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Proposed FDA Charges For NDA Drugs, Biologics Submissions Would Total $76 Million In FY 1990

Proposed user fees for the services of the Drugs & Biologics Centers of the Food & Drug Administration would total about $76 million in fiscal 1990--the bulk of the $100 million in user fees that the Administration has proposed that FDA charge. Most of that money would be generated by fees

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In Brief

Paul Sugarbaker To Head New DC Cancer Center; Michael Shimkin Dies; Tel Aviv Conference "Safe"

PAUL SUGARBAKER, director of surgical oncology at Emory Univ. School of Medicine for the past two years, will return to Washington in July as medical director of the Washington Hospital Center's new Cancer Institute. Sugarbaker was a senior investigator in the Surgery Branch of NCI from 1976 to 1986, and head of the colorectal cancer section from 1981 to 1986. Ground will be broken for the $13 million freestanding cancer center this fall. John Lynch is director of the hospital's oncology program. . . **MICHAEL SHIMKIN,** 76, whose epidemiological studies in the 1950s demonstrated a link between smoking and lung cancer, died of a stroke last week at the Medical Center of the Univ. of California (San Diego). He was professor emeritus of community and family medicine at the university, which he joined in 1969. Shimkin began his research in the 1930s as a fellow at NCI, where he stayed until 1963. He was at Temple Univ. until he returned to California. He wrote more than 300 articles and books, including a history of NCI. Born in Tomsk, Siberia, he came to the U.S. in 1923. . . .**FEW NORTH** American scientists and physicians have registered for the International Assn. for Breast Cancer Research Biennial Conference, March 5-9 in Tel Aviv. This "may be due to questions of personal safety," Iafa Keydar, conference chairman, wrote in a letter to prospective attendees. Keydar assured his colleagues that the unrest in Gaza and the West Bank "has zero spillover into Israel. In fact, like other cities in Israel, Tel Aviv remains among the safest in the world." Deadline for registration and submission of abstracts is extended to Feb. 1. . . . **DAVID BACHRACH** has been named executive vice president for administration and finance at the Univ. of Texas M.D. Anderson Cancer Center. He has been director of administrative and financial affairs at the Univ. of Michigan Medical School for the past eight years.

Bulk Of FDA User Fees Would Come From Drugs And Biologics NDAs

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charged for new drug applications and, possibly, investigational new drug applications.

Under the Reagan budget proposal, $14 million would be generated by fees for services of the Center for Medical Devices of FDA. About $10 million in user fees would be charged for services of the Food Safety & Applied Nutrition Center.

The Reagan Administration first proposed FDA user fees in 1985, but the idea was shot down by Congress and pressure from biotechnology and pharmaceutical industry associations. A second attempt two years ago also did not make it through Congress.

FDA has not yet set specific fees for investigational new drug and new drug application processing.

Under the 1985 proposal, FDA would have charged $126,200 for new drug applications, $9,900 for generics, $100,000 for regular new drug approvals, and $200,000 for new chemical entity approvals. There would have been no charge for INDs.

However, in 1985 the proposed user fees would have generated only $30 million--less than a third of this year's proposal. Presumably, user fees would be higher this time around, and possibly be imposed for INDs.

In 1988, a total of 792 NDAs were submitted. Of those, 108 were in the "new drug" category and 684 in the "generic." A breakdown among the three categories of new drugs was not available.

Applying the 1985 fee schedule to those numbers, the total revenue raised would still be only about $30 million.

Whoever drew up the new proposal (FDA spokesmen say they have no information other than what was in the budget proposal) must have based the $76 million estimate on fees more than twice as high as those in the 1985 plan, and may have also included INDs in a fee schedule.

In 1988, there were 96 IND submissions for anticancer agents, and six NDAs. There were 76 IND submissions for AIDS agents, and three NDAs.

The total FY 1990 budget for drugs and biologics is $220 million; the proposed fees would cover a little more than one third of that.

The budget for food and nutrition is $144.5 million, and for devices, $89.2 million.

Biotechnology and pharmaceutical trade associations have vowed to fight the proposal once again. Four groups released a statement opposing the fees earlier this month. They were the Industrial Biotechnology Assn., Health Industry Manufacturers Assn., Pharmaceutical Manufacturers Assn. and the Proprietary Assn.

"For the amount of money the fees would generate, the Administration would have to pay a large price to get this past Congress," Frank Samuel, president of the Health Industry Manufacturers Assn., told **The Cancer Letter** this week. "We're going to do everything we can to defeat it."

The budget request says FDA needs a $161 million increase to keep its funding level.

Samuel predicted that Congress will not go along with the user fees and will appropriate less money to FDA than the budget request.

President Bush is expected to present his amendments to the Reagan budget early next month.

At his confirmation hearing last week, Bush's budget director, Richard Darman, took a hard line against items that look like taxes but are called something else, including user fees and consumption taxes. "If it looks like a duck, walks like a duck, quacks like a duck, it's a duck," Darman said.

The FDA fee proposal is part of a larger budget recommendation to charge user fees for a variety of federal services. Fees would be also imposed on users of some services of the U.S. Coast Guard, the Army Corps of Engineers and the U.S. Forest Service.

The fee proposal would seek to recover the cost of services provided by the federal government "when the recipient of the service can be readily identified," according to the budget submitted to Congress earlier this month. "Those benefitting from a government service will have to pay for the service rather than being subsidized by the taxpayers."

The General Accounting Office is currently studying FDA's resources and is scheduled to release a report sometime this spring.

Sullivan Confirmation Hearing Feb. 1; House Sets Date To Hear NIH Budget

Louis Sullivan, President George Bush's designate for Secretary of Health & Human Services, is scheduled to appear before the Senate Finance Committee Feb. 1.

The Finance Committee has responsibility for Social Security and Medicare legislation.

Sullivan will have a second hearing before

the Labor & Human Resources Committee, which has responsibility for NIH authorization legislation.

The House Labor-HHS-Education Appropriations Subcommittee has scheduled hearings on the NIH budget to begin April 5. No date has been set for the Senate subcommittee hearings.

The Senate Finance Committee's Health Subcommittee has been split into two subcommittees. They are the Medicare & Long Term Care Subcommittee, chaired by Sen. John (Jay) Rockefeller (D-W.VA), and the Health for Families & the Uninsured Subcommittee, chaired by Sen. Donald Riegle (D-MI).

Broder Sworn In As Head Of "Magical Place," Cites Waldmann, Gallo, DeVita

Samuel Broder was sworn in Jan. 10 as director of NCI in a ceremony on the NIH campus that brought out nearly all of the Dept. of Health & Human Services brass, four former NCI directors, his wife Gail and one of his two daughters, Karen, his parents, his sister and a bevy of scientific colleagues.

Broder said he was indebted to President Reagan for the opportunity to serve as the 10th NCI director. He noted this is the centennial year of the Public Health Service, and "no one has steered it better" than Surgeon General Everett Koop, who was present.

NCI "is a magical place to work," Broder said in his remarks after being administered the oath of office by Thomas McFee, HHS assistant secretary for personnel administration. "Unfortunately, some of that magic may not extend to families of those who work here. They are called upon to pay an enormous price for us to do what we do. I am indebted to my wife and daughters for the sacrifices they have made."

The Broders' other daughter, Joanne, is a student at the Univ. of Michigan.

Broder related what he said was just "a short list" of accomplishments in cancer research since the last change of NCI directors, in 1980. He predicted that in another 10 years, an "extremely abbreviated list will be even longer."

Broder said it would be difficult to name all of those who had helped him in his career, but singled out three for special mention:

"Dr. Tom Waldmann (chief of the Metabolism Branch in the Div. of Cancer Biology & Diagnosis), whose mind grows younger and more agile each year. He taught me that clinical research can be a prelude to excellent basic research.

"Dr. Bob Gallo, with his sweeping vision and passion for scientific progress, who taught me that science is not necessarily a consensus seeking endeavor, and that it is possible to be alone and to be right."

Broder added, to a chorus of laughter, "I wouldn't take that too far, however."

Finally, "Dr. Vince DeVita (who was in the audience), a charasmatic leader, who taught me that words, however erudite, however inspiring, however self soothing, however self serving, however affirmative, do not stop cancer. Deeds stop cancer. Dr. DeVita is now physician in chief at Memorial Sloan-Kettering. I predict that students there will be required to recite a revised version of the Hippocratic oath, that portion that says 'Physician, first, do no harm.' Dr. DeVita's revised version is, 'Physician, first do some good.'

"In August, 1980, Dr. DeVita took the oath to effectively discharge the duty of the office of director. Few leaders of any office have ever been more faithful to that oath."

Broder concluded with a quote from Mark Twain, "which I hope will be the standing order of the day here. 'Always do the right thing. You will gratify some people, and astonish the rest.'"

HHS Secretary Otis Bowen noted Broder's "penchant for waxing philosophical." An example is his statement made at an AIDS conference: "The search for a perfect drug should not interfere with the search for a good drug."

HHS Undersecretary Don Newman, who acted as master of ceremonies, said that Broder "will continue the work of Dr. Alan Rabson, who is an outstanding leader. We all thank him for a job extremely well done." Rabson, director of the Div. of Cancer Biology & Diagnosis, was acting director of NCI from September until December.

Robert Tuttle, director of personnel at the White House, who with Newman played the key role in Broder's appointment, was present, as were former NCI Directors Leonard Scheele, John Heller and Carl Baker, and former NIH Director Donald Fredrickson. Also present were NIH Deputy Director William Raub (Director James Wyngaarden was out of the country); Broder's parents, Mr. and Mrs. Meyer Broder; and sister, Claire Stern.

Biotechnology Has Potential To Lower Cancer Risk; Lab Needed--Greenwald

The impact of new technology in the food industry could include reductions in cancer risk, Peter Greenwald, NCI Div. of Cancer Prevention & Control director, has been saying at various forums lately.

Already the industry is experimenting with the genetic engineering of crops in order to use fewer pesticides, and the injection of hormones into beef or pigs to produce less fatty meat.

"The same technology that has been built up in biomedical science is now being used in other fields," Greenwald told the President's Cancer Panel. "That, I believe, is going to have a huge effect on our rates of cancer and our ability to meet our goal of cutting cancer rates in half."

But the potential for great advances in cancer prevention through dietary changes could be limited by the current lack of extensive research in the field. Greenwald tried to impress upon the panel the need for a nutrition and science lab at NCI.

Roughly 35 percent of cancer incidence is related to diet, Greenwald said. "I feel we are in a transition time in the U.S. diet."

The first major transition involved the technology of canning and refrigeration that ensured a year round food supply and cut down on food contaminants. That technology, most likely, is what has led to a drop in incidence of stomach cancer by more than half.

The current transition, Greenwald said, involves biotechnology. About 150 companies in the U.S. are working on genetic engineering of crops. Those companies and their researchers rarely discuss their work with NIH, he said. "We need to build links with the industry," he said.

For example, one company has altered a bacteria to make its own biopesticide that discourages the corn borer, an insect which causes major crop destruction.

Another example of change is in the beef industry.

The grand champion steer of 1949 was deep in the chest, with very short legs and a very fatty brisket, he told the panel. In 1968, a different breed became the norm, with somewhat less fat. The grand champion steer in 1983 was bigger and had only four tenths of an inch of fat at the rib.

"Through breeding, the older technology, we have had improvements in the food supply," Greenwald said.

Now, the industry is going one step beyond simple breeding--using biotechnology. Some pig producers treating pigs with the growth hormone somatotropin, which causes the ratio of protein to fat to increase.

The fields of nutrition and immunology, as well as trangenics "have tremendous implications" for cancer research, Greenwald said.

Researchers know that rates of various types of cancers vary greatly in different parts of the world. Consider the example of colon cancer. In Finland, the rate of colon cancer is less than a third of that in the U.S., partly because Finns eat more fiber and whole grains.

A study of Puerto Ricans living in Puerto Rico and Puerto Rican born people living in Manhattan showed the effects of diet on the incidence of colon cancer. The colon cancer rate of Puerto Ricans living in New York is about double that of Puerto Rico, and it has increased markedly from 1958 to 1979, the years of the study.

Yet, Greenwald said, some people doubt that it is possible to change the way Americans eat.

"My feeling is that you don't have to convince people to change what they pick off the shelf," Greenwald said. "We can work with industry to have products modified so they are still tasty and attractive."

For example, it is possible to produce a sugar that the body does not absorb. This is done by reversing the hydroxyl group of the fifth carbon of a sugar molecule so that the body's enzymes do not recognize it and the body does not absorb the sugar. This type of sugar is preferable to artificial sweeteners, because it can be used in cooking.

"You can make your baked goods, have them taste the same, eat the same amount, but not have the calories," Greenwald said.

There are fake fats that have the physical characteristics of fat, but are actually proteins, such as Simplesse, made by the Nutrasweet Co., and Olestra, or sucrose polyester, made by Proctor & Gamble.

"I think that these are going to have a tremendous impact in, perhaps, helping us to bring down rates of breast cancer, colon cancer, and prostate cancer," Greenwald said.

However, a stronger effort in basic research is necessary. "A small number of us are working in this area, but not in the kind of depth" that exists in other basic sciences.

In 1987, the Div. of Cancer Prevention & Control of the Board of Scientific Counselors set up a committee to look into the situation. The committee recommended that NCI build a 60,000 square foot nutrition and cancer lab at the Frederick Cancer Research Facility, to be staffed by about 40 people. The lab would have a wet bench part, a clinical metabolic part and the ability to do human field studies. The National Cancer Advisory Board approved the plan.

The problem is that there is no funding from Congress for construction at the Frederick facility. "That has been the bottleneck," Greenwald said. Another bottleneck has been the situation of full time equivalents, or job positions. For the time being, NCI can only hire one person for every two that leave.

"The biotechnology we are all so excited about is impacting what we are eating," Greenwald said. "My guess is that it will have a favorable impact on cancer rates in the future.

"We Really Need The Lab"

"Yet we have a limitation, and that is we don't have the depth of research effort to be absolutely sure about what we are doing in some of these areas. We really need the lab program to go along with it."

In response to a question from the panel about the amount of time needed for nutrition studies, Greenwald said that some nutrition studies do take years to complete, but there are ways to shorten the time. One example he gave involved the way fat may affect bacteria in the colon to form mutagens.

"It would not be too difficult to study those things with the foods and look at whether they are having the physiological and biochemical effects on the body that we think are associated with cancer risk."

The Div. of Cancer Etiology is working on improving markers to try to predict the risk of various cancers. "As we reach an ability to identify markers that will tell us more clearly who will get cancer, we can then change those through the trial and collapse the time of trial down from many years to just a few."

Greenwald predicted that sometime in the near future, doctors will have test kits that would be able to tell the patient his cancer risk. "That will be a difficult time for biomedical research," he said, because there will be a window between "when we can predict risk and when we can do something about it."

Record Number Of Abstracts Received For AACR Meeting In San Francisco

The American Assn. for Cancer Research has received more than 2,500 abstracts for its 80th annual meeting, to be held in San Francisco May 24-27. That is a 22 percent increase in submissions from last year, and by far the largest number ever submitted.

The Program Committee, chaired by Bernard Strauss of the Univ. of Chicago, is currently reviewing the abstracts. The committee will meet late this month to organize slide sessions, poster sessions, minisymposia and poster discussion sessions at which acceptable abstracts will be presented.

The committee has already organized the following plenary sessions, symposia and workshops that will take place in San Francisco, with names of session chairmen:

Plenary Sessions

Hematopoietic growth factors, Jerome Groopman, sponsored jointly with the American Society of Clinical Oncology; signal transduction and gene expression, Ronald Evans; molecular and cellular approaches to proliferation and differentiation, Gary Stein; molecular dosimetry and DNA repair, Miriam Poirier; targets of anticancer drug action, Kurt Kohn.

Symposia

Immunoconjugates for cancer therapy, Ralph Reisfeld; prediction of tumor response, Sydney Salmon and Anne Hamburger; novel approaches to drug dosing and scheduling, Richard Schilsky; molecular aspects of growth regulation of breast cancer by hormones, growth factors and oncogenes, Geoffrey Greene; new developments in tumors of the urothelial tract, Alan Yagoda; human retroviruses, William Haseltine; from epidemiology to cancer biology, Frederick Li and William London; the epigenetics of cell transformation and tumor development, Harry Rubin; lymphoid receptors and growth factors, Cox Terhorst; glutathione, Cecil Picket; molecular aspects of carcinogenesis, Arthur Grollman.

Workshops

Cloning, expressing and modifying genes and gene products, Martin Rosenberg; Transgenic mice, Timothy Stewart; polymerase chain reactions, Bernard Poiesz.

Registration for the AACR meeting will take place in the lobby of the Moscone Convention Center beginning at noon on

Tuesday, May 23. Advance registration is available until March 31 by contacting AACR, 530 Walnut St., 10th Floor, Philadelphia, PA 19106, phone 215/440-9300.

In conjunction with the annual meeting, AACR will sponsor three special conferences which will examine developing areas of the molecular biology of cancer. Attendance is limited and participants will be selected by the program committees on the basis of submitted applications. The conferences are:

Gene Expression in Cancer Cells, May 22-24, San Francisco Hilton, San Francisco. Chairman: Inder Verma.

Molecular Events in Mutation and Cancer, May 21-23, Tiburon Lodge, Tiburon, CA. Co-chairmen: B. Singer and D.J. Patel.

Molecular Aspects of Growth Control: Joint AACR/Japanese Cancer Assn. Meeting, May 28-31, Sheraton Waikiki Hotel, Honolulu, HI. Co-chairmen: Enrico Mihich and Takashi Sugimura.

USC Cancer Center Plans Expansion, Has New Name Honoring Benefactor

The Univ. of Southern California Comprehensive Cancer Center is planning a major expansion to serve a growing number of patients and faculty researchers, and has changed its name to honor the benefactor who helped make the expansion possible.

The center will build an additional 42,000 square feet of research laboratories, 26,000 square feet of space for epidemiological research into cancer cause and prevention, 15,500 square feet for physician offices, as well as a meditation room, a dining facility and a conference center. The opening of the additional facilities is scheduled for late 1991.

The center's name has been changed to the Kenneth P. Norris Jr. Comprehensive Cancer Center.

The university's Board of Trustees adopted the new name in recognition of the major gifts Norris, his family and the Norris Foundation have made to the cancer program there--$5 million toward development of the Norris Cancer Hospital & Research Institute, and $4.5 million toward the new additions.

The cancer center opened in April 1983 as the only hospital in Southern California created exclusively for the diagnosis and treatment of cancer. Brian Henderson is the center's director.

Norris, USC class of 1953, was chairman of the board of Norris Industries until the sale of the company several years ago.

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

Cancer Management Course--Feb. 3-4, Bethesda, MD. Contact Bimal Ghosh, MD,. or John Spratt, MD, Cancer Dept., American College of Surgeons, 55 E. Erie St., Chicago 60611, phone 312/664-4050.

Cellular and Molecular Biology and Abnormal Erythroid Membranes--Feb. 3-10, Taos, NM. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles 90025, phone 213/207-5042.

Human Retroviruses--Feb. 4-11, Tamarron, CO. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles 90025, phone 213/207-5042.

Society of Gynecologic Oncologists--Feb. 5-9, Hyatt Regency, Maui, HI. 20th anniversary meeting. Contact SGO, 111 E. Whacker Dr., Chicago 60601, phone 312/644-6610.

National Cancer Advisory Board Committee on Centers--Feb. 5, NIH Bldg 31 Rm 7, 3 p.m. (Sunday afternoon).

National Cancer Advisory Board--Feb. 6-7, NIH Bldg 31 Rm 6, 8:30 a.m., open. Closed Feb. 7 8:30 a.m.-noon.

NCAB Committee on Planning & Budget--Feb. 6, NIH Bldg 31 Rm 8, starting immediately after adjournment of full Board meeting, probably 5 p.m. Closed first half hour.

NCAB Committee on AIDS--Feb. 6, NIH Bldg 31 Rm 7, starting immediately after full Board meeting.

NCAB Committee on Minority Manpower Development --Feb. 7, NIH Bldg 31 Rm 6, 1 p.m.

Developmental Therapeutics Contract Review Committee--Feb. 9, Bethesda Holiday Inn, open 8-8:30 a.m.

Physician Update on Cancer, AIDS and Liver Disease --Feb. 10-12, Davis, WV. Contact Kathy Saumure, phone 215/387-3685.

Div. of Cancer Treatment Board of Scientific Counselors--Feb. 13-14, NIH Bldg 31 Rm 10, 8:30 a.m. Closed Feb. 13, 5 p.m.

Effects of Therapy on the Biology and Kinetics of Surviving Tumor--Feb. 15-19, Vancouver, BC. International symposium. Contact International Symposium Secretariat, Venue West, 801-750 Jervis St., Vancouver, BC, Canada V6E 2A9, phone 604/681-5226.

Indian Assn. of Cancer Chemotherapists--Feb. 17-19, Bombay. Fifth biennial conference. Contact Dr. Nagraj Huilgol, Div. of Radiation Oncology, Nanavati Hospital & Medical Research Centre, S.V. Road, Vile Parle (W), Bombay-56, India.

Current Status & Future Directions of Immunoconjugates in Monoclonal Antibody Based Imaging & Treatment--Feb. 17-18, Orlando. Contact Div. of Continuing Medical Education, Univ. of Miami School of Medicine, Box 016960 (D23-3), Miami, FL 33101, phone 305/547-6716.

Advances in Skin Cancer Management--Feb. 17-18, San Francisco. Contact Extended Programs in Medical Education, Univ. of California, Rm U-569, San Francisco 94143, phone 415/476-4251.

United Arab Emirates Third Cancer Conference--Feb. 18-23, Abu Dhabi. Contact Dr. Abdulrahim Jaafar, Chairman, Emirates Medical Assn., PO Box 6600, Dubai, UAE.

6th Annual Mohs Micrographic Surgery Conference--Feb. 18-20, Scottsdale, AZ. Contact Mitzi Moulds, Executive Director, The Skin Cancer Foundation, 245 Fifth Ave. Suite 2402, New York 10016, phone 212/725-5176.

Div. of Cancer Biology & Diagnosis Board of Scientific Counselors--Feb. 21, Bethesda Hyatt Regency, 8 p.m.-10 p.m. (evening meeting).

Div. of Cancer Etiology Board of Scientific Counselors--Feb. 23-24, NIH Bldg 31 Rm 10. Open Feb.

23, 1 p.m.-adjournament; Feb. 24, 8:30 a.m.

Krebs und Alternativmedizin--Feb. 23-25, St. Gallen, Switzerland. Contact Secretariat "KAM-89", Med. Dept. C, Kantonsspital, 9007 St. Gallen, Switzerland.

Twenty Third Annual Clinical Symposium--Feb. 24, St. Jude Children's Research Hospital, Memphis. Contact Joseph Simone, MD, Director, Box 318, Memphis, TN 38101.

Symposium on Stereotactic Irradiation for Brain Tumors--Feb. 23-25, Tucson, AZ. Contact Office of Medical Education, Univ. of Arizona, Health Sciences Center, Tucson 85724, phone 602/626-7832.

Chromosomes in Solid Tumors--Feb. 26-28, Doubletree Inn, Tucson. Third international workshop. Contact Mary Humphrey, Conference Coordinator, Arizona Cancer Center, Tucson 85724, phone 602/626-2276.

Clinical Advances in Biotechnology--March 1, Hyatt Regency, Chicago. Contact Communitech Market Intelligence Inc., phone 914/245-7764.

Health Care for Women--March 2-4, Palm Springs, CA. Second annual symposium sponsored by the Univ. of California (Irvine) Cancer Center. Contact Marianne French, RN, Cancer Center, UCI Medical Center, 101 City Dr., Bldg 44, Rt. 81, Orange, CA 92668, phone 714/634-5081.

EORTC G.I. Tract Cancer Cooperative Group--March 3-4, Brussles, Belgium. Contact Prof. Dr. U. Metzger, Dept. Chirurgie, Universitatsspital, 8091,Zurich, Switzerland.

Biennial International Breast Cancer Research Conference--March 5-9, Tel Aviv Hilton Conference Center, Tel Aviv, Israel. Contact Dr. Iafa Keydar, Dean, Faculty of Life Sciences, Tel Aviv Univ., Ramat Aviv 69978, Israel, phone 972/3-413532.

Biennial Conference on Chemotherapy of Infectious Diseases and Malignancies--March 5-8, Montreux, Switzerland. Contact Congress Secretariat, PO Box 700640, D-8000 Munich 70, FRG, phone 089/780-9170.

Therapeutic Endoscopy and Bleeding Ulcers--March 6-8, NIH Clinical Center. Contact Susan Wallace, Prospect Associates, phone 301/468-6555.

Symposium Cancer du Pancreas--March 6-7, Paris, France. Contact Mme. S. Villedieu, Institut Curie, 26, rue d'Ulm, 75231 Paris Cedex, 05, France.

Sixth NCI-EORTC Symposium on New Drugs in Cancer Therapy--March 7-10, Amsterdam, Netherlands. Contact EORTC New Drug Development Office, Free Univ. Hospital, PO Box 7057, 1007 MB, Amsterdam, Netherlands, phone (0)20/548-5192.

Advanced Course in Cancer Pain Control--March 9-10, Oxford, UK. Contact Study Centre Coordinator, Sir Michael Sobell House, The Churchill Hospital, Oxford OX 3, 7LJ, UK.

Cancer Management Course--March 10-11, Lubbock, TX. Sponsored by Commission on Cancer, American College of Surgeons and St. Mary of the Plains Hospital. Contact Dr. David Close, Cancer Dept., American College of Surgeons, 55 E. Erie Street, Chicago, IL 60611, phone 312/664-4050.

Advances in Clinical Oncology--March 11-17, Snobird, Utah. Contact Mary Humphrey, Arizona Cancer Center, Tucson, AZ 85724, phone 602/626-2276.

Papillomaviruses--March 11-18, Taos, NM. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles, CA 90025, phone 213/207-5042.

Current Problems in Breast Cancer--March 12-15, Vienna, Austria. Contact Secretariat, International College of Surgeons, E. Ribar-Maurer, c/o Weiner Medizinishe Akademie, Alser Strasse 4, A-1090 Vienna, Austria.

Advances in Cancer Treatment Research and Autologous Bone Marrow Transplantation Symposium--March 16-18, Grand Hyatt Hotel, New York City. Contact Office of Continuing Medical Education, Albert Einstein College of Medicine, Montefiore Medical Center, 3301 Bainbridge Ave., Bronx, NY 10467, phone 212/920-6674.

Radiation Research Society and North American Hyperthermia Group--March 18-23, Seattle, WA. Annual meetings. Contact Radiation Research Society, 1101 Market St., 14th Floor, Philadelphia, PA 19107, phone 215/574-3153.

American Society of Preventive Oncology--March 20-21, Hyatt Regency, Bethesda, MD. Contact Dr. Richard Love, American Society of Preventive Oncology, 1300 University Ave.7C, Madison, WI53706, phone 608/263-6919.

EORTC G.I. Tract Cancer Cooperative Group--March 22-23, Nijmegen, Netherlands. Contact Prof. Dr. U. Metzger, Dept. Chirurgie, Universtatsspital, 8091, Zurich, Switzerland.

Midwest Regional Oncology Conference--March 24-26, Kansas City, MO. Contact Beth Paul, Center for Continuing Education, St. Luke's Hospital of Kansas City, Wornall Rd. at 44th, Kansas City, MO64111, phone 816/932-2301.

Cancer Update--March 24, London, UK. Contact Conference Centre Manager, Royal Marsden Hospital, Fulham Road, London, SW3 6JJ, UK.

Molecular Mechanisms in DNA Replication and Recombination--March 27-April 3, Keystone, CO. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles, CA 90025, phone 213/207-5042.

Assn. of Community Cancer Centers--March 29-April 1, Washington, D.C. 15th national meeting. Contact Carol Johnson, ACCC, 11600 Nebel St., Suite 201, Rockville, MD 20852, phone 301/984-9496.

Monoclonal Antibody Immunoconjugates for Cancer--March 30-April 1, San Diego, CA. Contact Cass Jones, Meeting Management, 3770 Tansy St., San Diego, CA 92121, phone 619/453-6222.

Oncogenes and Oncosuppressor Genes--March 30-April 1, Athens, Greece. Contact Prof. D.A. Spandidos, National Hellenic Research Foundation, 48, Vass. Constantinu Ave., Gr-11635 Athens, Greece.

FUTURE MEETINGS

In Vitro Toxicology: New Directions--April 4-5, Johns Hopkins School of Hygiene and Public Health, Baltimore, MD. Contact Program Coordinator, Office of Continuing Education, Turner 22, 720 Rutland Ave., Baltimore, MD 21205, phone 301/955-2959.

J. Donald Woodruff Symposium on Gynecologic Oncology--April 13-14, Lord Baltimore Radisson Plaza Hotel, Baltimore, MD. On April 15, the Huouston Everett Memorial Course in Gynecologic Urology. Sponsored by Dept. of Obstetrics and Gynecology, Johns Hopkins Medical Institutions. Contact Office of Continuing Education, Turner Building, 720 Rutland Ave., Baltimore, MD 21205 phone 301/955-2959.

Cultural and Religious Diversity: Implications for Health Care Professionals--April 25-26, Calvary Hospital, Bronx, New York. Contact Sr. Patricia Sheridan, Calvary Hospital, 1740 Eastchester Rd., Bronx, NY 10461, phone 212/518-2259.

Spirituality: A Neglected Dimension in Patient Care--June 8, Thruway Marriott Hotel, Rochester, NY. Sponsored by Genesee Valley Chapter, Oncology Nursing Society. Conact Michele Haller, Strong Memorial Hospital, 601 Elmwood Ave., Rochester, NY 14642, phone 716/257-2171.

Transrectal Ultrasound in the Diagnosis and Management of Prostate Cancer--Sept. 14-16, Chicago, IL. Sponsored by Huron Valley Radiology, Catherine McAuley Health Center, Ann Arbor, MI. Contact Diversified Conference Management Inc. PO Box 2508, Ann Arbor, MI 48106, phone 313/665-2535.

EORTC Symposium on Advances in Gastrointestinal Cancer: Research and Treatment--Nov. 15-17, Strasbourg, France. Contact Dr. J.P. Arnaud, 19 rue Louis Pasteur, Schiltigheim B.P. 120, 67042 Strasbourg Cedex, France phone 88/628300 or 88/628329.

RFAs Available

RFA 89-CA-07
Title: The relationship between blood and tissue micronutrient levels in humans
Application receipt date: March 27
Letter of intent receipt date: Feb. 3

The Div. of Cancer Prevention & Control of NCI invites applications for grants to study the relationship between blood and tissue micronutrient levels in humans. Micronutrients of interest are those that have been found to be associated with cancer risk. Studies comparing blood and tissue micronutrient levels with cancer risk are also encouraged as is methods development for collecting tissue specimens suitable for the quantitative analysis of micronutrients. It is anticipated that there will be four awards.

Much of the knowledge about the relationship between micronutrients and cancer comes from studies in which serum or red blood cell nutrient levels have been correlated with cancer incidence. Although blood micronutrient levels are presumed to reflect tissue levels, human data in this area are limited. In fact, some evidence suggests that in many cases blood levels may not reflect tissue micronutrient content.

The purpose of this RFA is to solicit applications from qualified investigators interested in analyzing blood and tissue micronutrient content in humans. Subjects can include both individuals without established cancer risk factors as well as those with premalignant lesions and cancer.

When using subjects with cancer or premalignant lesions such as cervical dysplasia or bronchial metaplasia, comparisons of blood and tissue micronutrient levels with control subjects are encouraged.

Tissue micronutrient content of cancerous and/or premalignant tissue can also be compared to normal tissue from the same subject. Micronutients chosen for analysis should be those for which there is evidence indicating an association with cancer risk. Examples are beta carotene, folate, vitamins C and E, calcium and selenium.

When methodology to determine tissue and/or blood micronutrient content is not available, the applicant should develop methods for obtaining tissue and/or blood samples suitable for micronutrient analysis. Ideally, samples should be suitable for multiple analysis.

Approximately $900,000 total costs per year for four years will be committed to specifically fund applications submitted in response to this RFA. It is anticipated that four awards will be made. The earliest feasible start date for the initial awards will be Nov. 27, 1989.

A copy of the complete RFA may be obtained from Mark Messina, PhD, Program Director, Diet & Cancer Branch, NCI, DCPC, EPN 212C, Bethesda, MD 20892, phone 301/496-8573. Written and telephone inquiries are encouraged.

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 Executive Plaza room number shown, National Cancer Institute, NIH, Bethesda, MD 20892. Proposals may be hand delivered to the Executive Plaza, 6130 Executive Blvd., Rockville, MD. RFP announcements from other agencies will include the complete mailing address at the end of each.

RFP NCI-CM-97597-30
Title: Shallow water marine organism collection
Deadline: Maarch 27

The Developmental Therapeutics Program of NCI's Div. of Cancer Treatment wishes to establish contracts for the collection of marine organisms for evaluation as sources of potential antineoplastic agents. This contract is a continuation of the original contract awarded in 1986 which was terminated in 1987. The ultimate goal of this effort is to discover agents of novel structural types which can be developed for the selective treatment of cancer in man.

Contractors should be able to provide qualified personnel, materials and equipment for the collection, storage and shipping of 1,000 marine samples per year to NCI designated extraction and isolation facilities. Collections will comprise approximately 1-1.5 kg of each organism collected at depths down to 100 feet. Properly relaxed and preserved voucher specimens of each organism will be submitted for unambiguous identification and deposit in a designated repository.

The contractor will be expected to provide detailed documentation, including identification of each organism collected, habitat, and location of the collection site in a computer format provided by NCI. The collection team should include a qualified marine taxonomist and certified SCUBA divers experienced in marine organism collection.

The principal investigator should be experienced in the organization of collection programs, and have at least five years of experience of marine organism collection.

The program focuses on the collection of invertebrate species from as wide a variety of classes and genera as possible. To this end, the geographic location of proposed collection areas will be important and while the Indo-Pacific region has been the focus of previous collections, collections in other areas of the world will be favorably considered if suitably justified.

All necessary negotiations with foreign governments and local agencies concerning the collection and shipment of organisms will be carried out by the contractor.

The government anticipates two incrementally funded awards to be made to cover a period of two years for each award.

Contract Specialist: Elsa Carlton
RCB Executive Plaza South Rm 603
301/496-8620

NCI CONTRACT AWARDS

Title: Cancer communications program evaluation
Contractor: Prospect Associates, $2,050,231

Title: Computer support for cancer information dissemination
Contractor: Second Foundation Inc., $6,870,212

Title: Cancer information processing for the PDQ information system
Contractor: Technical Resources Inc., $163,563

Title: Feral mouse breeding colony and attendant support services
Contractor: Hazleton Laboratories America Inc., $440,319

Title: Dietary surveys and food composition data
Contractor: Technical Assessment Systems Inc., $1,279,-216

Title: Effect of periodic screening for occult stool blood on mortality from colorectal cancer
Contractor: Univ. of Minnesota, $10,300,000