining. Attempts to explain this decline, he said, have been inconclusive. Food consumption comparisons based on populations in 1909 and 1975 have been undertaken but show only small changes in the consumption of most foods, except for an increase in the amount of citrus fruits consumed in more recent years. Here, he said, Vitamin C's possible role in the decline has been studied, but investigators have found no clear indications, since consumption of potatoes, another source of Vitamin C, has decreased. Dr Henderson explained that cooking methods may cause this discrepancy, but no conclusive evidence of the preventive effects of Vitamin C has been found. He said that



Brian E. Henderson, MD, reviewed the progress being made in cancer etiology and prevention for an audience of Texas Medical Center personnel May 21 at the UT School of Public Health—Houston auditorium.

many questions concerning the relation between both Vitamins C and A and cancer still remain unanswered.

According to Dr Henderson, hormone-related cancers are receiving a great deal of attention, and many studies are examining how hormones determine cancer risks. He said that these cancers account for a sizable number of cancers, particularly in women, and that "they seem to be the major cause of certain forms, such as cancer of the breast, endometrium, ovary, prostate, thyroid, and bone."

Estrogen has been implicated in several of these gynecologic cancers. Dr Henderson presented what he called a "biologically plausible model" for endometrial cancer, explaining how large amounts of estrogen lead to proliferation of the endometrium and in turn to hyperplasia, neoplasia, and then carcinoma. Obesity, he said, appears to increase a woman's risk of developing endometrial cancer, since fat cells are a source of estrogen in the body and give obese women higher levels of circulating estrogen in the blood. Further evidence of the link is found in the rapid rise in the incidence of endometrial cancer when postmenopausal women are given estrogen replacement therapy.

Estrogen, along with prolactin, has also been linked to breast cancer. According to Dr Henderson, it is possible to predict a woman's risk of breast cancer by calculations based on the ages when she undergoes menarche and menopause. The time interval between the onset of menstruation and a woman's first full-term pregnancy is also a determinant in that pregnancy appears to have a protective effect against breast cancer. This

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David Henington, MSLS (far left), and Warren Rutherford, MHA (left), look on as Page Lawson, BA, cuts the ribbon in the official opening of the Patient and Family Library's new facilities. Inside, Mr Rutherford examines some of the library's popular and foreign language titles.



Patient and Family Library Expands

A ribbon-cutting ceremony was held June 23, 1981, to celebrate the opening of the Patient and Family Library's new facilities in the Lutheran Pavilion. David Henington, MSLS, Director of the Houston Public Library System, Ann Hornak, BSLS, Assistant Director, and Len Radoff, MLS, Chief of Branch Services, were on-hand for the open house, as were members of the Junior League of Houston, Inc. UT MDAH staff were represented by Warren Rutherford, MHA, Associate Vice President for Patient Care Operations, and Page M. Lawson, BA, Director of Volunteer Services, as well as representatives from the Patient Education program and other departments and several of the hospital volunteers who help staff the library.

The Patient and Family Library was established through a grant from the former Department of Health, Education and Welfare in 1977 that allowed the hospital's small, all-donation patient library to be expanded into an actual component of the Houston Public Library System. The grant allowed the library to acquire books, films, tapes, and newspaper subscriptions and to open a small facility in the basement of the chapel, with deposit and collection stations throughout the hospital and

clinics. The Patient and Family Library, in contrast to the hospital's Research Medical Library, which serves physicians and researchers, was designed to offer general interest and popular selections to patients and their families. It is a public library-type facility that complements the extensive and highly technical Research Medical Library.*

According to Deborah Patton, MSLS, head librarian of the Patient and Family Library, space had always been limited, but increasing acquisitions finally made an expansion necessary. More space, she said, provides a more open and inviting environment for the more than 100 persons who use the library's services each week. "We're already seeing more people using the library now that we're in our new quarters," she said.

According to Ms Patton, the Patient and Family Library was almost entirely "public library oriented" at first, but now more people are asking for information about their or their family member's illness. She says that one of the advantages to the library's new space is that there is now room to expand the health information collection. Currently, the library has about 20 books on basic health information or, in some cases, personal narratives about coping with the cancer problem.

The library's primary service to patients and their families is still dispensing hometown newspapers, romances, mysteries, westerns, and other light and popular reading, but requests for books on cancer have made working with the Patient Education program in selecting new acquisitions in this area one of Ms Patton's goals. Current health information books have been reviewed by the Junior League of Houston, Inc., and some volumes have been reviewed by the Patient Education Steering Committee. Ms Patton hopes that continued cooperation among the groups involved will enable the Patient and Family Library to offer more health-related resources in the future.

* For a description of the Research Medical Library and the many services available to staff and area physicians, see the January-February 1981 issue of the *Newsletter* (Vol. 26, No. 1, 1981, page 3).

newsletter

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Science Park Hosts Meetings on Primatology

What natural resource in medical research is being preserved by the formation of harems? It is the chimpanzee. According to Michale E. Keeling, DVM, associate professor at The University of Texas Science Park, the chimp is an endangered species, and great care must be taken to use the animals properly in research and to find ways that their population in this country, which is now only about 1,235, can be increased. The formation of productive harems in protected breeding compounds, like the ones at the UT Science Park, is just one method of addressing this serious problem.

Two national meetings were held at the UT Science Park recently in an effort to educate the medical research community on the care, management, and reproductive process of the nonhuman primates.

The first, The Continuing Education Conference I, "Practical Primatology," was held May 1-2, 1981, for members of The American Society of Laboratory Practitioners. In essence, the meeting was a short course on practical primatology, covering the whole field of the medical care and management of nonhuman primates. The course was aimed at members having only small populations of these primates. Experts from all over the United States were present to advise participants on the proper techniques and procedures to use in working with laboratory primates.

From May 31-June 2, 1981, the staff of the UT Science Park hosted a National Institutes of Health (NIH) Task Force Committee Meeting concerning a National Chimpanzee Breeding Program. This group has been asked to advise The Interagency Primate Steering Committee of the NIH on the chimpanzee's reproductive physiology and behavior and the demography and captive management of these primates. The task force meeting was a workshop designed for the exchange of information.

"The common goal of both meetings was to ensure that a valuable resource, namely our laboratory primates, is effectively used and conserved," said Dr Keeling. "Both meetings were a

part of our effort to make maximum use of an irreplaceable resource through proper management and medical care."

Dr Keeling emphasized that chimps are used only in sophisticated experiments that neither require their death nor damage them. "The chimpanzee's phylogenetic closeness to man makes it an excellent model for some types of biomedical research," he said.

"If we can solve the problem of the supply of chimpanzees to the same extent that it has been solved for the rhesus monkey, we will be doing well," he said. At present, the UT Science Park's rhesus colony produces more monkeys than are needed by the UT System, and some are made available on the open market. There are commercial firms, such as the Bionetics Corporation, with an island in the Florida Keys, and the Hazleton Corporation, with an island off the South Carolina coast, that have been successful in maintaining productive rhesus colonies to supply research. This success with rhesus monkeys was made necessary by India's ban on their export some years ago.

Approaching the same level of success with chimpanzees will be a formidable task. Their generation time of 17 to 18 years approaches that of man. This means that any mistakes that are made in managing them are a long time in becoming apparent, and the effects of attempted improvements are not obvious for at least 10 to 12 years.

Chimpanzee colonies for reproduction have become necessary because animals that have been born in captivity and raised by hand have been found to be inept at both sexual reproduction and the raising of young. Part of the answer to this problem can be seen at the UT Science Park in the large harems housed within the innovative high concrete wall enclosures that provide the seclusion that is conducive to breeding. Innovations such as this and continuing efforts to educate the scientific community may help to preserve a valuable resource of medical research.

UT Science Park is using protected, high-walled breeding compounds to help preserve the chimpanzee, a valuable and endangered resource in medical research.



Cancer Prevention . . .

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effect may stem from the lowered prolactin levels that result even up to a year after a woman has given birth. Body weight is again a risk factor, but, in breast cancer, only after menopause.

Dr Henderson then discussed recent research on the effect of oral contraceptives on breast cancer. "Virtually all studies have shown oral contraceptives to have very little effect on breast cancer," he said. He pointed out, however, that these studies were conducted on women who had used oral contraceptives after they had undergone a full-term pregnancy. Because of this, USC researchers are looking at women who had breast cancer by the age of 32 and, according to Dr Henderson, they are seeing a "significant increase in risk for women who use oral contraceptives four years before their first full-term pregnancy."

In light of these findings about estrogen's effects on gynecologic cancers, Dr Henderson addressed the question of risk versus benefit in the administration of estrogen replacements to postmenopausal women. The risk, as he stated it, is that women who use estrogen replacements are two to three times more likely to develop breast cancer, and their risk of developing endometrial cancer increases with the dose of the substance and the duration of use. However, estrogens do have beneficial effects in castrate women in that they protect against hip fractures, which are usually caused by osteoporosis. More significantly, estrogens reduce by half a woman's risk of dying of cardiovascular disease. This protection against cardiovascular disease is, according to Dr Henderson, "a major factor on the benefit side of the equation," and he concluded that more information is needed before the risk-benefit ratio for estrogen can be fully assessed.

A broad overview of recent findings in several other cancers followed. Dr Henderson revealed that Los Angeles has the highest rates of malignant melanoma for whites in the United States and that rates for Texas and other Sun Belt areas are similar. In the Los Angeles area, the incidence of this cancer on the body, rather than the face, has been rising and particularly for persons in the professional class. Rates are two to three times higher for professional men and women than they are for blue-collar workers, who often are exposed to the sun daily in their jobs. This seemingly ironic finding, he says, "suggests that the way a person is exposed to the sun may be more important than is the amount of exposure. Studies are underway to determine if intermittent sun exposure and sunburn, as occur in recreation, for example, may be related to the occurrence of malignant melanoma.

Turning to the subject of liver cancer, Dr Henderson said that although hepatomas are rare, they are increasing, particularly among women. Consequently, studies are being conducted to determine if liver cancer in women is related to the use of oral contraceptives. For liver cancer overall, strong evidence links this form of cancer to active Hepatitis B antigen. According to Dr Henderson, this antigen probably accounts for 40% of liver cancers. Hepatitis B vaccination, he added, may be an approach to the prevention of liver cancer, and there are currently three or four vaccines under study. Dr Henderson predicts that "within this decade, we will see massive vacci-

nation programs underway in areas where the Hepatitis B antigen is prevalent."

Dr Henderson concluded his talk with brief remarks on suggested links between mesothelioma and exposure to asbestos in shipyards during World War II, links between brain tumors in children and their father's ever having worked in the aircraft industry, pancreas and bladder cancer's relation to coffee consumption, and the possible links between consumption of salted fish in South China and the high incidence of nasopharyngeal cancer in that area. Recent findings about these forms of cancer suggest possible causes, but as Dr Henderson indicated, further work is needed before firm predictions or recommendations can be made.

Dr Henderson's discussion of the work underway in cancer etiology at USC and around the country highlighted the kinds of information being amassed today and identified for those in attendance what new avenues toward cancer prevention may be explored in the future. In keeping with the stated objectives of the Cancer Prevention Lecture Series, his talk allowed Texas Medical Center employees an opportunity to keep abreast of what key investigators and institutions have learned about the causes and ultimate prevention of cancer.

UT MDAH Staff Publish Three New Books

UT MDAH staff members published three new books this spring. In March, G. K. Hall Medical Publishers published ***Sexual Rehabilitation of the Urologic Cancer Patient*** by Andrew C. von Eschenbach, MD, and Dorothy B. Rodriguez, RN (Boston, G. K. Hall Medical Publishers, 1981, 322 pages, \$39.95). Based on the proceedings of a conference on sexual rehabilitation of patients with genitourinary cancers held at UT MDAH in May 1979, this is the first book devoted to the problem of assisting the recovering cancer patient in the physical and emotional readjustments required after treatment for urologic cancer. Some of the topics covered in this multidisciplinary volume are definition of the problem, sexuality assessment of the patient, the impact of therapy on sexual function, methods of rehabilitation, options of sexual expression, and the psychological needs of the patient and his or her partner. ***Sexual Rehabilitation of the Urologic Cancer Patient*** is a valuable reference for physicians, urologists, nurses, psychologists, sexual therapists, and others involved in caring for patients with genitourinary cancer.

Humanity and Personhood: Personal Reaction to a World in Which Children Can Die by Jan van Eys, MD, PhD, has been published by Charles C Thomas (Springfield, Illinois, Charles C Thomas Publisher, 1981, 108 pages, \$14.95). The book records the author's personal struggle with the difficult questions the pediatric oncologist must face in the treatment of very sick children. It explores the author's concepts of humanity and personhood, the means through which he came to terms with the reality of children dying of cancer. ***Humanity and Personhood***, as the author states in the preface, is a highly personal and philosophical treatise on a subject that touches physicians,

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International Colloquium to Look at Cancer Patient Care Today and in 2001

The year 1981 marks the 10th anniversary of the National Cancer Program and the 40th anniversary of The University of Texas M. D. Anderson Hospital and Tumor Institute. To commemorate the occasion, The University of Texas System Cancer Center will sponsor an international colloquium, "Cancer 1981/2001," November 11-14, 1981, at The Shamrock Hilton Hotel in Houston.

The colloquium will bring together outstanding authorities to define where cancer research and treatment stand today, take a reasoned look at the directions they should be taking in the future, and consider what the status of cancer patient care is likely to be in 2001. The scientific program will include broad-scope plenary sessions balanced by small, focused symposia. Presentations will be made by both basic and clinical scientists, and the look at the future will examine not only promising avenues of future research but also related fields—communications, imaging, data storage and retrieval, artificial intelligence, monitoring—and what their impact might be on the cancer patient. An exhibition hall will feature displays on the medical advances and spin-off benefits of space exploration and exhibits from scientific and industrial companies on the most recent technological advances.

This colloquium will be held in lieu of the UT MDAH annual Clinical Conference. It is open to all members of the health professions, and continuing education credits will be offered.

Further information may be obtained by writing to C. Stratton Hill, Jr, MD, Conference Coordinator, Room 115, The University of Texas System Cancer Center, 6723 Bertner Avenue, Houston, Texas 77030.

Noteworthy

Michael J. Siciliano, PhD, acting director of the Department of Carcinogenetics, has been named Chairman of the Organizing Committee for the 4th International Congress on Isozymes to be held June 13-18, 1982, in Austin. As Chairman, Dr Siciliano is responsible for coordinating the activities of the other committee members, 15 of whom represent foreign nations. With the Congress a year away, he is currently receiving suggestions for program topics and participants and has appointed a program chairman and other necessary committee members. Held last in 1974 at Yale University, the International Congress on Isozymes is designed to bring together scientists working on isozyme research from around the world for a complete exchange of information in the field. Dr Siciliano says he hopes as many as 600 persons will attend the Congress and that large contingencies from Japan and the Soviet Union are expected.



A. Clark Griffin, PhD

A. Clark Griffin Assumes Leadership of UT Science Park's Research Division

A. Clark Griffin, PhD, is the new director of The University of Texas Science Park—Research Division near Smithville. The Research Division, part of The University of Texas System Cancer Center, is a 717-acre complex devoted to determining how cancer-causing substances change cellular makeup and identifying cancer-causing agents in the environment.

Dr Griffin has devoted over 35 years to the study of carcinogenesis and has been associated with the UT Cancer Center since 1954. That year he came to UT MDAH to organize and head the hospital's first Department of Biochemistry. He headed this department until 1961, when he relinquished his administrative duties at the hospital to assume a lifetime American Cancer Society Professorship. Awarded in 1960, the American Cancer Society Professorship allowed Dr Griffin to devote himself fully to cancer research for the remainder of his career.

According to Charles A. LeMaistre, MD, president, Dr Griffin's contributions to UT MDAH have been many. In addition to organizing the Department of Biochemistry, he helped establish and then served as chief of the Environmental Carcinogenesis Study Section. With his expertise in environmental carcinogenesis, Dr LeMaistre added, Dr Griffin was instrumental in the early planning of the UT Science Park's laboratory facilities.

Dr Griffin received his undergraduate degree from Utah State University and his Master's degree in chemistry from the University of Michigan. He was awarded his doctorate in biochemistry from the University of Wisconsin. He is the author of over 200 articles on carcinogenesis and has edited or contributed to 12 books.

UTSCC Well Represented at ASCO/AACR Meeting

Again this year The University of Texas System Cancer Center was well represented at the joint meeting of the American Society of Clinical Oncology (ASCO) and the American Association for Cancer Research (AACR). Held in Washington, DC, April 27 to May 2, this was ASCO's 17th Annual Meeting and AACR's 72nd.

Staff members representing 11 departments or divisions presented nearly 100 papers at the ASCO/AACR meeting. Members of the Departments of Physics, Pathology, Molecular Carcinogenesis, and Laboratory Medicine, plus the Research Division of the UT Science Park, each gave one presentation. Staff from the Division of Biology and the Department of General Surgery presented three; the Department of Pediatrics, seven; and the Department of Internal Medicine, 24.

More than half of the 93 papers presented at the meeting were contributed by members of the Department of Developmental Therapeutics. Staff from the Department of Developmental Therapeutics gave 51 presentations, according to John A. Benvenuto, PhD, who helped coordinate the department's contributions. Working with Emil J Freireich, MD, head of the Department of Developmental Therapeutics and immediate past president of ASCO, Dr Benvenuto chose several papers of particular interest to highlight.

"Reduction of Adriamycin Cardiac Toxicity Using a Prolonged Continuous Intravenous Infusion," by Robert Benjamin, MD, Sewa Legha, MBBS, Bruce Mackay, PhD, Michael Ewer, MD, Sidney Wallace, MD, Manuel Valdivieso, MD, Shelly Rasmussen, PhD, George Blumenschein, MD, and Emil Freireich, MD, compared the cardiac toxicity experienced by 21 patients receiving Adriamycin through 48- to 96-hour continuous infusions and that experienced by 30 control patients treated by the standard intravenous injection. Fewer patients in the continuous infusion group developed pathologic changes precluding further Adriamycin administration, other toxicity was similar, and the antitumor activity of the drug did not appear to be diminished, leading the authors to conclude that lowering the peak plasma level of Adriamycin through continuous infusion reduces cardiac toxicity without sacrificing antitumor activity.

"Reutilization of Adriamycin in Previously Treated Patients," by Sewa Legha, MBBS, Robert Benjamin, MD, Bruce Mackay, PhD, George Blumenschein, MD, Michael Ewer, MD, Hwee-Yong Yap, MD, Sidney Wallace, MD, and Gerald Bodey, MD, reported that approximately 90% of a group of relapsing patients who were previously treated with 400-450 mg/m² of Adriamycin could be treated with additional Adriamycin starting at least one year after the initial therapy. The authors concluded that since the retreatment brought about therapeutic benefit in two thirds of the study patients, this strategy should be attempted in patients who have had a good prior remission, as long as cardiac toxicity is monitored closely and the drug is administered through a continuous infusion schedule.

In "A Randomized Study of Oral Ftorafur Versus Intravenous 5-Fluorouracil in Advanced Colorectal Cancer," John Stroehlein, MD, Agop Bedikian, MD, David Karlin, MD, Manuel Valdivieso, MD, Roland Bennetts, MD, Gerald Bodey, MD, and

Robert Hickey, MD, evaluated the relative effectiveness and toxicity of oral ftorafur (a tetrahydrofuran analog of 5-fluorouracil) with intravenous 5-fluorouracil and found that oral ftorafur was not only equally effective to intravenous 5-fluorouracil but that it also produced much less myelosuppression.

In "A Five-Year Experience with Cyclophosphamide, Vincristine, Adriamycin, and DTIC (CYVADIC) Chemotherapy in 169 Adults with Advanced Soft Tissue Sarcoma," Boh-Seng Yap, MD, Michael Burgess, MD, Joseph Sinkovics, MD, Robert Benjamin, MD, and Gerald Bodey, MD, reevaluated the CYVADIC treatment regimen developed by the late Jeffrey Gottlieb several years ago at UT MDAH and concluded that this is still the most effective treatment regimen for adults with advanced soft tissue sarcomas.

"Treatment of Small Cell Bronchogenic Carcinoma with High-Dose Chemotherapy and Autologous Bone Marrow Transplantation," by Peter Farha, MD, Gary Spitzer, MD, Manuel Valdivieso, MD, Axel Zander, MD, Dharmvir Verma, MD, Guillermo Minnhaar, MD, Lijda Vellekoop, MD, Karel Dicke, MD, PhD, and Gerald Bodey, MD, reported results of a study using megadose chemotherapy, followed by autologous bone marrow transplantation to ameliorate myelosuppression, in hopes of prolonging remission duration and survival in patients with small cell bronchogenic carcinoma. The authors reported a 100% response rate and concluded that megadose chemo-

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New Staff Appointments

NAME	DEPARTMENT
Robert Barr, MD	Gynecology
Lola Bilowich, MSME	Cancer Prevention
Michael Boileau, MD	Urology
Shirley Browne, MD	Anesthesiology
Joan Bull, MD	Developmental Therapeutics
Thomas Cleary, MD	Pediatrics
Charles Donaghey, PhD	Cell Biology
Johnnie Frazier, MD	Pediatrics
Masahiko Fujino, MD	General Surgery
Martin Grabois, MD	Internal Medicine
Michiko Kawaguchi, MD	Tumor Biology
Takanori Kawaguchi, MD	Tumor Biology
James Kelly, MD	Internal Medicine
Edmund Kim, MD	Internal Medicine
Randy Legerski, PhD	Molecular Biology
James Chia-Hung Lin, PhD	Biology
Oscar Maldonado, DDS	Dental Oncology
John McGee, MD	Head and Neck Surgery
Peter McLaughlin, MD	Internal Medicine
Guillermo Minnhaar, MD	Developmental Therapeutics
Linda Peterson, MD	Internal Medicine
Gregor Prindull, MD	Developmental Therapeutics
Adan Rios, MD	Developmental Therapeutics
Margaret Spitz, MD	Cancer Prevention
Lacy Stephens, DVM, PhD	Veterinary Med. and Surgery
Hideki Takanari, MD	Cell Biology
Rosa Tang, MD	Head and Neck Surgery

Dr Richard Doll Questions the Existence of a General Cancer Epidemic

In a talk at UT MDAH on April 14, 1981, Richard Doll, Kt, OBE, FRS, MD, DSc, FRCP, an epidemiologist from Oxford University asked the question, "Is the cancer epidemic fact or fiction?" Dr Doll is a former member of the Advisory Committee of Medical Research for the World Health Organization and a recipient of the United Nations Award for Cancer Research. Before his review of the epidemiological information relating to cancer in this century, the visiting professor at The University of Texas Medical School at Galveston made it clear that his audience might interpret these data differently from the way he did.

"Untrue hypotheses have the habit of traveling around the world faster than a true one," he said, referring to the popular notion that there is a cancer epidemic and that it is mostly due to the increasing exposure to chemical products and pollution, such as the compounds resulting from the chlorination of water. "If all this is not true," he emphasized, "it may be a waste of money to control the chemicals, retard economies, and hold back the uncovering of cancer's true causes."

Dr Doll contends that the apparent increase in the incidence of cancer is the result of many factors: Cancer is more discussed now. "New causes" of cancer, such as hair dyes and coffee, are widely advertised in the press. The apparent increase in the number of deaths caused by cancer is partly the result of elimination of other causes of death, but reported cancer is absolutely more common. Cancer is more readily diagnosed now. Listing senility as a cause of death is out of fashion. With the advent of Medicare, there has been an increase in the rate of surgical operations for cancer. That sociological factors have a strong effect on reported cancer is evidenced by the apparent sharp increase in breast cancer incidence after then First Lady Betty Ford was operated on for breast cancer in 1974.

Dr Doll said that he cannot accept the idea that improvements in treatment alone have decreased the mortality rate due to cancer. He does believe that the mortality trends more truly reflect the incidence rates of cancer than do the reported incidence rates. He pointed out that the medical literature indicates that the incidence of cancer has increased since 1945, whereas in the same period the mortality rate has decreased.

Finally, Dr Doll said that another thing that is often overlooked is that sometimes a neoplasm can be histologically classified as malignant but if it were left alone it might not be classified as such clinically. As an example of the latter factor, he said that a man of his age, nearing his 70th birthday, would have a 25% chance of a histologist finding evidence of cancer in his prostate through biopsy; yet, if he did not have the biopsy there would be only a 1.15% chance of his actually developing a prostate cancer that would be classified clinically as malignant. This phenomenon is reflected in the medical literature, which indicates that cancer of the prostate is increasing, but the mortality rate from cancer of the prostate is going down.

Dr Doll pointed out that a similar situation exists in relation to breast cancer. In those women having had cancer in one breast, there is only a 0.5% per year chance of cancer occurring in the other breast, but 15% of those women having had cancer in one

breast are reported histologically to have it in the other breast. Most of these women do not have clinical evidence of cancer. The increasing use of occult blood tests and other new procedures has also increased the apparent incidence of cancer of the colon.

Dr Doll said that overall there has been an actual reduction in the occurrence of many types of cancer, such as cancer of the stomach, cancer of the rectum, lung cancer in men, bladder cancer, brain cancer, leukemia, plus 20 other types.

The incidence of a few types of cancer *has* increased to epidemic levels, Dr Doll explained, but these can be directly related to specific causes in most cases. The increase in the occurrence of mesothelioma, for example, has been linked to exposure to asbestos. The number of lung cancer cases resulting from the use of tobacco has increased. The rates of occurrence of melanoma and cancer of the upper digestive tract have also increased.

Dr Doll concluded that there is no reason to believe that a general cancer epidemic exists. Mortality data, which he demonstrated to be more reliable than incidence data, according to his interpretation, support his conclusion. He believes that, although some of the decrease in the cancer mortality rate is due to better treatment techniques, much is due to a natural decrease in many types of cancer.

Staff Publications . . .

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nurses, parents, mental health professionals, members of the clergy, and anyone who works with critically ill children.

Raven Press recently published ***Nutrition and Cancer: Etiology and Treatment*** by Guy R. Newell, MD, and Neil M. Ellison, MD (New York, Raven Press, 1981, 445 pages, \$49.50). Part of Raven's ***Progress in Cancer Research and Therapy*** series, this volume is a comprehensive review of the relationships between nutrition and cancer, focusing primarily on the role of diet in the etiology of cancer, but also including material on the nutritional management of patients with cancer. Major topics are: general approaches to cancer; approaches to nutritional assessment; possible nutrition and cancer association; and nutritional treatments of the cancer patient. Within these broad categories are discussions on the epidemiology of cancer; mechanisms of carcinogenesis; associations between various food substances, vitamins, minerals, and additives and cancer; mutagens in food; nutritional assessment through dietary diaries and histories, anthropometric measurements, and biochemical testing; and nutritional problems associated with chemotherapy and radiotherapy. Oncologists, epidemiologists, nutritionists, and other practitioners interested in the relationship between cancer and nutrition should find this latest volume from Raven Press to be a valuable review of timely topics on nutrition and cancer.

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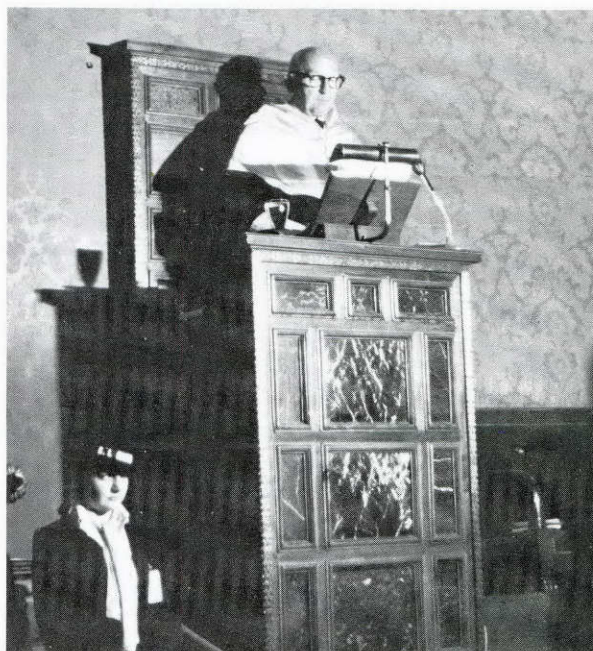
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Gilbert Fletcher Honored in Granada

Naming an honorary doctor for only the 28th time in over 400 years, the University of Granada in Granada, Spain, installed Gilbert Fletcher, MD, head of the Division of Radiotherapy, as "Doctor Honoris Causa" in May. Of the 28 honorary doctors named in the university's long history, only six are physicians, and five of the 28 are Nobel Prize winners.

Dr Fletcher's installation was sponsored by Vicente Pedraza, MD, chairman of the Department of Radiology at the University of Granada. In his introductory speech, Dr Pedraza outlined the reasons for Dr Fletcher's nomination for the honorary degree. He cited Dr Fletcher's lifelong contributions to radiotherapy, his technical innovations, clinical observations, and contributions to the biology of radiation and combination treatments. Dr Fletcher's installment speech was entitled "The Impact on Oncology of the Interaction of Radiation Therapy and Radiobiology."

As part of the installment activities, senior members of Dr Fletcher's staff gave a week-long refresher course on radiotherapy. Staff members participating were: Eleanor Montague, MD, Robert Lindberg, MD, Mario Gonzalez, MD, and Luis Delclos, MD; two former members of the UT MDAH staff, Lester Peters, MD, and Rodney Withers, MD, also participated.



Gilbert Fletcher, MD, gives his installment speech during the elaborate ceremony honoring him as the 28th honorary doctor of the University of Granada.

ASCO / AACR Meeting . . .

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therapy can be given safely with autologous bone marrow transplantation, resulting in rapid hematopoietic recovery. Although there is no apparent value to the regimen's use as initial therapy, the approach is being investigated for use in late intensification therapy using marrow collected after the initial response.

"Host Defense and Prognosis in Hairy Cell Leukemia," by Evan Hersh, MD, Samuel Murphy, MD, PhD, and Shelly Rasmussen, PhD, examined numerous means of measuring host-defense mechanisms and their effect on prognosis in patients with hairy cell leukemia. The authors concluded that serum lysozyme, antibody-dependent cellular cytotoxicity to chicken erythrocytes, average delayed-type hypersensitivity skin test diameter, monocyte adherence, Concanavalin-A response, and platelet count were the most important measurements in terms of predicting survival and that these data suggest avenues for future investigations of hairy cell leukemia and its management.

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