THE CANCER NEWSLETTER

11800 Sunrise Valley Drive, Reston, Virginia 22091 Phone 703—471-9695

Vol. 1 No. 33

Sept. 20, 1974

Subscription $100 per year

NCI TO PROCEED WITH ITS TRAINING PROGRAMS WITHOUT WAITING FOR IMPLEMENTATION OF RESEARCH SERVICE ACT

The National Research Service Act repealed most of the other authorities under which research training had been conducted, but NCI still may conduct its own clinical training programs separate from those authorized by the new law and without the payback feature of that law.

Implementation of the new law is still months away. NIH has not yet drawn up regulations and has not decided who will conduct the review of applications. Also, the Act requires that the National Academy of

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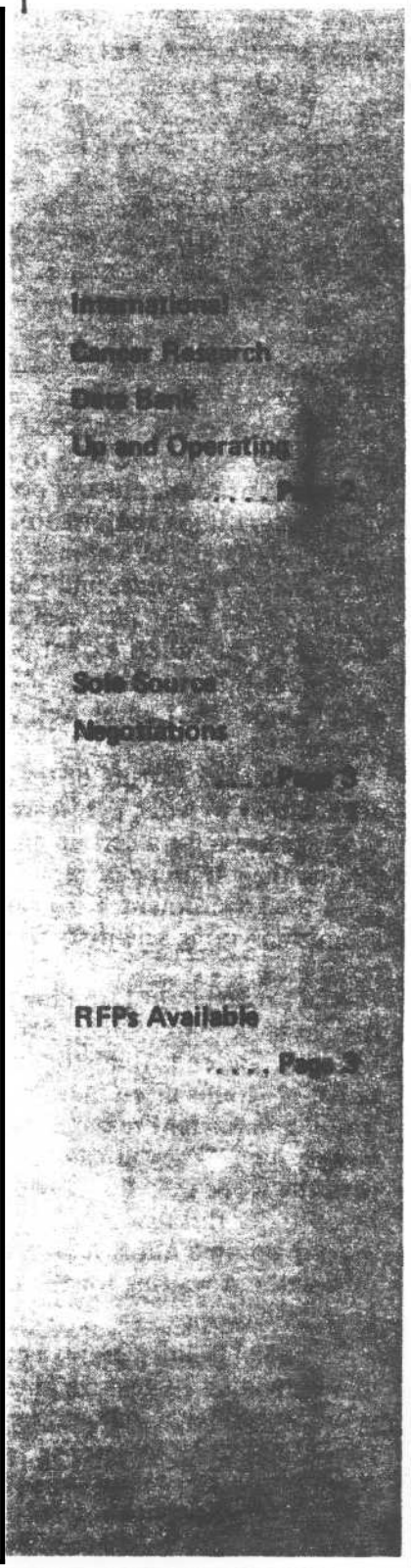
In Brief

RFP OFFERS PATENT RIGHTS INSTEAD OF PROFIT; ACS, NCI PLAN MORE JOINT PROJECTS; BC REPORT SEPT. 30

CHEMOTHERAPY RFP for synthesis of anthracyclene antitumor agents (NCI-CM-43758, *The Cancer Newsletter*, Aug. 9) was written to encourage industrial contractors to draw up proposals in which they would accept patent rights to products developed under the contract in lieu of a fee or profit. Offerors have three options: cost-plus-fixed fee with the standard patent clause in which the government retains the patent rights; cost-plus-reimbursement with the standard patent clause; and cost-with-no-fee, with a special patent clause conferring certain patent rights on the contractor (this option available only to industrial organizations). Deadline for submission of proposals is Oct. 15 . . . . **JOINT NCI-ACS** breast cancer screening program is working out so well that additional collaborative efforts are being considered. American Cancer Society representatives and NCI have set up a conference on nutrition as it relates to cancer for May, 1975, in Key Biscayne. . . . **THE 100** consultants NCI may hire without counting against the personnel ceiling, authority specifically granted in the Cancer Act, may be shared with other institutes at NIH. NCI has offered to let other institutes fill some of those slots provided the consultants they hire perform work in some way related to cancer. . . . **NATHANIEL BERLIN**, chief of NCI's Div. of Cancer Biology & Diagnosis, will present a "report to the profession" on breast cancer Sept. 30. . . . **FIRST WOMAN** to head an NIH institute is Ruth L. Kirschstein, who has been appointed director of the National Institute of General Medical Sciences. She has been deputy associate commissioner for science at FDA, before that deputy director of FDA's Bureau of Biologics and was assistant director of that bureau when it was known as the Div. of Biologic Standards before it was moved from NIH to FDA. . . . **WILLIAM A. WALTER JR.**, deputy director of NCI's Div. of Cancer Research Resources & Centers, has received his second PHS Commendation Medal for continued excellence and significant contributions to the NCI grant, construction and centers programs.



NCI TO SUPPORT PRE, POST DOCTORAL CLINICAL TRAINING; NO PAYBACK

(Continued from page 1)

Sciences must determine in which disciplines shortages exist, and training programs may be initiated only in those areas. NAS has formed a group headed by Philip Handler to make the necessary surveys, but its report will not be ready for some time.

Another factor that could delay new training programs is that, while the law authorizes $208 million per year, no money has been included in the fiscal 1975 appropriations bill now moving through Congress. Funds probably will be included in a supplemental appropriations measure, but that won't be completed until late in the fiscal year.

The new law repeals all previous existing authority under which NIH had operated its old research training and fellowship programs. It also eliminates the "Weinberger fellowships" which the HEW secretary developed as a compromise between his hard-line no training stance and the scientific community's demand for continued research training support.

The newly-revised National Cancer Act, however, specifically authorizes NCI to establish clinical training programs, both pre and post doctoral, with individual fellowships and institutional grants. Director Frank Rauscher and Thomas King, head of the Div. of Research Resources and Centers, told the President's Cancer Panel last week that this authority will be used to the fullest extent possible.

"Under the new Act, we'll have to wait," King said. "Under the Cancer Act, we can move ahead and we are."

The payback feature of the new Act requires students either to work in research, education or MD-shortage areas for a certain amount of time after completing their training or repay stipends they received from the government. King said this will deter many promising young scientists from participating in the program.

NCI's own clinical training programs will not have the payback requirement. Panel Chairman Benno Schmidt contends that students in research educational programs more than earn their stipends, performing important research tasks for comparatively meager pay. "They already pay the government back with the work they do. Now they'll be paying it back twice under this new Act," Schmidt said.

King pointed out several programs NCI may undertake without waiting for the new law to become operational:

—Clinical training grants (institutional grants).

—Individual clinical training fellowships.

—Post-residency fellowships (an NCI program phased out in 1973).

—Special fellowships for overseas training, including an exchange with foreign students.

—Practicing physician fellowships through the cancer centers. MDs could participate in seminars, clinical rounds, demonstration programs. The award would be $10,000 a year, King said.

—Allied health professions fellowships.

—Payment of stipends to students participating in NCI's clinical education improvement program, approved earlier this year strictly as an institutional program without trainee stipends.

Margaret Edwards has been selected to head the clinical education improvement program. King is still searching for someone to direct all of NCI's manpower training efforts.

The National Research Service Act authorizes individual predoctoral programs, individual post doctoral programs, and institutional pre and post doctoral training grants.

NCI and the National Institute of Mental Health appear to be the only agencies interested in supporting predoctoral programs. "There has been great sentiment for it here in the hope that we can draw into the cancer field people early in their careers," King said.

Support for predoctoral programs probably would include a tuition allowance of $2,500 and stipends ranging from $1,800 to $4,000. Guidelines and regulations have not been worked up.

Guidelines for post doctoral fellowships probably will follow those of the Weinberger fellowships because they are already in place and operating and will permit quick approval.

INTERNATIONAL RESEARCH DATA BANK UP AND OPERATING THROUGH NLM SYSTEMS

The International Cancer Research Data Bank (ICRDB) is "on line" and operating.

Gregory O'Conor, NCI associate director for international affairs, and John Schneider, data bank program director, described to the President's Cancer Panel how the computerized data bank works and what it is attempting to accomplish.

The ICRDB was mandated in the 1971 National Cancer Act at the insistence of Sen. Claiborne Pell (D-R.I.). At the Senate hearing on renewal of the Act earlier this year, Pell expressed his dismay that the program had not been implemented.

Objective of the ICRDB "is to actively promote and facilitate, on a world wide basis, the exchange of information between cancer scientists and the dissemination of information through cancer centers and other appropriation organizations," Schneider said in his presentation to the Panel.

The Program uses the National Library of Medicine's extensive computer system at NIH. Anyone with a valid code for use of the NLM system, including all Medline and Toxline users, may tap into the cancer data bank through ordinary telephone connections. Users must have an acoustic coupler, which costs about $1,500, and they may either use their own printer (about $2,000) or ask NLM to mail

the printed copies, at a cost of 10 cents per page. Users are charged $6 per hour for time the system uses in responding to queries, with a $12 minimum.

ICRDB has four segments--cancer information dissemination and analysis centers; scientist-to-scientist communication; clinical cancer data methods; and special cancer information project support.

Sources for data include descriptions of on-going cancer research projects; summaries of clinical cancer therapy protocols; abstracts of results published in journals; abstracts of books, monographs and reports; and information from special ICRDB-supported centers outside the U.S.

Specific products and services include:

–Steady stream of research results and project descriptions in narrow specific areas sent directly to researchers.

–Creation and updating of the Cancerline data base for on-line searching and retrieval.

–Technical bulletins with comprehensive coverage of specific research topics.

–Response to request for technical information.

–Special directories and listings.

The system currently has 15,000 cancer chemotherapy abstracts on-line. There will be 18,700 carcinogenesis abstracts entered by December, 1974. About 10,000 new abstracts will be added each year. It will include 10,000 descriptions of current cancer research projects, including summaries of clinical protocols.

The program includes more than the on-line use of the computer-stored data bank. The cancer information dissemination and analysis centers (CIDAC) will provide automated current awareness services to individual cancer scientists and small groups of scientists; publish technical bulletins on specific cancer topics; conduct information searches on request; monitor the quality of abstracts entered into data base; identify and describe significant new research findings; and stimulate researcher-to-researcher communication.

The scientist-to-scientist segment will attempt to encourage collaboration in developing new research techniques; enable scientists to collaborate on key experiments; and support research trips between countries. A research workshop program is planned.

SOLE SOURCE

Proposals listed here are for information purposes only. RFPs are not available.

Title: Use of lymphoma cells in vitro and in host-mediated bioassays as a potential prescreen for chemical carcinogenesis
Contractor: Arthur D. Little

Title: Hematology supportive care
Contractor: Microbiological Associates

Title: In vitro tests for tumor specific antigens, antibodies and immune cells with animal and human serum cells
Contractor: Litton Bionetics

Title: Phase I development of cancer patient data systems for comprehensive cancer centers
Contractor: Assn. of American Cancer Institutes

RFPs AVAILABLE

Requests for proposal described here pertain to contracts planned for award by the National Cancer Institute, unless otherwise noted. Write to the Contracting Officer or Contract Specialist for copies of the RFP. Some listings will show the phone number of the Contract Specialist, who will respond to questions about the RFP. Contract Sections for the Cause & Prevention and Biology and Diagnosis Divisions are located at: NCI, Landow Bldg. NIH, Bethesda, Md. 20014; for the Treatment and Control Divisions at NCI, Blair Bldg., 8300 Colesville Rd., Silver Spring, Md. 20910. All requests for copies of RFPs should cite the RFP number. The deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

RFP NCI-CN-55159-06

Title: *Community-based cancer control program*
Deadline: *Not yet determined; probably late October*

The Cancer Control Program is soliciting proposals for the demonstration and promotion of comprehensive cancer control measures through a community based effort. The following objectives must be accomplished:

–Develop community leadership in cancer control, and coordinate and wisely use community resources, as well as NCI and other federal resources, in a comprehensive cancer control effort.

–Mobilize the resources of the community so that a comprehensive cancer control program can become self-sustained.

–Put into effect a comprehensive cancer control scheme utilizing all tested and acceptable intervention procedures in a program especially designed for the community and based on known epidemiologic characteristics of the disease, and the demographic and socio-economic characteristics of the community.

–Establish an evaluation scheme whereby the community organization and NCI can monitor the progress of the program, and assess the impact of intervention activities against selected cancers within the community.

For purposes of this procurement a community is defined as "a natural or logical health services area. A community may include an entire metropolitan area, including its suburban and rural fringe; a segment of a large city; a large rural area including small towns and open country, or suitable combinations of these. It may comprise an entire state or a group of states."

An organization must be able to provide convincing assurances that it can speak for and act administratively in behalf of the community and for all the organizations therein with acknowledged interests and capabilities relative to the control of cancer.

An organization must be legally constituted so that it can receive and manage federal and state contracts and grants, and that it can receive and manage local funds.

An organization must present convincing evidence that an organized population-based cancer reporting system is present and functioning in the community, or that all of the resources and capabilities exist in the community from which a population-based cancer reporting system can be developed.

This RFP will give offerors the opportunity to propose on either Phase I—Planning or Phase II—Implementation, but not both. If a community is in the early stage of development, the responding organization representing that community should respond to Phase I—Planning. Completion of the work scope under Phase I can lead directly into Phase II—Implementation. If a community considers itself ready to start an action program, it should direct its proposal to Phase II.

Contracting Officer: Hugh E. Mahanes Jr.
Cancer Control
301-427-7984

RFP NCI-CN-55174-06

Title: *Mammography training for the early detection of breast cancer*

Deadline: *Not yet determined; probably mid-November*

The Cancer Control Program is soliciting proposals to expand the capability of health professionals in performing breast cancer screening examinations utilizing the techniques of mammography, thermography and clinical examination of the breast.

Proposals must demonstrate ability to initiate new or expanded training programs for health professionals in breast cancer screening examinations; develop curricula using educational methods consistent with the backgrounds of the proposed trainees in each type of course; develop a recruitment plan which will attract adequate qualified trainees; identify, select or recruit staff to conduct the program; develop an evaluation design for the overall program and for each proposed course.

It is anticipated that multiple awards may be made under this RFP.

Contracting Officer: Hugh E. Mahanes Jr.
Cancer Control
301-427-7984

RFP NCI-CM-53828

Title: *Investigation of clinical pharmacology of potential anticancer agents*

Deadline: *Oct. 11, 1974*

This project has been initiated to provide support for the pharmacologic study of antineoplastic agents in man. The scope of the studies will include obtaining basic information on the distribution and elimination of radio-labeled drug in man, the isolation and identification of major metabolites in plasma and urine, and in-vitro study of drug metabolism by available human tissues such as granulocytes or hepatic biopsy material.

The pharmacokinetics of plasma disappearance, urinary excretion and hepatic metabolism will also be a major subject of interest in this work. Agents selected for study will be those in active Phase I and Phase II trials, as designated by the government project officer, and laboratory work will be coordinated with ongoing clinical studies. Thus a strong liaison with a clinical oncology department will be necessary for execution of the provisions of this RFP.

The contractor will investigate the clinical pharmacology of potential anticancer agents with primary concern of the acquisition of data relating to the absorption, distribution, metabolism, and excretion of these agents in man. These agents may be currently in clinical trials, or they may be introduced at a later date. Analytic methods will be developed for the identification and measurement of the agent and its metabolites in physiological media. Limited studies will be conducted in experimental animals to correlate with and supplement observations made in patients. The selection of agents for study will be made by the project officer in concert with the contractor.

All drugs will be furnished by the government.

Performance of the above described services will entail approximately five man years of effort; however, offerors should make their independent assessment of the level of effort required, and develop their proposal accordingly.

Contract Specialist: Deborah J. Bowers
Cancer Treatment
301-427-7460

RFP NO1-CP-VO-53513-67

Title: *Organic synthesis of radioactive DNA oligonucleotide*

Deadline: *Oct. 25, 1974*

As part of its effort to provide appropriate quantities of a wide variety of reagents to qualified investigators involved in tumor virus research, NCI has initiated this proposal. There are no other program contractors currently involved in such a potential organic synthesis. Therefore, this effort will be unique in the Virus Cancer Program, and will require collaboration in the use of the radioactive DNA probe with other program funded contracts.

Increasing emphasis on the viral etiology of human cancer requires varied approaches to this problem. Many efforts are ongoing in the Virus Cancer Program toward the isolation of a human RNA tumor virus. However, this proposal will deal with an alternate approach to the identification of the genetic material

of an RNA-containing tumor virus in the DNA of mammalian cells.

In many species of mammals, it is known that the RNA-containing tumor viruses are harbored as a part of the normal genetic material of the cell, and that these viruses are expressed coordinately with the expression of malignancy in many different types of tissues.

The purpose of this contract is to synthesize a DNA oligonucleotide sequence, highly radioactive, which can be used to ascertain if mammalian cells, in which RNA-containing type-C viruses are not yet isolated, contain in their DNA the sequence to code for one of the major proteins contained in all RNA-containing tumor viruses from mice through monkeys. It might be possible by the synthesis of an appropriate DNA oligonucleotide sequence coding for this peptide sequence to ascertain if humans contain the information for the synthesis of this peptide sequence.

The contractor must have demonstrated a basic knowledge concerning organic chemistry. Background in the organic synthesis of DNA oligonucleotide would also be required for this problem. The contractor should also consider alternate ways to synthesize the labeled DNA sequence, with the highest possible specific activity.

The contractor must have facilities available to initiate the synthesis of the labeled ologonucleotide sequence.

Contract Specialist: W.R. Mundorf
Cause & Prevention
301-496-1781

RFP NCI-CM-53823-15

Title: *Biomedical engineering studies*
Deadline: *30 days after release of RFP, which probably will be Sept. 30*

NCI plans to negotiate a new contract for biomedical engineering research and development type services to provide support to NCI scientists engaged in diverse specialized and interdisciplinary cancer treatment research programs. The principal goal of this contract will be to advance cancer research through the utilization of new hardward, processes and systems that result from carefully structured engineer/medical scientist groups focused on diverse long-term problem areas and projects of importance to major NCI programs.

This procurement action will involve the recompetition of an on-going project currently being performed by Arthur D. Little Inc.

The proposed services will require that the contractor shall maintain (subcontracting permitted) a significantly varied staff of engineers and scientists, from which the appropriate skills can be extracted as needed and integrated with the specialized skills and interests of NCI scientists, clinicians, engineers and consultants, so as to formulate effective tasks groups to:

–Characterize various biomedical engineering problems relating to cancer research and the requirements for the solution of such problems.

–Conceive, design and provide instrumentation, products, processes and systems, which currently are non-existent.

–Design, conduct and analyze critical experiments to determine technical opportunities.

Interested organizations must demonstrate staffing resources that reflect broad competence in the fields of engineering and the life sciences, and the ability to quickly and flexibly apply such resources in support of priority areas of cancer research in the immediate future.

Conceivably the following fields of technology including cross disciplines might be applied to existing or new problem areas:

Electrical/electronic engineering–Circuit and circuit logic design and implementation, systems logic design, medical electronics, data transmission, image processing, pattern recognition, telemetry, electrophysics.

Mechanical engineering–Applied mechanics, properties of materials, rheology and dispersion systems, systems concepts and design.

Chemical engineering–Absorption and adsorption, chemical and mechanical separation, electrochemical operations, flue flow, heat transfer.

General engineering–Biomedical instrumentation, systems sciences (control, communication), acoustics, optical engineering, cyrogenics, etc.

Biochemistry–Clinical biochemistry, cytochemistry and histochemistry, enzyme chemistry, immunochemistry, physical biochemistry.

Biophysics–Biophysical chemistry, bioenergetics, cellular biophysics, fluid mechanics, molecular biophysics, cell membranes, etc.

Medical sciences–Cell biology, physiology, microbiology, immunology, pathology, pharmacology, toxicology, etc.

Contracting Officer: George E. Summers
Cancer Treatment
301-427-7463

RFP NCI-CM-53826

Title: *Studies in immunochemotherapy research*
Deadline: *On or about Nov. 14, 1974*

NCI is seeking the service of a contractor to conduct basic and developmental research on immunochemotherapy of experimental tumors that have originated in inbred (with emphasis on congenic-resistant strains) and genetically defined F1 hybrid mice.

The project aims are:

–Developing new tumor-host systems employing spontaneous or induced primary tumors in inbred (especially in congenic-resistant strains) and F1 hybrid mice, suitable for immunochemotherapy studies in various genetic situations.

–Perform immunochemotherapy studies employing established and new immunochemotherapy models using active, adoptive, passive or non-specific immunotherapy in conjunction with antineoplastic agents.

Minimal research staff required includes one supervisory professional (20%), two other professionals (80-100%) and three technicians.

Contracting Officer: George E. Summers
Cancer Treatment
301-427-7463

RFP NCI-CM-53766

Title: *Immunochemotherapy research on the action of anticancer agents on immune responses in-vivo and in-vitro*

Deadline: *On or about Nov. 14, 1974*

NCI is seeking the service of a contractor to conduct basic studies on the action of anticancer agents on immune responses in-vivo and in-vitro.

This program will include the following studies:

(a) Basic investigation and development of new models for studying:

–The effect of selected anticancer agents on functional activity of T and B cells.

–The effects of selected agents on macrophages.

–The effects of selected drugs on immune responses of mice against Hh (Hemopoietic-histocompatibility) incompatible bone marrow or lymphoma cells.

Minimal research staff required includes one senior professional (20%), two other professionals (80-100%) and three technicians.

(b) Studies employing established models aimed at testing the effects of antineoplastic agents on:

–Humoral immune responses.

–Cell-mediated immune responses.

–Immune responses of mice against Hh (Hemopoietic-histocompatibility) incompatible bone marrow and lymphoma grafts.

Minimal research staff required includes one senior professional (20%), one junior professional (80-100%) and two technicians.

Contracting Officer: George E. Summers
Cancer Treatment
301-427-7463

RFP NCI-CM-53767

Title: *Cancer chemotherapy research for development of biological systems for evaluation of antitumor agents*

Deadline: *On or about Nov. 14, 1974*

NCI is seeking a contractor with exceptional professional scientific qualifications, technical and supportive personnel and physical facilities to conduct basic research projects on development of biological systems for screening and detailed evaluation of established and experimental antitumor drugs.

The principle objectives of this contract will be to conduct basic studies to aid the DCT in:

–Development of new animal tumor systems with potential predictive value in selecting drugs which will be active in human solid tumors.

–Development, in-vivo and in-vitro, of tumor cell lines resistant to antitumor drugs and basic investigations of cross resistance and collateral sensitivity among antitumor agents.

–Basic chemotherapy research in experimental solid tumor models leading to the application of biochemical, cytokinetic and pharmacologic characteristics of experimental antitumor drugs to improve therapeutic response.

Candidates may respond on the basis of stated interests in projects aimed at any one or more of the above stated objectives.

Contracting Officer: George E. Summers
Cancer Treatment
301-427-7463

Three more RFPs were announced this week by the Immunology Branch of NCI's Div. of Biology & Diagnosis, bringing to 17 the number of immunology projects announced so far this fiscal year. (See The *Cancer Newsletter*, Sept. 6 and 13, for previously announced RFPs.) Details on each RFP will be published as they are made available by NCI.

RFP NCI-CB-53888-31

Title: *Systems analysis and information services resource for the international registry of tumor immunotherapy*

Deadline: *Nov. 1, 1974*

A bidder's conference will be held Oct. 11 in NIH's Landow Building, located in downtown Bethesda, Md., 7910 Woodmont Ave. The meeting will start at 9 a.m. and organizations are asked to limit their representatives to two. Those planning to attend should notify the Div. of Biology & Diagnosis research contracts branch, including names of representatives who will attend.

RFP NCI-CB-53889-31

Title: *Studies of immune response of mice and rats to tumor associated antigens*

Deadline: *Nov. 13, 1974*

NCI-CB-53890-31

Title: *NCI histocompatibility testing center*

Deadline: *Nov. 13, 1974*

The Cancer Newsletter—*Editor* JERRY D. BOYD

Published weekly by The Cancer Newsletter, 1411 Aldenham Lane, Reston, Va. 22090.