

NIH Guide for Grants and Contracts

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 you 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

Ultracentrifuge Safety Notice from Beckman Instruments
Dated June 22, 1984

P.T. 18; K.W. 0701034, 1014002

This important safety letter, mailed by Beckman Instruments to all ultracentrifuge owners, contains reclassification information on all of the older Model L, Model L2, Model L3 and Model L4 series of ultracentrifuges, and to owners of Type 35 or Type 42 rotors below Serial Number 1299. The letter contains information on two recent chemical explosions and the steps which Beckman is taking to eliminate the possibility of these potentially dangerous explosions occurring in the future. These steps on the older instruments (15 years old or older) are the elimination of the centrifuge/rotor combination which could trigger a secondary chemical failure. If you have a Beckman ultracentrifuge of the type listed above, and have not received the letter, contact Beckman Spinco Division (415) 857-1150, Ext. 1506 or 1702.

At the beginning of August representatives of the Spinco Division of Beckman Instruments visited the NIH to provide a fuller explanation of secondary chemical failures than was possible in their recent letter. This situation analysis was presented to Administrative, Safety and Research personnel. Also outlined were the financial programs which Beckman is offering to researchers where the recommendations outlined in the letter cannot be compiled with while continuing research programs.

NIH believes that, in view of the potential danger in secondary chemical explosions, Beckman has acted prudently and responsibly in the user notification for eliminating possible ultracentrifuge/rotor combinations. We strongly recommend that users of ultracentrifuges follow the instructions in the Beckman letter of June 22, 1984.

NIH grantee institutions may, within the normal prior approval policies, rebudget funds from other budget categories to assist in emergency replacement of equipment when such a step is required in order to continue the research activity. In the event that other supplemental funding is not available or the rebudgeting of existing funds is not possible, NIH awarding units may consider the authorization of administrative supplements in certain cases where they judge that absolutely essential replacements are required to carry out the NIH-supported research. NIH can not, however, guarantee supplemental financial assistance to replace existing equipment or parts.

Investigators with NIH contracts should reach the appropriate NIH project officer to discuss how to proceed on this issue if it is relevant to the contract. Only the NIH contracting officer, however, has the authority to authorize any major changes in the conduct or funding of the contract.

NIH also wishes to remind its grantees that the NIH is not legally responsible for accidents, illnesses or claims arising out of work undertaken with the aid of any grant or assistance award.

NOTICE**WITHDRAWAL OF PROGRAM ANNOUNCEMENTS: DIAGNOSIS PROGRAM**

P.T. 34; K.W. 1002014, 1200370, 1200640

NATIONAL CANCER INSTITUTE

The National Cancer Institute (NCI) hereby withdraws its program announcements entitled "Specific Immunoassays for Cancer Associated Isoenzymes" and "Non-invasive Approach for Detection of Lung Cancer," which appeared in the NIH Guide for Grants and Contracts, Vol. 12, No. 3, March 25, 1983. Please contact the NCI Diagnosis Program (Dr. Roger Aamodt, (301) 496-7147) if you have any questions concerning these announcements.

NOTICE

8TH ANNUAL NIH RESEARCH SAFETY SYMPOSIUM
CREATING A SAFE ENVIRONMENT FOR BIOMEDICAL
SUPPORT SERVICES PERSONNEL

January 10-11, 1985
Washington, D.C.

P.T. 42; K.W. 0701034

CONFERENCE DESCRIPTION:

The Division of Safety, National Institutes of Health (NIH) is pleased to announce its Eighth Annual NIH Research Safety Symposium. The symposium for this year will address the biological, chemical and radiological hazards facing auxiliary support personnel who work in biomedical research and hospital facilities. Specifically, the symposium is designed to:

- o Increase awareness about the wide range of safety and health problems facing maintenance and housekeeping personnel.
- o Provide a common theoretical framework from which to identify safety and health concerns so that practical solutions may be applied in various work environments.
- o Introduce training and information dissemination guidelines and strategies which can be adapted to various settings.
- o Promote dialogue and information exchange among conference participants.

Speakers with expertise as safety specialists, engineers, managers, and professional educators will address the four broad topic areas of this symposium:

- o Handling and disposal of biological, chemical and radiological agents.
- o Design of facilities (technical solutions to problems which minimize job-related risks).
- o Models of technical training approaches to handling job-related hazards.
- o Discussion of the managerial and technical responsibilities for protecting employees from hazards.

The general sessions are designed to provide a common basis from which to assess the technical, administrative and legal concerns facing administrative and support services personnel. The audience for the symposium will be managers of housekeeping, plant engineering, and support service departments, as well as professionals in the environmental health and safety arena.

GENERAL INFORMATION

- o Symposium Location: The symposium will be held at the Washington-Plaza Hotel, Massachusetts Avenue at Vermont, N.W., Washington, D.C. 20005. The telephone number is (202) 842-1300 or (800) 424-1140.
- o Accommodations: A block of rooms has been reserved at the Washington-Plaza Hotel for symposium participants. Room rates are \$60.00/night for a single and \$70.00/night for a double. Upon receipt of the registration form, a hotel reservation card will be mailed. In order to take advantage of symposium room rates and to be assured of a sleeping room, participants must return the hotel reservation form to the Washington-Plaza Hotel by December 20, 1984.
- o Registration: To register for the symposium, please return the registration form, which appears on the last page of this Guide, no later than DECEMBER 10, 1984 to:

Ms. Attrices Griffin
8th Annual NIH Research Safety Symposium
EXPAND ASSOCIATES, INC.
7923 Eastern Avenue - Suite 400
Silver Spring, Maryland 20910

There is no registration fee for the symposium. (Registration is limited to the first 300 persons.)

- o Luncheon: A luncheon for symposium participants will be held on January 10, 1985. Please indicate on the reservation form if you plan to attend. The cost of the luncheon is \$8.00 per person.
- o Continuing Education Units (CEU's): will be provided to members and non-members of the Environmental Management Association (EMA). For additional information, contact:

Harold C. Rowe
President, EMA
1019 Highland Avenue
Largo, Florida 33540

NOTICE

CHANGE OF POLICIES RELATING TO APPLICATIONS FOR PROGRAM PROJECT
GRANTS ASSIGNED TO NIADDK

P.T. 34; K.W. 1200180, 1014002

**NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, AND DIGESTIVE AND KIDNEY
DISEASES**

Program project grants provide support for broadly based multidisciplinary research programs each having well defined research objectives and employing the coordinated efforts of a number of individual project leaders. The typical program project consists of several interrelated projects and one or more supporting resources (core components).

The NIADDK has conducted a review of the current use of this mechanism in regard to its most effective utilization by NIADDK grantees. As a result, two changes in the guidelines for the program project mechanism have been made.

I. MAXIMUM REQUESTED BUDGETS

New program project applications submitted on or after February 1, 1985 and assigned to the NIADDK will be subjected to the following restriction: Requested budgets should not total more than \$1 million per year in direct costs when averaged over the requested project period. In cases where exceptional circumstances make this limitation inappropriate, applicants should consult with NIADDK staff well in advance of the anticipated submission date to permit careful fiscal and programmatic review.

Competing continuation applications will be subject to the following provisions:

- A. Program Projects currently funded by NIADDK with recommended budgets of \$1 million or more per year will be handled as follows:
 1. Competing applications submitted to renew projects scheduled to terminate before July 1, 1987 will not be subject to the \$1 million restriction.
 2. Competing applications submitted to renew projects scheduled to terminate on or after July 1, 1987 will be subject to the \$1 million restriction.
- B. Program projects currently funded by NIADDK with recommended budgets of less than \$1 million per year will be subject to the new maximum for competitive renewal applications submitted on or after February 1, 1985.

II. CHANGE IN REVIEW PROCEDURES

Currently, program project applications assigned to NIADDK undergo an initial review but separate numerical priority scores are not given to each component project. Initial Review Groups (IRG) may assign priority scores to projects recommended for approval and to applications recommended for approval. Priority scores for projects will be reported as advisory information in Summary Statements together with the review groups' perception of the relationship of each component project to the overall program objectives. Core components will not receive priority scores. It is expected that this change of review procedure will be helpful to the Institute in making decisions regarding the levels of funding to be awarded to program project applications.

ANNOUNCEMENT

BIOMEDICAL RESEARCH SUPPORT GRANT APPLICATIONS FOR FISCAL YEAR 1985

P.T. 34; K.W. 1200280, 0404000

DIVISION OF RESEARCH RESOURCES

Application Receipt Date: January 1, 1985

I. BACKGROUND

The Biomedical Research Support Grant (BRSG) Program is specifically designed to provide funds on a continuing basis to eligible institutions heavily engaged in health-related research to strengthen their programs by allowing flexibility available to the institutions to meet emerging opportunities in research; to explore new and unorthodox ideas; and to use these research funds in ways and for purposes which they (the institutions), in their judgment, feel would contribute effectively to the furtherance of their research program.

II. ELIGIBILITY

Awards are made to non-profit institutions, not directly to individual investigators. Health professional schools, other academic institutions, hospitals, state and municipal health agencies, and research organizations may apply if the institution received a minimum of three allowable PHS biomedical or health-related behavioral research grants, totaling \$200,000 (including direct and indirect costs), awarded during FY 1984 (October 1, 1983 through September 30, 1984). Federal institutions and institutions located in a foreign country are not eligible.

NOTE: Other academic includes, as a single eligible component, all other schools, departments, colleges and free-standing institutes of the institution except the health professional schools.

This program is described in the Catalog of Federal Domestic Assistance, No. 13.337, Biomedical Research Support. Grants will be awarded under the authority of the Public Health Service Act, Section 301 (a)(3); Public Law 86-798, (42 USC 241) and administered under PHS grant policies and Federal Regulations 45 CFR Part 74 and the Biomedical Research Support Grant Information Statement and Administrative Guidelines. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

III. AWARD CONDITIONS

The BRSG award is for one year and must be renewed annually. The start date is April 1. It is estimated that approximately 556 BRSG awards will be made in FY 1985.

The amount of each BRSG award is based upon a formula that is applied to the total of direct and indirect costs awarded for allowable PHS research grants.

IV. METHOD OF APPLYING

BRSG application kits (Form NIH-147-1) will be mailed on or about November 26 to institutions that, according to NIH records, are eligible to apply for a BRSG.

Completed BRSG applications must be received by January 1, 1985.

If an institution believes that it is eligible and has not received an application kit by December 5, call:

Mrs. Gilda Polletto
Grants Management Specialist

ANNOUNCEMENT

AVAILABILITY OF SENIOR INTERNATIONAL FELLOWSHIPS FOR 1984-85

P.T. 22, 48; K.W. 1200170, 1200270, 1200180

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

Application Receipt Date: January 15, 1985

The John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC) announces the availability of senior postdoctoral fellowships to outstanding U.S. health scientists who wish to conduct collaborative research abroad. The purpose of these fellowships is to enhance the exchange of ideas and information in the biomedical, behavioral and health sciences. The types of activity that are supported by this program include collaboration in health studies, basic or clinical research, and the familiarization with or utilization of special techniques and equipment not otherwise available to the applicant. This program does not provide support for brief observational visits, attendance at scientific meetings, attendance in formal training courses, independent research projects, or full-time clinical, technical or teaching services.

I. ELIGIBILITY REQUIREMENTS

Applicants must meet the following requirements.

- o Be a U.S. citizen or permanent U.S. resident.
- o Hold a doctoral degree in one of the biomedical, behavioral or health sciences.
- o Have five years or more postdoctoral experience.
- o Have professional experience in one of the health, biomedical or behavioral sciences for at least two of the last four years.
- o Hold a full-time appointment on the staff of a U.S. not-for-profit institution
- o Be nominated by the dean or appropriate U.S. institutional official.
- o Be invited by a not-for-profit foreign institution.
- o Not be a previous recipient of a Senior International Fellowship.

II. APPLICATION AND SELECTION

The next receipt date for Senior International Fellowship applications is January 15, 1985. All applications are reviewed for scientific merit by the National Institutes of Health. Fellowship awards are made for periods of three to twelve

months. A fellowship must be activated within one year after receiving the Notice of Award and the starting date of the fellowship is set by mutual agreement between the fellow and the collaborator at the foreign host institution. Prospective applicants for the Senior International Fellowship Program may obtain information brochures from FIC. Fellowship applications will be available from the FIC between October 15, 1984 and January 6, 1985 and may be requested only by the dean or equivalent institutional official. Information and fellowship applications are available from:

Senior International Fellowship Program
International Research and Awards Branch
Fogarty International Center
Building 38A - Rm 615
National Institutes of Health
Bethesda, Maryland 20205

For an expeditious reply, please send a self-addressed label with your request to the above address.

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-NS-01

SENATOR JACOB JAVITS CENTERS OF EXCELLENCE IN NEUROSCIENCE

P.T. 34; K.W. 1200875, 1200870, 1002030, 0701007, 1200180

**NATIONAL INSTITUTE OF NEUROLOGICAL AND COMMUNICATIVE DISORDERS AND
STROKE**

Application Receipt Date: January 15, 1985

I. PROGRAM OBJECTIVES AND SCOPE

The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) announces the availability of a limited number of awards for Senator Jacob Javits Centers of Excellence in Neuroscience. These awards have been proposed by the Congress to honor former Senator Jacob Javits of New York. In the words of the Congressional proposal: "The centers shall be dedicated to finding the cause, prevention, and cure for neurological diseases and shall be designed so that multidisciplinary teams of the most capable scientists would address fundamental biological issues of nervous system structure and function."

The NINCDS plans to implement this proposal through its program project (P01) mechanism, by supporting the research of small groups of investigators on the forefront of an area of the neurological or communicative sciences which shows promise of a major contribution to the understanding of the nervous system and its disorders. The groups of investigators should consist of independent, highly-qualified research workers who have through their individual or collective efforts demonstrated a high potential for scientific achievement. The merit of applications will be judged on the credentials and past research accomplishments of the investigators, the significance of the area of research proposed, the interrelationships of the scientists in the group, and a general description of the intended approaches. A demonstration of the significance and likelihood of success of the proposed approach in relation to long-term research objectives will be important. Planned time commitments of each of the senior investigators to the proposed research effort should be described.

This program is described in the Catalog of Federal Domestic Assistance No. 13.853, Stroke, Nervous System Trauma. Awards will be made under the authority of the Public Health Service Act, Title IV, 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 the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

II. ELIGIBILITY AND REVIEW

For profit and non-profit organizations or institutions in the United States are eligible to apply. Applications will be reviewed by an initial scientific merit review group specifically constituted for this RFA. Secondary review will be performed by the National Advisory Neurological and Communicative Disorders and Stroke Council; grants can be awarded only upon a recommendation of approval by the National Advisory Council.

III. MECHANISM OF SUPPORT

These centers of excellence will be supported through the program project (P01) mechanism. Although this program is provided for in the financial plans of the NINCDS, the award of grants pursuant to this RFA is contingent upon the availability of funds for this purpose. The Institute expects to make up to five awards in amounts up to \$750,000 per year direct costs. Awards will be made for periods of five years, and will be issued no later than September 30, 1985.

IV. APPLICATION

Applications should be submitted on form PHS 398 according to the instructions provided with the form and according to supplemental guidelines for this program, available from NINCDS (see below). Applicants should not attempt to respond to this RFA without acquiring and following these supplemental guidelines.

Applicants will be required to document past performance and potential for future contributions. These applications will differ from the usual program project applications in that individual sub-projects will not have to be described in as much detail. Instead, the concept(s) to be explored should be described in detail, as well as the background and progress to date and the general research direction(s) to be taken by each senior investigator and his/her colleagues during the period of the grant award. Only one consolidated or composite budget request will be required. Direct costs for up to \$750,000 in each of five years may be requested. The usual budget categories contained in form PHS 398 will be applicable. The receipt date for applications is January 15, 1985.

The original and six copies of the application should be submitted to:

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

V. LETTER OF INTENT AND INQUIRIES

In order to assist the NINCDS in making plans for the scientific merit review of applications, all applicants are asked to submit a letter of intent, describing briefly the area of research for which support will be requested, and the names of the principal investigators who will be responsible for the research. The letters should be mailed to Dr. John C. Dalton (see address below) so as to be received in NINCDS by December 1, 1984.

For further information concerning this program, and for detailed supplementary application guidelines (which must be followed if an acceptable application is to be submitted) contact:

Dr. John C. Dalton
Director, Extramural Activities Program
National Institute of Neurological and
Communicative Disorders and Stroke
Federal Building - Room 1016
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-9248.

ANNOUNCEMENT

RESEARCH GRANTS ON BASIC MECHANISMS OF THE EPILEPSIES

P.T. 34; K.W. 1200330, 1002030, 1200180, 1200900, 1200820, 1002008

NATIONAL INSTITUTE OF NEUROLOGICAL AND COMMUNICATIVE DISORDERS AND STROKE

Application Receipt Dates: March 1, July 1, and November 1

I. INTRODUCTION

The Epilepsy Branch, Convulsive, Developmental, and Neuromuscular Disorder Program, National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) encourages the submission of research project grant applications (R01) related to the basic mechanisms of the epilepsies.

II. BACKGROUND

Over the last decade, advances in the neurosciences have seen the development of new concepts in cell recognition, intracellular communication, and cell to cell information transfer. In December 1983, an international symposium on Basic Mechanisms of the Epilepsies provided a critical, definitive statement of current knowledge, and was intended to foster the application of the advances in cellular and molecular neurosciences to the understanding of seizure generation, spread and arrest. Such understanding is fundamental to more effective prevention, diagnosis, and treatment of seizures.

At the international symposium, a number of cogent areas which could profit from immediate research, including problems requiring application of new technologies to epilepsy research, were identified. The NINCDS seeks to encourage cross-communication among diverse scientific disciplines so that the potential of all of the relevant neurosciences can be brought to bear on the basic mechanisms of the epilepsies.

This program is described in the Catalog of Federal Domestic Assistance No. 13.854, Biological Basis Research, NINCDS. Awards will be made under the authority of the Public Health Service Act, Title IV, 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 intergovernmental review requirements of Executive Order 12372 or Health Systems Agency Review.

III. RESEARCH GOALS

The goals of this research program are to obtain information about basic mechanisms in the production of seizures. Examples of some of the new concepts in neurosciences are given below, but applications are not limited to these.

Recent advances have occurred specifically in the areas of molecular genetics, where the application of recombinant DNA technologies to biological problems are revealing the sequence complexities of brain RNA transcriptional control and the processing of secretory products. In molecular neurosciences, the isolation and subdivision of acetylcholine, opiate, glutamate, GABA, and benzodiazepine receptors have provided a solid basis for increased understanding of transducer mechanisms by which target cells are activated. The regulation of these receptors by neurotransmitters, neuromodulators, and ligands may be of major importance in epilepsy. Selective purification of Na⁺, K⁺ ATPase and Ca²⁺, Mg²⁺ ATPase and reconstitution experiments of the alpha, beta, and gamma subunits of Na⁺, K⁺ ATPase, including monoclonal antibodies to the alpha subunit, are now available and are being tested for functional abnormalities in epileptogenic states.

In cellular physiology, neuron nets and electrical coupling have assumed important roles as neuronal ensembles responsible for higher cortical functions. Non-activating calcium conductances, followed by both voltage dependent and calcium dependent potassium currents in dendritic elements, and inactivating and non-activating voltage dependent sodium, potassium, and calcium conductances in neuronal soma are now being complemented by molecular studies. A variety of new single microelectrode methods are available to define the contributions of electronic and synaptic transmission, transitional characteristics of open and closed channels, and the ionic events in the paroxysmal depolarization shifts.

IV. MECHANISM OF SUPPORT

Support for this program will be through the traditional research grant-in-aid. Successful applicants will direct and carry out the individual research projects.

V. APPLICATION AND REVIEW PROCEDURES

Applications should be prepared on Form PHS 398 according to instructions contained in the application kit. Application kits are available from most institutional business offices or may be obtained from the Division of Research Grants at the address given below.

Check "yes" in item two on the face sheet of the application and type **"Grants Related to the Basic Mechanisms of the Epilepsies"** in the space provided.

Applications must be responsive to the program announcement and the goals of NINCDS. They will be judged on scientific merit and program relevance in accordance with NIH policy and procedures involving peer review. An initial review will be made by an appropriate study section of the Division of Research Grants. A second level of review will be made by the National Advisory Neurological and Communicative Disorders and Stroke Council.

Deadlines for the receipt of applications are: November 1, March 1, and July 1.

The original and six copies of the application should be mailed to the following address:

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

An information copy of the application may be sent to the address below. Also, for further information applicants may contact:

James J. Cereghino, M.D.
National Institutes Health
NINCDS, CDNDP, EB
Federal Building - Room 114
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-1917

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-AI-01

PROGRAM PROJECTS ON MECHANISMS OF IMMUNOLOGIC DISEASES

P.T. 34; K.W. 1200610, 1200640, 1200630, 1002015, 1003002, 1002034, 0701038

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Application Receipt Date: June 15, 1985

I. BACKGROUND INFORMATION

The Immunopathology Branch of the Immunology, Allergic and Immunologic Diseases Program (IAIDP) of the National Institute of Allergy and Infectious Diseases (NIAID) is concerned with cellular and molecular mechanisms of immunologic diseases. This request for applications (RFA) is intended to encourage the development of applications from collaborative basic science and clinical investigative groups, and to coordinate the submission of new and renewal program project applications providing equitable opportunity for both to compete for funds currently available for existing programmatic activities concerned with the study of mechanisms of immunologic diseases. Eight such program projects are currently funded and support for four are scheduled to conclude in 1986.

II. RESEARCH GOALS AND SCOPE

Realizing that immunologic diseases and inflammatory disorders constitute major areas of endeavor of the Immunopathology Branch, the goals of these program projects are aimed at understanding the underlying mechanisms of disease and the development of diagnostic measures and approaches to effective prevention, control, and treatment of a wide variety of immunologic disorders. The scope of these program projects is intended to include studies of all aspects of immunologic responses aimed at defining etiologic factors and pathogenetic mechanisms.

Research approaches in this area include clinical immunology studies of acquired and inherited diseases associated with dysfunctions of the immune system and immunopathology studies of the genetics, cytology, biochemistry, physiology, and pharmacology of the immune system and its disorders.

This program is described in the Catalog of Federal Domestic Assistance No. 13.855, Immunology, Allergic and Immunologic Diseases Research. 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 Regulation 42 CFR Part 74. This program is not subject to intergovernmental review requirements of Executive Order 12372 or Health Systems Agency Review.

III. MECHANISM OF SUPPORT

Program project grants are awarded to an institution on behalf of a program director for support of a broadly based, multidisciplinary, long-term research program which has a specific major objective or basic theme. A program project generally involves the organized efforts of groups of investigators, whose members conduct research projects related to the overall program objective. The grant can provide support for the projects and for certain core resources shared by individuals in a program where the sharing facilitates the total research effort. Each component project supported under a program project grant is expected to contribute to and be directly related to a common theme; the projects should demonstrate an essential element of unity and interdependence.

IV. STAFF CONTACT

A more detailed RFA may be obtained from:

Robert A. Goldstein, M.D., Ph.D.
Chief, Immunopathology Branch, IAIDP
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Westwood Building - Room 755
Bethesda, Maryland 20205

Telephone: (301) 496-7104

Prospective applicants are encouraged to submit a one-page letter of intent that includes a brief synopsis of the proposed research and identification of any other participating institutions. The Institute requests such letters by March 15, 1985, for the purpose of providing an indication of the number and scope of applications to be received. A letter of intent is not binding. It will not enter into the review of any application subsequently submitted and is not a requirement for application. Letters of intent and inquiries should be directed to Dr. Goldstein at the address shown above.

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR COOPERATIVE AGREEMENT APPLICATIONS: RFA

85-CA-01

COOPERATIVE GROUP FOR STUDIES ON MUTAGENS IN HUMAN FOODS

P.T. 34; K.W. 1002014, 1002028, 0202022, 1003008

NATIONAL CANCER INSTITUTE

Application Receipt Date: January 15, 1985

The Division of Cancer Etiology (DCE) of the National Cancer Institute (NCI) invites cooperative agreement applications from groups of interested investigators for basic studies intended to provide insights and approaches to an understanding of the possible role of food mutagens in human cancer causation.

BACKGROUND

Concern over the presence of mutagens in human foods is part of a large and growing interest in the role of diet in human cancer causation and in the possible inhibition of cancer by dietary means. In this context, the relevance of dietary mutagens derives from their genotoxic effects which could lead to cancer induction. Concern over dietary mutagens gains further emphasis from the widespread occurrence of mutagens in human foods. Apart from the well-publicized association of mutagens with charcoal-broiled steak, mutagen formation has been reported to occur upon the boiling of beef stock, the broiling of hamburgers at a relatively modest surface temperature, the frying of potatoes, and the toasting of bread. Mutagens have also been found to be present in many vegetables, in alcoholic beverages, spices, coffee, and tea. Various contaminants may also constitute a source of mutagens present in human foods. According to one estimate, the foods and beverages ingested by an individual in the course of a single day might contain 1-2 grams of mutagens.

OBJECTIVES AND SCOPE

The purpose of this RFA is to accelerate the development of additional understanding relative to the possible role, fate, and cancer relevance of known dietary mutagens commonly present in human foods. Applications submitted in response to this RFA should be responsive to one or more of the items selected from any one or from a combination of the following categories:

- A. In depth, basic studies on a small number of mutagens selected from among those which are known to occur naturally in human foods, those found in human feces, and those human dietary mutagens the formation of which is associated with the processing and preparation of food; compounds of particular interest include, but are not limited to, the following six classes:

1. Heteroaromatic amines of the carboline and imidoquinoline types.

2. Hydroxylated flavonoids.
 3. Carbonyl compounds such as acrolein, malonaldehyde and methylglyoxal.
 4. Fecapentaenes.
 5. Endogenous N-nitroso compounds.
 6. Aromatic hydrocarbons.
- B Development of analytical procedures for the quantitation of the foregoing mutagens in foods and for the quantitation of them and their respective metabolic products present in blood, body fluids and tissues, and feces.
- A. In vitro and in vivo studies relative to the absorption, metabolism, and possible carcinogenicity of selected compounds such as quercetin and the human fecapentaenes. However, full scale animal bioassays will not be supported through this announcement.

MECHANISM OF SUPPORT

This announcement seeks to make at least one award for a group funding arrangement that permits a combination of available research expertise from diverse institutions (academic, not-for-profit, and industrial) and the facilitating resources of the NCI. Awards will be made as cooperative agreements. An assistance relationship will exist between NCI and the awardees to accomplish the purpose of the activity. Units, in which these research talents and resources are combined, are termed "Cooperative Groups." The composition of a Cooperative group is envisioned as requiring a group director, an NCI coordinator, and program leaders in four broad scientific disciplines: biology, chemistry, biochemistry, and toxicology. Alternative scientific disciplines may be proposed if they are essential to the scientific objectives and experimental approaches planned. As more completely described in the RFA which is available, the recipients will have primary responsibility for the development and conduct of the research. The role of the NCI coordinator will be that of a facilitator and not that of a director. The initial project period proposed should not exceed four years.

INQUIRIES

Copies of the complete RFA and additional information may be obtained from:

Chief, Chemical and Physical
Carcinogenesis Branch
Division of Cancer Etiology
National Cancer Institute
Landow Building - Room 9B01
7910 Woodmont Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-5471

To insure their review, applications must be received by January 15, 1985.

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR COOPERATIVE AGREEMENT APPLICATIONS: RFA

85-CA-02

INTER-INSTITUTIONAL NETWORK FOR AUTOMATED FLOW CYTOMETRY
RESEARCH IN THE DIAGNOSIS AND TREATMENT OF URINARY BLADDER CANCER

P.T. 34; K.W. 1200370, 1201275, 1004019, 0603000

NATIONAL CANCER INSTITUTE

Letter of Intent Receipt Date: November 16, 1984
Application Receipt Date: January 11, 1985

The Division of Cancer Prevention and Control (DCPC), National Cancer Institute (NCI), invites cooperative agreement applications for support of participation in an inter-institutional Flow Cytometry Network for research in urinary bladder cancer. This Announcement indicates the availability of a Request for Applications (RFA). Copies of the RFA must be requested in writing with the RFA number, 85-CA-02, indicated.

The major goal of this RFA effort is to encourage rapid development of a state-of-the-art Flow Cytometry Network to serve the diagnostic and treatment needs of bladder cancer patients. The proposed Network of collaborating laboratories will evolve optimum methods for identifying bladder cancer through steps of technique modification and refinement. Flow cytometry will be evaluated for detecting tumor recurrence in bladder cancer patients who are receiving chemical, radiation or immunotherapy, and for monitoring symptomatic patients and high-risk populations.

The principal investigators in the Network will have primary responsibility for planning, directing and evaluating research in conjunction with an active participation by the DCPC program staff throughout the course of the study. DCPC staff will periodically evaluate research priorities and review progress to ensure that the Network conforms to the objectives and conditions of the award.

The intent of the RFA is to initiate inter-institutional clinical studies of the urinary bladder among flow cytometry laboratories which are already contributing to cancer research. The required technical expertise, facilities and resources should already exist in an applicant institution which responds to the RFA.

An applicant institution may apply for a period of support of up to three years under the RFA. A maximum of five awards will be made. The specific amount to be awarded will depend on the availability of funds. Such awards will support only inter-institutional aspects of the research program. Core support for bladder cancer flow cytometry at the applicant institution must be fully funded through alternative mechanisms. This type of RFA is used when the NCI--with concurrence of a Board of Scientific Counselors--wishes to stimulate investigator interest, proposes to assist in research planning, and intends to monitor investigator progress in an important and opportune area of research. Applicants should be aware that in the case of this Announcement and RFA solicitation, the NCI has funds committed to this specific program need.

A potential applicant institution is encouraged to submit a letter of intent and to consult with NCI staff before submitting an application in response to the RFA. The letter of intent is due on November 16, 1984. Information in the letter should indicate how capably the applicant institution is able to respond to the requirements of the RFA. All such letters will be evaluated and answered by NCI staff.

Institutions within the United States may apply. Applications must address all requirements in the RFA. Form PHS-398 (revised 5/82) should be used, which is the application form for the traditional research project grant. It is available in the business and grant-contract offices of most academic and research institutions, or from the Division of Research Grants (DRG), National Institutes of Health (NIH) Bethesda, Maryland 20205.

The original and six copies of the application should be delivered to the DRG no later than January 11, 1985.

Neither this Announcement nor the RFA commits the Government to award a cooperative agreement.

Requests for copies of the complete RFA and inquiries related to further information, application development or letter of intent should be sent to:

William E. Straile, Ph.D.
Cancer Centers Branch
Division of Cancer Prevention and Control
National Cancer Institute
Blair Building - Room 727
8300 Colesville Road
Bethesda, Maryland 20205

Telephone: (301) 427-8818

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-CA-03

CYTOGENETICS AND PREDISPOSITION TO CANCER

P.T. 34; K.W. 1002014, 1002015, 1002019, 1201330

NATIONAL CANCER INSTITUTE

Application Receipt Date: March 15, 1985

The Division of Cancer Biology and Diagnosis (DCBD) of the National Cancer Institute (NCI), is inviting grant applications from interested investigators to determine whether certain sites on chromosomes can be identified as predisposing factors in human cancer. Recent research in cytogenetics has indicated that there may be significant correlations between certain nonrandom chromosomal aberrations and particular types of cancer. Improved techniques for eliciting and examining these alterations in human chromosomes have contributed to the development of a small but growing body of data which supports the potential importance of cytogenetic analysis to the early detection, diagnosis and prognosis of cancer. Considerably more data are necessary in order to confirm the importance of these observations.

This type of solicitation (the RFA) is being used to encourage investigator initiated research projects studying nonrandom identifiable chromosomal sites and to focus this research on the relationship of these sites to cancer. This is an area of special importance to the National Cancer Program. Support for such awards is through the traditional NIH grant-in-aid and is governed by the policies applicable to such grants. All applications in response to the RFA will be reviewed by an appropriate peer review group of NIH.

The present RFA announcement is for a single competition with a specified deadline of March 15, 1985 for receipt of applications.

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 intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

I. RESEARCH GOALS AND SCOPE

Significant progress has been made in the ability to elicit and identify fragile sites. In order to maximize the opportunities to identify additional nonrandom chromosomal sites which might be significant in cancer, more research must be done to improve the techniques for eliciting such sites and for fine structure analysis of chromosomes. The hereditary pattern of new sites must be established. Studies must be designed to determine whether the known sites and newly discovered ones act as predisposing factors in human cancer. The purpose of this RFA is to encourage applications directed toward development of new techniques and toward testing the hypothesis of the relationship between fragile sites and other identifiable nonrandom sites and cancer. It is hoped that suitable collaborations will be developed between clinicians with access to appropriate patient populations and basic scientists involved in cytogenetic research.

II. MECHANISM OF SUPPORT

The support mechanism for this program will be the traditional NIH grant-in-aid. Applicants will plan and execute their own programs. Approximately \$625,000 will be set aside to specifically fund applications which are submitted in response to the RFA. It is anticipated that four to five applications can be funded. These applications will not compete for funding within the general pool of dollars available for other investigator-initiated research proposals. However, all applications received will be evaluated by the rigorous standards of Study Section review. The expected starting date is December 1, 1985. Although this program is provided for in the financial plans of the National Cancer Institute, the award of grants pursuant to this RFA is contingent upon availability of funds appropriated for Fiscal Year 1986. Only applications of sufficiently high scientific merit will be funded.

III. INQUIRIES

A copy of the complete RFA describing the research goals and scope, the review criteria and the method of applying can be obtained by contacting:

Sheila E. Taube, Ph.D.
Chief, Biochemical Diagnosis Section
Division of Cancer Biology and Diagnosis
National Cancer Institute
Westwood Building - Room 10A15
Bethesda, Maryland 20205

Inquiries concerning this announcement are encouraged and should be directed to Dr. Sheila E. Taube at the above address (Phone 301-496-7147). The program would appreciate the opportunity to clarify any issues or questions from potential applicants.

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR COOPERATIVE AGREEMENT APPLICATIONS:

85-CA-04

CONTINUING CARE RESEARCH: IDENTIFYING AND REDUCING OBSTACLES FOR CANCER PATIENTS

P.T. 34; K.W. 1002014, 0701037, 0701029, 0403004

NATIONAL CANCER INSTITUTE

Letter of Intent Receipt Date: November 4, 1984
Application Receipt Date: January 8, 1985

The Division of Cancer Prevention and Control (DCPC), National Cancer Institute (NCI), invites applications for research projects which address the various concrete problems that confront cancer patients and/or their families.

I. BACKGROUND

Concrete problems are defined as those administrative and functional issues that confound or limit the ability of a cancer patient or his family to cope with the treatment and the consequences of cancer. They emerge from the interaction of the cancer patient and their families with the cancer care system. Resolution of such problems may involve changes in personal skills or knowledge, or changes in institutional and community services available. However, the primary focus of this request for applications is not unmet psychological needs of cancer patients and their families; such needs are less clearly linked to the system of cancer care.

II. OBJECTIVES AND SCOPE

This initiative encourages studies that seek ways to facilitate the resolution of concrete problems. As a first step, investigators will establish the incidence and prevalence of concrete problems found in their cancer care setting. They will estimate the extent and efficacy with which available resources or services have solved these concrete problems. Following an analysis of these data, a second step will involve implementation of a program(s) aimed at resolving the obstacles that contribute to the creation or maintenance of such concrete problems. The awardees will individually prioritize these needs, and design specific interventions based on local needs or demands and available resources and personnel. The proposed research effort will be divided into the following stages:

- A. Descriptive Studies: Perform prospective surveys, using a common instrument and set of definitions, to determine the incidence and prevalence of resolved and unresolved concrete problems. The description should include information related to site and stage of disease and functional status of the

patient. Characterize the efficiency and effectiveness of existing mechanisms for the resolution of concrete problems. Develop a predictive model for practical interventions.

- B. Implementation Program: Implement a program consisting of evaluable interventions aimed at maximizing resolution of concrete problems. Evaluate the predictive model and the efficacy of the interventions.

III. MECHANISM OF SUPPORT

Applicants funded under this RFA will be supported through the cooperative agreement mechanism. An assistance relationship will exist between NCI and the awardees to accomplish the purpose of the activity. The terms of award will detail the Government involvement and will specify the level of NCI program assistance and cooperation. Awards will be made for a period of four years. NCI anticipates making six awards as a result of this request. A total of \$300,000 has been set aside to fund the direct costs of the awards for the initial year.

IV. STAFF CONTACT

Copies of the complete RFA and additional information may be obtained from:

Mrs. Wilma H. Dunlap
Community Outreach and Rehabilitation Branch
Centers and Community Oncology Program
Division of Cancer Prevention and Control
National Cancer Institute
Blair Building - Room 7A05
Bethesda, Maryland 20205

Telephone: (301) 427-8708

ANNOUNCEMENT

RESEARCH ON BIOLOGICAL RESPONSE MODIFIERS

P.T. 34; K.W. 1200130, 1200820, 1200520, 1200244, 1201320, 0602000

NATIONAL CANCER INSTITUTE

Application Receipt Dates: March 1, July 1, November 1

The National Cancer Institute (NCI), Division of Cancer Treatment (DCT) desires to expand its support for several areas of research dealing with biological response modifiers related to clinical treatment. Five areas of special interest to the Institute are described below. Interested applicants are encouraged to contact the NCI staff members listed for additional information.

In making this program announcement it is not the intent of the NCI to make or imply any delimitation related to the biological response modifier research, but rather to stimulate investigator initiated research in biological response modifiers.

Applications in response to this announcement will be reviewed in accordance with the usual National Institutes of Health (NIH) peer review procedures. They will first be reviewed for scientific and technical merit by a review group composed mostly of non-Federal scientific consultants. Following this initial review, the application will be evaluated for program relevance by the National Cancer Advisory Board. The review criteria customarily employed by the NIH for regular research grant applications will prevail.

DETERMINATION OF THE THERAPEUTIC USEFULNESS OF PURIFIED CYTOKINES
AND ANTI-CYTOKINE MONOCLONAL ANTIBODIES IN CANCER MODELS

The NCI, DTC desires to expand its support of research on cytokines (lymphokines, monokines, growth factors, etc.) and in determining the potential for using these factors in the treatment of cancer. The Biological Response Modifiers Program is seeking applications for research grants concerned with the modes of action of purified cytokines in ways that will be relevant to determination of therapeutic potential through direct effects on certain types of malignant cells or on supportive tissue of tumors. Methods of regulating or manipulating the specific cytokine levels through utilization of purified cytokines and/or utilization of anti-cytokine monoclonal antibodies are of interest. Work with in vivo animal models would be particularly relevant.

This program is described in the Catalog of Federal Domestic Assistance No. 13.395, Cancer Treatment Research. 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 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

For further information, investigators are encouraged to contact:

Dr. Gary B. Thurman
Program Director for Molecular Immunology
Biological Resources Branch
Biological Response Modifiers Program
Division of Cancer Treatment
National Cancer Institute
Frederick Cancer Research Facility
Building 426 - Room 1
Frederick, Maryland 21701

Telephone: (301) 695-1098

USE OF GROWTH FACTORS, MATURATION FACTORS AND ANTI-GROWTH FACTORS IN ANIMAL TUMOR MODELS

The NCI, DCT, desires to expand its support of clinical treatment research. The program is seeking applications for research grants concerned with the therapeutic effects of growth factors, maturation factors, and monoclonal antibody to growth factors on the growth and metastasis of cancer in animal tumor models.

For further information, investigators are encouraged to contact:

Dr. Cedric W. Long, Acting Chief
Biological Resources Branch
Biological Response Modifiers Program
Division of Cancer Treatment
National Cancer Institute
Frederick Cancer Research Facility
Building 426 - Room 1
Frederick, Maryland 21701

Telephone: (301) 695-1098

USE OF TUMOR ASSOCIATED ANTIGENS AS IMMUNOGENS

The program is seeking applications for research grants concerned with the development of methods of immunization that evoke effective in vivo anti-tumor immunity using purified tumor associated antigens as immunogens. Isolation of tumor associated antigens is now possible using monoclonal antibodies. There is considerable uncertainty, however, how best to administer purified antigens in vivo to evoke effective anti-tumor immunity. Certain antigens may facilitate and others may inhibit tumor growth and metastases. The proposed studies should investigate this issue in both normal and tumor bearing animals using purified antigens as therapeutic agents. Preference will be given to non-viral tumor associated antigens on recently derived spontaneous or chemically induced fully syngeneic tumors although consideration will be given to viral coded tumor

antigens and even normal cell surface alloantigens as model antigens. The use of various immunization schedules and adjuvants in therapy models with detailed monitoring of the host cellular and immune responses will be required. These studies must be directed toward optimizing the therapeutic effects of these antigens in vivo as demonstrated by protection studies against subsequent tumor growth. Proposals to investigate monoclonal antibody purified tumor associated antigens as therapeutic reagents in many may also be submitted. As in the animal models, homogenous preparations of high purity are preferred for these investigations. End points may be assessed by in vitro or by in vivo therapeutic effects.

For further information, investigators are encouraged to contact Dr. Cedric W. Long at the address given above.

DEVELOPMENT OF CELL LINES PRODUCING LYMPHOKINES AND CYTOKINES

The program is seeking meritorious grant applications for research grants concerned with the development of cell lines and the development of methods to isolate, purify and characterize the therapeutic potential of the various products of these cell lines in appropriate test systems. These products may have a potential long-term usefulness in the treatment of cancer and/or in the alteration of biological responses in the course of cancer.

For further information, investigators are encouraged to contact Dr. Cedric W. Long at the address given above.

DEVELOPMENT OF GENETICALLY ENGINEERED CELL PRODUCTS

The program is seeking applications for research grants concerned with the development of genetically engineered cell products for therapeutic application as biological response modifiers. This announcement will support diverse approaches into the use of genetic engineering to transpose genes coding for biological response modifiers such as interferons, lymphokines, growth factors and other gene products into microbial organisms for a large scale production, isolation, purification and characterization of these factors for therapeutic application as biological response modifiers.

For further information, investigators are encouraged to contact Dr. Cedric W. Long at the address given above.

DEADLINE

Applications will be accepted in accordance with the usual NIH receipt dates for new applications. Deadline dates are: March 1, July 1, November 1.

METHOD OF APPLYING

Applications should be submitted on form PHS 398, which is available in the grants and contracts business office at most academic and research institutions or from the Division of Research Grants (DRG), NIH. In space #2 on the first page of this form, indicate the title of the Program Announcement.

Additionally, a brief covering letter should accompany the application indicating it is being submitted in response to this program announcement. All applications will be received by the NIH's Division of Research Grants (DRG) and assigned to awarding organizations based on current guidelines used by the DRG. All PHS and NIH grant policies governing regular research project grants, including cost-sharing, will apply to applications received in response to this Program Announcement. Non-profit organizations and institutions, governments and their agencies, for-profit organizations and individuals are eligible to apply. The original and six copies of the application should be sent or delivered to:

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

In order to alert the DCT to the submission of applications with primary thrust directed to biological response modifiers research, a copy of the covering letter should be sent under separate cover to Dr. Thurman or Dr. Long, as appropriate, at the addresses given above.

ANNOUNCEMENT

MEDICAL IMAGING FOR DIAGNOSIS AND TREATMENT OF CANCER

P.T. 34; K.W. 1200380, 1200370, 1002014, 1200280, 0607024, 0603000

NATIONAL CANCER INSTITUTE

Application Receipt Dates: March 1, July 1, November 1

The Radiation Research Program (RRP), Division of Cancer Treatment (DCT), National Cancer Institute (NCI) supports a variety of research programs in the area of medical imaging for the diagnosis and treatment of cancer. The present program announcement is to encourage the submission of scientifically meritorious applications in the areas described below.

DEVELOPMENT OF NEW AND IMPROVED CONTRAST MEDIA

The pressing need for effective low cost and less toxic contrast agents for conventional and ultrasound diagnostic imaging, as well as for new modalities such as magnetic resonance imaging (MRI) mandated this initiative. This announcement is to emphasize the continuing interest of the Diagnostic Imaging Research Branch (DIRB), RRP, DCT, NCI in innovative research in contrast media (CM) and encourage the submission of applications leading to the advancement and improvement of the state-of-the-art in this important area of cancer detection.

There is an unfilled need for radiographic contrast media that will provide improved delineation of organs and disease processes. The present agents either do not work well or have limitations of use because of toxicity. The recommendation for development of these agents grows out of needs expressed by the report of the "Task Force on Imaging" which was developed in 1983 and published in the Investigative Radiology Supplement of May-June 1984. Special areas of interest specifically identified are:

1. Development of less expensive nonionic substances, MRI general media, and media for ultrasound.
2. Development of paramagnetic contrast agents for MRI.

This program is described in the Catalog of Federal Domestic Assistance No. 13.395, Cancer Treatment Research. Awards are made under authorization of the Public Health Service Act, Title III, 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 the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

3. The brain, kidney, and spinal cord to a greater degree than other organs are likely to be damaged by contrast agents. Better and safer CM are needed for angiography, CT, myelography, and cisternography.
4. Research in the pathogenesis of life-threatening adverse reactions, anaphylaxis occurring with current and new CM, and to study predictive tests and preventive measures.
5. Clinical trials for comparative cost, efficacy, and safety of new and current media.
6. Increase diagnostic efficacy and decrease morbidity and mortality of imaging examination.
7. Develop new tissue and lesion specific media.

Other areas of research in contrast media inadvertently omitted in this announcement would be appropriate to this program.

For further information contact:

Dr. Matti Al-Aish
Program Director
Diagnostic Imaging Research Branch
Radiation Research Program
National Cancer Institute
National Institutes of Health
Landow Building - Room 8C09
Bethesda, Maryland 20814

Telephone: (301) 496-9531

RESEARCH ON 99m TECHNETIUM AND/OR 123 IODINE LABELED
RADIOPHARMACEUTICALS AND ASSOCIATED TOMOGRAPHIC IMAGING SYSTEMS

NCI also encourages the submission of scientifically sound and meritorious applications in the areas of single photon labeled radiopharmaceuticals and tomographic imaging systems (SPECT) that utilize these agents.

Recent developments in other areas of diagnostic imaging including ultrasound, positron emission tomography, and magnetic resonance imaging have reduced attention to radiopharmaceutical and associated instrumentation research. This announcement emphasizes the interest and support of the RRP, NCI in innovative and significant investigation in these areas. It is intended that products of the investigations will be readily usable for diagnosis and treatment of cancer in most hospitals.

Nuclear Medicine procedures have the advantages of wide availability and relatively low cost for instruments and radiopharmaceuticals in the usual clinical settings. The procedures are cost effective for clinical use and research. The scope of this announcement encompasses investigations that will develop and improve all aspects of the title area including instrumentation, computer algorithms, and radiopharmaceutical development and testing.

A workshop held in Bethesda, Maryland, in 1984, identified the following specific areas of special interest for scientific and technological development; however, applications are not limited to these areas.

1. Better refinement and characterization of presently available SPECT systems.
2. The development of improved SPECT systems either based on new or novel technology.
3. Further technical development of gamma camera based SPECT systems including collimator design and gantry and/or detector refinement.
4. Development of integrated mathematical models of SPECT data collection and image reconstruction including attenuation, scatter, detector characteristics and uniformity, and image forming elements with the goals of improved spatial resolution and/or improved quantitation.
5. A study of the relationships between chemical structure and in vivo transport and metabolic disposition of potential biomedically useful 99m Technetium and/or 123 Iodine radiotracers as probes of physiologic processes.
6. Development and validation of 99m Technetium and/or 123 Iodine radiotracers for the study and/or detection of primary cancer, cancer metastasis, heart biochemistry (glucose or fat metabolism), heart blood flow, brain metabolism, brain blood flow, and/or other organ metabolism or blood flow.
7. Development of methods or procedures for evaluating possible toxicity of radiotracers developed under 5 and 6 above that will allow prompt dissemination of useful tracers into clinical medicine.

This list is not meant to be complete and applications on other topics or areas are welcomed.

For further information, contact Dr. Al-Aish at the address given above.

TISSUE CHARACTERIZATION BY ULTRASOUND AND BY X-RAY COMPUTED TOMOGRAPHY

An elaborate "Plan for Diagnostic Imaging Research," developed by a large Task Force of clinical and physical scientists in medical imaging, was recently published as a Supplement to the May/June 1984 issue of the journal "Investigative Radiology." This plan identifies for investigators a wide variety of clinical needs and potential scientific opportunities in diagnostic imaging research and should be examined for its descriptions of additional suitable topics for research of interest to NCI and other institutes of NIH.

This announcement invites grant applications for research studies and for development, initial evaluation, and/or application of new and improved techniques for noninvasive characterization of biological tissues by either of two imaging modalities: (A) ultrasound and (B) X-ray computed tomography (CT). These modalities are independent of each other and are selected simply for current emphasis. Responses to this announcement are typically expected to address only one or the other.

Tissue characterization in this context means the ability to specify qualitatively or quantitatively the physiological or pathological state of tissues or of their functions, or the identity of specific tissues, or the viscoelastic properties or other intrinsic parameters of tissues by use of information from these imaging modalities. Techniques which image flow or provide assessment of flow or perfusion, including the use of contrast media, may potentially contribute to tissue characterization.

A. Ultrasound

Although ultrasound imaging applications have proliferated in number and variety, additional electronic information is contained within the acquired signals from pulsed and continuous wave ultrasound imaging and flow equipment that has not been fully utilized. Examples of possible avenues for improvement include, but are not limited to, sophisticated signal processing of digitized radio-frequency signals; wider aperture and multiple transducer arrays to obtain correlatable signals from many angles; frequency diversity techniques; higher capacity, faster, and lower-priced computers; and novel methods for acquiring, processing, and displaying data.

Application areas for ultrasound tissue characterization include, for example, breast disease and neoplasms of abdominal organs (liver, pancreas, spleen, kidneys).

B. X-ray Computed Tomography

Few attempts have been made to achieve specific characterization of tissues from CT data and with limited success. Innovative ideas appear to be needed in methods for acquiring, processing, and displaying x-ray CT data. This area must be regarded as exploratory at the present time, but the millions of CT images taken weekly suggest the importance of making advances in the full use of these data. Application areas may include differential bone density measurement, tumor detection, and the characterization of musculoskeletal neoplasms.

For further information contact:

Mr. Roger S. Powell
Program Director
Diagnostic Imaging Research Branch
Radiation Research Program
National Cancer Institute
National Institutes of Health
Landow Building - Room 8C-09
7910 Woodmont Avenue
Bethesda, Maryland 20814

Telephone: (301) 496-9531

ELIGIBILITY

Non-profit organizations and institutions, governments and their agencies, for-profit organizations, and individuals are eligible to apply.

REVIEW PROCEDURES AND CRITERIA

Applications should be submitted on form (PHS-398-Rev 5/82), which is available in the institution's collaborative research or business office; otherwise an application kit may be obtained from the Office of Grants Inquiries, Division of Research Grants (DRG) NIH. The original and six copies of the application should be sent to:

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

Upon receipt of the applications, the Referral Office, DRG will assign each application to a specific NIH institute, in accordance with the usual referral guidelines, for possible funding and to a Study Section composed mostly of non-Federal scientific consultants for scientific and technical merit review. Subsequently, the applications assigned to NCI will be evaluated for program relevance by the National Cancer Advisory Board (NCAB). All applications recommended for approval will compete with other regular ROI approved grant applications for available funds. All PHS and NIH grant policies governing regular research project grants, including cost sharing, apply to applications received in response to this program announcement.

The title of this announcement, **"Medical Imaging for Diagnosis and Treatment of Cancer,"** should be typed under item 2 on page 1 of the application and the "yes" should be checked to indicate a response to this announcement.

Application receipt dates are March 1, July 1, and November 1.

ANNOUNCEMENT

PREDICTION OF TUMOR RESPONSE TO RADIATION THERAPY

P.T. 34; K.W. 1201180, 1201275, 1002014

NATIONAL CANCER INSTITUTE

Application Receipt Dates: March 1, July 1, November 1

The Radiotherapy Development Branch of the Radiation Research Program, Division of Cancer Treatment (DCT), National Cancer Institute (NCI), is interested in supporting research in the area of predictive assays for tumor response to radiation therapy.

Radiation therapy has been an important treatment for human malignancies since the turn of the century. Despite advances in tumor localization and radiation therapy equipment and technique, there are a large number of localized malignancies that are not cured by proper application of radiation therapy. The response of a tumor to radiation therapy depends upon many factors intrinsic to the tumor cell itself as well as factors related to its local environment. There has been significant progress in recent years in developing techniques for analyzing the local environment and the intracellular environment itself.

Several intracellular parameters have been identified which may constitute either direct or indirect measurement of cellular radiosensitivity. DNA strand break and repair is such a parameter, as is the related process of potentially lethal damage repair. The micronucleus assay has also been developed and is based on the consideration that the micronucleus represents genetic material lost from the main genome of the cell and indicates therefore a loss of reproductive integrity. Correlations between micronucleus frequency and parameters of the clonogenic cell survival curve have been demonstrated both in vitro and in vivo. Other parameters that have been shown to be useful, either singly or in combination, included DNA content, ploidy, number of S-phased cells, and sulphhydryl content.

Extracellular environmental factors influencing radiosensitivity include oxygen tension and environmental nutrients. The most extensively studied of these parameters is the state of tumor oxygenation. Though the oxygen effect has been known since the early 1950's, its relevance to clinical radiocurability remains uncertain at this time. Newer diagnostic tools such as NMR and PET scanning may provide useful ways to monitor hypoxia and re-oxygenation in tumors undergoing radiation therapy. Other methods that may be useful in determining hypoxic cell fractions and their clinical implications include microprobes for intratumoral oxygen measurements and radioactively-labelled hypoxic cell sensitizers which have been shown to preferentially bind to hypoxic fractions of solid tumors in vitro.

This program is described in the Catalog of Federal Domestic Assistance No. 13-395, Cancer Treatment Research. 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 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive order 12372 or Health Systems Agency review.

Studies of tumor cell characteristics are now possible through flow cytometry analysis. Such characteristics as cell ploidy, and identification of hetero-geneous subpopulations can now be investigated relatively reliably and rapidly. These techniques may be especially useful since additional techniques have been developed for "salvaging" paraffin-embedded biopsy specimens for use in flow cytometry analysis. This could allow large volumes of retrospective data to be analyzed in which the outcome of treatment is already known.

Some or all of the above-mentioned factors or other factors may be useful in predicting before, or shortly after, beginning radiation treatment whether or not the treatment will be successful in terms of cure or local control. This would allow a more rational selection process for both routine clinical applications and investigational treatment protocols.

The Radiation Research Program therefore invites grant applications to investigate the relationship of the previously-described factors, as well as other factors, to the curability of malignant tumors by radiation therapy in the clinical situation.

REVIEW PROCEDURES AND CRITERIA

Applications should be submitted on form PHS-398 (Rev 5/82) which is available in the institution's collaborative research or business office, otherwise an application kit may be obtained from the Office of Grants Inquiries, Division of Research Grants (DRG), NIH. The original and six copies of the application should be sent to:

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

Upon receipt of the applications, the Referral Office, DRG will assign each application to a specific NIH institute, in this case NCI, for possible funding and to a Study Section composed mostly of non-Federal scientific consultants for scientific and technical merit review. Subsequently, the applications will be evaluated for program relevance by the NCI Advisory Board (NCAB). All applications recommended for approval will compete with other NCI regular (R01) approved grant applications for available funds.

The title of this announcement, "**Prediction of Tumor Response to Radiation Therapy**", should be typed under item 2 on page 1 of this application and the word "yes" should be checked to indicate a response to this announcement.

Application receipt dates are March 1, July 1, and November 1.

For further information contact:

Dr. Richard L. Cumberlin
Program Director
Radiotherapy Development Branch
Radiation Research Program
National Cancer Institute
National Institutes of Health
Landow Building - Room 8C08
Bethesda, Maryland 20205

Telephone: (301) 496-9360

ANNOUNCEMENT**AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA****85-HL-01-1-L****SPECIALIZED CENTERS OF RESEARCH CONCERNED WITH RESPIRATORY DISORDERS OF NEONATES AND CHILDREN****NATIONAL RESEARCH AND DEMONSTRATION CENTERS FOR RESPIRATORY DISORDERS OF NEONATES AND CHILDREN**

P.T. 34; K.W. 1201210, 1201020, 1200270, 1200180

DIVISION OF LUNG DISEASES**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date: September 2, 1985

The Division of Lung Diseases, National Heart, Lung, and Blood Institute, (NHLBI) supports a comprehensive research program dealing with respiratory disorders of neonates and children which includes both clinical and basic approaches directed at expediting the development and application of new knowledge essential for improved diagnosis, treatment, and prevention of these disease problems. As part of this comprehensive program, the NHLBI announces competition for Specialized Centers of Research (SCORs) and for National Research and Demonstration Centers (NRDCs) that focus on respiratory disorders of neonates and children. SCOR programs must contain both clinical and basic research activities, whereas a NRDC is envisioned as an enhancement of a SCOR through incorporation of demonstration and education research along with a coordination and integration component.

An applicant may submit a request for either a SCOR or a NRDC grant. An NRDC application may be awarded as a SCOR if, after peer review, the demonstration and education component and the integration component are judged to be weak while the clinical and basic research projects are favorably recommended. Applications received in response to this announcement will be part of a single competition.

Copies of the complete RFA may be obtained from:

Suzanne S. Hurd, Ph.D.
Director
Division of Lung Diseases
National Heart, Lung, and Blood Institute
Westwood Building - Room 6A16
National Institutes of Health
Bethesda, Maryland 20205

Telephone: (301)496-7208

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-02-L

SPECIALIZED CENTERS OF RESEARCH AND NATIONAL RESEARCH AND
DEMONSTRATION CENTERS

- o CHRONIC DISEASES OF THE AIRWAYS
- o OCCUPATIONAL AND IMMUNOLOGIC LUNG DISEASES
- o PULMONARY VASCULAR DISEASES

P.T. 34; K.W. 1201210, 1002023, 0701034, 1200270, 1200180

DIVISION OF LUNG DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: December 2, 1985

The National Heart, Lung, and Blood Institute (NHLBI) Division of Lung Diseases, supports comprehensive research programs dealing with: (i) chronic diseases of the airways; (ii) occupational and immunologic lung diseases; and (iii) pulmonary vascular diseases. These comprehensive research programs are intended to include both clinical and basic approaches directed at expediting the development and application of new knowledge essential for improved diagnosis, treatment, and prevention.

The NHLBI announces competition for Specialized Centers of Research (SCORs) and National Research and Demonstration Centers (NRDCs) that focus on one of these disease categories or research areas. A SCOR program must contain both clinical and basic research activities, whereas a NRDC is envisioned as an enhancement of a SCOR through incorporation of demonstration and education research along with a coordination and integration component.

An applicant may submit a request for either a SCOR or a NRDC grant dealing with chronic diseases of the airways, or occupational and immunologic lung diseases, or pulmonary vascular diseases. A NRDC application may be awarded as a SCOR grant if, after peer review, the demonstration and education component and the integration component are judged to be weak while the clinical and basic research projects are favorably recommended. All applications resulting from this RFA will be part of a single competition.

Copies of the complete RFA may be obtained from:

Suzanne S. Hurd, Ph.D.
Director
Division of Lung Diseases
National Heart, Lung, and Blood Institute
Westwood Building - Room 6A16
National Institutes of Health
Bethesda, Maryland 20205

Telephone: (301)496-7208

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-03-B

INHIBITOR FORMATION IN HEMOPHILIA

P.T. 34; K.W. 1200680, 1200200, 1200560, 1002019, 1003002, 0201058

DIVISION OF BLOOD DISEASES AND RESOURCES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1985

The Blood Diseases Branch of the Division of Blood Diseases and Resources, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA, 85-HL-3-B, may be obtained from staff of the NHLBI.

The program will encourage research addressing fundamental questions concerning the development of inhibitors to factors VIII and IX in hemophilia and to determine what measures may prevent or modify the immunologic response. It is expected that the approach to these questions will be an immunological one but that collaborative research among disciplines such as hematology, immunohematology, genetics, biochemistry and veterinary medicine may be required.

Requests for copies of the RFA should be addressed to:

Carol H. Letendre, Ph.D.
Division of Blood Diseases and Resources
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 5A12
Bethesda, Maryland 20205

Telephone: (301) 496-5911

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-04-L

ENDOTHELIAL AND SMOOTH MUSCLE CELL INTERACTIONS IN LUNG

P.T. 34; K.W. 1201210, 1003002, 1002023, 1002034, 0701038, 1201000, 1002004

DIVISION OF LUNG DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 1, 1985

The Division of Lung Diseases, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on pulmonary vascular endothelial and smooth muscle cell interactions in the normal and injured lung. The primary purpose of this program is to better define the role of the endothelium in modulating the response of vascular smooth muscle to endogenous and exogenous stimuli.

Specific objectives of this program include: 1) determine the role of endothelial cells in modulating vascular tone in response to endogenous and exogenous vasoactive agents; 2) determine the effects of endothelial injury on endothelial-smooth muscle cell interactions; 3) improve understanding of mechanisms leading to pulmonary hypertension; and 4) provide the basis for developing new approaches to vasodilator therapy. This announcement may be of particular interest to investigators with expertise in biochemistry, immunology, physiology, pharmacology, pathology, and cell biology.

A letter of intent is requested by January 15, 1985 and the deadline for receipt of applications is April 1, 1985. The earliest award date for successful applicants will be in September 1985. Requests for copies of this RFA should be addressed to:

Carol E. Vreim, Ph.D.
Chief, Interstitial Lung Diseases Branch
Division of Lung Diseases, NHLBI
National Institutes of Health
Westwood Building - Room 6A05
Bethesda, Maryland 20205

Telephone: (301) 496-7034

ANNOUNCEMENT**AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA****85-HL-05-H****JUVENILE HYPERTENSION AND THE PREHYPERTENSIVE STATE**

P.T. 34; K.W. 1200600, 1201020, 1200180

DIVISION OF HEART AND VASCULAR DISEASES**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date: April 1, 1985

The Hypertension and Kidney Diseases Branch, Division of Heart and Vascular Diseases (DHVD), National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above program.

The proposed program, "Juvenile Hypertension and the Prehypertensive State", will provide support for approximately ten research projects for a period of five years, after which it is anticipated that the grantees will continue to compete through regular support mechanisms. Each application should focus on multidisciplinary investigations seeking to elucidate mechanisms of blood pressure regulation and hypertension in the young (children and/or animal models), to identify individuals who will develop systemic hypertension as adults, and to improve the medical management of juvenile hypertension. The staff for these undertakings will consist of investigators within the spectrum of laboratory and clinical skills related to hypertension research. Of the clinical research skills, those in pediatric hypertension are especially sought.

Requests for copies for the RFA should be addressed to:

Dr. John B. Dunbar
Hypertension & Kidney Diseases Branch
National Heart, Lung, & Blood Institute
National Institutes of Health
Federal Building - Room 4C08
Bethesda, Maryland 20205

Telephone: (301) 496-1857

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-06-H

BLOOD VESSELS OF THE BRAIN AND NECK

P.T. 34; K.W. 1200220, 1200240, 1002034, 0701038, 1200270, 1200180

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 1, 1985

The Hypertension and Kidney Diseases Branch, Division of Heart and Vascular Diseases (DHVD), National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a request for applications (RFA) on the above program.

The proposed program, "Blood Vessels of the Brain and Neck", will provide support for approximately ten research projects for a period of five years, after which it is anticipated that the grantees will continue to compete through regular support mechanisms. Each application should focus on research involving one or more of the vascular aspects of cerebrovascular disease in human subjects or in animal models. Among the disciplines and expertise that may be appropriate for this research program are physiology, pharmacology, pathology, biochemistry, biophysics, neurology, endocrinology, and other clinical specialties related to hypertension and atherosclerosis, blood dyscrasias, and others.

Requests for copies for the RFA should be addressed to:

Dr. John B. Dunbar
Hypertension & Kidney Diseases Branch
National Heart, Lung, & Blood Institute
National Institutes of Health
Federal Building - Room 4C08
Bethesda, Maryland 20205

Telephone: (301) 496-1857

ANNOUNCEMENT**AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA****85-HL-07-H****CELL BIOLOGY OF THE VASCULATURE IN THE PATHOGENESIS OF HYPERTENSION**

P.T. 34; K.W. 1200600, 1002004, 1200180

DIVISION OF HEART AND VASCULAR DISEASES**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date: April 1, 1985

The Hypertension and Kidney Diseases Branch, Division of Heart and Vascular Diseases (DHVD), National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above program.

The proposed program, "Cell Biology of the Vasculature in the Pathogenesis of Hypertension" will provide support for five to ten grants for a period of five years, after which it is anticipated that the grantees will continue to compete through regular support mechanisms. Each application should focus on one or more interdisciplinary investigation(s) of the vasculature in hypertension utilizing a cell biology approach. The ideal staff of these grants will consist of experienced cell biologists and experienced hypertension investigators who are willing to interact in this research program.

Requests for copies for the RFA should be addressed to:

Mr. Armando Sandoval
Hypertension & Kidney Diseases Branch
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 4C08
Bethesda, Maryland 20205

Telephone: (301) 496-1857

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-08-H

MOLECULAR GENETICS AND HYPERTENSION

P.T. 34; K.W. 1200600, 1002019, 1002008, 1002004, 1002034, 1200180

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 1, 1985

The Hypertension and Kidney Diseases Branch, Division of Heart and Vascular Diseases (DHVD), National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above program.

The proposed program "Molecular Genetics and Hypertension" will provide support for five to ten grants for a period of five years, after which it is anticipated that the grantees will continue to compete through regular support mechanisms. Each application should focus on one or more interdisciplinary investigations dealing with molecular genetics in hypertension. Among the disciplines and expertise that may be appropriate for this research program are molecular biology, genetics, physiology, biochemistry, cell biology, and clinical specialities related to hypertension.

Requests for copies for the RFA should be addressed to:

Mr. Armando Sandoval
Hypertension and Kidney Diseases Branch
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 4C08
Bethesda, Maryland 20205

Telephone: (301) 496-1857

ANNOUNCEMENT**AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA****85-HL-09-H****CELLULAR AND MOLECULAR BIOLOGY OF THE ATHEROSCLEROTIC LESION**

P.T. 34; K.W. 1200235, 1002004, 1002008, 1002027, 1002023, 1003002, 1201000, 0201058

DIVISION OF HEART AND VASCULAR DISEASES**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date April 2, 1985

The Lipid Metabolism and Atherogenesis Branch of the Division of Heart and Vascular Diseases, National Heart, Lung, and Blood Institute announces the availability of a Request for Applications (RFA) on the above subject.

Applications are sought that will apply the methods of cellular and molecular biology to study the mechanisms that underlie the formation of atherosclerotic lesions.

A wide variety of disciplines may be appropriate including cellular, molecular and developmental biology, virology, microbiology, genetics, oncology, immunology, biochemistry, pathology and veterinary medicine. Expertise in atherogenesis will be required and interdisciplinary research associations among investigators in one or more of the above fields and atherosclerosis is encouraged.

The mechanism of support will be the traditional NIH research grant (R01). About eight to ten awards are anticipated to result from this request.

Copies of the RFA and further information may be obtained by contacting:

Dr. Edwin C. Gangloff
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building - Room 4C12
National Institutes of Health
Bethesda, Maryland 20205

Telephone (301) 496-1978

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-10-H

SPECIALIZED CENTERS OF RESEARCH IN ARTERIOSCLEROSIS (SCOR-A) AND
NATIONAL RESEARCH AND DEMONSTRATION CENTERS IN ARTERIOSCLEROSIS
(NRDC-A)

P.T. 04, 34; K.W. 1200235, 1200270, 1200180

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application receipt date: September 16, 1985

The Lipid Metabolism Atherogenesis Branch of the Division of Heart and Vascular Diseases of the National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subjects.

The Division invites applications for Specialized Centers of Research (SCOR) in Arteriosclerosis. At the same time, it invites with this request proposals from institutions with the capability for both SCOR and demonstration and education research to apply for National Research and Demonstration Centers in Arteriosclerosis.

The Centers are large, multidisciplinary research activities that have a thematic relationship among their various parts. The SCOR must contain both basic and clinical activities while the NRDC comprises the full research spectrum of basic, clinical, demonstration and educational research together with activities that provide integration of the component parts.

The application receipt date is September 16, 1985 and the award date is expected to be December 1, 1986. Subject to the availability of funds, it is presently anticipated that about eight to ten awards can be made of which two or three may be NRDC in Arteriosclerosis.

A detailed description of the nature of the Centers, their scope, administration and the method of application is contained in the RFA which is available from the address below. In addition, there is available a 12-page brochure on the Guidelines for Demonstration and Education Research Grants prepared by the Institute that can be helpful to prospective applicants.

Requests for copies of the RFA should be addressed to:

G. C. McMillan, M.D., Ph.D.
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 406
Bethesda, Maryland 20205

Telephone (301) 496-1613

ANNOUNCEMENT**AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA****85-HL-11-H****STUDIES ON THE SEX DIFFERENCES IN CORONARY ARTERIOSCLEROSIS AND THE POSSIBLE ROLES OF SEX STEROIDS**

P.T. 34; K.W. 1200235, 1200440, 1003002, 1200180, 0411005, 1200563

DIVISION OF HEART AND VASCULAR DISEASES**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date January 15, 1985

The Lipid Metabolism-Atherogenesis Branch of the Division of Heart and Vascular Diseases, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are available from the address listed below.

The research objectives of this program are to elucidate reasons why the severity of coronary arteriosclerosis and the frequency of heart attacks differ in men and women and to study the possible role(s) of sex steroids, particularly estrogen in these differences. To these ends studies at the cellular, tissue, and animal levels and clinical investigation are appropriate. Many different kinds of disciplines and expertise are appropriate including, for example, cellular biology, steroid, protein and connective tissue biochemistry, blood coagulation and thrombotic processes, metabolism, and clinical investigation, knowledge of experimental atherosclerosis especially in nonhuman primates, and expertise in plaque pathology and pathogenesis.

The request excludes epidemiology and clinical trials. Studies on sex steroids without reasonable association with arteriosclerosis, heart attack, risk factors or pathogenetic mechanisms for cardiovascular disease will not be responsive to the request.

Request for copies of the RFA should be addressed to:

Ms. Irma Mebane
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 401
Bethesda, Maryland 20205

Telephone (301) 496-1681

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-12-L

AIRWAY SMOOTH MUSCLE: BIOLOGY AND PHARMACOLOGY

P.T. 34; K.W. 1201210, 1003002, 1002004, 0701038, 1201000, 1200890

DIVISION OF LUNG DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 15, 1985

The Division of Lung Diseases, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the biology and pharmacology of airway smooth muscle in health and disease. The main objective of this special grant program is to stimulate research on the morphological, physiological, pharmacological and other functional correlates of airway smooth muscle in normal conditions and various pulmonary diseases.

Some specific objectives of this program include the characterization of: the structural features, innervation, and spatial distribution of the surface macromolecules of airway smooth muscle, the morphological correlates of the neurogenic control, and the agents and the regulatory mechanisms leading to the reversible bronchoconstriction in humans and animals in health and pulmonary disease. This announcement may be of particular interest to investigators with expertise in cell biology, pharmacology, biochemistry, cell physiology, pathology and neurophysiology.

A letter of intent is requested by February 15, 1985 and the deadline for receipt of applications is April 15, 1985. The earliest award date for successful applicants will be in September 1985. Requests for copies of this RFA should be addressed to:

J. Sri Ram, Ph.D.
Chief, Airways Disease Branch

or

Dorothy Berlin Gail, Ph.D.
Chief, Structure & Function Branch

Telephone: (301) 496-7332

Telephone: (301) 496-7171

Division of Lung Diseases, NHLBI
National Institutes of Health
5333 Westbard Avenue
Bethesda, Maryland 20205

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-13-L

MINORITY SUMMER PROGRAM IN PULMONARY RESEARCH

P.T. 34; K.W. 1201210, 1200170, 1200180

DIVISION OF LUNG DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: August 1, 1985

The Prevention, Education, and Manpower Branch of the Division of Lung Diseases, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

This program will encourage qualified minority school faculty members and graduate students to develop interests and skills in research in pulmonary diseases at established pulmonary training centers. It will also stimulate pulmonary research by offering minority school faculty members and students the opportunity to enhance their research capabilities at domestic institutions which offer superior opportunities in this area.

Requests for copies of the RFA should be addressed to:

Joan Wolle, Ph.D.
Division of Lung Diseases
National Heart, Lung, and Blood Institute
Westwood Building - Room 6A12
5333 Westbard Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-7668

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-14-H

MYOCARDIAL PROTEINS IN CARDIAC DISEASES

P. T. 34; K.W. 1200235, 1201150, 1201190, 1200180

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: January 15, 1985

The Cardiac Diseases Branch in the Division of Heart and Vascular Diseases of the National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

This program will support basic research on the identification, isolation, characterization, and quantification of proteins from diseased human hearts. Specifically, the program is intended to encourage the rapid application of developing technologies to indepth studies of proteins from diseased hearts as a means of better understanding the pathogenesis of irreversible heart disease. Among the disciplines that may be appropriate for this research program are biochemistry, pathology, pharmacology, physiology, cell biology, molecular biology, genetics, cardiology, and surgery. Areas of expertise that may be relevant include biochemistry, cardiac pathology, muscle physiology, recombinant DNA technology, and cardiac performance.

Requests for copies of the RFA should be addressed to:

Dr. Michael C. Lowe
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 3C06
Bethesda, Maryland 20205

Telephone: (301) 496-1081

ANNOUNCEMENT**AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA****85-HL-15-B****MECHANISMS OF PLATELET REFRACTORINESS**

P.T. 34; K.W. 1200200, 1002023, 1002034

DIVISION OF BLOOD DISEASES AND RESOURCES**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date: February 15, 1985

The Blood Resources Branch of the Division of Blood Diseases and Resources, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) 85-HL-15-B on the above subject. Copies of the RFA may be obtained from staff of the NHLBI.

The program will encourage research to elucidate the immunologic and physiologic mechanisms of refractoriness of platelet transfusions. The effectiveness of platelet transfusion to control bleeding in thrombocytopenic patients has been well established. Due to progress in platelet therapy and in the preparation and preservation of platelets, the number of platelet concentrate transfusions has increased dramatically over the last ten years. However, in spite of HLA matching of donors and recipients, platelet refractoriness has become a major limitation to effective long-term platelet support in a significant number of patients. The mechanisms producing these refractory states are unknown but are presumed to be related to immunologic reactions as yet unidentified, to consumptive coagulopathies, or to other mechanisms.

This solicitation represents a major effort by the NHLBI to identify the indications, effectiveness and factors that may modify the response to transfused platelets. Other than the relevance of HLA antigens to platelet compatibility, little is known about specific platelet antigen systems. Likewise, information is incomplete on the extent to which consumptive coagulopathy may contribute to refractoriness and how it may be controlled. Such information should make possible the evaluation of various patient management regimens, resulting in a prolongation of effective platelet support.

Requests for copies of the RFA should be addressed to:

Luiz H. Barbosa, D.V.M.
Division of Blood Diseases and Resources
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 5C10
Bethesda, Maryland 20205

Telephone (301) 496-1537

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-17-H

MOLECULAR MECHANISMS CONTROLLING MYOCARDIAL GROWTH AND
HYPERTROPHY

P.T. 34; K.W. 1200240, 1002008, 1002006, 1200180

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: March 15, 1985

The Cardiac Functions Branch of the Division of Heart and Vascular Diseases, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject.

This program will support research applying the recent advances in molecular and cellular biology to the study of the basic mechanisms underlying myocardial growth and the development of myocardial hypertrophy. This announcement may be of particular interest to investigators in disciplines which include biochemistry, cardiology, cellular biology, developmental biology, genetics, molecular biology, and physiology.

Requests for copies of the RFA should be addressed to:

Stephen C. Mockrin, Ph.D.
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building - Room 304
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-1627

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-18-H

FUNDAMENTAL STUDIES OF NORMAL AND ABNORMAL CARDIAC RHYTHM

P.T. 43; K.W. 1200240, 1002034, 1002001, 1200875, 1200180

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1985

The Cardiac Diseases Branch in the Division of Heart and Vascular Diseases of the National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from NHLBI staff.

The major purpose of this special grant program is to stimulate comprehensive multidisciplinary investigations into the genesis of normal cardiac rhythm and the mechanisms underlying dysrhythmias, particularly those induced by myocardial ischemic injury. Members of departments of anatomy, physiology, cellular biology, molecular biology, pharmacology, cardiology, neurology, surgery, and behavioral medicine may be interested in responding individually or jointly to this RFA.

Requests for copies of the RFA should be addressed to:

Dr. Elliott C. Kulakowski
Cardiac Diseases Branch
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 3C06
Bethesda, Maryland 20205

Telephone: (301) 496-1081

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-19-P

CHILDHOOD NUTRITION, PHYSICAL ACTIVITY, AND CV HEALTH

P.T. 34; K.W. 0202022, 1200240, 1200180, 0404000, 0414007, 0404004

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1985

The Prevention and Demonstration Research Branch of the Division of Epidemiology and Clinical Applications, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

This program will support prospective research studies that will identify and track the acquisition of food intake and physical activity patterns related to cardiovascular health in children three or four years of age at entry into a study. Children from families with a high risk for coronary heart disease or stroke would be compared with children from families with a low risk for these diseases. It is expected that the research projects will require expertise from the biomedical, social, and behavioral disciplines including cardiology, pediatrics, nutrition, physiology, epidemiology, experimental psychology, social psychology, education psychology, and medical anthropology.

Request for copies of the RFA should be addressed to:

Elaine J. Stone, Ph.D.
Division of Epidemiology and Clinical Applications
National Heart, Lung, and Blood Institute
Federal Building - Room 6A-12
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-2465

ANNOUNCEMENT**AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA****85-HL-20-P****EXERCISE, STRESS AND ATHEROSCLEROSIS**

P.T. 34; K.W. 0701046, 1200235, 1200440

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date: February 15, 1984

The Behavioral Medicine Branch of the Division of Epidemiology and Clinical Applications, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

The special grant program will support research investigating the role of physical exercise as a potential mediator of the effects of stress on the development and progression of atherosclerosis. Preliminary evidence on the moderating effects of exercise on cardiovascular and neuroendocrine responsivity to environmental demand has suggested potential common pathways for mechanism of action. Elucidation of this relationship will require the development of appropriate animal models to adequately control for genetic, dietary, developmental and environmental variables. Multidisciplinary approaches involving the above fields are strongly encouraged.

Requests for copies of the RFA should be addressed to:

Stephen M. Weiss, Ph.D.
Behavioral Medicine Branch
National Heart, Lung, and Blood Institute
Federal Building - Room 604
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-9380

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-21-P

SMOKING CESSATION IN PATIENTS WITH CARDIOVASCULAR DISEASE

P.T. 34; K.W. 1200235, 0404019, 0414000, 041700, 1200230, 0701032

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1985

The Behavioral Medicine Branch of the Division of Epidemiology and Clinical Applications, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

This special grant program will support biobehavioral research on smoking cessation and maintenance of cessation within the specialized population of patients with diagnosed cardiovascular disease. Studies seeking to develop and evaluate interventions tailored to the needs of this specific population in attaining long-term smoking abstinence are encouraged, and may encompass approaches from the fields of psychology, sociology, physiology, nursing, and cardiology.

Requests for copies of the RFA should be addressed to:

Peter G. Kaufmann, Ph.D.
Behavioral Medicine Branch
National Heart, Lung, and Blood Institute
Federal Building - Room 604
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-9380

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-22-P

BEHAVIORAL STRESS, NEUROACTIVE PEPTIDES, AND CARDIOVASCULAR DISEASE

P.T. 34; K.W. 0701046, 1200235, 1201020, 1200440, 1200180

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1985

The Behavioral Medicine Branch of the Division of Epidemiology and Clinical Applications, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

This special grant program will support research explicating the relationship of behavioral stress to cardiovascular function in health and disease, specifically as mediated by the new family of neuroactive peptides. Clinical studies, as well as laboratory investigations utilizing either human subjects or animal models are encouraged, and may encompass approaches from the fields of anatomy, behavior, physiology, pharmacology, physiology, endocrinology, neuroscience and pathology.

Requests for copies of the RFA should be addressed to:

Peter G. Kaufmann, Ph.D.
Division Epidemiology and Clinical Applications
National Heart, Lung, and Blood Institute
Federal Building - Room 604
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-9380

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-23-P

WORKPLACE DEMONSTRATION AND EDUCATION RESEARCH IN CARDIO-

VASCULAR DISEASES

P.T. 34; K.W. 1200235, 0502017, 0701042, 0411005, 1010013, 0701013

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1985

The Prevention and Demonstration Research Branch, Division of Epidemiology and Clinical Applications, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of this RFA are currently available from staff of the NHLBI.

This program will support demonstration and education research projects on risk factor reduction for cardiovascular diseases (CVD) in the workplace. Each intervention project should include studies of intervention on two or more major risk factors for these diseases. Each applicant must agree, if successful, to work along with other successful applicants on the primary purpose to test whether successful major risk factor interventions for CVD can be adapted to the workplace and shown to be clinically and behaviorally effective. In addition, each applicant may choose one or more of the following research areas to pursue in the workplace:

To compare strategies for implementing single risk factor modification approaches to intervention with strategies to modify two or more major CVD risk factors. The effect on variables, such as participation rates and logistic risk scores for individuals and for all employees in the study site, as well as the effects on specific risk factors, could be assessed. A third control group without intervention could also be part of the design.

To test selected health education approaches to enhance compliance to interventions on one or more CVD risk factors.

Staffing and consultation for the research should include health care professionals experienced in working with industries, and in the CVD field, trained technicians, health educators and counsellors, a biostatistician, an epidemiologist, and data processing and support staff.

The populations in which the research would be conducted would be employees of intermediate size companies that include a large proportion of blue collar and hourly paid workers.

Research designs should be experimental or quasi-experimental. The plans for analysis to be done appropriate to the research design, must be included in the application. Budgets should include four trips to Bethesda and eight days per diem the first year for investigators to develop together standardized screening approaches where appropriate. Budgets for subsequent years should allow two trips to Bethesda and four days per diem each year for sharing experiences and results and refining methods. Applicants must indicate their willingness to attend and participate in these meetings and to show plans and proposed methods and to agree to carry out standardized assessments agreed upon by the successful applicants (where feasible and appropriate).

Request for copies of the RFA should be addressed to:

Gerald H. Payne, M.D., M.P.H.
Federal Building - Room 6A14
National Heart, Lung, and Blood Institute
National Institutes of Health
Bethesda, Maryland 20205

Telephone: (301) 496-2465

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-24-H

MINIMALLY INVASIVE TECHNIQUES FOR CHARACTERIZATION OF
ATHEROSCLEROTIC PLAQUE

P.T. 34; K.W. 1200235, 1200370, 0603000, 1004019, 0607024, 1200180

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: January 15, 1985

This grant program will support basic research and development of new and improved techniques to identify and quantify components of atherosclerotic plaque in arteries. It is expected that research projects will encompass a variety of approaches such as ultrasound, nuclear medicine, x-ray, and nuclear magnetic resonance. Disciplines that may be appropriate for this research program are atherogenesis, biochemistry, bioengineering, blood coagulation, cardiology, cellular biology, chemistry, nuclear medicine, pathology, physics, radiology, surgery, or others. Of particular value may be expertise in nuclear magnetic resonance, ultrasound, and x-ray methodologies, tracer techniques applicable to the plaque, and biology of the plaque.

The Devices and Technology Branch of the Division of Heart and Vascular Diseases, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

Request for copies of the RFA should be addressed to:

Alan S. Berson, Ph.D.
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building - Room 312
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-1586

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

85-HL-25-P

RESEARCH IN NUTRITION AND CARDIOVASCULAR DISEASES

P.T. 34; K.W. 0202022, 1200235, 1200600, 1200930, 1200180

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1985

The Prevention and Demonstration Research Branch of the DECA, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. Copies of the RFA are currently available from staff of the NHLBI.

This program will support research in nutrition and CVD, including basic, clinical, behavioral, and demonstration and education research. There shall be a central theme for proposed investigations and component scientific projects which relate to it, and which also complement or contribute to one another. Since many approaches are possible, this research may be of interest to investigators in a variety of disciplines such as cardiology, physiology, biochemistry, epidemiology, pediatrics, nutrition, behavioral sciences, and public health, with particular expertise in hyperlipidemia, hypertension and obesity.

Request for copies of the RFA should be addressed to:

Marilyn Farrand, R.D.
Division of Epidemiology and Clinical Applications
Federal Building - Room 6A08
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-3503

ANNOUNCEMENT

PREVENTIVE CARDIOLOGY ACADEMIC AWARD

P.T. 34; K.W. 1200230, 0701042, 1200235, 0502024

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 1, 1985

The Division of Epidemiology and Clinical Applications (DECA) of the National Heart, Lung, and Blood Institute (NHLBI) has initiated the Preventive Cardiology Academic Award (PCAA) to provide a stimulus for the development of a preventive cardiology curriculum in those schools of medicine and osteopathy that do not have one and to strengthen and improve the preventive cardiology curriculum in those schools that do. Each school of medicine or osteopathy in the United States and its possessions or territories is eligible to compete for one award for a project period that does not exceed five years. The number of awards made each year will depend upon the merit of the applications received and availability of funds.

For the purposes of the PCAA, the term preventive cardiology is used to define the area of cardiovascular medicine having a special concern with the development of knowledge and the application of knowledge directed at the prevention of heart and vascular diseases. This includes the area of primary prevention of cardiovascular diseases in infants, children, and adults who are at risk of developing such diseases and the reduction of preventable complications or disability in persons who have already developed cardiovascular disease.

This award is intended to:

Encourage the development of a high quality preventive cardiology curriculum in schools of medicine and osteopathy that will significantly increase the opportunities for students and house staff to learn both the principles and practice of preventive cardiology; develop promising faculty whose interest and training are in preventive cardiology teaching, research, and practice; develop established faculty who have a major commitment to and possess educational skills for teaching preventive cardiology;

This program is described in the Catalog of Federal Domestic Assistance No. 13.837, Heart and Vascular Diseases. 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 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency Review.

Facilitate interchange of educational ideas and methods applicable to teaching preventive cardiology among awardees and institutions;

Develop at the grantee institution the ability to strengthen continuously the improved preventive cardiology curriculum, with local funds, subsequent to the award.

Requests for copies of the PCAA Program Guidelines should be directed to:

Curt Furberg, M.D.
Acting Associate Director
Clinical Applications and Prevention Program
Division of Epidemiology and Clinical
Applications
National Heart, Lung, and Blood Institute
Federal Building - Room 216
Bethesda, Maryland 20205

Telephone: (301) 496-3107

ANNOUNCEMENT

RESEARCH CAREER DEVELOPMENT AWARD IN BASIC SCIENCE RELATED TO THE
RESPIRATORY SYSTEM

P.T. 34; K.W. 1201210, 1003002, 1002023, 1002019, 1002008, 1200180

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

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

The Division of Lung Diseases of the National Heart, Lung, and Blood Institute (NHLBI) supports the career development of research investigators through the Research Career Development (RCDA) program, an NIH-wide mechanism. The career development of investigators interested in basic research is an important part of the program of the Division of Lung Diseases, and this program announcement is intended to focus attention on this important area.

In the past ten years, major advances in genetics, immunology, biochemistry, and molecular biology have taken place and have contributed to the understanding of a number of disease processes. Although pulmonary research has benefited from these advances to some extent, the potential still exists for basic science contributions to pulmonary research. For example, the influence of genetics and inherited factors in respiratory disease is not well understood. The biochemical properties of mediators involved in the regulation of airway smooth muscle function in health and disease also need to be investigated further. Similarly, more work is needed to elucidate the metabolism of peptides, amines, lipids, and other substances by the lung and the role of the prostaglandins and other mediators in injury and repair processes of the normal and diseased lung. To further develop and stimulate research in these important areas, approaches involving geneticists, biochemists, and other basic scientists should be encouraged.

The objective of this announcement is to encourage basic scientists to gain experience in the basic science aspects of pulmonary research. The awards are available for persons whose research potential is apparent, but who need additional experience in a productive scientific environment conducive to the development of a career in independent research. The initiative will encourage scientists in disciplines including, but not limited to, biochemistry, molecular biology, genetics, and immunology to interact with pulmonary researchers in the conduct of pulmonary research. The award will provide five years of research experience to an individual who has a doctoral degree, at least 3 years of subsequent relevant research or professional experience, and who meets the other eligibility criteria for an RCDA from NIH.

This program is described in the Catalog of Federal Domestic Assistance No. 13.838, Lung Diseases. 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 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

APPLICATION SUBMISSION AND REVIEW

Application receipt dates for new applications are the regular application receipt dates for NIH Research Career Development Award (RCDA) applications of February 1, June 1, and October 1. The earliest possible award date is approximately nine months after the receipt date. Applicants should use the regular research grant application form PHS 398 and consult the "Policy Brochure and Additional Instructions for Preparing an Application for a National Institute of Health Research Career Development Award" in developing an application. Both of these are available at most institutional business offices or from the Division of Research Grants (DRG) NIH.

To identify responses to this announcement, check "yes" and write "**Research Career Development Award in Basic Science Related to the Respiratory System**" under item 2 of page 1 of those grant applications relating to this topic.

The completed application should be mailed to:

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

The DRG will assign applications for review according to the NIH process for regular research grant applications. Additional information may be obtained by contacting:

Joan Wolle, Ph.D.
Prevention, Education, and Manpower Branch
Division of Lung Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Westwood Building - Room 6A12
Bethesda, Maryland 20205

Telephone: (301) 496-7668

ANNOUNCEMENT

MINIATURIZED TRANSDUCERS FOR IMAGING AND MEASURING CARDIOVASCULAR
STRUCTURE AND FUNCTION IN INFANTS AND IN THE YOUNG

P.T. 34; K.W. 1200380, 1004019, 1201020, 0603000

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Dates: March 1, July 1, November 1

Pediatric cardiology is an important sector of several programs in the Division of Heart and Vascular Diseases(DHVD) of the National Heart, Lung, and Blood Institute (NHLBI). Diagnostic instrumentation for detection and evaluation of heart and vascular diseases is supported in the Division.

Research and development has traditionally been conducted for application to the adult population. As a result, physical features and performance of existing instruments often inhibit or prevent their application to infants or young children. As an example, a typically well designed, externally applied transducer to detect blood flow may be perfectly acceptable for use in an adult, but cannot be applied properly at a rib interspace in a small child. For an ultrasonic device, bone interference could prevent transmission and receiving of acoustic signals. As another example, if one were interested in imaging certain arterial structures, resolution of 1-2 mm may be adequate for an adult but, because this structure is 1/2 to 1/3 the size in an infant, such resolution may be entirely unacceptable for use with an infant.

The intent of this announcement is to encourage research involving externally applied transducers for imaging and measuring cardiovascular structure and function in infants and in the young. Indwelling transducers for use in the young are also of interest.

Applications should ideally propose to address a physiological or medical research problem to test and validate the instrumentation. Applications may include human and/or animal studies involving infants, young children, or early developmental stages.

This program is described in the Catalog of Federal Domestic Assistance No. 13.837, Heart and Vascular Diseases Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 73-410, 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 intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

APPLICATION SUBMISSION AND REVIEW

Application receipt dates for new regular research applications (ROIs) are the regular application receipt dates of March 1, July 1, and November 1. The earliest possible award date is approximately nine months after the receipt date. Applicants should use the regular research grant application form PHS 398, which is available at most institutional business offices or from the Division of Research Grants (DRG), NIH.

To identify responses to this announcement, check "yes" and put **"Miniaturized Transducers for Imaging and Measuring Cardiovascular Structure and Function in Infants and in the Young"** under item 2 of page 1 of those grant applications relating to the topics identified herein. The completed application (original plus five copies) should be mailed to:

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

The DRG will assign applications for review according to the NIH process for regular research grant applications.

Additional information may be obtained by contacting:

Alan S. Berson, Ph. D.
Devices & Technology Branch
Division of Heart and Vascular Diseases
National Institutes of Health
Federal Building - Room 312
Bethesda, Maryland 20205

Telephone: (301) 496-1586

One additional copy of the application should be sent to Dr. Berson.

SMALL BUSINESS INNOVATIVE RESEARCH (SBIR) PROGRAM

Anyone interested in responding to this announcement through the SBIR program should request the Omnibus Solicitation for SBIR from:

Office of Grants Inquiries
Division of Research Grants
Westwood Building - Room 449
Bethesda, Maryland 20205

The Omnibus Solicitation contains information about the SBIR program, an application form and instructions how to apply. Questions regarding the Miniaturized Transducers Program should be addressed to Dr. Alan S. Berson whose address and phone number appear above.

ANNOUNCEMENT

ARRHYTHMIA DETECTION AND DISCRIMINATION FROM ELECTROGRAMS

P.T. 34; K.W. 1200370, 1004019, 0603006

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Dates: March 1, July 1 and November 1

The objective of this announcement is to encourage research in the detection of arrhythmias from electrograms and in the development of algorithms for differential diagnosis among both atrial and ventricular rhythm abnormalities.

Detection and diagnosis of cardiac rhythm abnormalities based upon electrocardiographic signals have been a developing area since the early days of electrocardiography. Although most of the frequently observed arrhythmias are distinguishable from one or more ECG leads, differential diagnosis remains a problem for several of the less common arrhythmias. Basic physiologic mechanisms responsible for many of these arrhythmias are much less understood. In recent years, investigators have been directing efforts at arrhythmia detection from electrograms. A principal aim of these efforts has been to develop means for automatically detecting ventricular fibrillation so as to defibrillate an animal or human patient (some times without manual intervention) using totally implanted electronic circuitry. Other investigators have been interested in detecting rhythm abnormalities other than ventricular fibrillation using implanted circuitry for automatic cardioversion or defibrillation.

In September, 1983, a Workshop on this subject was held at the National Institutes of Health (NIH) supported by the National Heart, Lung, and Blood Institute (NHLBI) entitled Electrical Control of Tachyarrhythmias by Implantable Devices. Among the gap areas identified by the Workshop participants was the recognition that detection of arrhythmias by electrograms is in need of much additional research. Typical examples of unknowns are: Is it possible using suitable electrogram leads to allow differential diagnosis among various arrhythmias which cannot be well distinguished with surface ECG leads? How well can algorithms developed on the basis of surface ECG leads be adapted to electrograms? What type of electrodes should be used and how many leads and locations are optimum? Applicants are encouraged to consider these and other research questions related to this topic.

This program is described in the Catalog of Federal Domestic Assistance No. 13.837, Heart and Vascular Diseases Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 73-410, 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 the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

The ability to successfully diagnose specific rhythm abnormalities from electrograms is likely to have a considerable impact on health care. Technologic advancements have made it possible to design sophisticated electronic circuitry compact enough to totally implant a system which can both detect rhythm abnormalities and apply electrical stimuli to interrupt an arrhythmia and convert cardiac activity back to normal rhythm. Such electrical conversion has the potential for being specific and for permitting continuous monitoring and application of properly timed and shaped electrical stimuli. Thus, rather than wait until the onset of a life-threatening ventricular arrhythmia, corrective action can be taken much earlier.

Research applications should ideally propose a hypothesis related to this topic and an experimental plan to test and validate the hypothesis. Theoretical, animal, and human studies may be appropriately included.

Application Submission and Review

Application receipt dates for new regular research applications (ROIs) are the regular application receipt dates of March 1, July 1, and November 1. The earliest possible award date is approximately nine months after the receipt date. Applicants should use the regular research grant application form PHS 398, which is available at most institutional business offices or from the Division of Research Grants (DRG), NIH.

To identify responses to this announcement, check "yes" and put "**Arrhythmia Detection and Discrimination from Electrograms**" under item 2 of page 1 of those grant applications relating to the topics identified herein.

The completed application should be mailed to:

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

The DRG will assign applications for review according to the NIH process for regular research grant applications. Additional information may be obtained by contacting:

Alan S. Berson, Ph. D.
Devices & Technology Branch
Division of Heart and Vascular Diseases
National Institutes of Health
Federal Building - Room 312
Bethesda, Maryland 20205

Telephone: (301) 496-1586

ANNOUNCEMENT

DEMONSTRATION AND EDUCATION RESEARCH RELATED TO PULMONARY DISEASE

P.T. 04; K.W. 1201210, 0502017, 0701042, 1200540, 0404000

NATIONAL, HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Dates: March 1, July 1, November 1

Demonstration and education research is an integral part of the National Heart, Lung, and Blood Institute's (NHLBI) systematic approach to supporting research at the most basic level and then advancing these developments to the ultimate goal of improved health and health care for the nation. The NHLBI seeks to maintain an optimal balance in its support of various types of research. The Division of Lung Diseases of the NHLBI is particularly interested in stimulating more quality applications in the area of demonstration and education research related to pulmonary disease.

Demonstration and education research is the testing of the effectiveness of interventions to promote health or prevent disease in defined populations. The interventions selected for such testing should be those that have already been found to be efficacious in other studies and include, but are not limited to, education strategies and modifications in health care and health related practices. The studies should be based on the fields of biomedical, behavioral, and social sciences.

Demonstration and education research is the last phase of the five phases of the NHLBI biomedical research spectrum composed of: (1) basic research, which seeks new knowledge about normal and abnormal functions of the heart, lungs, and blood and the etiology and pathogenesis of their diseases; (2) applied research and development, which seeks to develop new ways of using basic research results to achieve specific practical goals, (3) clinical investigations, which evaluate the application of fundamental research results in the clinical setting, usually in a relatively small number of patients, (4) clinical trials, which determine the efficacy and safety of clinical interventions in samples of patients drawn from larger population groups, and (5) demonstration and education research, which determines the effectiveness of interventions designed to promote health or prevent disease in defined populations. The interventions selected for such testing should be those that have already been found to be efficacious in other studies and include, but are not limited to, education strategies and modifications in health care and health related practices.

The demonstration and education programs that the NHLBI intends to support are related to the provisions of the National Heart, Blood Vessel, Lung, and Blood Act of 1972 (Public Law 92-423, as extended by the Health Research and Health Service Amendments of 1976 (Public Law 94-278), the Biomedical Research Extension Act of 1977 (Public Law 95-83), and subsequent reauthorizations through 1980. These programs are described in the Catalog of Federal Domestic Assistance No. 13.838, Lung Diseases. 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 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

Topics which might be investigated in this program include, but are not limited to:

- o Education for cystic fibrosis patients and their parents to enhance their self-management of the disease.
- o Examination of the usefulness of peak-flow meters as an adjunct to health education for adult and pediatric asthmatics.
- o Development and evaluation of methods to encourage smoking cessation in those individuals diagnosed as having mild airflow obstruction or with chronic obstructive pulmonary disease.

The objective of this program announcement is to encourage grant applications for demonstration and education research into significant aspects of lung diseases. The population in which the research would be conducted should be well defined and may include health-care professionals, defined groups within a community, or the general population. Staffing for the research should include relevant professional expertise in disciplines as needed, including medical disciplines, health education, epidemiology, biostatistics, and behavioral and social sciences.

APPLICATION SUBMISSION AND REVIEW

Application receipt dates for new applications are the regular receipt dates of March 1, July 1, and November 1.

In preparing an application, potential applicants should consult the "Guidelines for Demonstration and Education Research Grants" (June 15, 1983) available from the National Heart, Lung, and Blood Institute Program Office listed below. Applicants should use the regular research grant application form PHS 398, which is available at most institutional business offices or from the Division of Research Grants (DRG) NIH.

To identify responses to this announcement, check "yes" and put "**NHLBI Demonstration and Education Research**" under item 2 of page 1 of those grant applications relating to the topics identified herein. The completed application should be mailed to:

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

The DRG will assign applications from the review according to the NIH process for regular research grant applications. Additional information may be obtained by contacting:

Sydney Parker, Ph.D., Chief
Prevention, Education, and Manpower Branch
Division of Lung Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Westwood Building - Room 6A12
Bethesda, Maryland 20205

Telephone: (301) 496-7668

ANNOUNCEMENT

CAREER DEVELOPMENT PROGRAMS FOR PHYSICIANS IN CARDIAC AND VASCULAR RESEARCH IN CEREBROVASCULAR DISEASE

P.T. 34; K.W. 1200235, 1200220, 1200180

NATIONAL HEART, LUNG AND BLOOD INSTITUTE

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

The Division of Heart and Vascular Diseases, National Heart, Lung and Blood Institute, (NHLBI) supports research on the cardiac and vascular aspects of cerebrovascular disease. There is a need to increase the pool of basic and clinical investigators whose competence and interests embrace this important field of research. For example, there is need to investigate the regional differences in atherogenesis between the cerebral and coronary or iliaco-femoral arteries; the effects of hypertension on these vessels; thrombotic and embolic disorders; the effects of cardiac arrhythmias and chronic heart failure; the pathogenesis of aneurysms; and others.

The Institute announces its interest in receiving applications from physicians in this area. Application should be made to either of two existing programs designed to foster research training and experience for those with degrees in medicine.

The two programs are the Clinical Investigator Award and the Physician Scientist Award. The Clinical Investigator Award is designed to provide the opportunity for promising clinically-trained individuals to develop into independent biomedical investigators by investigating a well-defined problem under the guidance of a sponsor who is competent in the chosen area of research. The Physician Scientist Award is intended to encourage newly trained clinicians to develop independent research skills and experience in a fundamental science under the guidance of a sponsor who will provide the training in a basic scientific discipline for application to a research problem that may not yet be well defined. Annual receipt dates of February 1, June 1, and October 1 have been established with the earliest beginning dates of December 1, April 1 and July 1 respectively. Descriptions of these awards may be found in the NIH Guide for Grants and Contracts, Volume 13, Number 8, June 29, 1984. Specific information concerning guidelines, eligibility, duration, stipends of the two programs can be obtained from:

Max A. Heinrich, Jr., Ph.D.
Research Training and Development Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building - Room 3A12
Bethesda, Maryland 20205

Telephone: (301) 496-1724

This program is described in the Catalog of Federal Domestic Assistance No. 13.837, Heart and Vascular Diseases. 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 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) has a Clinical Investigator Development Award (CIDA) for training in clinical research, including cerebrovascular disease. The availability of this award was announced in the NIH Guide for Grants and Contracts, Volume 13, Number 9, August 3, 1984.

ANNOUNCEMENT

MINIMALLY INVASIVE MEASUREMENT OF BLOOD PRESSURE IN THE HEART AND CENTRAL ARTERIES

P.T. 34; K.W. 1200370, 1004019, 0603000

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Dates: March 1, July 1, and November 1

Diagnostic instrumentation for detection and evaluation of heart and vascular diseases is supported in the Division of Heart and Vascular Diseases (DHVD) of the National Heart, Lung, and Blood Institute (NHLBI). The intent of this announcement is to encourage research aimed at minimally invasive techniques to measure pressure in the chambers of the heart and in central arteries.

In many patients with cardiac disease, it is clinically important to know what pressures exist in right atrium, right ventricle, pulmonary artery, left atrium, left ventricle or aorta. Currently, pressures can be estimated with minimally invasive means in right atrium (jugular venous pressure) and aorta (sphygmomanometer). Right atrial pressure will be the same as right ventricular diastolic pressure except for the rare occurrence of tricuspid stenosis. None of the other pressures can be directly measured unless more invasive techniques are used.

Attempts to measure pressures with minimally invasive techniques have included measurements of time intervals, blood velocity, and ventricular wall thickness and diameter.

Apart from Doppler velocity measurements (which themselves are indirect measurements of pressures) on stenotic lesions, measurements are not of pressures but of ventricular responses to pressures. Because there is a great deal of variability of response, confidence intervals are very large. Furthermore, because inverse prediction is involved, the ability to predict pressure in a single individual has limits that are too wide to be useful. Doppler studies are based on physical principles directly related to valve orifice area and at present have to assume normal outputs; this assumption will lead to some variability.

This program is described in the Catalog of Federal Domestic Assistance No. 13.837, Heart and Vascular Diseases Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 73-410, 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 the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

Research applications should ideally include a sound theoretical basis for the proposed minimally invasive pressure measurement method and an experimental plan to test and validate the system in models, animals and/or humans.

Application Submission and Review

Application receipt dates for new regular research applications (R01s) are the regular application receipt dates of March 1, July 1, and November 1. The earliest possible award date is approximately nine months after the receipt date. Applicants should use the regular research grant application form PHS 398, which is available at most institutional business offices or from the Division of Research Grants (DRG), NIH.

To identify responses to this announcement, check "yes" and put "**Minimally Invasive Measurement of Blood Pressure in the Heart and Central Arteries**" under item 2 of page 1 of those grant applications relating to the topic identified herein. The completed application should be mailed to:

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

The DRG will assign applications for review according to the NIH process for regular research grant applications. Additional information may be obtained by contacting:

Alan S. Berson, Ph. D.
Devices & Technology Branch
Division of Heart and Vascular Diseases
National Institutes of Health
Federal Building - Room 312
Bethesda, Maryland 20205

Telephone: (301) 496-1586

Small Business Innovative Research (SBIR) Program

Anyone interested in responding to this announcement through the SBIR program should request the Omnibus Solicitation for SBIR from:

Office of Grants Inquiries
Division of Research Grants
Westwood Building - Room 449
Bethesda, Maryland 20205

The Omnibus Solicitation contains information about the SBIR program, an application form and instructions how to apply. Questions regarding the minimally invasive blood pressure measurement program should be addressed to Dr. Alan S. Berson whose address and phone number appear above.

To identify responses to this announcement, check "yes" and put "**Development of Genetic Hypertensive Animal Models**" under item 2 of page 1 of the grant application. The completed application should be mailed to:

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

The DRG will assign applications for review according to the NIH process for regular research grant applications. Additional information may be obtained by contacting:

Armando Sandoval
Hypertension and Kidney Diseases Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 4C08
Bethesda, Maryland 20205

Telephone: (301) 496-1857

Small Business Innovative Research (SBIR) Program

Anyone interested in responding to this announcement through the SBIR program should request the Omnibus Solicitation for SBIR from:

Office of Grants Inquiries
Division of Research Grants
Westwood Building - Room 449
Bethesda, Maryland 20205

The Omnibus Solicitation contains information about the SBIR program, an application form and instructions how to apply. Questions regarding the genetic hypertensive model program should be addressed to Mr. Sandoval whose address and phone number appear above.

ANNOUNCEMENT

DEVELOPMENT OF GENETIC HYPERTENSIVE ANIMAL MODELS

P.T. 34; K.W. 1200600, 1200410, 1002019, 1002002

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Dates: March 1, July 1 and November 1

The National Heart, Lung, and Blood Institute (NHLBI) supports numerous basic research projects dealing with many of the multiple facets of essential hypertension. Essential hypertension is believed to have a genetic component, which is polygenic in nature. Therefore, the phenotypic expressions (genetic traits) are many and varied. However, despite this genetic multiplicity most of the basic research has been done with one genetic hypertensive model, the Okamoto spontaneously hypertensive rat (SHR). This model appears relevant to human essential hypertension and it is readily available. Other genetic hypertensive models do exist (e.g. the New Zealand Rat), but they are far less accessible than the SHR. Because of these circumstances, virtually all scientific advisory groups that have assessed the research needs of the hypertension field have at one time or another recommended the development of new hypertensive models including genetic models.

This program announcement is to encourage the development of new genetic animal models of hypertension. To develop a model it is imperative that a breeder work with an investigator so that the finished product reflects the research need and is marketable. This announcement offers support for the development phase in the hope that once a genetic hypertensive model is established, private enterprise will take over and make it accessible to all investigators. With appropriate attention to detail, both the research value of the model and its marketability can be enhanced. The model should (1) facilitate research; (2) be healthy; and (3) be cost-effective. All animal species will be considered. This announcement pertains to the de novo development of animal models, as well as to refinement of animal models whose development is already underway but not yet completed. The input of a geneticist is desirable.

This announcement is addressed to animal breeders and hypertension investigators through the regular research grant program and also through the Small Business Innovative Research (SBIR) program.

This program is described in the Catalog of Federal Domestic Assistance No. 13.837, Heart and Vascular Diseases. 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 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

REGISTRATION FORM

8th Annual NIH Research Safety Symposium

Creating a Safe Environment for Biomedical
Support Services Personnel

January 10-11, 1985
Washington, D.C.

I will attend the symposium I will not attend the symposium

NAME: _____ TITLE: _____

AFFILIATION: _____

ADDRESS: _____

I will attend the luncheon

I will not attend the luncheon

Please forward hotel reservation card

PLEASE RETURN BY DECEMBER 10, 1984 TO:

Ms. Attrices D. Griffin
EXPAND ASSOCIATES, INC.
7923 Eastern Avenue - Suite 400
Silver Spring, Maryland 20910

Telephone: (301) 585-7400