THE CANCER LETTER

Vol. 14 No. 5

Jan. 29, 1988

Subscription: $175 year North America, $190 year elsewhere

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

NCI To Pay 34 Percent Of Grants, At 155 Payline; $100 Million For Centers To Fund All Core Grants

NCI's 1988 fiscal year appropriation of $1.469 billion (specifically, $1,469,367,000) will permit funding of 34 percent of approved competing grants, at a priority score payline of about 155. A total of 1,014 competing grants will

(Continued to page 2)

In Brief

NCAB To Ponder Organ Systems Program Fate, Cancer Centers Issues, Hear Surveillance Review

NATIONAL CANCER Advisory Board members will ponder, and perhaps decide, the fate of the Organ Systems Program at their meeting next week, and possibly move a step closer toward resolving some of the issues facing the Cancer Centers Program. The Board's Organ Systems Committee will decide at its meeting Feb. 2, 7 p.m., what its recommendation will be on NCI's proposals to drop the external Organ Systems Coordinating Center and to distribute the organ systems grants portfolio among NCI's divisions. Best guess: the committee will say no to both, and the full Board will agree. The Centers Committee meets Feb. 2, immediately after the Board's closed grants review session, to hear results of the survey on centers issues. Major issues there: what if any changes should be made in characteristics of comprehensive centers, where should the program be housed in NCI. The Planning & Budget Committee will meet immediately after the Board meeting Feb. 1; first 30 minutes will be closed for discussion of the FY 1989 budget (See Meetings, page 7, for complete list of NCAB committee meetings). The Board will also hear the annual cancer surveillance review, presented by Edward Sondik, chief of the Surveillance & Operations Branch. . . **DAVID FISH**, director of the surgical intensive care unit at Temple Univ. Hospital, will join Fox Chase Cancer Center Feb. 1 as chief of the Div. of Anesthesiology and as director of the intensive care unit. . . . **OLIVER BEAHRS**, emeritus professor of surgery at Mayo Medical School, former advisor to NCI on cancer control and the Breast Cancer Detection Demonstration Project, and head of the team that performed prostate surgery on President Reagan, is president elect of the American College of Surgeons. . . . **ROGER ANDERSON**, head of the Div. of Pharmacy at M.D. Anderson Hospital & Tumor Institute, has been named the institution's first winner of the $10,000 Julie and Ben Rogers Award for Excellence.

Core Grants To Be Funded At Less Than Recommended Levels In FY'87

(Continued from page 1)
be funded, down from 1,060 in 1987. The payline is down about 10-15 points, but that is a result of "priority score compression" at least as much as the dollar restrictions.

The $1.469 billion NCI is getting this year is $63 million more than last. Almost half that increase is from the $27 million increase in AIDS money, up from $63 million in 1987.

NCI is getting $90 million for AIDS research, most of which will go into drug and vaccine development.

The totals for NCI, and NIH as well, were less than those in either the original House or Senate appropriations bills. This reflected the cuts across the board made necessary by the agreement between Congress and the White House to achieve a significant reduction in the deficit. Unlike most agencies with discretionary funding, however, NIH and NCI did wind up with modest increases, about four percent.

There was a significant difference between the House and Senate bills over funding of cancer centers. The Senate Appropriations Committee report stated that $118 million was to be earmarked for center core grants, which would permit funding of all the competing renewals, two or three new centers, all at the peer review recommended levels. In addition, that amount would provide funds to restore cuts made from recommended levels in noncompeting core grants. The House bill had $103 million for centers.

Centers representatives worked hard to get the Senate version accepted by the conferees, but the deficit reduction agreement ruined those efforts. The result: $100.6 million for centers. That is an increase of about $7 million over the White House budget request for centers and is the largest percentage increase over 1987 of any major NCI program.

All the competing renewal core grants which have cleared review so far will be funded, along with at least one new center which scored well enough to be assured of funding.

It is clear, however, that the core grants will not be funded at their recommended levels, nor will the cuts taken by the noncompeting grants be restored. NCI executives worked on the funding plan, for other grants including cooperative groups as well as centers, at their annual January retreat. Details were still being worked out this week.

Most other major programs received small increases: the clinical cooperative groups, up $1 million from 1987, to $58 million; cancer control, $69.8 million, up by $2.3 million; intramural research, which at $257 million is a $12 million increase over 1987, half of that from AIDS money; research contracts, $190 million, up from $174 million--$15 million of that increase is for AIDS contracts. Research training remains the same, at $31.5 million.

Now that the 1988 fiscal year appropriations issues have been settled, for the most part, 1989 is not far behind. In the past, the White House has been ultrasecretive about its upcoming budget requests, attempting to keep them under wraps until they go to Congress. This year, since the deficit reduction agreement covered two years, the the 1989 budget figures are not so mysterious. The Office of Management & Budget publicly floated a proposed figure for NIH, a little more than $7 billion, an increase of less than five percent.

NCI's bypass budget request for 1989 was $20 billion, which would require an increase of more than 30 percent. Not likely, even in the best of years without a restrictive deficit reduction agreement in force.

To hit that level, which is what NCI and its advisors agree is needed to get resources into place to reach the Year 2000 goals, will require a major new effort similar to that which resulted in the National Cancer Act of 1971.

Brennan, Zubrod Leaving Positions As Comprehensive Center Directors

Two veteran directors of comprehensive cancer centers are bowing out of those roles, although one will continue to head a major component of his center.

Gordon Zubrod will retire May 31 as director of the Papanicolaou Comprehensive Cancer Center at the Univ. of Miami. Zubrod has headed the center since 1974, after retiring as director of NCI's Div. of Cancer Treatment.

Zubrod, who led NCI's development of cancer chemotherapy, has been invited by the university to remain on the faculty. He said he has not determined yet how active he will be; his wife is seriously ill and he intends

to spend as much time as possible with her.

Michael Brennan has been succeeded by Laurence Baker as director of the Comprehensive Cancer Center of Detroit. Brennan had been director of the center since it was formed from the partnership of Wayne State Univ. and the Michigan Cancer Foundation in the mid-1970s. He will continue as president of the Michigan Cancer Foundation.

Baker has been deputy director of the comprehensive center as well as head of the Wayne State Div. of Hematology/Oncology. He will continue to head that division and also has been appointed assistant dean for cancer programs of the medical school.

When the Wayne State-MCF partnership was formed, it was determined that the directorship would alternative between the two institutions every five years. In 1982, Brennan was asked to continue for another five years.

Baker, 45, is a medical oncologist with a long history of participation in clinical trials, particularly with the Southwest Oncology Group.

A search committee chaired by Gerard Kaiser, MD, has been formed to find a successor to Zubrod. Kaiser, who is deputy dean for clinical affairs of the Univ. of Miami School of Medicine, said the position is tenured and that "the director's charge is to initiate and enhance the cancer effort by developing and facilitating interdisciplinary programs in the areas of clinical care, research and education for the school and community." Candidates should have an MD or PhD degree and qualify for professor level in their respective discipline.

Correspondence and CVs should be sent to Kaiser, Chairman Search Committee for Comprehensive Cancer Center, Univ. of Miami, Cardiovascular Surgery (R114), Miami, FL 33101.

WHT Investigators To Continue Planning For Full Scale Study

The Women's Health Trial is not dead, after all.

Investigators with the trial's statistical, nutrition and three clinical units, meeting shortly after the Div. of Cancer Prevention & Control's Board of Scientific Counselors had voted against proceeding with the full scale study, decided to continue their efforts with the intention of eventually doing the complete trial.

The DCPC Board recommended that the existing units be funded to continue followup for two more years of the 1,700 women enrolled in the trial so far, although not permitting any additional recruitment.

The full scale trial would require addition of 10 or more clinical units and enrollment of 32,500 women who would be followed for 10 years. The women, all determined to be at high risk for breast cancer, would be randomized to a low fat diet or control. The hypothesis is that reduction in dietary fat would reduce breast cancer incidence by 50 percent over 10 years.

The estimated cost--$90 million over 10 years--and doubts about the scientific basis for the hypothesis generated heated opposition to the trial among NCI staff and advisors. There were also questions about the feasibility--whether women would remain on low fat diets and that compliance could be monitored, whether accrual could be accomplished fast enough.

A feasibility study with three clinical units was initiated and accrual, compliance and monitoring all were demonstrated convincingly. However, by then questions based on the hypthesis became more convincing, at least to most members of the DCPC Board.

Not to the WHT investigators, nor to DCPC Director Peter Greenwald, who accepted the Board's decision with reluctance. "It's a hypothesis that has to be tested sometime," Greenwald said.

Maureen Henderson, principal investigator for the clinical unit at Fred Hutchinson Cancer Center, said, "I disagree that the evidence is not strong enough. I know that scientists are polarized on this issue, but there is no other way to resolve it (than a full scale trial)."

Henderson told **The Cancer Letter** that the investigators agreed to continue following the existing cohort and will work at improving the protocol. "We think we can write a better proposal, and in my opinion, I think we can get the cost down to about $75 million."

The group will explore the possibility of including other cancers in the study, as was recommended by some DCPC Board members. That would not necessarily mean that more women would have to be enrolled. "We already agreed that we can cut the number needed for breast cancer. We will cut it less if we add other cancers."

During the next two years, an effort will

be made to identify other clinical units and get them involved and ready to go once a decision is made to proceed with a full scale trial, Henderson said.

The group is considering more than one approach to NCI support. The existing program is being funded through cooperative agreements, awarded after an RFA had been issued. The RFA required concept approval from the DCPC Board, and because of the size of the program and the controversy it engendered, the National Cancer Advisory Board was brought in on it.

"My suggestion is that we put together a program project," Henderson said. An application for a PO1 grant would go straight to an ad hoc review committee, with an award depending on how well it would fare there.

Henderson knows a thing or two about PO1s. While a member of the National Cancer Advisory Board, she headed up a study of how PO1s are reviewed. Her committee's recommendations, which included abolishing standing PO1 review committees and streamlining applications, were approved by the NCAB and implemented by NCI.

William Insull, PI for the clinical unit at Baylor College of Medicine, pointed out that since there are no other diet and cancer trials going on or planned, "NCI needs the Women's Health Trial to justify the dietary recommendations it is making as part of the effort to meet the Year 2000 goals."

Insull said the group during the next two years will work at making the study more cost effective and efficient, and how to make it easier for participants to comply with the diets. "We hope to learn something about the metabolic consequences of going on a diet."

Greenwald will brief the NCAB on the status of the WHT Feb. 1. Henderson said there are no plans for anyone from the group to appeal the DCPC Board's decision, as had been reported.

Prevention Program Being Developed Aimed At Primary Care Providers

NCI's Div. of Cancer Prevention & Control is developing a new demonstration program aimed at "improving the routine office practice of selected preventive services by primary care providers."

The five year project, with a price tag of $20 million, was presented to the DCPC Board of Scientific Counselors earlier this month for concept review. The Board generally supported the concept, but considering its cost and various ramifications, deferred action until a working group studies the proposal and possibly provides some fine tuning.

Advocates of increased efforts in cancer prevention have lamented what they contend is neglect by physicians of their opportunities to encourage patients to avail themselves of preventive services or adopt more healthful lifestyles.

Primary objectives of the proposed project would be to characterize the level of practice of selected preventive services by primary care providers; design interventions through intermediary organizations to improve the routine office practice of selected preventive services by primary care providers; and conduct a demonstration/evaluation (phase 5) of the effectiveness of interventions through intermediary organizations to improve the routine office practice of selected preventive services by primary care providers.

Secondary objectives would be to determine the predictors of diffusion of preventive services among primary care providers; determine the effectiveness of Prescribe for Health interventions on the practice partners of targeted providers; and determine the validity of provider self report of change in practice of preventive services.

In smoking prevention and cessation, diet modification and cancer screening, primary care preventive services have been demonstrated to be efficacious in contributing to desired patient outcomes.

In the area of smoking cessation, routine minimal (35-40 seconds) advice to quit smoking delivered by a physician has been found to increase quit rates approximately five percent over spontaneous quit rates. Physician counseling (3-5 minutes) increased quit rates over advice only interventions by three to five percent. Nicotine gum, when offered with physician advice to quit, has resulted in quit rates double those found amaong smoking patients receiving physician advice without gum. Furthermore, providing written materials to patients and following up initial interventions for reinforcement also appear to enhance quit rates.

Dietary fat and serum cholesterol reduction can also be achieved through primary care interventions. Assessment, advice, counseling and followup for reinforcement by physicians, dietitians and/or nutritionists

have been found to be efficacious in reducing patient dietary fat intake and serum cholesterol. For patients with hypercholesterolemia resistant to diet modification, pharmacotherapy can be efficacious in serum cholesterol reduction.

Screening for cancers of the breast and cervix have been demonstrated to be efficacious in reducing cancer mortality. Additional cancer screening procedures, such as sigmoidoscopy or fecal occult blood testing, may reduce cancer morbidity and/or mortality.

Primary care physicians are optimally positioned in the health care systrem to provide preventive services. In national surveys, the public has described physicians as the most reliable and credible sources of health information. Data from the 1983 national health interview survey indicate that Americans visited a physician an average of 2.8 times per year. In addition, 74 percent of all Americans reported visiting a physician within the preceding year.

Despite the evidence for the efficacy of these preventive services, recent studies suggest that they are frequently not practiced by primary care physicians. For example, over 50 percent of smoking adults report that they have never received physician advice to quit. Similarly, 64 percent of adults reported that eating proper foods was rarely or never discussed in routine health care visits. In a recent national survey, over 50 percent of primary care physicians reported that they never do mammography on asymptomatic women. Of these same physicians, 27 percent reported that they did Pap smears with less frequency than recommended by the American Cancer Society.

The proposed project, DCPC said, would involve a demonstration/evaluation of interventions through intermediary organizations to build upon previous and ongoing NCI activities related to primary care medical practice. It would address multiple risk factors with rigorous evaluation of the effects of the interventions upon the practice of selected preventive services by primary care providers. By evaluating the change in practice of selected preventive services among targeted providers and their partners, the project would assess diffusion from intermediary leaders to individual providers and from provider to provider within primary care practices. Change in provider practice would be measured by both provider self report and patient report, permitting assessment of the validity of provider self reported change in practice behavior. Health related patient outcomes resulting from the project interventions would also be evaluated.

Collaboration on proposals by a variety of primary care provider organizations would be necessary, DCPC suggested. These include professional societies, specialty boards, residency training programs, schools of medicine, state medical societies and HMOs.

Interventions would be designed and implemented by a steering committee including principal investigators, their study teams, designated representives of intermediary organizations, NCI staff and consultants. Interventions would be designed to be generalizable and durable for use by intermediary organizations following completion of the project. Potential interventions would include published reports on the efficacy of selected preventive services in organization journals and newsletters; published recommendations regarding the routine office practice of selected preventive services; direct mailings, including letters from organization and NIH leaders, selected literature reprints; printed, software and video materials for provider and patient education; chart flow sheets, and computer software for monitoring preventive services and reminding providers and patients of the need for delivering and receiving a preventive service; providing office based promotional materials; "train the trainer" program; examinations of primary care provider knowledge, attitudes and skills regarding targeted preventive services; continuing medical education offerings; development of local referral resource lists; promotion of the Cancer Information Service use; promotion of smoke free environments; cost and quality control programs for screening services.

Practices with at least one provider indicating an interest in receiving study interventions would be randomized to intervention and comparison group cohorts within each project proposal. Only those practices with provider interest would be randomized in order to reduce the sample size necessary to measure the impact of the interventions. Randomization would be stratified based upon number of providers in the practice. Practices in the intervention group would receive interventions over the

two year period from the middle of year 2 to the middle of year 4.

DCPC estimated that two contracts would be awarded for intermediary organizations, at a total cost from 1989 through 1993 at more than $8.5 million; and one evaluation contract, at a total cost of more than $11 million.

"This proposal bothers me," Board member Mary-Claire King said. "It involves an extraordinary large amount of money, but does not seem to be well thought out. Most women at highest risk do not see a physician very often. To spend $20 million and miss people at highest risk would be a misuse of money."

William Mayer, who would be project officer, said that about 140,000 patients would be seen annually by physicians involved in the program. With a given percentage of those considered at high risk, the cost would be $28 per patient at high risk.

Board member Virginia Ernster said that 75 percent of smokers see physicians at least one a year.

Board member Donald Iverson said that a greater percentage of lower income people see physicians more than do those in middle income brackets. He suggested that the RFP could require inclusion of lower income people.

"I see this as development of a whole avenue of approaches to cancer prevention," DCPC Director Peter Greenwald said. "If it works, we could have something really worthwhile for many years."

Board member Johanna Dwyer said she was "enthusiastic about the concept" and suggested that an oversight group be established for it, that definite minority participation requirements be built in and that a preproposal conference be held, as recommended by Iverson.

Board member Frank Meyskins said he was "strongly in favor" of the concept. "It could have a long term impact on implementation of a number of strategies, chemoprevention for instance. But it would be a mistake to vote on this concept now. It should be referred to a committee, for further development and refinement. It would be worthwhile to take another six months."

Board Chairman Paul Engstrom said that "this needs to be phased, rather than jump in with both feet. We also need to look at the evaluation aspect."

Board member Robert McKenna said, "I suggest we not limit this to high risk groups. We would be changing medical practice for everyone."

The motion to refer the concept to a working group to be appointed by Engstrom, and to be returned either at the May or September meeting of the Board, was approved unanimously.

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 NCI-CP-EB-85610-21

Title: Tracing individuals for environmental epidemiologic studies of cancer (master agreements)
Deadline: Approximately March 5

NCI's Div. of Cancer Etiology, Epidemiology & Biostatistics Program, Environmental Epidemiology Branch, is seeking experienced firms to carry out tracing of epidemiologic study subjects. These firms will provide support for the following tracing methods--credit bureau records, motor vehicle bureau records, publicly available directories and lists and other resources and sources.

The required services will be defined by master agreement orders (MAOs) issued during the five year period of performance. This is a reissuance of a master agreement announcement with the intention of seeking new sources and enlarging the current pool of master agreement holders. The pool now consists of four organizations whose master agreements expire Jan. 29, 1991. Existing master agreement holders are not required to respond to this announcement.

Master agreements will be awarded to all firms whose technical proposal is considered acceptable. Multiple MAO/RFPs will be issued each year. A master agreement holder is free to respond or not to any particular RFP without having any effect on its master agreement.

Contract Specialist: Barbara Shadrick
RCB Blair Bldg Rm 114
301/427-8888

RFP NCI-CM-97553-72

Title: Quality control and model development in rodents and tumor cells
Deadline: Approximately March 15

The Developmental Therapeutics Program of NCI's Div. of Cancer Treatment is interested in organizations having the necessary experience, scientific and technical personnel and facilities to test and evaluate the activity of compounds against in vitro cell lines and in vivo tumor systems.

In order to maintain the integrity and reliability of these in vivo tumor systems, it is necessary to maintain rigorous quality control over both tumors and host animals. Kinetic data will be utilized for drug treatment scheduling and for the interpretation of testing results.

In addition, in vivo protocols shall be established

for candidate tumor models from the human tumor cell line disease oriented screen to provide for the necessary followup for active materials identified as having potential for development for possible clinical trial. Such protocol development shall include the testing of standard and selected experimental agents to evaluate their effectiveness against these in vivo models. In vivo protocols shall utilize the athymic mouse host and may include such models as the micro-encapsulation model, or subcutaneous, intracranial or subrenal capsule models. The offeror may recommend additional models. The government will provide, prepaid, all tumors necessary for the in vivo assay systems, animals, test materials, experimental protocols, parameters and criteria for evaluation of test material efficacy, methods of reporting test results, and the quality specifications where established.

It is estimated the level of effort will be 29,500 direct staff hours per annum, exclusive of sick, vacation, holiday pay, etc. It is anticipated that one incrementally funded award will be made for a five year period of performance.

This is a recompetition of a contract currently held by Southern Research Institute.

When requesting copies of the RFP, include two two self addressed labels.

Contracting Officer: Jacqueline Ballard
RCB Blair Bldg Rm 224
301/427-8737

NCI Advisory Group, Other Cancer Meetings For Feb., March, Future

National Cancer Advisory Board--Feb. 1-3, NIH Bldg 31 Rm 6, open Feb. 1, 8:30 a.m.-adjournment; closed Feb. 2 for grant review.

NCAB Committee on Information--Feb. 1, NIH Bldg 31 Rm 7, immediately following Board meeting (approximately 5 p.m.).

NCAB Committee on Planning & Budget--Feb. 1, NIH Bldg 31 Rm 6, to start immediately following Board meeting, closed for the first 30 minutes.

NCAB Committee on AIDS--Feb. 1, NIH Bldg 31 Rm 8, 7 p.m.

NCAB Committee on Innovations in Surgical Oncology --Feb. 1, NIH Bldg 31 Rm 7, 7 p.m.

NCAB Committee on Cancer Centers--Feb. 2, NIH Bldg 31 Rm 6, to start immediately after the closed grants review session of the full Board, probably about 3 p.m.

NCAB Committee on Cancer Control & the Year 2000--Feb. 2, NIH Bldg 31 Rm 7, 6:30 p.m.

NCAB Committee on Environmental Carcinogenesis--Feb. 2, NIH Bldg 31 Rm 8, 6:30 p.m.

NCAB Committee on Organ Systems Programs--Feb. 2, NIH Bldg 31 Rm 6, 7 p.m.

Diagnostic Cytopathology for Pathologists--Feb. through April, Home Study Course A, Johns Hopkins Univ. School of Medicine. In residence Course B is scheduled for April 25-May 6. Contact John Frost, MD, 604 Pathology Bldg, Johns Hopkins Hospital, Baltimore, MD 21205.

Monoclonal Antibody Immunoconjugates for Cancer--Feb. 4-6, Inter-Continental Hotel, San Diego. Third international conference. Contact Office of Continuing Education, Univ. of California (San Diego) School of Medicine, La Jolla, CA 92093, phone 619/534-3940.

Developmental Therapeutics Contract Review Committee--Feb. 5, Linden Hill Hotel, Bethesda, open 8-8:30 a.m.

Gene Transfer and Cancer Therapy--Feb. 6-12, Tamarron, CO. Contact UCLA Symposia, 103 Molecular Biology Institute, UCLA, Los Angeles 90025.

Cancer Control in Developing Countries--Feb. 8-9, Bangalore, India. Precongress workshop. Contact Dr. Krishna Bhargava, Director, Kidwai Memorial Institute of Oncology, Hosur Road, Bangalore, India.

Indian Society of Oncology--Feb. 10-12, Bangalore. III Biennial Congress. Contact Dr. Bhargava, address above.

American Assn. for the Advancement of Science--Feb. 11-15, Boston. The 154th national meeting will include sessions on AIDS, cancer risk assessment, epidemiology of HIV infection, human genome mapping, and more. Contact Joan Wrather, Washington DC, phone 202/326-6440.

Liposomes in the Therapy of Infectious Diseases and Cancer--Feb. 16-20, Lake Tahoe, CA. Contact UCLA Symposia, 103 Molecular Biology Institute, UCLA, Los Angeles 90025.

32nd Symposium on Endocrinology--Feb. 17-20, Hamburg, German. Contact M. Dietel, Institute of Pathology, University Hospital Eppendorf, Martinistr 52, 2000 Hamburg 20, Federal Republic of Germany.

Cancer Control Grant Review Committee--Feb. 17-19, Holiday Inn Crowne Plaza, Bethesda. Open Feb. 17, 8-8:30 a.m.

Div. of Cancer Treatment Board of Scientific Counselors--Feb. 18-19, NIH Bldg 31 Rm 10, 8:30 a.m. both days. Closed Feb. 18, 5:30 p.m.-adjournment.

Neoadjuvant Chemotherapy--Feb. 19-21, Paris. Second international conference. Contact Prof. Claude Jacquillat, SOMPS, Hospital de la Salpetriere, 47 boulevard de l'Hospital, 75651 Paris, Cedex 13, France.

Ninth GDR Cancer Congress--Feb. 22-25, Leipzig. Contact Dr. K. Schauer, Organizing Committee, University Clinic of Surger, Leibigstr 20A, 7010 Leipzig, German Democratic Republic.

Behavioral Techniques and Relaxation in the Treatment of Stress, Pain and Anxiety--Feb. 22-25, New York. Contact Course Secretary, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York 10021, phone 212/794-7-19.

Div. of Cancer Etiology Board of Scientific Counselors--Feb. 25-26, NIH Bldg 31 Rm 10, open Feb. 25, 1 p.m.-adjournment and Feb. 26, 9 a.m.-adjournment.

Intracavitary Chemotherapy--Feb. 25-27, U.S. Grant Hotel, San Diego. Second international conference. Contact Office of Continuing Medical Education, M-017, Univ. of California (San Diego) School of Medicine, La Jolla, CA 92093, phone 619/543-3940.

22nd Annual Clinical Symposium--Feb. 26-27, Memphis. Contact Joseph Simone, Director, St. Jude Children's Research Hospital, Box 318, Memphis, TN 38101.

Cancer in Women: Diagnosis and Management--Feb. 27, Cleveland. Contact Barbara Guy, PhD, R. Livingston Ireland Cancer Center, University Hospitals of Cleveland/Case Western Reserve Univ., 2074 Abington Rd, Cleveland, OH 44106, phone 216/844-7856.

23rd National Conference on Breast Cancer--Feb. 29-March 4, Los Angeles. Contact Billie Hunt, American College of Radiology, l891 Preston White Dr., Reston, VA 22091.

Adjuvant Therapy of Breast Cancer--March 3-5, St. Gallen, Switzerland. Contact Secretariat Prof. H.J. Senn, MD, Dept. of Medicine C, Oncology Center, Kantonsspital, CH-9007 St. Gallen, Switzerland.

Pain and Symptom Management in the Terminally Ill--March 3-5, San Francisco. Contact Dr. Richard Williams, Hospice Care Inc., 5740 Prospect, #2004, Dallas, TX 75206, phone 214/823-2891.

Advances in Hematologic Malignancies--March 5-12, Snorbird, UT. 6th winter symposium. Contact Mary Humphrey, Conference Coordinator, Arizona Cancer Center, Tucscon 85724, phone 602/626-2276.

Bone Marrow Transplantation: Current Controversies --March 6-12, Tamarron, CO. Contact UCLA Symposia, 103

Moleculare Biology Institute, UCLA, Los Angeles 90025.

Israel Cancer Research Fund Scientific Conference --March 6-10, Tiberias. Contact Greta Kweller, ICRF, 29 Hamered St., Tel Aviv 68125, Israel; or Roberta Rothman, Israel Cancer Research Fund, 1290 Ave. of the Americas, Rm 270, New York 10104, phone 212/969-9800.

World Congress III on Cancers of the Skin--March 7-9, Houston. Contact Office of Conference Services, HMB 131, M.D. Anderson Hospital, 1515 Holcombe Blvd, Houston 77030, phone 713/792-2222.

UICC Advanced Medical Oncology Course--March 7-9, St. Gallen. Contact Prof. H.J. Senn, Div. of Oncology, Med Klinic C. Kantonsspital, 9007 St. Gallen, Switzerland.

UICC Advanced Postgraduate Medical Oncology Course --Narcg 7-11, Mexico. Contact Prof. Senn, address above.

NCI/EORTC Symposium on New Drugs in Cancer Therapy --March 8-10, Amsterdam. Contact EORTC, New Drug Development Office, Free University Hospital, Box 7057, 1007 MB Amsterdam, The Netherlands.

Artificial Intelligence Systems as Diagnostic Consultants for the Cytologic and Histologic Diagnosis of Cancer--March 13-15, Chicago. 2nd international conference. Contact International Academy of Cytology, 5841 maryland Ave., H.M. 449, Chicago, IL 60637.

American Society of Preventive Oncology--March 14-15, Hyatt Hotel, Bethesda. Annual meeting. Contact Richard Love, MD, MS, ASPO, 1300 University Ave.-7C, Madison, WI 53706, phone 608/263-6919.

International Symposium on Benzene Metabolism, Toxicity and Carcinogenesis--March 14-16, National Institute of Environmental Health Sciences, Research Triangle Park, NC. Contact Prof. Robert Snyder, Director, Joint Graduate Program in Toxicology, Rutgers College of Pharmacy, Piscataway, NJ 08855, phone 201/932-3720.

Advances in Cancer Control VI--March 16, J.W. Marriott Hotel, Washington DC. Jointly sponsored by American Society of Preventive Oncology, Assn. of Community Cancer Centers, Assn. of Community Cancer Centers. The morning session will focus on innovative approaches to cancer prevention control research, the afternoon on cancer control research evaluation.

Clinical Indicators: Striving for Excellence and the Joint Commission Mandate--March 16-19, J.W. Marriott Hotel, Washington DC. 14th national meeting of the Assn. of Community Cancer Centers. Contact ACCC Executive Office, 11600 Nebel St. Suite 201, Rockville, MD 20852, phone 301/984-9496.

Drug Treatment of Cancer Pain in a Drug Oriented Society: Adequate or Inadequate?--March 16-18, Houston. Contact Office of Conference Services, HMB Box 131, M.D. Anderson Hospital & Tumor Institute, 1515 Holcombe Blvd, Houston 77030, phone 713/792-2222.

Leukemia: Molelcular Alterations and Cellular Proliferation--March 16-19, Hotel Inter-Continental, New Orleans. fourth national symposium. Contact Louise Toglia, Leukemia Society of American, 733 Third Ave., New York 10017, phone 212/573-8484.

Chemotherapy of Cancer and Cancer Nursing--March 19-24, Cairo. Contact Prof. S. El-Haddad, Kasr El-Aini Centre of Radiation Oncology and Nuclear Medicine, Faculty of Medicine, Cairo Univ., Cairo, Egypt.

British Assn. for Cancer Research--March 21-24, Norwich. 29th annual meeting. Contact B. Cavilla, Institute of Biology, 20 Queensbury Place, London SW7 2DZ, UK.

AIDS: Defining the Progress--March 24-26, Hilton Hotel, Daytona Beach, FL. Fifth annual oncology conference sponsored by Halifax Medical Center and the Regional Oncology Center, Herbert Kerman, director. Contact Educational Services, PO Box 1990, Daytona Beach 32015.

Molecular Biology of T Cell Differentiation and Function--March 24-25, Chapel Hill. 12th annual symposium of the Lineberger Cancer Research Center. Contact the center, Univ. of North Carolina, School of Medicine, Chapel Hill, NC 27514.

EORTC GI Tract Cancer Meeting--March 25-26, Lucerne. Contact Dr. U. Metzger, Oberaarzi, Dept. Chirurgie, Universitatsspital, 8091 Zurich, Switzerland.

Molecular Biology of Plant-Pathogen Interactions--March 26-April 1, Steamboat Springs, CO. Contact Jacqueline Wester, Molecular Biology Institute, UCLA, Los Angeles 90024, phone 213/206-6292.

Cancer Clinical Investigation Review Committee--March 28-29, Hyatt Regency, Bethesda. Open March 28 8:30-9 a.m.

Care of the Patient with Cancer--March 29-31, London. Contact Institute of Oncology, Marie Curie Memorial Foundation, 28 Belgrave Square, London SW1X 8QG, UK.

National Council on Radiation Protection and Measurements--March 30-31, Washington DC, 24th annual meeting. Contact the Council, 7910 Woodmont Ave., Suite 1016, Bethesda, MD 20814, phone 301/657-2652.

FUTURE MEETINGS

Immunology and Cancer--April 8, Memphis. Preseneted by the Dorothy Snider Foundation Forum on Cancer and the Univ. of Tennessee (Memphis). Contact Dr. James Hamner, Forum Director, Univ. of Tennessee, 62 S. Dunlap, Memphis 38163, phone 901/528-6354.

Provocative Topics in Gynecologic Oncology--April 14-16, Harbor Court Hotel, Baltimore. The J. Donald Woodruff Symposium 1988. Contact Francette Boling, Program Coordinator, Johns Hopkins Medical Institutions, Office of Continuing Education, 720 Rutland Ave., Turner 22, Baltimore, MD 21205, phone 301/955-6085.

Cancer Progress III, Executive Conference--April 25-26, Sheraton Centre, New York. For executives in the pharmaceutical and diagnostic industries and the investment community. Twenty scientists and business executives will discuss latest developments in drug and diagnostic research. Contact Communitech Market Intelligence, PO Box 67, Yorktown Heights, NY 10598, phone 914/245-7764.

The Profession with a Vision--May 24-27, Westin Hotel, Seattle. 14th annual conference of the National Tumor Registrars Assn. Contact NTRA, 104 Wilmot Rd., Suite 201, Deerfield, IL 60015, phone 312/940-8800.

Adjuvant Therapy of Cancer--June 25, Cleveland. Contact Dept. of Continuing Education, Cleveland Clinic Educational Foundation, 9500 Euclid Ave, Rm TT3-301, Cleveland, OH 44195, phone 444-5696 (local); 800/762-8172 (Ohio); 800/762-8173 (elsewhere).

Supportive Care in Oncology--Aug. 23-25, Brussels. 1st international conference. Sponsored by the Institut Jules Bordet Centre des Tumeurs de l'Universite Libre de Bruxelles and the Univ. of Maryland School of Medicine. Deadline for abstract submission is March 15. Contact ICSCO at SYMEDCO, 900 State Rd., Princeton, NJ 08540, phone 800/821-5678.

Second International Conference on Melanoma--Oct. 16-19, 1989, Venice. Contact Secretariat, Istituto Nazionale Tumori, Via Venezian 1, 20133 Milano, Italy.

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

Published forty-eight times a year by The Cancer Letter, Inc., P.O. Box 2370, Reston, Virginia 22090. Also publisher of The Clinical Cancer Letter.