THE CANCER LETTER

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Give Young Women Data, Not Guidelines, Advisors Tell NCI; Consensus For Over 50

NCI should continue to tell women aged 50 and over to get an annual mammogram and clinical breast examination, but should not promulgate screening guidelines for younger women, advisors to NCI's Div. of Cancer Prevention & Control said last week.

The Institute should provide women under 50 "a summary of existing evidence and data" and suggest that women discuss breast cancer screening with a physician or health care provider, a statement approved by the board said. In addition, NCI should support further research to answer remaining questions about the effectiveness of screening techniques, the board said.

(Continued to page 2)

In Brief

Clinton Signs FY95 Appropriations Into Law, To Seek $12 Billion Recision; NIH Cuts Likely

PRESIDENT CLINTON signed the FY 1995 appropriations bill last week which contains $10.9 billion for NIH, including $2.082 billion for NCI. However, the Administration is expected to ask for a $12 billion recision. Sources said the Administration's proposal was expected to implement portions of the recently completed plan by a commission headed by Vice President Albert Gore for reducing the size of the government. It is unclear how the measures would affect NIH funding. . . . **FRANK TORTI** was appointed director of the Comprehensive Cancer Center of Wake Forest Univ., at the Bowman Gray School of Medicine. Torti, who left the medical faculty at Stanford Univ., also was appointed the Charles L. Spurr professor of medicine and head of the section on hematology/oncology. . . **JAMES HUTH** was appointed chief of surgical oncology in the Dept. of Surgery at Univ. of Texas Southwestern Medical Center. He was chief of surgical oncology at Univ. of North Carolina School of Medicine. James Carrico is chairman of the UT Southwestern surgery department. . . . **SUSAN KOMEN** Breast Cancer Foundation presented the 1993 Brinker International Awards for breast cancer research last week. **Arnold Levine**, Princeton Univ., received the award for basic research for work on the p53 protein. **Richard Santen**, Wayne State Univ., received the clinical research award for work on aminoglutethimide. . . . **ASTRO OFFICERS:** American Society for Therapeutic Radiology and Oncology named its officers for 1993-94 at the society's annual meeting earlier this month. They are: **J. Frank Wilson**, chairman of the board of directors; **Lester Peters**, president; **Jay Harris**, president-elect; **Eric Hall**, secretary; and **David Hussey**, treasurer.

DCPC Board Wonders Whether NCI Should Issue "Guidelines"

(Continued from page 1)

The board's recommendations will be presented to the National Cancer Advisory Board at its next meeting Nov. 22-23.

The recommendations were reached after an all-day discussion at NIH last week of data on mammography screening, and comments by breast cancer advocacy groups and professional organizations.

"I came away terribly educated, but more confused," board member Cutberto Garza, Cornell Univ., said. Garza was among a number of board members who thought NCI's 1988 screening guidelines, reached in conjunction with the American Cancer Society, the American College of Radiology, and several other organizations, should not be changed. "If someone decides not to have their `5-a-day' [of fruits and vegetables, NCI's dietary recommendation], they are not going to die of it. If someone forgoes a mammogram, it could kill them," he said.

Board member John Boyce, SUNY Health Science Center, said the greatest improvement in breast cancer mortality over the past two decades has been in younger women. Although it is not proven that this is the result of mammography, "it seems difficult for us to change our procedures for women in that subgroup," he said.

Other board members said the data did not support the 1988 recommendation that women aged 40-49 get a mammogram every one to two years.

"We are attempting to change a guideline based on better science," said board member Ian Thompson Jr., Brooke Army Medical Center. "The question is, what would we write if the existing guidelines did not exist?" Thompson supported the draft guidelines that NCI officials discussed with the NCAB in September (**The Cancer Letter**, Sept. 24).

Some board members said NCI should not issue guidelines regarding screening modalities.

"I am wondering whether we should be in the guidelines business at all," said board member Helene Brown, Univ. of California, Los Angeles. "We are here to generate information. Let's leave the creation of guidelines to public health agencies."

DCPC Director Peter Greenwald said the board could consider whether to establish a policy on guidelines at its January meeting. However, he pressed the board to deal immediately with the proposed breast cancer screening guidelines.

"It would be helpful to NCI if you could give advice on our draft guidelines," he said. "We are partway through a process."

Brown proposed that NCI not use the word "guidelines," but issue an "NCI fact sheet." For women aged 50-69, the fact sheet should say there is a consensus that annual mammography screening is effective, she said. For women aged 40-49, there is no agreement on the benefit of mammography. "I'd like to say that and give them the facts," Brown said. She also noted that clinical breast examination and breast self-examination are not proven to affect mortality.

Board member Maryann Roper said NCI should issue guidelines to help physicians. "A fact sheet is OK, but you are sitting in that room with a patient and she asks you, `Doctor, what would you do if it were your wife?'... If we can't make a statement about one of the most common types of cancer in women, then what does this board do?"

Regardless of the outcome of NCI's new screening recommendations, Roper said, "I'm in the 40-49 age group. I will continue to have my annual mammogram because I don't want to take a chance."

THE CANCER LETTER

Editor: **Kirsten Boyd Goldberg**
Associate Editor: **Paul Goldberg**
Founder & Contributing Editor: **Jerry D. Boyd**

P.O. Box 15189, Washington, D.C. 20003
Tel. (202) 543-7665 Fax: (202) 543-6879

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HHS To Hold Hearings To Form U.S. Breast Cancer Strategy

HHS Secretary Donna Shalala plans to hold hearings that will form the basis of a national strategy for combatting breast cancer.

The hearings, scheduled for mid-December, are a response to the demand by the National Breast Cancer Coalition that the government recognize combatting breast cancer as one of its top priorities and de-

velop a plan for fighting the disease.

The coalition last week presented the Administration with a petition bearing 2.6 million signatures, demanding that a national strategy be formulated.

"A national strategy are what these petitions are all about," Clinton said accepting the petitions. "To help coordinate our research and delivery efforts, in mid-December Secretary Shalala will bring together a broad range of health professionals, government agencies and groups like yours to develop a national action plan for the prevention, the diagnosis and the treatment of breast cancer."

Citing the mammography guidelines being revised by NCI, Clinton said the Administration's health plan would not cover screening mammography for women under 50 unless they are found to be at high risk for breast cancer.

"The unique structure of this plan, with some preventive benefits absolutely free to Americans in the highest risk categories, was based upon the best available scientific evidence expressed in the findings of the U.S. Preventive Services Task Force and supported by forthcoming guidelines on mammograms from NCI," Clinton said.

It is unclear what role the just-completed report of the Special Commission on Breast Cancer will play in the strategic plan (**The Cancer Letter**, Oct 8). Brinker was expected to present the report to Hillary Clinton late Tuesday.

Capitol Notes

Wyden: Induce Drug Makers To Conduct Clinical Trials

Rep. Ron Wyden (D-OR) said he intends to introduce legislation that would grant incentives for drug and medical technology manufacturers to perform clinical trials comparing new technologies to existing ones.

"What is needed is a concerted national campaign to discover comparative effectiveness of medical technologies, and feed a steady stream of this information to payers, practitioners and patients across the country," Wyden said at a hearing Oct. 21.

Wyden said the measure should be included in the health reform package.

"Congress has a choice: build national health reform on a solid scientific foundation, or pretend that reform can be constructed on a shaky technological base," Wyden said.

To induce drug companies to compile comparative data, Wyden proposed the following incentives:

--Companies that conduct clinical studies comparing their products to those being used for the same indication would receive extended exclusivity for three years for the first such study. FDA would be authorized to grant additional single-year increments for particularly large scale studies.

--Companies that conduct clinical studies analyzing the effectiveness of their products in a geriatric, pediatric or at-risk minority populations would receive additional two years of exclusivity if the studies are completed in time for results to be incorporated into initial product labeling.

Another one-year extension of exclusivity would be granted if comparative studies are completed and supplemental labeling approved prior to expiration of any other exclusivity granted to the product.

--FDA would have 30 days after receiving the final results of an approved trial to determine whether the study establishes the product as "superior." If such a designation is justified, the product's review would be expedited.

A product would be regarded as superior either because it demonstrates a clinical advantage or because it offers equivalent effectiveness at a lower cost.

--If a product is recognized as superior, the government would assist in dissemination of trial results demonstrating this advantage.

DCT Board Oks Recompetition Of Clinical Trials Contracts

NCI's Div. of Cancer Treatment Board of Scientific Counselors last week gave concept approval to recompetiton of contracts for phase I and phase II/III clinical trials of anticancer agents.

The board approved spending of more than $4.6 million for the two programs. Also approved in concept were the recompetiton of seven contract projects worth about $7.8 million in the next year. Also presented was a program announcement for a joint NCI/NASA technology transfer program in digital mammography.

Following are excerpts of the concept statements.

Phase I Clinical Trials of Anticancer Agents.

Reports on concept reviews by NCI Boards of Scientific Counselors provide advance notice of the Institute's spending plans. Proposals need not be submitted to NCI until RFAs, RFPs, and PAs are released.

Recompetition of contracts held by Univ. of Chicago, Johns Hopkins Univ., Univ. of Maryland at Baltimore, Mayo Foundation, Univ. of Texas Health Science Center, Univ. of Wisconsin. Estimated annual amount $3.5 million, five and one-half years.

The objectives of the phase I clinical trials contracts are to characterize drug toxicity and maximum tolerated dose and pharmacokinetics of drugs entering clinical trials. The agents studied have been obtained primarily from the NCI drug development program, although some compounds were made available to NCI from the pharmaceutical industry for collaborative development.

The six phase I contractors have demonstrated that the toxicity of new agents can be assessed qualitatively and quantitatively across several institutions with the determination of appropriate and reliable pharmacokinetics. For the period of May 1, 1990, to March 31, 1993, 22 investigational cytotoxics, one radiosensitizer, and four differentiating or biological agents have been studied. Fifteen trials have been combination studies involving either biochemical or biological modulation or pilots for cytotoxic combinations. During this period, 1,208 patients have been studied, and 60 trials have been underway with an average of 10 per institution.

These contracts will play an increasingly important role in NCI's drug development program as the DTP drug screen produces new disease-specific leads that will require rapid and more focused clinical trials.

Program staff anticipate the award of six to eight contracts for these efforts at a total estimated cost of $3.5 million. The goals of these contracts will be 1) to define the acute toxicities of new anticancer agents in patients with advanced cancer, 2) to redefine the acute toxicities and pharmacokinetics of existing anticancer agents administered in combination with colony-stimulating factors and other toxicity/ameliorating agents such as nerve growth factor and WR-2721, which may facilitate the exploration of more effective doses and schedules, 3) to provide information on the pharmacologic characteristics, 4) to define treatment regimens for evaluation of antitumor activity in phase II trials, 5) based on pharmacologic characteristics, to establish appropriate phase II doses in special patient populations, such as those with impaired end-organ function or with heavy pretreatment, geriatric populations, etc., 6) to obtain preliminary information on pharmacokinetic/

harmacodynamic correlations, 7) to incorporate ancillary basic laboratory studies, when possible and appropriate, to enhance our understanding of the biochemical and/or biological mechanisms of drug actions.

Each contractor will be expected to accrue at least 50 patients per year to at least three active phase I trials per year. Pharmacokinetics and/or correlative lab studies will be a standard feature of these studies.

Phase II/III Clinical Trials of Anticancer Agents. Recompetition of contracts held by Mayo Foundation, Univ. of Texas M.D. Anderson Cancer Center, Sloan-Kettering Institute for Cancer Research. Estimated annual amount $1.125 million, seven years (includes follow-up of treated patients).

The purpose of this project is to provide a resource for the conduct of early and high priority phase II trials. The objectives of this project are:

1. To confirm that the dose and schedule selected for new agents that have just completed phase I trials can be safely given in subsequent phase II studies.

2. To determine the spectrum of antitumor activity for new agents across a variety of human cancers.

3. To determine the antitumor activity of existing antitumor agents that can be administered in significantly higher doses when used with colony-stimulating factors or other agents to ameliorate dose-limiting toxicities.

4. To determine the antitumor activity of combinations of antitumor agents.

5. To define pharmacokinetic/pharmacodynamic correlations that can then be used to optimize individual dosing.

6. To determine the safety and efficacy of these agents and explore pharmacokinetic/pharmacodynamic correlations in special patient populations, such as those with impaired end-organ function or with heavy prior treatment, geriatric populations, underrepresented groups in whom differences would be anticipated, etc.

7. To incorporate ancillary basic laboratory studies, when possible and appropriate, to enhance our understanding of the biochemical and/or biological mechanisms of drug actions.

While the contract will continue to permit occasional phase III trials, major emphasis will be on early phase II studies, pilot protocols that explore promising combination therapies, and high priority studies that are pivotal for drug development and require rapid initiation, completion, and data reporting.

Each institution will be expected to accrue at least 200 patients per year and to complete clinical trials in a timely manner. In all categories of disease, patients to be selected for trial will be those with excellent performance status and the minimum amount of prior treatment that is consistent with ethical medical practice. For any proposed trial, the offerors will be required to document their ability to accrue the required number of patients within a reasonable time period. For rare tumors, intercontract studies will be encouraged.

Clinical Data Management. Recompetition. Estimated annual amount $1.078 million, five years.

This contractual effort has been in place since 1972

under the direction of the Biostatistics and Data Management Section, the statistical component of the Clinical Oncology Program. Working in government-provided space at NIH, as well as at corporate headquarters, contract staff work directly with COP investigators, helping them define data collection requirements and develop data collection instruments. Contract staff then 1) develop, document, and maintain the software necessary to support various databases for COP, 2) provide data collection and data management capabilities as required, and 3) respond to the other data processing requirements of the COP branches as directed by the project officer.

Detailed Drug Evaluation and Development of Treatment Strategies for Chemotherapeutic Agents. Recompetition of a contract held by Southern Research Institute Inc. Estimated first year amount: $800,000, five years.

This contract provides the drug development program of Developmental Therapeutics Program with a resource to conduct a diversity of nonroutine in vivo preclinical antitumor experiments on agents selected for development to clinical trial or undergoing initial clinical trials. The principal objective of the contract is to optimize the antitumor activity of agents originally identified by DTP's disease-oriented human tumor cell line screen. Studies using a variety of in vivo experimental tumor models are conducted in which drug concentration and exposure time of the tumor cells and host to the drug are varied. Results are interrelated with pharmacokinetic, toxicologic, biochemical, and immunologic information to devise and recommend treatment strategies for clinical trial, and are included in Investigational New Drug Applications filed with FDA. Depending on needs, other tasks involve 1) comparing the activity of parenteral formulations with the original bulk material, 2) evaluating the influence of route of administration on activity, 3) preparing cross-resistance profiles, 4) collaborating with outside investigators to explore new chemotherapeutic strategies, and 5) providing a resource for specialized in vivo expertise for studies in collaboration with the National Cooperative Drug Discovery Groups.

Major emphasis in the new contract will continue to be placed on evaluating compounds identified by the human tumor cell line screen. With these agents it is important to ascertain whether a compound exerts selective antitumor toxicity in a tumor-bearing host. Human tumor xenograft models, developed by other contract resources using tumor cell lines from the in vitro screen, will be employed. Some capacity in this recompeted contract will be maintained to explore exciting new chemotherapeutic approaches requiring in vivo evaluation and to provide a resource for specialized in vivo expertise in collaboration with the National Cooperative Drug Discovery Groups.

In Vivo Evaluation of Combination Therapy for Anticancer Activity. Recompetiton of contracts held by Southern Research Institute Inc. and Univ. of Maryland at Baltimore. Estimated first year amount $566,370.

These contracts provide the Div. of Cancer Treatment with the resource to conduct preclinical studies. Information of importance to clinical protocol design with regard to appropriate dosage ratios, schedules, sequencing, and timing of individual drugs comprising the combination are obtained in a timely manner. The project is a collaborative one, combining the preclinical expertise of the Developmental Therapeutics Program with the clinical knowledge and needs of the Cancer Therapy Evaluation Program. A steering committee involving staff from both programs has been established and meets routinely to identify combinations of newly defined interest and to set priorities for testing. Studies may involve any combination of cytotoxic antitumor agents, biological response modifiers, or biochemical modifiers. The majority of experiments are conducted in vivo utilizing murine tumors or human tumor xenografts growing in pathogen-free, immune-competent or immune-deficient mice.

Operational Systems Development in Support of the Developmental Therapeutics Program. Recompetiton of contract held by ARC Professional Services Group Inc. Estimated first year amount $354,260, five years.

The Information Technology Branch supports the DTP automated information needs for both cancer and AIDS. The large and complex chemical database and the massive relational biological databases for cancer and for AIDS are maintained by two specialized contracts. The objective of this additional contract is to provide quick response to data processing needs that may arise in the performance of the various computer support commitments of the Information Technology Branch and to provide for ongoing operations that evolve over time. The task order-managed contract has been chosen for this, as it provides the flexibility needed in the workscope so that we can fill a great variety of programming needs with one contract.

Primary Rodent Production Centers. Recompetition of contracts held by Charles River Laboratories, Harlan-Sprague-Dawley, and Simonsen Laboratories. Estimated first year amount $3.8 million (80% cancer; 20% AIDS), three years.

These contracts annually produce approximately 2,500,000 laboratory rodents, including nude mice, which are distributed intramurally to NCI, NIH investigators on the Bethesda campus and extramurally to other NCI divisions, grantees, collaborators, and to qualified users,

These contracts represent three of the five animal production contracts. Other efforts are the production facility

for marketing approval by regulatory agencies in the U.S., Canada and Europe, for its lead indication to image colorectal cancer. Phase 2 trials are near completion for breast cancer imaging.

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Neoprobe Corp. (NASDAQ: NEOP, NEOPW) of Columbus, OH, announced expansion of its adoptive cellular therapy (ACT) pilot study for colorectal cancer.

Neoprobe's approach to adoptive cellular therapy uses "helper cells" found in lymph nodes identified during surgery by Neoprobe's Radioimmunoguided Surgery (RIGS) system. Results from the pilot study prompted the move to an expanded phase 1/2 trial, the company said.

"Previous adoptive cellular therapy programs were limited by their complexity and toxicity," said Pierre Triozzi, principal investigator at the Arthur G. James Cancer Hospital and Research Institute of Columbus. "Our approach is expedient and nontoxic. These helper cells appear to have unique biologic activity and to be readily found by the RIGS technology."

In the Neoprobe method, the lymph nodes containing helper immune cells are identified by using the RIGS surgical system. The lymph nodes are removed from the patient, and the helper cells are grown in large quantities in the laboratory. After 10 to 14 days, from 10 billion to 100 billion cells are injected back into the patient's body where they elicit a cancer-fighting immune response. Human trials, so far limited to patients with advanced colorectal cancer, show the therapy holds promise for reversing or stopping the growth of malignant tumors.

Neoprobe licensed the rights to RIGS-based ACT from The Ohio State University Research Foundation (OSURF).

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Roberts Pharmaceutical Corp. (NASDAQ: RPCX) of Eatontown, NJ, raised $99.4 million from the sale of 3.3 million shares of common stock.

Of the total shares sold, 2.5 million shares were sold at a public offering through an underwriting group managed by Morgan Stanley & Co. and Merrill Lynch & Co. Another 800,000 shares were sold to Yamanouchi Pharmaceutical Co. Ltd., the company's largest shareholder, the company said.

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Seragen Inc. (NASDAQ: SRGN) of Hopkinton, MA, announced that its fusion toxin produced a response in five of 11 refractory cutaneous T-cell lymphoma patients in a phase 1/2 study. Results from the trial of the agent, an IL-2 receptor-targeted fusion toxin, DAB389IL-2 were reported by Francine Foss, Boston Univ.

In another development, Seragen filed an Investigational new Drug application with FDA to test its epidermal growth factor receptor-targeted fusion toxin, DAB389EGF. The phase 1/2 trials would focus on solid tumors that express EGF receptor.

People

Axion Names Herfindal Senior VP; Gerety Resigns From Biogen

Eric Herfindal was appointed senior vice president of **Axion Pharmaceuticals Inc.** of South San Francisco.

Herfindal will oversee the development of Axion's managed care programs and its existing clinical programs, currently focusing on state-of-the-art oncology treatments.

As a corporate officer and consultant to Axion for the past five years, Herfindal has directed all aspects of Axion's clinical pharmacy programs, including pharmacoeconomics and outcomes studies, clinical trials, formulary development, investigational drug management, and protocols for drug handling and preparation.

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Robert Gerety has resigned from his position as vice president, development operations at Biogen Inc. (NASDAQ/BGEN) of Cambridge, MA, to become executive vice president of **ImmuLogic**, a biotechnology company based in Waltham, MA.

Gerety's responsibilities for Biogen's regulatory affairs, toxicology and development operations will be taken over by **Irvin Smith**, Biogen's vice president.

In another development at Biogen, **John Conley** and **Mark Leuchtenberger** were appointed to the newly created positions of directors of marketing.

Conley's responsibilities include Hirulog, Biogen's proprietary direct thrombin inhibitor, other cardiovascular and infectious disease programs and market research. Leuchtenberger is responsible for the marketing and business development of Biogen's interferon and inflammation programs. Conley and Leuchtenberger are former product managers at the company.

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Thomas McKearn, president and one of the

counders of **Cytogen Corp.** (NASDAQ: CYTO) of Princeton, NJ, will assume the additional post of CEO effective Jan. 1. George Ebright, will vacate the CEO post, but will continue as chairman of the board "for a sufficient period of time to help assure a smooth transition," the company said.

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Michael Masterson was appointed clinical medical director of Westlake Comprehensive Cancer Center at Westlake Village, CA, a joint venture involving **Salick Health Care** (NASDAQ: SHCI) of Los Angeles and Universal Health Services. The center commenced its operations earlier this month.

Masterson, an oncologist and hematologist, will continue to maintain his practice at the center.

Technology Transfer Program Research Topics Are Listed

(Continued from page 1)

applications, rehabilitation and continuing care, special populations, early detection and screening, and interactive multimedia technologies for cancer prevention. Contact: Dr. Barry Portnoy, NCI Bldg 31 Rm 10A49, Bethesda, MD 20892, Tel. 301/496-1071.

SBIR Contract Proposals Due Dec. 6

Contract proposals for the Small Business Innovation Research program are due Dec. 6.

Information and applications for these contracts are contained in "Solicitation of the Public Health Service for Small Business Innovation Research Contract Proposals," available from the NIH Research Training and Special Programs Office, Bldg 31 Rm 5B44, Bethesda, MD 20892, Tel. 301/496-1968.

NCI invited contract proposals in "3D interactive graphic user interface prototype for PDQ and Cancerlit," and "Multimedia PDQ prototype."

SBIR Grant Applications Due Dec. 15

Applications for SBIR grants and cooperative agreements are due Dec. 15.

In a supplement to the PHS solicitation for the SBIR grant program, NIH institutes listed "special emphasis areas" in which funds are set aside for "research areas of specific, high program interest."

Copies of the "Special Supplement to the Omnibus Solicitation of the Public Health Service for Small Business Innovation Research Grant and Cooperative Agreement Applications" are available from the NIH Research Training office named above.

NCI's "special emphasis areas" are as follows:

—Basic and applied studies on the biology and diagnosis of breast, prostate, ovarian, and cervical cancer. NCI expects to make up to five awards, or approximately $375,000 of its funds set aside for the SBIR program, in response to this special emphasis area.

Innovative technologies with commercial potential would form the basis of suitable project applications. These technologies, described in the "Omnibus Solicitation," should enhance the automation or improve the sensitivity of current diagnostic and basic research tools, or provide a new approach to cancer diagnosis or basic cancer research in these priority areas. Projects applicable to research on the cellular and molecular biology of malignant cells, the role of the immune system in tumor growth and progression, and the transfer of basic research findings to clinical application for the improved diagnosis/prognosis of cancer are of interest. In the area of cancer biology, areas of interest include but are not limited to: soluble factors (e.g. hormones, growth factors), and matrix and membrane macromolecules that modulate the growth of tumor cells; the regulation of the expression of these effectors and the mechanism of action; and the genetic events responsible for progression of tumors to a highly malignant and metastatic state. In the area of cancer immunology, specific interests include, but are not limited to: cellular and humoral immune cells, immune control of tumor metastasis, other regulatory effects of the immune system on tumor growth, and tumor modulation of host immune function. Studies are specifically solicited for further research in these areas of immunology aimed at the eventual development of vaccines for the primary or secondary prevention of these cancers. In the area of cancer diagnosis, areas of emphasis include, but are not limited to: more precise staging of tumors for prognostic and therapeutic decision making, more effective monitoring of response to therapy, earlier detection of both initial and recurrent tumors, and identification of populations at risk for developing particular cancers.

Contact: Dr. Mary Fletcher, Div. of Cancer Biology, Diagnosis & Centers, Executive Plaza South Rm 642, Bethesda, MD 20892 Tel. 301/496-5307.

—Human T-cell lymphotropic virus studies, to develop a small animal model which displays observable disease or symptoms after virus inoculation and

in total costs per year for four years, up to five to seven individual awards.

Goals: 1) provide support for Phase I/II trials of promising new therapeutic strategies for treatment of breast cancer; and 2) provide support for laboratory programs that are necessary for clinical development of the therapeutic approach. CTEP proposes to stimulate clinical research relevant to breast cancer through the support of multidisciplinary teams of basic and clinical investigators interested in performing Phase I/II trials of innovative therapeutic strategies and in conducting laboratory studies relevant to the clinical development of the agents. Applicants will form Breast Cancer Treatment Groups that consist of Clinical and Laboratory programs representing diverse scientific disciplines under the leadership of a single Principal Investigator.

Applications should be focused on integrating clinical goals with laboratory research areas. The application should have a central, common theme that should be the focus of the clinical studies and the group's efforts overall.

Inquiries: Diane Bronzert, DCT, NCI, Executive Plaza North Rm 734, Bethesda, MD 20892, Tel. 301/496-8866, fax 301/480-4663.

Cancer Meetings Listed For November, December, Future

Women's Health: Occupation and Cancer—Nov. 1-2, Baltimore, MD. Contact Carmen Warren 301/907-3844.

American Cancer Society National Conference on Clinical Trials—Nov. 3-5, Atlanta, GA. Contact Andy Cannon 404/329-7604.

Cancer Education Review Committee—Nov. 3, Georgetown Inn, DC. open 8:30-9.

Immunocytochemistry Pathology Review Workshop—Nov. 3-5, Philadelphia, PA. Contact Kathy Smith, Fox Chase Cancer Center, phone 215/728-5358.

Growth Control, Signal Transduction and Oncogenesis: Bristol-Myers Squibb Cancer Research Symposium—Nov. 4-5, Beverly Hills, CA. Contact UCLA Extension, Tel. 310/206-8983.

Pittsburgh Cancer Conference: Breast Cancer—Nov. 4-5, Pittsburgh, PA. Contact Diane Applegate 412/647-8263.

Colorectal Cancer—Nov. 4-7, Houston, TX. Contact M.D. Anderson Cancer Center, 713/792-2222.

San Antonio Breast Cancer Symposium—Nov. 5-6, San Antonio, TX. Contact Lois Dunnington, 8122 Datapoint Dr. Suite 600, San Antonio, TX 78229.

Chemotherapy Foundation Symposium XI: Innovative Cancer Chemotherapy for Tomorrow—Nov. 10-12, New York City. Contact Jaclyn Silverman, Mount Sinai School of Medicine 212/241-6772.

What's New For Cancer Patients?—Nov. 11, New York City. Contact 212/241-6772.

National Coalition for Cancer Survivorship Annual Assembly—Nov. 11-14, Seattle, WA. Contact NCCS 301/650-8868.

American Assn. of Pharmaceutical Scientists—Nov. 14-18, Lake Buena Vista, FL. Contact 703/548-3000.

American Geriatrics Society/American Federation for Aging Research Annual Meeting—Nov. 15-19, New Orleans, LA. Contact AGS, 212/308-1414.

President's Cancer Panel—Nov. 15, LaGuardia Narriott, New York City, 8 a.m.-5 p.m.

Pediatric Hematology/Oncology Care—Nov. 18-20, Orlando, FL. Contact Nancy Cowen Pollock 904/375-6848.

American Assn. for Cancer Education—Nov. 18-21, Houston, TX. Contact Robert Chamberlain, 713/792-3020.

National Cancer Advisory Board—Nov. 22-23, NIH Bldg 31 Conf. Rm 10.

NCI Div. of Cancer Biology, Diagnosis & Centers Board of Scientific Counselors—Nov. 29, NIH Bldg 31 Conf. Rm 6.

Frederick Cancer Research & Development Center Advisory Committee—Nov. 30, FCRDC Bldg 549, Executive Board Room, open 8:30 a.m.-noon.

CNS Tumors and Cerebrovascular Lesions—Dec. 2-3, San Francisco, CA. Contact Univ. of California, San Francisco 415/476-5808.

Society for Basic Urologic Research—Dec. 2-5, Houston, TX. Contact Shirley Roy 713/792-2222.

Cancer Biology, Immunology Contracts Review Committee—Subcommittee A meets Dec. 2, EPN Conf. Rm D, Rockville, MD, open 8-9 a.m. Subcommittee B meet Dec. 6, open 8:30-9:30 a.m.

American Endocurietherapy Society—Dec. 8-11, Phoenix, AZ. Contact AES 215/574-3158.

Tokyo Symposium on Prostate Cancer—Dec. 16-17, Tokyo, Japan. Contact James Karr, Roswell Park Cancer Institute, Tel. 716/845-2389, Fax 716/845-3545 or Kyoichi Imai, Gunma Univ. School of Medicine, Tel. 272-31-7221 ext. 3353, Fax 272-35-5034.

Future Meetings

Converging Aspects of Community Cancer Care—Feb. 11-13, Newport Beach, CA. Contact Hoag Cancer Symposium meeting office, 714/752-8205.

NCI-EORTC Symposium on New Drugs in Cancer Therapy—March 15-18, 1994, Amsterdam, The Netherlands. Contact Technical Resources Inc., 800/883-6338.

Symptom Management—March 17-19, San Francisco, CA. Contact UCSF 415/476-5808.

American Radium Society Annual Meeting—April 22-26, Bermuda. Contact Office of the Secretariat 215/574-3179.

Experimental Biology Meeting—April 24-28, Anaheim, CA. Contact FASEB 301/530-7010.

10th International Conference on AIDS—Aug. 7-12, 1994, Yokohama, Japan. Contact Gil-Kenes Travel, Congress Dept., 1617 JFK Blvd Ste 946, Philadelphia, PA 19103; Tel. 215/568-6655, or 800/223-3855; Fax 215/568-0696.