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P.O. Box 2370 Reston, Virginia 22090 Telephone 703-620-4646

House Figures For NCI, NIH Will be Known This Week; Senate Probably Will Wait Until After Recess

The House Appropriations Committee was scheduled to wrap up its work on the 1988 fiscal year Health & Human Services-Labor-Education appropriations bill this week, after which the amounts allocated for NCI and the rest of NIH will be made public. The Senate Appropriations Committee probably

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In Brief

Reagan Names Hammer To Third Term As Cancer Panel Chairman; RPMI Opens Survivor Clinic

ARMAND HAMMER has been named by President Reagan to a third consecutive three year term as chairman of the President's Cancer Panel. A little more than a year into his new term, Hammer will surpass Benno Schmidt in longevity at that job; Schmidt served two terms plus another 15 months when then President Carter delayed naming his successor. Hammer is 89 (not 88 as reported July 17 in **The Cancer Letter**) and may already be the oldest active Reagan appointee. Hammer probably is the only member of this Administration who makes the oldest person ever to serve as President feel like a kid. **William Longmire** and **John Montgomery** continue as the other members of the Panel. . . . **CASEY KASEM**, host of a popular syndicated radio music program, received a letter of congratulations from NCI Director Vincent DeVita for an antismoking message Kasem distributed to radio stations around the country. DeVita said that more than 60 percent of the nation's young adult radio stations had broadcast the message. . . . **DOUGLAS ARMSTRONG**, assistant professor of pharmacology at the Univ. of California (San Francisco), has joined the La Jolla Cancer Research Foundation as administrator and scientific liaison officer. . . . **ROSWELL PARK** Memorial Institute has opened a long term followup clinic to provide specialized medical care and counseling to former childhood cancer patients. "This clinic is needed because the dramatic success in the treatment of cancer in children and adolescents has created a population of long term survivors who may have unique problems that require care," Daniel Green, cancer research pediatrician who will direct the clinic, said. Patients who were diagnosed with any type of cancer before age 20, but more than five years ago, are eligible to be evaluated in the clinic, regardless of where they were treated.

AACI, Coalition, ASCO Presented Strong Case For Bypass Budget Level

(Continued from page 1)
will not complete its version of the bill until after the August recess. The Senate Labor-HHS-Education Appropriations Subcommittee will not mark up the bill until it sees the House measure reported out by the full Appropriations Committee, which was scheduled for July 30.

When Congress resumes after Labor Day, the Senate markup and full committee action will have to precede floor action. Assuming the House has passed its bill by then, the conference to settle any differences will have to be scheduled and completed.

All that makes it unlikely that a final bill can be sent to the President before the start of the new fiscal year, Oct. 1, requiring an interim "continuing resolution" to fund NIH and all other agencies for which no regular appropriations bill has been passed and signed. However, unless some major differences develop over the Labor-HHS-Education bill or unless President Reagan vetoes it, it seems likely that final appropriations legislation for cancer and other biomedical research will be enacted early in the new fiscal year.

Whatever the final level turns out to be for NCI, if it is not at least at the bypass budget request of $1.7 billion, it will not be the fault of three organizations which made solid, sound and thoroughly documented appeals for that level.

John Potter, who resigned this month as director of the Lombardi Cancer Research Center at Georgetown Univ., made the case for more adequate funding of cancer centers, representing the Assn. of American Cancer Institutes. Potter was AACI president at that time.

In his appearance before the House Labor-HHS-Education Appropritions Subcommittee, Potter noted that the Senate report on the 1987 bill had stated that money had been added to permit funding of cancer center core grants "at approximately their peer review approved levels so that a sense of stability and continuity can be reintroduced into the cancer center programs."

Potter added, "Unhappily, as a result of the Senate-House conference and other budgetary pressures, the funds simply were not available in the appropriation to do that." He noted that NCI Director Vincent DeVita had admitted that the 5.4 percent increase for centers in FY 1987 "represented the lowest percentage increase to any program at NCI for that fiscal year." Further, DeVita commented, "It is a chronically underfunded program."

Potter pointed out that the bypass budget requests $118.2 million for centers in FY 1988, compared to $93.3 million in 1987. He asked the committee for that amount; for $1.7 billion for NCI in total, which was the bypass request; and for $7.69 billion for NIH.

Potter also reminded the committee of the bypass request of $35 million for construction. While not specifically asking for that amount, he said, "an increase in construction funds is vital for us to continue our progress."

John Ultmann, director of the Univ. of Chicago Cancer Research Center, represented the Coalition for Cancer Research before the House subcommittee.

Ultmann is chairman of the Coalition, which consists of 11 cancer related organizations and professional societies, plus Mary Lasker, probably the most active and effective lay supporter of health research and legislation in the country's history.

Ultmann compared the cost of health care in the U.S. to the amount spent on research which would reduce that cost. He said the total estimated cost is $400 billion a year, and that if a minimum of 5 percent, which he said is the minimum high tech enterprises spend on research, were to be allocated to biomedical research, the NIH, NSF and other federal biomedical research budgets would be $20 billion. They are nowhere near that. He asked for $7.4 billion for NIH and $1.7 billion for NCI.

Ultmann called attention to the fact that while NCI's budget has had a "modest increase" over the last 10 years, "there has actually been a decrease in the purchasing power of NCI's dollars." That decrease has been felt by all funding mechanisms other than research project grants.

"While there is a large number of highly qualified research project grant applications that encompass most of the scientific research areas, many of the components of the National Cancer Program require different support mechanisms, including cooperative agreements, R&D contracts, intramural research, and a more direct involvement of the federal sector which is accomplished

through the use of clinical trials, epidemiological investigations, drug screening and development efforts, and prevention efforts. Everyone of these programs has been cut in constant dollars since 1980.

"I would use the centers program as a specific example of a long neglected need," Ultmann continued. "The Cancer Centers Program across this nation is the backbone of much of our research and treatment effort, yet for each of the last few years, the budget has grown less than five percent. What that simply and tragically means is that there have been cutbacks nationwide in our cancer research, treatment and community programs. This cannot continue."

Ultmann appealed for more money for research training, research instrumentation and renovation of research and animal facilities.

Karen Antman, chairman of the Public Issues Committee of the American Society of Clinical Oncology, presented ASCO's view of cancer program funding needs.

Antman is clinical director of the Solid Tumor Autologous Marrow Program at Dana-Farber Cancer Institute. She asked for the bypass budget total of $1.7 billion for NCI, and for $7.6 billion for NIH, and also pointed to the "dire need for funding of construction grants and for equipment."

ASCO, Antman said, is "very concerned about two patterns of funding for NCI programs. The first is funding for clinical research. Opportunities for clinical research currently far exceed the money currently available. We urge this committee to review the clinical research program at NCI so that it may fully understand the required increase in funding.

"Second is the inadequate funding of cancer centers." The increase of less than 20 percent over the last five years occured when NCI's budget increased 45 percent and the NIH budget 50 percent, Antman pointed out.

Lederle Scientists Report Powerful New Antitumor Agent, Calichemicin

A new antitumor substance estimated to be 1,000 times more potent than doxorubicin was described last week at the Gordon Research Conference on Natural Products in New Hampton, NH.

The new compound, called calichemicin for the microorganism that produces it, "represents a whole new class of antitumor agents," said May Lee, of Lederle Laboratories, who made the presentation. "It's chemical structure is very unusual, unlike any naturally occurring or synthetic antitumor substance identified to date."

Lederle scientists isolated the calichemicin producing organism in 1981 during a directed screening program to detect antitumor compounds.

"In our search for new anticancer and antibiotic substances, we try to examine unusual environments hoping to find organisms with unusual biological properties," Lee said. "The calichemicin producing subspecies of micromonospora echinospora endogenous to the caliche soil of central Texas proved to be such an organism. It was a lucky find."

Calichemicin, like doxorubicin and the majority of other antitumor agents, exerts its therapeutic effect by interfering with DNA of tumor cells.

"We are just beginning to define the breadth of calichemicin's antitumor activity," Lee said. "So far, this substance has been shown to be effective against a variety of tumors in mice, including leukemias and solid tumors."

Donald Borders, head of Microbial Chemistry in Lederle's Infectious Disease Section, emphasized that calichemicin is an experimental compound. "Like all antitumor chemotherapeutic agents, this substance has toxic side effects," he said. "We are investigating methods to reduce toxicity and still preserve the compound's extraordinary potency. Eventually, we hope to attach calichemicin to an antitumor drug delivery system which will allow the substance to bypass normal cells and go directly to malignant tissue."

NCI To Continue Program Looking At Domestic Animals For Cancer Data

One little discussed aspect of the National Cancer Program is the prospect that household pets and other animals may serve as "sentinels" in the detection of environmental carcinogens before they become major threats to human populations.

NCI's Div. of Cancer Etiology recently received concept approval from its Board of Scientific Counselors to continue a program for studying animal morbidity and mortality through veterinary colleges. The program, supported through a contract with the Assn. of Veterinary Medical DAta Program Parti-

cipants Inc., looks at a variety of factors in the study of cancer, one of which is use of animals as "sentinels."

The Board's approval of the concept of renewing the contract for five more years on a noncompetitive basis continues the program which was started in 1964. Estimated total cost for the five years is just under $1 million.

Howard Hayes, staff member of the Environmental Epidemiology Branch, described the program to the Board. His statement justifying the concept:

With the expectation that a knowledge of neoplasia and related diseases in domestic animals would contribute to a better understanding of similar diseases in man, NCI initiated in 1964 a systematic information collection program (the Veterinary Medical Data Program). Medical records departments of teaching hospitals of colleges of veterinary medicine were enrolled into this program to create a hospital based registry composed of animals brought to medical attention for any reason. In 1977 the program participants collectively formed their own consortium and accepted responsibility from NCI for quality control, data processing and storage. Thereafter NCI has purchased computerized medical record abstracts from VMDP to provide data for ongoing studies. NCI continues to be the focal point for information from this database answering requests from the public, domestic and foreign scientists, as well as from the media, and staff of other governmental agencies.

Each abstract medical record identifies the submitting facility, unique patient number and other patient characteristics (age, species/breed, sex, weight) diagnoses, surgical operations and/or diagnostic tests performed, and identification of the owner's home by ZIP code. This resource now has a continuing medical history on 800,000 dogs and 250,000 cats, as well as data on other animals brought to veterinary attention. Presently 18 North American colleges of veterinary medicine (two thirds of the existing schools) contribute more than 300,000 hospital episodes annually to the VMDP; seven additional colleges have made a commitment to pool their hospital data with the VMDP.

A summary of the research accomplishments of the program was published in 1971. Subsequently, information about tumors identified in all species through June 1977 was presented in tabular form in NCI Monograph 54 to make it available to the general research community.

A major direction of the veterinary studies area in the last decade has been to encourage and conduct research to compare the epidemiology of disease in domestic animals with man in order to make interspecies comparisons and to generate etiologic hypotheses. This generation of etiologic hypotheses is classically illustrated by canine osteosarcoma, a condition determined to be positively associated with patient size--the larger the dog breed, the greater the risk. Subsequently, a case control study of children with bone sarcomas revealed that they were significantly taller for their age at the time of diagnosis than a hospital control group of children with nonosseous cancers.

Pet animals may be viewed as a biological monitor for exogenous carcinogens in man's nonwork environment. They share the same water, air, home and often the food their owners consume, but are not subjected to the confounding or interactive effects of primary tobacco usage or occupational exposures of their owners. The role of animal sentinels was illustrated by cancer of the slower urinary tract in the dog. The risk of this tumor has been correlated with an index of industrial activity in the geographic area of the pet dog's home. Mortality rates for bladder cancer in men and women revealed the same associations. Since the association in pet dogs and women could not be presumed to result from occupational exposures, it was suggested that carcingogens might have escaped into the ambient environment and that the dog's response mimics that in people. This is consistent with Hueper's research demostrating that laboratory dogs react to bladder carcinogens in a similar manner to man. However, the latent period in man is estimated to be at least 20 years after first exposure, whereas it is no more than 10 years in dogs. Thus, increase in bladder cancer in pet dogs over time could identify locales with emerging environmental hazards to their human companions.

Since 1982, VMDP participants have used the computerized abstracted data from their own instutitions to support more than 75 published investigations. During this same time, information from the total data base (3.2 million hospital episodes) has been utilized in at least 32 other investigations

resulting in numerous publications, 24 of which were conducted by staff members of the Branch.

The fequency of canine transmissible venereal tumor in North America showed an inverse association with latitude and a positive association with increasing temperature and rainfall. Review of the epidemiology of TVT revealed similarities to human Kaposi's sarcoma. Both are sarcomas of uncertain histogenesis, more aggressive and common in immunosuppressed hosts, endemic in tropical Africa, and apparently associated with latitude and rainfall. The mechanism of transmission of TVT is assumed to be a whole cell allograft, but the etiologic agent is unknown; some suspect a virus.

A study of canine nasal carcinoma revealed an increased frequency among male dogs, a strong positive correlation between risk and an index of industrial density in the locale of the dog's home, and a similarity of risk among purebreds and mongrels. This pattern suggests an effect of general environmental exposures that remain to be identified.

A study of canine cryptorchism revealed a nine fold risk of testicular neoplasia, compared to a four fold risk of neoplasia in dogs with inguinal hernia; these patterns are similar to many observations in man. In addition, in six high risk closely related breeds of dogs, the relative risk of cryptorchism was inversely associated with adult size, suggesting a role for physical size or growth rate in the development of this anomaly.

Objectives of the study are:

*To use the data as a resource for analytic case control and cohort studies involving owner questionnaires and interviews, and record abstraction. Specific case control studies are currently being designed for canine urothelial and nasa cancers, and canine malignant lymphoma.

*To conduct studies of temporal trends in veterinary medicine.

*To continue to provide the only systematic collection of the disease experience in domestic animals that exists in the world today.

Cancer is an uncommon to rare event in domestic pets. One of the major reasons for continuing this resource is that veterinary oncology is now an emerging field of interest. Because of more intensive efforts to identify cancers in animals, the numbers of cases available for more analytical efforts are now accruing at an impressive rate. For example, in the last five years the VMDP has identified 250 new cases of canine lower urinary tract cancer, 600 new cases of canine nasal carcinoma, and 1,400, dogs with malignant lymphoma. These numbers are approximately equal to the sum of such cases reported during all the combined previous years of the program. We believe that with the emergence of veterinary oncology, the opportunities for veterinary epidemiology to pursue clues applicable to the etiology of human cancer and to identify hazards for which domestic animals may be sentinels for human disease have never been more promising.

The proposed case control studies of urothelial and nasal cancers will attempt to clarify the effects of environmental exposures that may be responsible for the correlation findings of earlier descriptive sutdies. The study of malignant lymphoma in domestic dogs is being developed to assess the risk associated with residential use of herbicides and pesticides; this may be particularly timely considering the increase in non-Hodgkin's lymphoma in the U.S. and the recent study from our Branch linking non-Hodgkin's lymphoma with certain herbicides.

Owners of dogs with newly diagnosed cancers of interest, as well as those of matched controls, will be asked to complete a questionnaire providing information about their home, its environment (e.g., proximity to industry, use of household and yard chemicals), family life style, and their pets' life histories. These data will be collected from self administered questionnaires and shared with veterinary university collaborators. It is also thought that these questionnaires may be given to random owners upon arrival at the clinic before their pets are seen, to generate an underlying profile about owners and pet environment of mature domestic animals brought to medical attention.

The data base may provide clues to human health hazards in an accelerated manner compared to the latency periods expected in man. With the increasing public concern about experimental use of animal subjects, this data source gains additional importance because it makes use of the health experience of naturally occuring events. Our proposed course is to focus on analytical studies of the types mentioned, and where possible to continue to fill the remaining voids concerning the descriptive epidemiology of animal cancer and related diseases.

NCI Contract Awards

Title: Laboratory support for processing and storage of specimens from persons at high risk from cancer
Contractor: Biotech Research Laboratories, $301,538

RFAs Available

RFA 87-AI-22

Title: Influence of modifying the plasma membrane on lymphocyte functions
Application receipt date: Oct. 15

The National Institute of Allergy & Infectious Diseases is soliciting regular research project grant (RO1) applications that are designed to increase knowledge and understanding of the physical-chemical features of lymphocyte membranes as those features relate to the functions of lymphocytes preparing for, or engaged in, immune responses.

Studies of interest include but are not limited to the following as they relate to lymphocyte functions:

A. Assessment of the numbers and distribution of lipoprotein receptors on lymphocytes, and subsets of lymphocytes, and the relationship between those receptors, the transport of sterols and other lipids, the endogenous biosynthesis of lipids, and the immunological functions of lymphocytes.

B. Evaluations of rates and magnitudes of biosynthesis, and membrane incorporation and turnover, of substances such as fatty acids, sterols and phospholipids in lymphocytes and subsets of lymphocytes; and especially, of the influence of biosynthetic and turnover parameters on the functions of lymphocytes.

C. Relationships between the physical-chemical states of lymphocyte membranes (e.g., relative fluidity, existence of domains and regions of phase transitions) and the functional capabilities of those lymphocytes and subsets of lymphocytes (e.g., receptor densities and distributions, mitotic and biosynthetic abilities).

Applications concerned with basic problems in cell biology in which the lymphocyte merely serves as the model cell will not be acceptable. Proposals must focus on physico-chemical variables that influence the functions of lymphocytes.

The support mechanism for this program will be the individual research project grant. NIAID plans to support at least five awards at a direct cost of approximately $150,000 each for the first year. Up to five years of support is anticipated.

Applications must be submitted using Form 398 (Rev. 9/86). The RFA label contained in the application kit must be affixed to the bottom of the face page of the original copy of the application. Failure to use this label could result in delayed processing and review of the application.

Support is contingent upon receipt of applications of substantial scientific merit and the availability of funds.

For a complete copy of the RFA, contact Joseph Albright, PhD, Chief, Immunobiology & Immunochemistry Branch, NIAID, NIH, Westwood Bldg Rm 757, Bethesda, MD 20892, phone 301/496-7551.

RFPs Available

Requests for proposals described here pertain to contracts planned for award by the National Cancer Institute unless otherwise noted. NCI listings will show the phone number of the Contracting Officer or Contract Specialist who will respond to questions. Address requests for NCI RFPs, citing the RFP number, to the individual named, the Blair building room number shown, National Cancer Institute, NIH, Bethesda MD 20892. Proposals may be hand delivered to the Blair building, 8300 Colesville Rd., Silver Spring MD, but the U.S. Postal Service will not deliver there. RFP announcements from other agencies will include the complete mailing address at the end of each.

RFP NIAID-AIDSP-88-10

Title: Development, acquisition and characterization of reagents against tissue specific antigens
Deadline: Sept. 17

The Genetics & Transplantation Biology Branch of the Immunology, Allergy & Immunologic Diseases Program of NIAID is soliciting contract proposals from organizations having the capabilities and facilities for the development, acquisition and characterization of reagents directed against tissue specific antigens. Offerors should have the demonstrated experience in the serological and/or cellular techniques needed to produce and characterize the required reagents. Access to autopsy or biopsy specimens will be required. The capability to manage and analyze specificities is also needed.

One or more contracts may be awarded as a result of this solicitation. It is expected that they will have a three year period of performance.

To receive a copy of the complete RFP, send two self addressed mailing labels to Sylvia Cunningham, NIAID, NIH, Westwood Bldg Rm 707, Bethesda, MD 20892.

RFP NIAID-AIDSP-88-8

Title: Acquisition, analysis, storage and distribution of cells, viruses, proteins, chemicals and drugs used for AIDS research
Deadline: Approximately Sept. 10

NIAID has a requirement to acquire significant quantities of reagents to support the efforts of the scientific community in research on AIDS. The contractor will be required to acquire reagents which include, but are not limited to, biological substances; provide a centralized resource for assaying and evaluating, storing and distributing these reagents to investigataors; and provide and maintain a continuing computerized inventory and distribution data base and processing system to track and assist in the coordination of the activities under this acquisition.

This project will take approximately five years to complete. A cost reimbursement contract is anticipated.

For a complete copy of the RFP, send two self addressed mailing labels to Dorothy Tyler, NIAID, Westwood Bldg Rm 707, Bethesda, MD 20892.

RFP NIAID-AIDSP-88-9

Title: Investigations on human immunodeficiency virus antibodies
Deadline: Approximately Oct. 15

NIAID has a requirement for the development of new or improved neutralization assays for HIV and the use of these assays to investigate some important immunological issues of AIDS.

This project will take approximately three years to complete. It is expected that three to five cost reimbursement type contracts will be awarded.

For a complete copy of the RFP, send two self address mailing labels to Dorothy Tyler, NIAID, Westwood Bldg Rm 707, Bethesda, MD 20892.

RFP NIAID-AIDSP-88-6

Title: Collaborataive prospective cohort studies of perinatal transmission of human immunodeficiency virus and related retroviral infections
Deadline: Approximately Oct. 6

The Epidemiology Branch of the AIDS Program of NIAID is soliciting two part proposals from organizations having requisite capabilities and facilities.

Part 1: (A) Identify and recruit a cohort of pregnant women at risk for HIV infection; (B) conduct periodic clinical and behavioral evaluations on

approximately 500 women and their offspring for about five years; (C) collect and transmit proper specimens for testing and/or storage according to protocol; and (D) transmit edited data to the data coordinating center.

Part 2: Serve as the data coordinating center to clean, store and analyze all data collected from centers participating in this project. Offerors may respond to Part 1 only or Parts 1 and 2.

This project will take approximately five years to complete. This will be a cost reimbursement contract.

For a complete copy of the RFP, send two self addressed mailing labels to Mary Anne Glitz, Contract Management Branch, NIAID, Westwood Bldg Rm 707, Bethesda, MD 20892.

RFP NIAID-AIDSP-88-7

Title: Collaborative prospective cohort studies of heterosexual transmission of HIV and related retroviral infections

Deadline: Approximately Oct. 7

The Epidemiology Branch of the AIDS Program of NIAID is soliciting two part proposals from organizations having capabilities and facilities to:

Part 1 (A) Identify and recruit a cohort of women and nonhomosexual men without history of IV infection; (B) conduct periodic clinical and behavioral evaluations on approximately 1,000 individuals for about five years; (C) collect and transmit proper specimens for testing and/or storage according to protocol; and (D) transmit edited data to the data coordinating center.

Part 2--Serve as the data coordinating center, to clean, store and analyze all data collected from centers participating in this project. Offerors may respond to Part 1 only or Parts 1 and 2.

For a complete copy of the RFP, send two self addressed mailing labels to Nancy Hershey, Contract Management Branch, NIAID, Westwood Bldg Rm 707, Bethesda, MD 20892.

NCI Advisory Group, Other Cancer Meetings For August, Sept., Future

5th World Congress on Pain--Aug. 2-7, Hamburg. Contact Congress on Pain, Hamburg Messe und Congress GmbH, Congress Organization, Postfach 30 24 80, 2000 Hamburg 36, Federal Republic of Germany.

Surgical Pathology of Pediatric Tumors--Aug. 3-7, Aspen. Sponsored by Institute for Pediatric Medical Education. Contact Dr. Thomas Stocker, 6604 Landon Lane, Dept. OT, Bethesda, MD 20817, 301/229-8338.

Cancer Control Contract Review Committee--Aug. 3-4, Holiday Inn Crowne Plaza, Rockville, MD. Open Aug. 3, 7:30-9 a.m., Aug. 4, 8-9:30 a.m.

International Assn. of Cancer Registries--Aug. 5-7, Copenhagen. Annual scientific meeting. Contact Danish Cancer Registry, Landskronagade 66, 2100 Copenhagen, Denmark.

Breast Disease: Diagnostic Imaging and Current Management--Aug. 9-14, Grand Traverse Village, Michigan. Contact Gayle Fox, Office of Continuing Medical Education, Univ. of Michigan Medical School, Towsley Center, Box 0201, Ann Arbor 48109, 313/763-1400.

Pediatric Hepatology--Aug. 10-14, Aspen. Contact Dr. Thomas Stocker, 6604 Landon Lane, Dept. OT, Bethesda, MD 20817, 301/229-8338.

Cancer Therapeutic Program Project Review Committee --Aug. 11, Holiday Inn Crowne Plaza, Rockville, MD, open 8-8:30 a.m.

Home Pain Management--Aug. 14, Clinic Inn, Cleveland. Contact Dept. of Continuing Education, Cleveland Clinic Educational Foundation, 9500 Euclid Ave. Rm TT3-301, Cleveland, OH 44106, phone (local) 444-5696, (Ohio) 800-762-8172, (elsewhere) 800-762-8173.

Cancer Management Courses--Aug. 21-22, North River Yacht Club, Tuscaloosa, AL. Contact Cancer Dept., American College of Surgeons, 55 E. Erie St., Chicago, IL 60611.

Fine Needle Aspiration--Aug. 22-29, Royal Lahaina Restort, Kaanapali Beach, Maui. 7th annual symposium. Contact Univ. of California School of Medicine, Rm 569-U, Extended Programs in Medical Education, San Francisco 94143, phone 415/476-4251.

Thyroid/Iodine 131 Assessment Committee--Aug. 24-25, NIH Bldg 31 Rm 7, 9 a.m., open.

Human Tumor Markers--Aug. 25-28, Omni Park Hotel, New York City. 4th international conference. Contact Dr. J.V. Klavins, Pathology Dept., Catholic Medical Center, 152-11 89th Ave., 7th Floor, Jamaica, NY 11432.

National Laryngectomee Rehabilitation--Aug. 27-29, Melbourne. Contact Australian Cancer Society, GPO Box 4708, Sydney, NSW, Australia.

International Society of Hematology--Aug. 28-Sept. 2, Milan. 22nd Congress. Contact Organizing Secretariat, Fondazione Giovanni Lorenzini, Via Monte Napoleone, 23 Milan 20121, Italy.

Brazilian Head and Neck Cancer Congress--Sept. 2-5, Sao Paulo. Contact Sociedade Brasileira de Cirurgia de Cabeca y Pescoco, Praca Amadeu Amaral 47, conjunto 82, Sao Paulo, Brazil, CEP 01323.

Hormones and Cancer--Sept. 6-11, Hamburg. Contact Third International Congress, PO Box 302480/D-2000 Hamburg 36, Federal Republic of Germany.

Japanese Cancer Assn.--Sept. 7-9, Tokyo. 46th annual meeting. Contact Shozo Takayama, Director, National Cancer Center Research Institute 1-1, Tsukji 5-chome, Chuo-ku, Tokyo 104, Japan.

Upper Gastrointestinal Cancer--Sept. 9, Cleveland. Contact CME, Cleveland Clinical Educational Foundation, 9500 Euclid Ave. Rm TT3-301, Cleveland, OH 44106, phone (local) 444-5696; (Ohio) 800/762-8172; (elsewhere) 800/762-8173.

Chemotherapy Administration--Sept. 9, Philadelphia. Contact Pauline Sherry, RN, Fox Chase Cancer Center, Central & Shelmire Aves, Philadelphia 19111, phone 215/728-2576.

International Society of Pediatric Oncology--Sept. 13-18, Jerusalem. 19th annual meeting. Contact Kenes, PO Box 50006, Tel-Aviv 61500, Israel.

Cancer Nursing--Sept. 14-16, Crystal Gateway Marriott, Arlington, VA. American Cancer Society 5th national conference. Contact Trish Greene, RN, MSN, ACS, 90 Park Ave., New York 10016.

Home Intravenous Antibiotics--Sept. 14, Cleveland. Contact CME, Cleveland Clinic Educational Foundation, 9500 Euclid Ave. Rm TT3-301, Cleveland, OH 44106.

Tumor Necrosis Factor and Related Cytotoxins--Sept. 14-18, Heidelberg. International conference. Contact Dr. George Gifford, Dept. of Immunology & Medical Microbiology, College of Medicine, Univ. of Florida, Box J-266, JHMHC, Gainesville 32610, phone 904/392-3311.

8th Asia Pacific Cancer Congress--Sept. 14-19, Seoul. Contact Secretariat, Dept. of Surgery, Seoul National University Hospital, 28 Yunkun-dong, Chongro-Ku, 110 Seoul, Republic of Korea.

7th Annual Soft Tissue Tumor Symposium--Sept. 14-16, New York City. Contact Steven Hajdu, MD, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York 10021, phone 212/794-7999.

Towards 2000 III--Oncology Today--Sept. 15-16, Fox Chase Cancer Center, Philadelphia. Contact Peggy Conners or Janet Spause, Conference Coordinators, Fox Chase Cancer Center, 430A Rhawn St., Philadelphia 19111, phone 215/728-6900.

Viral Oncogenesis and Epidemiology--Sept. 15-18, Lyon. Contact European School of Oncology, Via

Venezian 1, 20133 Milano, Italy.

PET/SPECT--Sept. 16-17, Shoreham Hotel, Washington DC. Instrumentation, radiopharmaceuticals, neurology, physiologic measurement. Contact American College of Nuclear Physicians, Suite 700, 1101 Connecticut Ave NW, Washington DC 20036, phone 202/857-1135.

Current Concepts in Psycho-Oncology and AIDS--Sept. 17-19, New York City. Contact Roberto Fuenmayor, CME Office, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York 10021, phone 212/794-6754.

Cancer Management--Sept. 18-19, Yale Univ., New Haven, CT. Contact American College of Surgeons, Cancer Dept., 55 E. Erie St., Chicago 60611.

Recent Advances in Cancer Management--Sept. 20-23, Hong Kong. EORTC symposium. Contact ICTS, Vere & Associates Inc., 17/F, Jubilee Commercial Bldg, 42-46 Gloucester Rd, Hong Kong.

Advances in Clinical Nutrition--Sept. 20-22, Pheasant Run Resort (near Chicago). American College of Nutrition 28th annual meeting. Includes sessions on nutrition and cancer. Contact Dr. Mildred Seelig, Executive Director, American College of Nutrition, 345 Central Park ave., #4, Scarsdale, NY 10583, phone 914/723-4247.

Transrectal Ultrasound in the Diagnosis and Management of Prostate Cancer--Sept. 21-22, Westin Hotel Renaissance Center, Detroit. 2nd international symposium. Contact Diversified Conference Management, PO Box 2508, Ann Arbor, MI 48106, phone 313/665-2535.

Role of Nutrition in the Origins of Disease--Sept. 21-22, Fairmont Hotel, San Francisco. 7th annual Bristol-Myers Symposium on Nutrition Research. Contact Helen Miller, Program Coordinator, Continuing Education, Univ. of California (Davis) School of Medicine, 2701 Stockton Blvd., Sacramento 95817, phone 916/453-4390.

Freestanding Radiation Therapy Centers: Opportunities and Challenges--Sept. 21-22, Ramada Renaissance Hotel, San Francisco. Contact Allen Meadors, PhD, FACHE, Exeuctive Director, Northwest Arkansas Radiation Therapy Institute, PO Box 289, Springdale, AR 72765, phone 501/361-2585.

Div. of Cancer Prevention & Control Board of Scientific Counselors--Sept. 21-22, Holiday Inn, Bethesda, MD, 9 a.m. each day, open.

Breast Cancer--Sept. 21-25, Pomeirio Castle, Como, Italy. Postgraduate course. Contact European School of Oncology, Via Venezian 1, 20133 Milano, Italy.

Oncology Nursing--Sept. 21-26, Ankara. UICC course. Contact Assoc. Prof. Lale Atahan, Turkish Assn. for Cancer Research and Control, Atac Sok No. 21, Yenisehir, Ankara, Turkey.

Biobehavioral Oncology--Sept. 22-25, Ljubliana, Yugoslavia. 7th international symposium. Contact Secretariat EUPSYCA, Bergstrasse 10, 2900 Oldenburg, Federala Republic of Germany.

European Tumor Virus Group--Sept. 22-25, Dresden. XVIIth meeting. Contact Prof. Dr. D. Bierwolf, Central Institute for Cancer Research, Academy of Sciences of GDR, Lindenberger Weg 80, 1115 Berlin, German Democratic Republic.

Cancer Management--Sept. 25-26, Baylor Univ. Medical Center, Dallas. Contact Cancer Dept., American College of Surgeons, 55 E. Erie St., Chicago 60611.

National Cancer Advisor Board Committee on Cancer Centers--Sept. 27, NIH Bldg 31 Rm 7, 6 p.m., open.

NCAB Committee on Organ Systems Programs--Sept. 27, 7:30 p.m., open (room number to be determined).

National Cancer Advisory Board--Sept. 28-30, NIH Bldg 31 Rm 6. Open Sept. 28, 8:30 a.m.-adjournment, and Sept. 30, 8 a.m.-adjournment. Closed Sept. 29 for grant review.

NCAB Committee on Planning & Budget--Sept. 28, NIH Bldg 31 Rm 7, 5 p.m., open.

NCAB Committee on Cancer Control & the Year 2000--Sept. 28, NIH Bldg 31 Rm 4, 7:30 p.m., open.

NCAB Committee on Review of Contract Concepts & Budget for the Office of Director--Sept. 29, NIH Bldg 31 Rm 7, to follow adjournment of NCAB closed session, open.

NCAB Committee on AIDS--Sept. 29, NIH Bldg 31 Rm 7, open.

Leukemia & Lymphoma: Challenges for the Future--Sept. 28-30, Nagoya. Contact Secretariat, Central Convention Service Inc., 1-45 Shirakabe, Higashi-Ku, Nagoya 461, Japan.

Cancer Nursing on a Continuum--Sept. 29-Oct. 2, Westin Gallelria Hotel, Houston. Oncology Nursing Conference VIII. Contact Office of Conference Services, Box 131, M.D. Anderson Hospital & Tumor Institute, 1515 Holcombe Blvd., Houston 77030, phone 713/792-2222.

Fundamental Problems of Cancer Education--Sept. 29-Oct. 1, Lodz, Poland. Contact Organizing Committee, International Symposium, 194, Piotrkowska Str., 90-368, Lodz, Poland.

American College of Epidemiology--Sept. 30-Oct. 2, New Orleans. 6th annual meeting, including scientific symposium on techniques of environmental risk assessment. Contact Dr. Curtis Mettlin, Secretary, American College of Epidemiology, Roswell Park Memorial Institute, 666 Elm St., Buffalo, NY 14263, phone 716/845-4406.

FUTURE MEETINGS

Protection of Human Subjects in Cancer Research: Solutions to Dilemmas, Old and New--Oct. 1-2, San Antonio. Sponsored by NIH, FDA, Univ. of Texas Health Science Center and Southwest Oncology Group. Contact Pat Cote, IRB, Univ. of Texas Health Science Center, 7703 Floyd Curl Dr., San Antonio, TX 78284, phone 512/567-2350.

Nutritional Status Assessment of the Individual--Oct. 6-7, New York. Contact Dr. G.E. Livingston, American Health Foundation, Food & Nutrition Council, PO Box 265, Dobbs Ferry, NY 10522, phone 914/693-2660.

Cancer Chemotherapy--Oct. 11-14, Westin Galleria Hotel, Houston. 9th annual symposium. Contact Office of Conference Services, M.D. Anderson Hospital, 1515 Holcombe Blvd, Houston 77030, phone 713/792-2222.

Perspectives in Cancer Treatment--Nov. 1, Palacio de Congresos, Madrid. Satellite symposium of the 4th European Conference on Clinical Oncology. Contact Science and Medicine, 909 Third Ave., New York 10022, phone 212/909-9643.

Monoclonal Antibody Immunoconjugates for Cancer--Feb. 4-6, 1988, Hotel Inter-Continental, San Diego. 3rd international conference. Contact CME, M-017, Univ. of California (San Diego) School of Medicine, La Jolla, CA 92093, phone 619/534-3940.

Intracavitary Chemotherapy--Feb. 25-27, 1988, U.S. Grant Hotel, San Diego. 2nd international conference. Contact UCSD, address and phone above.

Joint Annual Meeting--April 16-21, 1988, Franklin Plaza Hotel, Philadelphia. 36th annual meeting of the Radiation Research Society and 8th annual meeting of the North American Hyperthermia Group. Contact Radiation Research Society, 1101 Market St., 14th Floor, Philadelphia, PA 19107, phone 215/574-3153.

The Cancer Letter _Editor Jerry D. Boyd Associate Editor Patricia Williams

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