

NIH Guide for Grants and Contracts

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U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES

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The NIH Guide is published at irregular intervals to announce scientific initiatives and to provide policy and administrative information to individuals and organizations who need to be kept informed of opportunities, requirements, and changes in grants and contracts activities administered by the National Institutes of Health.

Two types of supplements are published by the respective awarding units. Those printed on yellow paper concern contracts: solicitations of sources and announcement of availability of requests for proposals. Those printed on blue paper concern invitations for grant applications in well-defined scientific areas to accomplish specific program purposes.

Have You Moved?

If your present address differs from that shown on the address label, please send your new address to: Grants and Contract Guide Distribution Center, National Institutes of Health, Room B3BN10, Building 31, Bethesda, Maryland 20205, and attach your address label to your letter. Prompt notice of your change of address will prevent your name from being removed from our mailing list.

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NOTICE

SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM

PUBLIC HEALTH SERVICE

In the February 25, 1983 issue of the NIH Guide for Grants and Contracts, a Notice was published indicating that the Public Health Service (PHS) is changing the first Small Business Innovation Research (SBIR) grant application receipt date of March 15, 1983 to May 1, 1983. The receipt was extended to allow eligible small businesses additional time to prepare their grant applications but will still enable the PHS to make SBIR awards in Fiscal Year 1983, that is, before September 30, 1983.

Other changes have also been made in the receipt dates that appear in the PHS Omnibus Solicitation in order to ensure timely processing and review of grant applications for the year beginning October 1, 1983, (Fiscal Year 1984). They are as follows:

- o The July 1 and November 1, 1983 receipt dates have been cancelled.
- o The two receipt dates for Phase I grant applications for which awards can be made in Fiscal Year 1984 are: October 1, 1983 and February 1, 1984.
- o The receipt date for Phase II grant applications for which awards can be made in Fiscal Year 1984 is: April 15, 1984.

The above changes will be reflected in the next printing of the PHS Omnibus Solicitation. Any questions concerning these dates should be directed to:

Ms. Lily O. Engstrom
PHS SBIR Program Coordinator
Office of Extramural Research
and Training
National Institutes of Health
Shannon Building 1 - Room 111
Bethesda, Maryland 20205

Telephone: (301) 496-5356

NOTICE

NATIONAL RESEARCH SERVICE AWARD GUIDELINES REVISED

The Special Edition of the National Research Service Award Guidelines for Individual Awards—Institutional Grants will soon be revised to reflect the change in activation period, the FY 1983 increase in stipend levels, and information pertaining to the involvement of human subjects in training projects. The revision will be published as a Special Edition of this volume (Vol. 12, No. 3, March 25, 1983) of the NIH Guide for Grants and Contracts. Copies will be distributed to institutional offices of sponsored programs and training grant program directors. A limited number of additional copies may be available upon request from the following address:

Office of Grants Inquiries
Division of Research Grants
National Institutes of Health
Bethesda, Maryland 20205

Telephone: (301) 496-7441

NOTICE

AVAILABLE NONHUMAN PRIMATES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

The National Heart, Lung, and Blood Institute supports a contract program for a resource of nonhuman primates, modelled for atherosclerosis, as well as control animals. The following animals are currently available for sale.

African Green Monkeys
(*cercopithecus aethiops*)

100 M/F	6 mo. - 6 yrs., domestic born, laboratory reared; 67 of these animals are adapted to an atherosclerotic diet
74 M/F	Adult, wild caught, laboratory housed since 1976; 45 of these animals have been adapted to an atherosclerotic diet

Stumptailed Macaques
(*macaca arctoides*)

102 M/F	6 mo. - 7 yrs., domestic born, laboratory reared; 90 of these animals have been adapted to an atherosclerotic diet
41 M/F	Adult, wild caught, laboratory housed since 1976; 32 of these animals have been adapted to an atherosclerotic diet

Prices: Negotiable plus shipping and crates. For further information please contact:

Litton Bionetics, Inc.
Kensington, Maryland 20895

Dr. Elizabeth Gard
Telephone: (301) 881-5600, Ext. 268

or

Dr. David Martin
Telephone: (301) 881-5600, Ext. 226

REQUEST FOR RESEARCH GRANT APPLICATIONS: RFA

NIH-NCI-DCCP-82-18

HEPATITIS B VIRUS AND PRIMARY HEPATOCELLULAR CARCINOMA:

BIOLOGICAL INVESTIGATIONS OF VIRUS-HOST INTERACTIONS AND

MECHANISMS OF CAUSATION OF HUMAN CANCER

NATIONAL CANCER INSTITUTE

Application Receipt Date: July 15, 1983

The Division of Cancer Cause and Prevention (DCCP) of the National Cancer Institute (NCI) invites grant applications from interested investigators for biological investigations of Hepatitis B Virus host interactions and mechanisms of causation of human cancer.

Grants are awarded to nonprofit and profit organizations and institutions, governments and their agencies, and occasionally to individuals. This type of grant solicitation (the RFA) is utilized when it is desired to encourage investigator-initiated research projects in areas of special importance to the National Cancer Program. Applicants funded under the RFA are supported through the customary NIH grant-in-aid, in accordance with PHS policies applicable to Research Project Grants, including cost-sharing. The RFA solicitation, however, represents a single competition, with a specified deadline for receipt of applications. All applications received in response to the RFA will be reviewed by the same National Institutes of Health (NIH) Initial Review Group (IRB) and by the National Cancer Advisory Board. The specific deadline for the receipt of response to the RFA is July 15, 1983. Applications should be prepared and submitted in accordance with the aims and requirements of the following sections:

- I BACKGROUND INFORMATION
- II OBJECTIVES AND SCOPE
- III MECHANISMS OF SUPPORT
- IV REVIEW PROCEDURES AND CRITERIA
- V METHOD OF APPLYING
- VI INQUIRIES

This program is described in the Catalog of Federal Domestic Assistance No. 13.393, Cancer Cause and Prevention Research. Awards are under authorization of the Public Health Service Act, Section 301(c) and Section 402 (Public Law 78-410, as amended, 42 USC 241, 42 USC 282) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency review.

I. BACKGROUND INFORMATION

Of approximately 4 billion people in the world, 210 million are chronic carriers of Hepatitis B virus. This agent is known to cause acute and chronic hepatitis, very probably cirrhosis, and there is very strong epidemiological evidence to indicate that persistent hepatitis B virus infection is associated with subsequent development of primary hepatocellular carcinoma in man. This linkage was discussed at an NCI conference on Hepatitis B virus and Primary Hepatocellular Carcinoma held on May 3 and 4, 1982. Although the role of the virus in the pathogenesis of any of these diseases is not clearly understood, some important phenomenological data has been accumulated, i.e., the long onset period from 20 to 30 years between the onset of persistent infection with the virus and development of liver cancer; the observation that males are more likely than females to develop chronic liver disease and primary hepatocellular carcinoma; and that infants are more likely to develop persistent infection and adults to develop transient infections. The existence of a 210 million chronic carriers of HBV worldwide coupled with recent data which indicates that the lifetime risk of developing liver cancer in these individuals may be approximately 40% indicates that primary hepatocellular carcinoma is a major public health problem worldwide.

Conference participants generally agreed that the NCI should be involved in studies of Hepatitis B Virus and Primary Hepatocellular Carcinoma since this agent was thought to be the best model in humans of a specific viral agent related to a specific cancer. They felt that the epidemiologic evidence linking the two was overwhelming but the basic knowledge of how the virus acts to cause disease or even whether or not it is a transforming agent is completely lacking. Thus both basic and clinically oriented studies should be pursued to gain information on the mechanism(s) by which the virus is causally implicated in the disease and to enable meaningful planning for intervention and prevention of hepatocellular carcinoma in man.

II. OBJECTIVE AND SCOPE

The intent of the RFA would be to encourage research to determine: (a) whether or not hepatitis B virus is a complete carcinogen in humans; (b) the molecular mechanisms underlying the viral transformation of hepatocytes to malignant cells in human and model systems; (c) the characteristics of model systems already developed in terms of their suitability for studying the development of hepatocellular carcinoma and establishing their relevance, if any, to human disease; (d) whether or not any of the gene products of the hepatitis B virus are transforming proteins.

The following representative research is projected: (1) studies to determine whether or not the Hepatitis B Virus is a complete carcinogen in cultured human liver cells or in animal model systems; (2) investigations on the mechanism(s) of oncogenesis of HBV including the role of integrated DNA in transformation, examination of virus coded proteins for transforming potential and development of in vitro model system(s) for transformation; (3) studies on the progression of acute hepatitis through chronic hepatitis to primary hepatocellular carcinoma, including studies on why tumors develop in only a limited number of individuals infected with the Hepatitis B Virus (possible host determinants to the process) and in the mechanism(s) by which chronic infections are maintained in the immunologically competent host; (4) studies on the site of pathology of the disease to shed light on the mechanism(s) of liver damage and carcinogenesis.

III. MECHANISM OF SUPPORT

This RFA will use the traditional National Institutes of Health (NIH) grant-in-aid. The RFA has identified the scope of the Institute's interest. It is expected that responsibility for the planning, direction and execution of the proposed research will be solely that of the applicant. The intent is to fund multiple projects, with total costs amounting to approximately \$900,000 for the first year. It is anticipated that awards will be made for a period of up to four years. This funding level is dependent on the receipt of a sufficient number of applications of high scientific merit.

IV. REVIEW PROCEDURES AND CRITERIA

- A. Applications must be responsive to this RFA, in the sense of being directed towards the attainment of the stated programmatic goals and fall within one or more of the specified research categories (see II. OBJECTIVES AND SCOPE). If the application is judged by the NCI not to be responsive, the applicant may have it considered as a traditional R01 grant, along with other applications in the next regular review cycle. Should the number of approved grants exceed the dollar set aside for this RFA, those not paid will be considered for funding with other traditional R01 grants in the same funding cycle.
- B. The factors considered in evaluating each response to this RFA will be:
 1. Scientific merit of research approach, design, and methodology.
 2. Research experience and competence of the Principal Investigator and staff to conduct the proposed studies.
 3. Adequacy of time (effort) which the Principal Investigator and staff would devote to the proposed studies.
 4. Adequacy of existing/proposed facilities and resources. Applications which specify proposed use of human specimens need to provide assurance and details concerning the nature, source and availability of these specimens to ensure completion of meaningful studies in a reasonable period of time.
 5. Scientific, technical or medical significance and originality of proposed research.
 6. Reasonableness of proposed costs.

V. METHOD OF APPLYING

- A. Format of Application
 1. Applications must be submitted on form PHS 398 (Rev. 5/82), the application form for research project grants. Application kits are available at most institution business offices, or may be obtained from the Division of Research Grants (DRG), NIH. The conventional

presentation in form and detail applicable to regular research grant applications should be followed, and the requirements specified under Review Criteria (Section IV above) must be fulfilled.

2. The number and title of this RFA should be typed in section 2 on the front page of the grant application form.

B. Application Procedure

1. The completed original application and six (6) copies should be sent or delivered to:

Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
5333 Westbard Avenue
Bethesda, Maryland 20205

an additional two (2) copies should be sent to:

Dr. John S. Cole, III
Biological Carcinogenesis Branch
Landow Building - Room 9A22
Bethesda, Maryland 20205

Telephone: (301) 496-6085

and one copy of this application should also be sent to:

Dr. Harold Waters
Division of Research Grants
National Institutes of Health
Westwood Building - Room 2A16
Bethesda, Maryland 20205

- C. To ensure their review, applications should be received by July 15, 1983. If applications are received after that date, the applicant will have the opportunity of having them considered, along with other unsolicited applications, in the next regular review cycle. The DRG will not accept any application in response to this announcement that is the same as one currently being considered by any other NIH awarding unit.

VI. INQUIRIES

Inquiries may be directed to Dr. John S. Cole, III, at the above address.

REQUEST FOR COOPERATIVE AGREEMENT APPLICATIONS: RFA

NIH-NCI-DRCCA-OSP-83-2

ADMINISTRATIVE COORDINATING CENTER FOR THE ORGAN SYSTEMS PROGRAM

NATIONAL CANCER INSTITUTE

Application Receipt Date: July 15, 1983

The Division of Resources Centers and Community Activities (DRCCA) of the National Cancer Institute (NCI) invites cooperative agreement applications from institutions capable and interested in establishing a Coordinating Center for the Organ Systems Program. This Request for Applications (RFA) will be utilized to initiate a program in an area of special importance to the National Cancer Program. All applications received in response to this RFA will be reviewed by the same National Institutes of Health (NIH) initial review group. An applicant if funded under this RFA will be supported through the cooperative agreement award in accordance with the policies of the Public Health Service (PHS) and NIH.

The awardee will have the primary responsibility for the planning and direction of the proposed Organ Systems Coordinating Center (OSCC). This will involve active participation and interaction with the NCI Organ Systems Program staff. NCI staff will work closely with the Coordinating Center staff on both administrative and scientific matters. NCI staff will participate with the Coordinating Center staff in the planning of program activities as well as in the annual evaluation of program priorities. NCI staff will periodically review progress to ensure that the Center conforms to the purposes and objectives of the program, as well as conditions of the award. The Board of Scientific Counselors of the DRCCA and the National Cancer Advisory Board will oversee these activities.

An applicant may apply for a project period of up to five years under this RFA. Only one award for an OSCC will be made. The specific amount to be funded will depend on the merit of the applications received and the availability of funds.

It is the intent of this RFA to create an OSCC in a location where a critical mass of resources and qualified cancer administrators and investigators already exists.

The present announcement is for a competition with a deadline for receipt of applications of July 15, 1983. An applicant institution is encouraged to submit a letter of intent and consult with NCI staff before submitting an application in response to this RFA. The letter of intent would be due by April 29, 1983.

This program is described in the Catalog of Federal Domestic Assistance Nos. 13.393, 13.394, 13.395, and 13.396. Grants will be awarded under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended: 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency review.

The successfully funded awardee institution will be required to present its findings and progress to the NCI annually at a specified meeting time. The presentation will include recommendations regarding present and future research pursuits for each organ system. An annual trip to Bethesda, Maryland, should be budgeted for this purpose.

An application for an OSCC should be prepared and submitted in accordance with the aims and requirements described in the following sections:

- I. BACKGROUND INFORMATION
- II. ORGAN SYSTEMS CONCEPT AND GOAL
- III. ORGAN SYSTEMS COORDINATING CENTER
 - A. Organ Systems Working Groups
 - B. Research to be Stimulated by the OSCC
 - C. Communication and Information Transfer
 - D. Criteria and Guidelines for Initiation of a New Organ System Focus and for Possible Termination of an Individual Program
 - E. The Director and Management Structure of the OSCC
 - F. Resources of the Applicant Institution
 - G. Budget, Resources and Data Bases
- IV. ROLE OF THE NATIONAL CANCER INSTITUTE
- V. NATURE OF COOPERATION WITH NCI STAFF
- VI. LETTER OF INTENT
- VII. METHOD OF APPLYING
- VIII. REVIEW PROCEDURES AND CRITERIA
- IX. INQUIRIES

I. BACKGROUND INFORMATION

The program currently in existence is the Organ Systems Program which consists of the former Breast Cancer Program and National Organ Site Program. These are coordinated grants programs of focused research. The Breast Cancer Program, formerly located in the Division of Cancer Biology and Diagnosis, NCI, and now transferred to the DRCCA, has been administered by an NCI staff functioning in close coordination with the Breast Cancer Task Force Committee. This is a multidisciplinary, extramural advisory committee made up of clinical and laboratory research scientists. The National Organ Site Program consists of four grant supported projects of targeted cancer research. Each project is a planned research effort oriented toward cancer at a specific organ site. Currently there are projects concerned with cancers of the large bowel, pancreas, prostate and urinary bladder. The planning, direction and coordination of each project are provided at a headquarters office outside the NCI. Four Project Directors are assisted in planning and administration by the four headquarters staffs and by committees of clinical and laboratory research scientists recruited from institutions throughout the nation.

In May 1982, the National Cancer Advisory Board recommended that the National Organ Site Program be reorganized into an Organ Systems Program with a mission to continue to focus on the large bowel, pancreas, prostate and urinary bladder, and begin to appraise progress in other organ systems in order to identify those which might require specialized attention. In addition, the Breast Cancer Program has been integrated into the Organ Systems Program. A single OSCC external to the NCI will replace the present four headquarters for the large bowel, pancreas, prostate and urinary bladder, and the center will have five Working Groups at the

outset: breast, large bowel, pancreas, prostate and urinary bladder. Each Working Group will be responsible for planning, coordination, monitoring, evaluation, and overview of the epidemiologic, laboratory and clinical research components of these programs. Interactions and communication among these components will be fostered through workshops and conferences, and will be maintained through other mechanisms as appropriate. Peer review of research grant applications submitted in response to OSCC Working Group recommendations will be performed as appropriate by initial review groups within the NIH Division of Research Grants (DRG) and NCI Division of Extramural Activities (DEA). The Organ Systems Program will be located within the DRCCA.

II. ORGAN SYSTEMS CONCEPT AND GOAL

This program initiative is being taken because cancers of the breast, large bowel, pancreas, prostate and urinary bladder pose substantial problems in terms of incidence, morbidity, and mortality. Existing research results indicate that there are approaches to these problems, but insufficient exploitation of the leads occurs despite knowledgeable investigators. The NCI and NCAB have considered such criteria and have concluded that there is a need for a targeted organ systems cancer effort. The concept of an OSCC linked with the NCI for complementary programmatic effort is being put forth to address this need. This external organization, the OSCC, will support regular meetings of multidisciplinary Working Groups of scientists in the five respective organ systems areas. These Working Groups will engage in comprehensive program planning identifying the epidemiological, laboratory and clinical research needed to stimulate advancements in these areas. Investigator-initiated, peer-reviewed research projects will be encouraged through program announcements and RFA's to fulfill the program plans.

The goal of the Organ Systems Program is to reduce cancer incidence, morbidity and/or mortality by:

1. Pursuit of targeted research through investigator-initiated efforts.
2. Application of a spectrum of research disciplines to cancer within specific organ systems.
3. Encouragement of accomplished investigators to study cancer in specific organ systems.
4. Encouragement of multidisciplinary collaboration in studying specific organ system cancers.
5. Recruitment of scientific and administrative expertise from the biomedical community for planning and implementing targeted research.

III. ORGAN SYSTEMS COORDINATING CENTER

An applicant institution must present an OSCC program and separate programs for organizing, planning, coordinating, monitoring, and evaluating interdisciplinary activities relating to cancers of the breast, large bowel, pancreas, prostate and urinary bladder.

The following outline describes the basics of an OSCC administrative program and indicates the sequence which should be followed in the application format:

1. Administrative program of the Coordinating Center:
 - a. Goals and objectives
 - b. Scope of the administrative plan
2. Scientific rationales and activities for each of the five program areas, including how program planning will be carried out, areas of scientific expertise to be involved and how they relate to the activities of the OSCC (the application should not identify individual scientists; they will be specified during the pre-award negotiation according to procedures outlined in section V.A. of this announcement).
3. Scientific rationales and activities for the interaction and coordination of the respective Working Groups.
4. Resources at the Coordinating Center in support of administrative activities:
 - a. Scientist administrators and support staff
 - b. Size and location of available space
 - c. Available resources

An application for the OSCC should provide administrative operational plans and scientific rationales for all proposed activities and will be reviewed with this in mind. The goals and objectives of the OSCC should be consistent with the goals and objectives of the National Cancer Program. The application must include plans for the initial five program areas. The qualifications of the scientist administrators at the OSCC and the organization and management of the OSCC should be presented clearly and succinctly. A description of the available physical space, institutional resources and data management resources at the proposed OSCC should be given.

A. Organ Systems Working Groups:

The planning and direction of scientific efforts for the Organ Systems Program will be provided by five multidisciplinary Working Groups (breast, large bowel, pancreas, prostate and bladder) of expert scientists recruited by the OSCC from institutions throughout the nation. These scientists will be actively engaged in areas of research relevant to the focus of the Working Group. The OSCC will be responsible for managing and coordinating the activities of the Working Groups as appropriate, for continuously evaluating the scientific programs for shifts in emphasis, and for identifying additional organ systems requiring attention. The application should indicate how the OSCC would propose to coordinate the activities of the Working Groups, and how criteria would be developed for initiating new organ system programs and, when necessary, terminating a particular program.

It is anticipated that a portion of the membership of the Working Groups will include members servicing on current NCI Breast, Large Bowel-Pancreatic and Bladder-Prostate committees. This will ensure continuity during the transition. Proposed rotation of Working Group membership should be provided.

A major function of the Working Groups will be to develop detailed program plans for focusing multidisciplinary research in the various organ systems, and to develop new initiatives as appropriate. These plans will be transmitted to the NCI through the OSCC. They will be updated frequently, and formally revised each year. Areas of emphasis will be established with each revision of the plans. The program plans will serve as guides for the kinds of activities needed to maximize the impact of the Organ Systems Program in the areas of prevention, detection, diagnosis, treatment and control.

Proposed RFAs will be submitted to the appropriate NCI Boards of Scientific Counselors. The OSCC and Working Groups with the assistance of NCI staff will publicize these special initiatives through appropriate mechanisms such as OSCC newsletters, NCI program announcements, to encourage investigators to apply for research grants to fulfill the aims and objectives of each program plan. In order to discharge its planning responsibilities, the Working Groups will be kept informed by NCI staff of all NCI supported research in their respective areas. A description of how each Working Group will monitor research activities should be provided.

B. Research to be Stimulated by the OSCC:

Work to be stimulated by the OSCC Working Groups through mechanisms described in section III.A. above will include epidemiological, laboratory and clinical research in cause and prevention, detection, diagnosis, pre-treatment evaluation, and treatment. The emphasis will be programmatic and multidisciplinary, not restricted by conventional categorical approaches. Basic research clearly focused on cancer of a specific organ system will be addressed if it is relevant to a program plan. Each Working Group will monitor and evaluate all organ systems research as part of its program planning and coordination activities.

C. Communication and Information Transfer:

The OSCC Working Groups will be responsible for state-of-the-art assessments for each of the organ systems involved. To meet this end, and to discharge their planning responsibilities, the Working Groups will conduct workshops and conferences on a timely basis to discuss areas deemed ready for research implementation, and will survey relevant fields and make appropriate recommendations. Such workshops and conferences would normally result in written communications for the scientific and medical professions, and might identify areas with potential for medical applications. These are examples of types of communication activities which the OSCC would undertake, and are not meant to be all inclusive.

D. Criteria and Guidelines for Initiation of a New Organ System Focus and for Possible Termination of an Individual Program:

The OSCC will develop criteria and guidelines for the possible initiation of a new Organ System Program, for the operation of the existent Programs, and for the possible termination, when necessary, of an individual Program. These criteria and guidelines will be subject to the review by the NCI, the DRCCA Board of Scientific Counselors and the National Cancer Advisory Board. As an example, this application should set forth what criteria and guidelines the OSCC would follow in designing a new Organ System Program for upper respiratory tract, and how such a new program would be established, phased in, and coordinated with the overall Organ Systems Program. (This specific example is intended to be illustrative and does not imply any commitment or preference by the NCI).

E. The Director and Management Structure of the OSCC:

The proposed Director of the OSCC should be a health professional with demonstrated competence in cancer research, and in cancer research administration. The Director will have recognized strong interest in, and professional identification with the cancer field. The Director, in collaboration with NCI staff and advised by the Working Groups, will be responsible for setting objectives and developing strategies for carrying out the Organ Systems Program. The Director also will be responsible for the day-to-day operation and administration of the Coordinating Center. The Director must make a significant commitment of effort to the OSCC. The general duties responsibilities and authority of the OSCC Director should be fully described. A description of the management structure and operating procedures for the OSCC and the Working Groups should be provided; mechanisms for communication, collaboration, and multidisciplinary input into the OSCC should be described. The OSCC should be organized around a core of highly competent scientist administrators. This should include an individual with a program planning background. Key personnel should have demonstrated capability for obtaining peer reviewed project support. These scientist administrators will be comprised of the Director of the Coordinating Center and the additional administrator(s) needed to achieve the goals of the OSCC. A detailed justification for the proposed core of scientist administrators must be presented by the applicant institution. This should include each administrator's qualifications, scientific contributions, level and type of effort which the administrator will contribute to the OSCC, and level of support requested. Curriculum vitae should be provided on all key professional and other staff; relevant publications should be cited.

F. Resources of the Applicant Institution:

The institutional setting of the OSCC should be described, including the institutional commitments in support of the OSCC, personnel available with appropriate expertise, and the relationship of the OSCC to the institutional and departmental structure.

The physical location of the OSCC, square feet of space available, and all resources in support of the OSCC should be described. It is desirable for an applicant institution to have a record of cancer research achievement and to have currently established programs of substantial cancer research supported

by funds obtained through competitive national peer review. The current administrative activities at the applicant institution which are relevant to the proposed OSCC administrative plan should also be described, as well as how these would relate to the proposed OSCC.

G. Budget, Resources and Data Bases:

A detailed budget with time and effort for OSCC scientist administrators and support personnel should be included and justified. The number of consultants required, travel required, and general supplies for the OSCC as well as support for the operation and management of the Working Groups should be fully described and justified. Support for Working Groups may be subcontracted as needed. A brief description of each resource should be provided, explaining its significance in support of the program activities, the proposed users, and the total personnel and other costs. The budget should justify each resource within the OSCC. Resources include any equipment, facility, or material which supports the entire administrative program of the OSCC or which is used by administrators within the OSCC. Information should be provided on the capability of an applicant institution to utilize existing data bases at the NIH or elsewhere in each of the five organ systems areas. Details should be provided on plans for developing additional data relevant to the areas to be studied, and on the resources for storing and analyzing these data at the OSCC.

IV. ROLE OF THE NATIONAL CANCER INSTITUTE

The Director of the NCI is ultimately responsible for the Organ Systems Program and fulfills this responsibility through the Director, DRCCA, and Organ Systems Program Branch, DRCCA. NCI Program Directors within the Organ Systems Program Branch will provide liaison and guidance, and will participate in planning, organizing and administering the Organ Systems Program. They will provide liaison between the OSCC Director, the Working Groups, and the NCI. They assure that the Organ Systems Program will function within the framework of policies and regulations which govern all NIH extramural programs. They will be available to the OSCC Director and the Working Groups for consultation, and they can be expected to coordinate the Organ Systems Program with other NCI programs. To provide this liaison, NCI Program Directors will participate in the activities of the Working Groups, in the workshops of the Organ Systems Program, and in meetings and workshops of related programs of other Divisions of the NCI and NIH.

Annual progress reports will be submitted by the OSCC to the Organ Systems Program Branch and will be reviewed by the DRCCA Board of Scientific Counselors. At appropriate intervals, progress will be reviewed by the Director, NCI, the NCAB and President's Cancer Panel. Report format will be provided by DRCCA staff.

V. NATURE OF COOPERATION WITH NCI STAFF

A. Membership of Working Groups:

It will be the responsibility of the OSCC to form the membership of the Working Groups subject to NCI approval. Each group will include a member from the NCI Organ Systems Program Branch. Membership rosters will be submitted by the OSCC for approval by the Chief, Organ Systems Program

Branch. If any part of the membership is unacceptable to the NCI, the specific reasons for lack of approval will be communicated to the OSCC within 15 working days after receipt of the membership rosters. NCI staff will work with the OSCC to resolve any differences. If these differences cannot be resolved, they will be submitted to an arbitration panel appointed by the Director, DRCCA, NCI, with concurrence by the OSCC. This appeals process in no way affects the right of the OSCC to subsequently appeal an adverse determination using the NIH informal appeals system and the formal Department of Health and Human Services procedures.

B. Quality Control:

NCI staff will review, monitor and assess the mechanisms and procedures developed to carry out the objectives of the OSCC.

C. Scientific Resources:

NCI staff will serve as a resource for information on pertinent intramural and extramural NCI funded activities. This staff will assist the Working Groups in gathering and coordinating information for their planning activities.

D. Data Management:

NCI staff will have access to all data available at the OSCC and will periodically review data management by the OSCC. Data must be available for external monitoring if required by the NCI.

E. Reporting Requirements:

It will be the responsibility of the applicant to develop the details of a process by which the OSCC will report and record the activities of the Working Groups. An annual progress report of the OSCC will be submitted to the NCI, Organ Systems Program Branch. A report format will be provided. Following receipt of the report, progress will be reviewed by NCI staff and the DRCCA Board of Scientific Counselors.

VI. LETTER OF INTENT

A letter of intent may precede the submission of a cooperative agreement application, and would be due by April 29, 1983. This should be suitable for review for responsiveness to this RFA. All such letters will be answered by NCI staff within ten working days.

VII. METHOD OF APPLYING

Institutions within the United States may apply. Complete applications are due before close-of-business July 15, 1983, and must address all requirements as represented in this RFA. An application should be submitted on Form PHS-398 (Revised 5/80), which is the application for the traditional research project grant and is available in the business or grant contracts offices at most academic and research institutions, or from the DRG, NIH, Bethesda, Maryland 20205. There are no page limitations; however, applications should be as concise as possible. The words Organ Systems Coordinating Center should be typed in bold letters on line number two of the face page of the application and also on the outside of the

mailing package. Additionally, a brief covering letter should accompany the application indicating that it is being submitted in response to this RFA. The original and six copies of the application should be submitted to the DRG, NIH, as directed in the grant application instruction.

An additional copy should be sent to:

Referral Officer, Grants Review Branch
Division of Extramural Activities
National Cancer Institute
Westwood Building - Room 826
5333 Westbard Avenue
Bethesda, Maryland 20205

Two additional copies should also be sent to:

Chief, Organ Systems Program Branch
Division of Resources Centers and
Community Activities
National Cancer Institute
Blair Building - Room 3A05
8300 Colesville Road
Silver Spring, Maryland 20910

VIII. REVIEW PROCEDURES AND CRITERIA

Applications responding to this RFA will be reviewed by an appropriate initial review group of the NIH. Final review will be provided by the National Cancer Advisory Board.

Reviewers will consider the application in terms of the capability to implement the operations and activities described in sections III.A. through III.G. above. Attention will be directed toward:

1. Proposed programmatic activities including planning capabilities;
2. Scientific rationales and administrative plans for implementing and managing the proposed programmatic activities;
3. Disciplinary composition of the Working Groups with respect to balance and breadth of types of expertise, (individual scientists are not to be identified);
4. Resources of the applicant institution;
5. Qualifications and experience of the proposed OSCC Director as related to ability to organize, manage and direct an OSCC;
6. Qualifications, experience, proposed duties and responsibilities of other professional and support personnel.

IX. INQUIRIES

Inquiries related to further information, application development or letter of intent should be directed to:

Andrew Chiarodo, Ph.D.
Chief, Organ Systems Program Branch
Division of Resources Centers and
Community Activities
National Cancer Institute
Blair Building - Room 3A05
8300 Colesville Road
Silver Spring, Maryland 20910

Telephone: (301) 427-8818

ORGAN SYSTEMS COORDINATING CENTER

TIMETABLE

March 25, 1983	-	Formal Release of the Request for Application
April 29, 1983	-	Receipt of letters of intent
July 15, 1983	-	Due date for applications
September- November 1983	-	Review of applications
January 1984	-	Review of applications by the National Cancer Advisory Board
March 1, 1984	-	Initial Award

ANNOUNCEMENT

NON-INVASIVE APPROACH FOR DETECTION OF LUNG CANCER

NATIONAL CANCER INSTITUTE

The Diagnosis Branch of the National Cancer Institute (NCI) is inviting grant applications from interested investigators for pilot studies involving the use of gas chromatographic-mass spectrometric techniques for the chemical analysis of the volatile organic components of human expired air in an attempt to identify and quantitate characteristic constituents associated with lung cancer which may have potential for early diagnosis of this malignancy. Profiles or patterns from lung cancer patients should be distinguished from those of patients with pulmonary granuloma, pneumonia, chronic bronchitis, bronchiectasis, emphysema and other associated pulmonary diseases. The technology is available and capable of automation if pilot studies should suggest that larger studies would be worthwhile. This could provide a non-invasive method for the identification of persons at high risk and those with early pulmonary tumors who would benefit from further diagnostic tests.

I. BACKGROUND

Lung cancer mortality has increased continuously over the last half century. The high mortality is felt by many to be due to late diagnosis. Because current screening methods by sputum cytology and chest radiography, individually or in combination, do not provide convincing evidence that this dilemma can soon be resolved, other approaches to detection must be sought. Findings from studies in physiological chemistry show that the composition of expired air in health reflects amounts of all volatile constituents in the blood, and that in disease it would include those compounds which are intimately associated with pathologic processes. Hence, volatile expired constituents offer a potential source of quantitative information not only of the disease processes but may also serve as chemical signals for early detection and diagnosis of disease states of the body. Preliminary data is already available on normal profiles for correlation with the disease state. Other studies have documented the significance of this technique in detecting chemical exposure. These proposed studies would be a first step in evaluating volatile components in expired air to assess their value in the diagnosis of lung cancer. Lung cancer patients would be compared with benign lung disease patients and healthy matched controls. The study would also look for correlations between the magnitude of any marker compounds and the estimate of tumor burden.

This program is described in the Catalog of Federal Domestic Assistance, No. 13.394, Cancer Detection and Diagnosis Research. Grants will be awarded under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended: 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency review.

II. APPLICATION AND REVIEW PROCEDURES

Applications should be submitted on Form PHS-398 which is available at most institutional business offices or from the Division of Research Grants (DRG), National Institutes of Health (NIH). There are three receipt dates each year for new applications: March 1, July 1, and November 1. Review and award of the successful applications will be in accordance with the usual NIH procedures governing research grants. Funding decisions will be based upon scientific merit, program relevance and the Institute's ability to fund.

The title of this Program Announcement should be typed in Section 2 on the front page of the grant application form. The original and six copies of the application should be sent or delivered to:

Applications Receipt Office
Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
Bethesda, Maryland 20205

In order to alert the Diagnosis Program to the submission of proposals as requested above, copies of the face page and summary page of such applications should be forwarded under separate cover to:

K. Robert McIntire, M.D.
Chief, Diagnosis Branch
Program Director, Diagnosis Program
Division of Cancer Biology and Diagnosis
National Cancer Institute
Bethesda, Maryland 20205

Telephone: (301) 496-1591

Additional information regarding the program may be obtained by contacting Dr. McIntire.

ANNOUNCEMENT

SPECIFIC IMMUNOASSAYS FOR CANCER ASSOCIATED ISOENZYMES

NATIONAL CANCER INSTITUTE

The Diagnosis Branch of the National Cancer Institute (NCI) is encouraging submission of individual research grant applications for studies involving the development of sensitive quantitative assays using monoclonal antibodies which could accurately identify and monitor levels of various isoenzymes that have been shown to be quantitatively increased in certain cancers. The objective of this research would be to determine the value of analyzing isoenzymes levels in the serum as potential diagnostic and prognostic tumor markers. Efforts should be made to relate specific isoenzymes to given tumor types and demonstrate a correlation with changes in tumor mass.

I. BACKGROUND

A large number of isoenzymes have been linked with human cancer. However, there are many inconsistencies in the data, some of which may be due to variations in the specificities and cross-reactivities of the antibodies, others to problems in detecting low but still abnormal levels in serum by classical electrophoretic and staining techniques. In addition, some of the isoenzyme forms in tumor extracts have similar charges, hence, cannot be easily distinguished by electrophoresis alone. Monoclonal antibodies directed against the individual forms should help distinguish them.

Some isoenzymes which are known to have structural differences, have not been distinguished by classical immunological techniques using xenogeneic antisera. Monoclonal antibodies could have the necessary specificity to distinguish these forms, allowing the cancer associated isoenzyme to be used as a tumor marker. Minor changes unnoticed by earlier techniques might indicate antigenic forms of the enzyme specific for a particular tumor.

There is a need for developing antibodies that recognize isoenzymes with great specificity and are not dependent upon functional activity or physicochemical properties of the enzyme for that specificity. Monoclonal antibodies have become very powerful new tools in biology and medicine since the "hybridoma" technique was first described by Kohler and Milstein. The development of these antibodies would provide the technology for the production of antisera with the built-in ability to insure reproducibility of results for unlimited numbers of tests. The hybridoma technique is widely used for detection of tumor-related surface antigens. However,

This program is described in the Catalog of Federal Domestic Assistance, No. 13.394, Cancer Detection and Diagnosis Research. Grants will be awarded under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency review.

little is being done to exploit its potential use in identification and quantitation of cancer associated isoenzymes. This announcement is a step in stimulating research in this direction.

II. APPLICATION AND REVIEW PROCEDURES

Applications should be submitted on Form PHS-398 which is available at most institutional business offices or from the Division of Research Grants (DRG), National Institutes of Health (NIH). There are three receipt dates each year for new applications: March 1, July 1, and November 1. Review and award of the successful applications will be in accordance with the usual NIH procedures governing research grants. Funding decisions will be based upon scientific merit, program relevance and the Institute's ability to fund.

The title of this Program Announcement should be typed in Section 2 on the front page of the grant application form. The original and six copies of the application should be sent or delivered to:

Applications Receipt Office
Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
Bethesda, Maryland 20205

In order to alert the Diagnosis Program to the submission of proposals as requested above, copies of the face page and summary page of such applications should be forwarded under separate cover to:

K. Robert McIntire, M.D.
Chief, Diagnosis Branch
Program Director, Diagnosis Program
Division of Cancer Biology and Diagnosis
National Cancer Institute
Bethesda, Maryland 20205

Telephone: (301) 496-1591

Additional information regarding the program may be obtained by contacting Dr. McIntire.

ANNOUNCEMENT

MINORITY HYPERTENSION RESEARCH DEVELOPMENT SUMMER PROGRAM

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: September 15, 1983

The Division of Heart and Vascular Diseases (DHVD) of the National Heart, Lung, and Blood Institute (NHLBI) is accepting new and competing renewal applications for Institutional National Research Service Awards for research training under the Minority Hypertension Research Development Summer Program.

The Minority Hypertension Research Development Summer Program is intended to (1) encourage the recruitment and development of minority investigators in specialized areas of research, prevention, control and education related to hypertension and (2) stimulate hypertension research, prevention, control and education by offering minority school faculty members and graduate students the opportunity to enhance their research capabilities in these areas.

Training will be offered through hypertension training centers which have well-established hypertension research and training programs and are within 100 miles of (a) minority school(s) or provide satisfactory alternative arrangements for communication and exchange. The centers will collaborate with minority schools to work out plans for the identification, selection and development of participating minority school faculty members or graduate students.

Minority schools are those in which a majority or significant proportion of its enrollment is comprised of students of minority ethnic groups including, but not limited to Blacks, Spanish-speaking Americans, Native Americans, Pacific Islanders and Asian Americans, and which have a demonstrated commitment to the special encouragement of minority faculty, students, and investigators. The minority school must commit itself to encouraging appropriate faculty members or graduate students to participate in this program, to continue the faculty members or graduate students in status after the summer session(s) and guarantee at least limited resources for his or her hypertension research and teaching activities.

Participating faculty members or graduate students must be nominated by the minority school, be accepted by the Training Center, and agree to report annually for six years after training on his or her academic status, publications, grants and/or contracts and teaching activities related to hypertension.

This program is described in the Catalog of Federal Domestic Assistance Nos. 13.397, Heartt and Vascular Diseases Research. Awards will be made under the authority of Public Health Service Act, Section 472, 42 USC-2891-1 and administered under PHS grants policy and Federal Regulation 42 CFR Part 66. This program is not subject to A-95 Clearinghouse or Health Systems Agency review.

Applications may request funds to provide stipends for the duration of a summer program of \$1,170-\$1,643 per month for minority school faculty member participants and \$441 per month for minority school graduate student participants. In addition, funds may be requested for trainee travel; tuition and fees essential to the training; health insurance coverage for participants during the summer session; and up to \$1,250 per faculty member and \$750 per graduate student for institutional allowances which includes personnel, supplies, equipment essential to the program, and consultant costs when specifically justified. Indirect cost allowances will be limited to 8 percent of the total allowable direct costs or the actual rate, whichever is lower. These budget items are subject to administrative revision.

The present announcement is for a single competition with a September 15, 1983 receipt date for applications. These applications will be reviewed at the February 1984 meeting of the National Heart, Lung, and Blood Advisory Council. Awards will be made beginning May 1, 1984. Applications not received by September 15, 1983, will be returned to the applicant. Guidelines for the development of the application may be obtained by contacting Dr. George A. Hayden at (301) 496-1724.

LETTER OF INTENT

Prospective training center applicants are asked to submit a letter of intent not later than May 15, 1983 to:

Dr. George A. Hayden
Research Training and Development Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building - Room 3A-08
Bethesda, Maryland 20205

The Institute requests such letters to obtain an indication of the number and the scope of applications which will require merit review. A letter of intent is not binding and will not enter into the review of any proposal subsequently submitted. The letter should briefly describe the composition of the Hypertension Training Center, participating Minority Institutions, the overall approach, and areas of interest for the Minority Hypertension Research Development Summer Program.

ANNOUNCEMENT

THE NCI CLINICAL INVESTIGATOR AWARD

NATIONAL CANCER INSTITUTE

Application Receipt Dates: June 1, October 1, February 1

I. SUMMARY AND PURPOSE

The National Cancer Institute (NCI) announces the availability of Clinical Investigator Awards for the purpose of developing physician-researchers in basic and applied cancer sciences. The initiation of this award is intended to encourage recently-trained highly-qualified physicians (M.D. or D.O.) to undertake careers in cancer research. The award is prompted by the chronic shortage of physician-investigators particularly surgical oncologists, radiation oncologists, preventive oncologists, physiatrists, nutritionists and epidemiologists. It is expected to facilitate the awardees' transition to independent basic or applied researcher. The award will enable successful candidates to investigate for up to three years a defined cancer problem under the guidance of an active researcher who has the knowledge, background and research experience required to be a mentor in that field.

II. ELIGIBILITY

A. Candidate

Applications may be made by institutions on behalf of candidates who hold the M.D. or D.O. degrees. Those who hold a Ph.D. or comparable research degree, either with or without an accompanying M.D. or D.O. are not eligible for the Clinical Investigator Award. Nor are candidates who are or have been principal investigators on PHS supported research grants, program projects or new investigator awards. Candidates should have at least two years of clinical training at the postdoctoral level by the projected start of the award, but should not have more than seven years postdoctoral experience at the time of application for the award. In exceptional circumstances, people having less than two, or more than seven, years' postdoctoral experience may qualify for the award. However, the applicant must provide a very powerful justification for such an exception. Candidates must provide evidence of a serious intent to enter upon an academic research career.

Only United States citizens, nationals or permanent residents may be presented as candidates for this award.

This program is described in the Catalog of Federal Domestic Assistance No. 13.398, Cancer Research Manpower. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 74. This program is not subject to A-95 Clearinghouse or Health Systems Agency review.

B. Institution

The sponsoring institution must have a strong, well-established research program in the candidate's area of interest, and experienced faculty members in the clinical and basic departments relevant to the candidate's proposed training. The institution must include a plan for the candidate's research and academic development. Only domestic institutions are eligible.

C. Preceptor

The candidate's primary preceptor must be a competent investigator in the area of the candidate's proposed research activity. The preceptor must be active currently as an investigator, and must be prepared to provide personally much of the candidate's research supervision. The award is intended to provide an intensive, supervised research experience for the successful candidate.

III. PROVISIONS OF THE AWARD

The Clinical Investigator Award is made for a maximum nonrenewable and nontransferable period of three years. Support is based upon a full-time, twelve-month staff appointment. The award will provide salary support not to exceed \$30,000 annually from NCI funds for the three-year period. The actual salary must be consistent with the established salary structure of the grantee institution for persons of equivalent qualifications, experience, and rank. Up to a total of \$10,000 annually will be provided for supplies, equipment, travel, etc., which are necessary for pursuit of the awardee's research program. Funds will be provided for the reimbursement of indirect costs at a rate not to exceed eight percent of the total allowable direct costs. When requested, the grantee institution's share of the fringe benefits may be paid as a direct cost (if not treated as an indirect cost) on that portion of the employee's salary provided by the NCI Clinical Investigator Award.

It is expected that the candidate will spend at least 75 percent of his/her time in research during the period, with the remainder being divided among other activities such as teaching, pertinent clinical training, research training, and academic studies. An appropriate sponsor must assume responsibility and provide guidance for the research development in the chosen areas.

Institutions may apply for awards on behalf of named individuals meeting the above criteria. It is not essential for the applicant institution to commit itself in the application to eventual placement of the candidate on its permanent, full-time faculty, but it is expected that institutions will choose candidates who will be able to meet the criteria for making that decision. Evidence of the commitment of the institution to the candidate's research development must be provided.

Candidates for this award may not concurrently apply for a Research Career Development Award, an Academic Award or a New Investigator Research Award.

Candidates must be nominated by an institution on the basis of qualifications, interests accomplishments, motivation and potential for an academic or research career. Candidates must have one or more sponsors at the institution who are recognized as accomplished researchers or teachers in the candidate's area of proposed development. The sponsor(s) must provide (1) his/her concept of a

development and research plan for the candidates; (2) his/her updated curriculum vitae with a complete bibliography and research support; and (3) a letter indicating willingness to provide guidance and support for the award's duration.

Candidates must provide a full description of the proposed research and career development plan for the three-year period of the award. The candidate must be prepared to commit full-time effort to the objectives of this award.

Candidates must agree to inform the NCI annually for a period of ten years subsequent to completion of the award about academic status, publications, and research grants or contracts received.

IV. REVIEW CRITERIA

Applications for the NCI Clinical Investigator Award receive initial technical merit review by an NCI review committee and secondary review by the National Cancer Advisory Board.

Criteria for review include:

- A. The candidate's potential for a career in independent research;
- B. The candidate's commitment to a research career;
- C. The overall merit of the candidate's three-year plan for research and the development of research skills;
- D. The quality of the candidate's clinical training and experience;
- E. The institution's ability to provide quality facilities, resources, and opportunities necessary to the candidate's research development as indicated in the application;
- F. The quality of the faculty in the departments relative to the area of study;
- G. The ability and plans of the sponsor or sponsors who will guide the candidate in his career development;
- H. The candidate's conformance to the eligibility requirements discussed earlier.

V. HOW TO APPLY

An application for this award should be made on form PHS 398 (Rev. 5/82). Application receipt dates are: February 1, June 1, and October 1. At the time the required number of applications are submitted to the NIH Division of Research Grants as indicated in the instructions in the application kit, please send a copy to:

Barney C. Lepovetsky, Ph.D., J.D.
 Chief, Cancer Training Branch
 Division of Resources, Centers,
 and Community Activities
 Blair Building - Room 717
 8300 Colesville Road
 Silver Spring, Maryland 20910

Telephone: (301) 427-8898

ANNOUNCEMENT

U.S. PUBLIC HEALTH SERVICE HEALTH SCIENTIST EXCHANGES

HUNGARY, POLAND, ROMANIA, USSR, YUGOSLAVIA

FOGARTY INTERNATIONAL CENTER

In accordance with separate agreements between the Government of the United States and the Governments of Hungary, Poland, Romania, USSR, and Yugoslavia, programs for the exchange of health scientists have been established and are jointly supported. The programs are administered on behalf of the Public Health Service (PHS) by the Fogarty International Center (FIC) of the National Institutes of Health (NIH).

I. PURPOSE

The intent of the health scientist exchange programs is to foster collaborative activities between well-qualified health professionals and biomedical scientists in the U.S. and participating countries in the study of health and biomedical problems that are of mutual interest and that lend themselves to a cooperative approach. Under the programs, a limited number of individuals from each country are supported for varying periods of work in the other country. Activities may include the sharing of consultative and technical advice on individually conducted research in either country or joint research between collaborating scientists. Priority will be given to those whose work in the host country will have a good prospect for opening future and continuing collaborative ties; will strengthen and expand ongoing collaborative relationships; or will have particular and immediate benefits to both the United States and the participating country.

The programs do not provide support for formal, academic, clinical or research training, or for the primary purpose of attendance at scientific meetings.

II. ELIGIBILITY

U.S. applicants for the programs must meet the following basic requirements:

- o be U.S. citizens or permanent U.S. residents,
- o hold an advanced degree (normally a doctorate) in one of the health sciences or related fields,
- o have professional experience in the health or biomedical fields appropriate to the proposed study,
- o be affiliated with a U.S. public or private nonprofit educational, research, or clinical institution.

Working knowledge of the host country language is highly desirable. Prospective long-term participants are urged to study the language intensively in preparation for their visits.

III. SUPPORT

A. Hungary, Poland, Romania, USSR

Under the agreements with Hungary, Poland, Romania and the USSR, the sending side pays for all international transportation costs to the port of entry; the receiving side pays for laboratory costs, in-country travel, and a living allowance. For U.S. participants the following pertain:

- o Travel. The Fogarty International Center will provide round trip jet economy class fare for the participant between U.S. home city and the host city abroad. Travel will be in accordance with U.S. Government travel regulations, which require maximum use, where available, of U.S. air carriers. Additional costs of indirect routing at the option of the participant must be at his or her personal expense. An allowance for 22 pounds or unit of excess accompanied baggage will be included for long-term visits. A travel allowance for accompanying family members cannot be provided.
- o Living Allowance. The host government will pay for lodging and provide a daily living allowance and in-country travel.
- o Health Insurance. The host government will provide the participants with comprehensive health care for accidents and unanticipated medical needs during their stay in the host country. Visitors to Hungary, Romania and the USSR must arrange coverage for any accompanying family members. The Polish Ministry of Health and Social Welfare will provide health insurance coverage for accompanying family members.

B. Yugoslavia

The U.S.-Yugoslav Joint Board will provide round trip, jet economy class fare for the participants between the U.S. home city and the Yugoslav host city. A travel allowance for any accompanying family members cannot be provided. The cost of lodging, a daily living allowance, and other necessary local program-related expenses as well as health insurance coverage for the participant will also be paid for by the Joint Board.

IV. DURATION AND PRIOR CONTACTS

Periods of participation are expected to be no less than two weeks and generally no longer than 12 weeks, although variations from these periods will be considered where necessary and justified. If the applicant has had prior contact with proposed host(s), which is highly desirable, evidence of such contact should be submitted with the application.

V. APPLICATION AND SELECTION

Application materials, containing detailed information for U.S. health professionals interested in participation, will be provided on request by the FIC at the address given below. In addition to biodata and other supporting documentation, the applicant will be required to include a summary description of the proposed activity to be carried out.

After initial technical review, final selection of U.S. participants from among applicants is made by a review committee of the U.S. PHS with the concurrence of the host country and in accordance with the number of participants agreed to and funding availability. Notification of selection decisions is made to U.S. participants by the FIC. Applications will be received on a continuing basis. The review and selection process will take approximately six months.

VI. REPORTS AND PUBLICATIONS

U.S. participants must submit a summary report of work accomplished to the FIC following their visit. Technical articles may be submitted to scientific publications without prior clearance of the NIH or host country authorities. However, the support of the program should be acknowledged.

VII. INQUIRIES AND APPLICATION MATERIALS

For U.S. applicants:

Program Officer
U.S.-Eastern European Health Scientist Exchanges
International Coordination and Liaison Branch
Fogarty International Center
Building 38A - Room 614
National Institutes of Health
Bethesda, Maryland 20205

Eastern European and Yugoslav scientists interested in participating in these programs should apply to their respective Ministries of Health.

ANNOUNCEMENT

BIOMEDICAL RESEARCH FELLOWSHIP OPPORTUNITIES ABROAD

**JOHN E. FOGARTY INTERNATIONAL CENTER FOR
ADVANCED STUDY IN THE HEALTH SCIENCES**

The John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC) of the National Institutes of Health (NIH) announces the availability of postdoctoral fellowships to U.S. health scientists who wish to conduct collaborative research abroad. The purpose of these fellowships is to enhance the exchange of research experience and information in the biomedical, behavioral and health sciences.

Programs Available to U.S. Citizens or Permanent U.S. Residents

ALEXANDER VON HUMBOLDT FOUNDATION POSTDOCTORAL RESEARCH FELLOWSHIPS
(Supported by the Federal Republic of Germany)

FRENCH NATIONAL INSTITUTE OF HEALTH AND MEDICAL RESEARCH POSTDOCTORAL FELLOWSHIPS
(Supported by the Government of France)

NIH-FRENCH NATIONAL CENTER FOR SCIENTIFIC RESEARCH EXCHANGE PROGRAM
(Jointly Supported by the Governments of France and the United States)

SENIOR INTERNATIONAL FELLOWSHIPS
(Supported and administered by the FIC)

SWEDISH MEDICAL RESEARCH COUNCIL FELLOWSHIPS
(Supported by the Government of Sweden)

SWISS NATIONAL SCIENCE FOUNDATION POSTDOCTORAL FELLOWSHIPS
(Supported by the Government of Switzerland)

The eligibility requirements of each program vary and this information is provided in each program's brochure which is available upon request. However, at a minimum, each candidate must have an earned doctoral degree in one of the behavioral, biomedical or health sciences and some postdoctoral experience.

The receipt date for applications to the FIC Senior International Fellowship Program is June 1, 1983. The receipt date for all other applications except those to the Alexander von Humboldt Foundation is October 1, 1983. Applications for the Alexander von Humboldt Foundation Postdoctoral Research Fellowships are available and are accepted throughout the year. For those fellowship programs with an October 1 receipt date, application kits will be available from April 1, 1983 to September 15, 1983. The organization that provides financial support for each of the programs selects candidates for participation. While the maximum period of support for all programs is one year, the minimum period of support varies with each program.

Prospective applicants for Senior International Fellowships, the FIC sponsored program, may obtain information brochures from the above address. However, application kits for Senior International Fellowships may be requested only through the applicant's dean or equivalent institutional official any time between January 15 and May 15, 1983.

All correspondence should refer clearly to the specific program of interest. For further information, please send a self-addressed label with your request to:

International Research and Awards Branch
Fogarty International Center
National Institutes of Health
Bethesda, Maryland 20205