

# NIH Guide for Grants and Contracts

Vol. 12, No. 12, December 9, 1983

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**

**TERMINATION OF GERIATRIC MEDICINE ACADEMIC AWARD**

**NATIONAL INSTITUTE ON AGING**

The National Institute on Aging (NIA) announces that, effective immediately, acceptance of further applications for the Geriatric Medicine Academic Award will be deferred until further notice in the NIH Guide to Grants and Contracts.

Existing Geriatric Medicine Academic Awards are in no way affected by this announcement and will be funded by NIA through their expected termination dates within the limitations on availability of funds.

Those applications for the Geriatric Medicine Academic Award which were received by the NIH Division of Research Grants to meet the annual receipt date of July 1, 1983, will be processed, reviewed, and considered for funding on the basis of scientific merit. At this time emphasis in funding is being placed on other career development mechanisms in research and academic leadership. These mechanisms include NIA's Academic Award, Clinical Investigator Award, and Physician Scientist Award.

NOTICE

PROGRAM PROJECT RESEARCH GRANT APPLICATION (P01) SPECIAL DIRECTIVES

**NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT**

The National Institute of Child Health and Human Development (NICHD) announces updated directives for investigators submitting applications for Program Project Grants (P01's) which are likely to be assigned to NICHD for support. These directives will apply to all new and renewal applications submitted for the NIH-DRG application receipt date, February 1, 1984, and thereafter. This notice rescinds the special directives, including the dollar ceiling, announced in the NIH Guide for Grants and Contracts Vol. 9, No. 8, June 6, 1980.

**I. SCOPE OF NICHD PROGRAM PROJECT APPLICATIONS**

To be eligible for consideration for award as a program project, an approved application must contain a minimum of three component projects deemed to be of high scientific merit. Each of these projects must be relevant to the central theme of the program project application.

**II. PREAPPLICATION PROCESS**

- A. Applicants are encouraged to communicate in writing with NICHD prior to preparation and submission of a formal application. Although not mandatory, this letter will assist NICHD staff in determining if the proposal falls within the mission and research interests of the Institute, and if it meets the criteria for a program project. It will also permit the applicant to benefit from consultation with NICHD staff and to obtain current NICHD program project guidelines. Following receipt of the written communication, potential applicants will be contacted promptly by an Institute Health Scientist Administrator who will be available for further consultation.
- B. The written communication should provide in no more than two single spaced, typewritten pages, the following information:
1. A statement highlighting the central theme and objectives of the proposed program project.
  2. A brief description of each component project including the name of the Project Director and a statement of how each specific component project will contribute to the overall goal of the program project.
  3. An estimate of the annual budget and the number of years of support requested for the total program project and for each component project.

4. Depending on the central theme of the proposal, communications should be directed to:

Philip Corfman, M.D.  
 Director, Center for Population Research  
 National Institute of Child Health  
 and Human Development  
 Landow Building - Room 7A-21  
 Bethesda, Maryland 20205

Telephone: (301) 496-1101

or

Sumner Yaffe, M.D.  
 Director, Center for Research for Mothers  
 and Children  
 Landow Building - Room 7C-03  
 Bethesda, Maryland 20205

Telephone: (301) 496-5097

Population research may include the reproductive sciences and the demographic and behavioral sciences.

Research related to mothers and children may include mental retardation and developmental disabilities, human learning and behavior, pregnancy and perinatology, clinical nutrition and endocrinology, genetics and teratology, and developmental biology.

### III. THE APPLICATION

The program project application should be prepared on PHS Form 398 and identified by typing **"PROGRAM PROJECT"** in Item No. 2 of the face page. NIH-DRG receipt dates, NICHD review dates, and earliest potential start dates for program projects are shown below:

<u>Application Receipt Dates</u>	<u>Initial Review</u>	<u>Council Review</u>	<u>Earliest Beginning Dates</u>
February 1	June	September	December 1
June 1	November	January	April 1
October 1	March	June	August 1

The original and four copies of the complete application should be mailed to:

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

Two copies of the complete application should be mailed under separate cover to:

Eileen G. Hasselmeyer, Ph.D.  
Associate Director for Scientific Review  
National Institute of Child Health  
and Human Development  
Landow Building - Room 6C08  
Bethesda, Maryland 20205

Applications received too late for one cycle of review will be held for the next review cycle.

The scientific review of the application will be conducted by an NICHD initial review group, in accordance with NIH peer review procedures. A project site visit is not a prerequisite for consideration by an NICHD review committee. Questions and other communications about the review of the application should be addressed to the Executive Secretary of the assigned review committee, Office of Scientific Review, NICHD.

Second-level review will be provided by the National Advisory Child Health and Human Development Council.

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

SEXUALLY TRANSMITTED DISEASES RESEARCH UNITS

NIH-NIAID 84-AI-04

**NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES**

Application Receipt Date: March 15, 1984

**I. BACKGROUND INFORMATION**

The National Institute of Allergy and Infectious Diseases (NIAID) invites applications for one program project grant to be initiated during FY 1984 for participation in an ongoing program of research in Sexually Transmitted Diseases (STD). This RFA will be issued only once during fiscal year 1984.

One of the major health problems in the U.S. today is that of sexually transmitted (venereal) diseases. The explosive rise in gonococcal infections in the last decade, for example, with an estimated 2,000,000 gonococcal cases per year, can be considered a major infectious disease epidemic. Many other diseases, such as chlamydial infections, genital herpes, enteric infections, and hepatitis B, are known to be transmitted by the sexual route; these are now being recognized with increasing frequency. Pelvic inflammatory disease, the most serious sequela of gonococcal infection in females, costs the health services an estimated \$1 billion annually.

**II. RESEARCH GOALS AND SCOPE**

- A. As one means of achieving the stated goals, the NIAID proposes to maintain support of a number of STD research units, or centers of excellence, to serve as foci for research and training in STD. This RFA is for support of research to be considered for emphasis in this program can be on any or all of the STDs that are currently recognized as significant public health problems. A strong clinical component should be a major part of the application.
- B. The research efforts will focus on any or all of the diseases known, or believed to be transmitted by sexual contact or the sexual route. The diseases of interest in this program can include: gonorrhea; syphilis; chlamydial infection; Trichomonas; viral infections such as genital herpes, genital warts, hepatitis B; nonspecific vaginitis; enteric diseases; parasitic infestations; and Acquired Immune Deficiency Syndrome. Specific areas of research can include: biology or virulence factors of the causal organism; the hosts' immune responses; animal model systems; diagnosis, therapy, and preventive measures; and epidemiology, including computer modeling of control strategies.



### III. MECHANISM OF SUPPORT

**Eligibility:** Domestic universities, medical colleges, hospitals, and laboratories of other public or private institutions are eligible.

The program project can be supported for up to five years; renewability is dependent on successful competition and the availability of funds. Earliest start date is September 28, 1984.

Funds available will be in the range of \$300,000 - \$350,000 direct costs. All PHS-NIH policies pertaining to awards and administration of research program projects will be adhered to. The Catalog of Federal Domestic Assistance citation is No. 13.856, Microbiology and Infectious Diseases Research.

### IV. REVIEW PROCEDURES AND CRITERIA

Initial peer review will be by the Microbiology and Infectious Diseases Research Committee of the Institute. Final review will be by the National Advisory Allergy and Infectious Diseases Council. Prospective applicants are strongly advised to request from the Institute contact an Information Brochure: The Program Project Grant, National Institute of Allergy and Infectious Diseases. The brochure outlines the method of preparing a program project application and other important features including review criteria.

Proposals considered to be not responsive to the terms of this RFA by the DRG and NIAID will be returned to the investigator.

### V. METHOD OF APPLYING

A more detailed RFA is available upon request from the Institute contact. A letter of intent, while not mandatory, is suggested and should be forwarded to the Institute no later than January 6, 1984. Applications, on PHS Form 398 (rev. 5/82), are available from the applicant's business office, or the Division of Research Grants (DRG) NIH. An original and six copies should be sent to the DRG. Receipt date is March 15, 1984; late applications will be considered nonresponsive to this RFA.

The words **SEXUALLY TRANSMITTED DISEASES PROGRAM PROJECT** and the RFA number **84-AI-04** should appear in item 2 on the application face page.

### VI. IDENTIFICATION OF CONTACT POINTS

Direct all inquiries to:

Milton Puziss, Ph.D., Chief  
Bacteriology and Virology Branch  
MIDP  
National Institute of Allergy and  
Infectious Diseases  
National Institutes of Health  
Westwood Building - Room 738  
Bethesda, Maryland 20205

Telephone - (301) 496-7728

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

OPPORTUNISTIC INFECTIONS IN AIDS PATIENTS

NIAID 84-AI-05

**NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES**

Application Receipt Date: March 16, 1984

I. BACKGROUND INFORMATION

The National Institute of Allergy and Infectious Diseases (NIAID) invites applications for regular research grants to be initiated during fiscal year 1984 on the subject of opportunistic infections in individuals afflicted with a new disease called Acquired Immune Deficiency Syndrome, or AIDS.

AIDS is a serious condition characterized by a specific defect in natural immunity against disease. People who suffer from AIDS become susceptible to a variety of life-threatening infections. These infections are not often found in people whose immune system is normal, and if they occur, they are relatively mild. Many of these life-threatening infections are caused by the opportunistic microorganisms *Pneumocystis carinii*, *Cryptosporidium*, *Mycobacterium Avium* and *M. intracellulare*, and the fungal organisms *Candida*, *Aspergillus* and *Cryptococcus*.

II. RESEARCH GOALS AND SCOPE

The goals of the solicited research should focus on the seven opportunistic microorganisms mentioned above. The specific areas of research may be basic biology of the organisms, mechanisms of pathogenesis, virulence factors, immunogens and immunopathology, immunotherapy and immune prophylaxis, and other investigator selected areas. Experimental systems in other mammalian hosts may be used to investigate the basic processes of pathogenesis, virulence, etc. The model systems, however, must relate to the infection in humans.

III. MECHANISM OF SUPPORT

Eligibility - Domestic universities, medical colleges, hospitals, and laboratories of other public, private or for profit institutions are eligible.

The project can be supported for up to five years; renewability is dependent on successful competition and the availability of funds. Earliest start date is September 1, 1984.

Funds available for this program will approximate \$500,000 direct costs for the first year. All Public Health Service (PHS) and National Institutes of Health (NIH) policies pertaining to awards and administration of research projects will apply. The Catalog of Federal Domestic Assistance citation is Sec. 13.856, Microbiology and Infectious Diseases Research.

#### IV. REVIEW PROCEDURES AND CRITERIA

Initial peer review will be by a Study Section of the Division of Research Grants (DRG), NIH. Final review will be by the National Advisory Allergy and Infectious Diseases Council.

Applications will be reviewed by the DRG and NIAID to determine whether or not they are responsive to the terms of this RFA.

#### V. METHOD OF APPLYING

Prospective applicants are advised to contact the Institute representatives listed below for additional information concerning programmatic goals and scope. Prospective applicants are encouraged to submit a one page letter of intent that includes a brief description of the thrust of the research activities and identity of the Principal Investigator or other key personnel, if known. The Institute requests such letters for the purpose of providing an indication of the number and scope of applications to be received. A letter of intent is not binding, will not enter into the review of any application subsequently submitted, and is not a necessary requirement for application. Proposals are to be submitted on PHS Form 398 (rev. 5/82) available from the applicant's business office or the Division of Research Grants (DRG), NIH. An original and six copies should be sent to the DRG and a copy of the face page sent to the Institute contact. Receipt date is March 16, 1984.

The words "Opportunistic Infections in AIDS Patients" and the RFA number 84-AI-05 should appear in item 2 on the application face page.

#### VI. IDENTIFICATION OF CONTACT POINTS

Direct all inquiries prior to submission to:

##### Bacterial and Fungal

Darrel D. Gwinn, Ph.D.  
Program Officer, Tuberculosis/Mycology  
Microbiology and Infectious  
Diseases Program  
National Institute of Allergy  
and Infectious Diseases  
National Institutes of Health  
Westwood Building - Room 738  
Bethesda, Maryland 20205

Telephone: (301) 496-7728

##### Parasitic

Harley G. Sheffield, Ph.D.  
Parasitology Program Officer  
Microbiology and Infectious  
Diseases Program  
National Institute of Allergy  
and Infectious Diseases  
National Institutes of Health  
Westwood Building - Room 737  
Bethesda, Maryland 20205

Telephone: (301) 496-7115

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATION: RFA

ALZHEIMER DISEASE RESEARCH CENTERS

84-AG-01

NATIONAL INSTITUTE ON AGING

Application Receipt Date: March 20, 1984  
Letter of Intent Receipt Date: February 15, 1984

I. BACKGROUND

Of the many disabling conditions of the aged, one of the most serious is Alzheimer disease, a progressive degenerative disease of the brain. Alzheimer disease affects approximately five to six percent of the United States population over age 65. This disease is the most frequent cause of institutionalization of the aged in long-term-care facilities. In 1983 the United States will spend more than \$27 billion for the care of patients with Alzheimer disease. In developing specific initiatives in the 1984 appropriation, the Congress provided \$3.5 million to the National Institute on Aging (NIA) for the development of a multi-Institute collaborative effort to establish specialized research centers on Alzheimer disease. Under the leadership of the NIA, this effort involves the programmatic contributions and collaboration of the National Institute of Mental Health (NIMH), the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) and the National Institute of Allergy and Infectious Diseases (NIAID) to establish up to five specialized centers of excellence for research on Alzheimer disease and related disorders.

II. PROGRAM OBJECTIVES AND SCOPE

The National Institute on Aging is inviting grant applications from interested institutions to establish centers of excellence devoted to the study of Alzheimer disease and related disorders. This type of solicitation (the RFA) is issued to encourage coordinated multidisciplinary research in an area of special importance to the NIA, NINCDS, NIMH, and NIAID. An Alzheimer Disease Research Center (ADRC) will be an identifiable organizational unit formed by a

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This program is described in the Catalog of Federal Domestic Assistance, No. 13.866, Aging 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 Health Systems Agency Review.

single university medical center or a consortium of cooperating institutions, including the university affiliated centers. The general purpose of the ADRC is to support new research and to enhance ongoing research by providing core support to bring together behavioral, biomedical, and clinical science investigators in a manner that will enrich the effectiveness of Alzheimer disease research and ultimately improve health care delivery. An ADRC will be expected to foster three related functions: conducting multidisciplinary research; training scientists and clinicians (Ph.D., M.D., D.V.M., D.O., D.D.S., R.N.); and teaching and/or transferring new information concerning Alzheimer disease and related disorders.

To be eligible for a center grant under this program, the potential applicant institution must have ongoing, independently supported research and must propose new research in the area of Alzheimer disease and related dementing disorders of the aged. Relevant research projects supported by a DHHS agency, the VA or a foundation can become affiliated with a Center. The specific elements of an ADRC for which funds will be available in addition to core functions are: (a) new fully conceptualized research projects, (b) pilot or feasibility studies (new initiatives) in biomedical, epidemiological, behavioral and social research, and (c) core administrative activities fostering training of investigators and clinicians, information transfer, and program enrichment activities. The overall intent is to provide new support for an added dimension, capability, or potential for accomplishments greater than that possible by the present ongoing support at the applicant institution. The major source of research support sought by the investigators associated with the Center must be through independently funded projects of the participants. Stipends for trainees will not be available through ADRC funding; they must be sought through separate avenues of funding, e.g., individual fellowship and/or institutional training grant awards.

The core concept will be applicable to all of the ADRC activities--research, training and information transfer. Core facilities (shared resources) may be proposed which will enhance productivity or in other ways benefit a group of investigators to accomplish the stated goals of the ADRC. Three types of core units will be mandatory of all ADRCs:

- (a) an administrative unit to manage the overall activities of the Center,
- (b) a research support unit which serves the functions of patient registry, coordination, and evaluation; and clinical, pathological, social, behavioral and epidemiological data gathering, storage, coordination and analysis, and
- (c) an autopsy unit, either on site or available through specified contractual arrangement, which serves the functions of collecting, storing and distributing brain tissue, and provides routine services for biochemical, histological and neuropathological studies.

In addition to the above, each ADRC may propose other types of cores. These may include specific common facilities for activities which will be utilized and shared by at least two or more components of the Center. If exceptional concentration of resources, investigators and research are present in one or more ADRC center that focuses in a particular area such as neuropathology and brain banking, patient diagnosis and evaluation, or data registry and epidemiology, it is possible that such

a center may be designated as a National Coordinating Center in this field. Applicants interested in developing a center with an added specific focus in one of these areas may contact the program administrator for further details.

### III. 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 \$3.5 million will be set aside to fund applications which are submitted in response to the RFA. It is anticipated that approximately five grants will be awarded under this program. This specific amount will, however, depend on the merit and scope of the applications received. These applications will not compete for funding within the general pool of dollars available for other investigator-initiated research proposals. Only applications of sufficiently high scientific merit will be funded. The expected starting date is September 30, 1984. The current policies and requirements that govern the research grant programs of the NIH will prevail. No more than one ADRC Grant will be made to any one institution (or, for multicampus institutions, no more than one to each campus). Applications may also be submitted for consortium arrangements among investigators at separate but neighboring institutions who demonstrate a high degree of multidisciplinary collaboration.

### IV. REVIEW PROCEDURES AND CRITERIA

- A. Review Method: All applications responding to the RFA will be reviewed for scientific and technical merit by an initial review group which will be convened by the Scientific Review Office of the NIA solely to review these applications. Upon receipt, applications will be reviewed for their responsiveness to the objectives of this RFA. If an application is judged nonresponsive, the applicant will be contacted and given an opportunity to submit supplemental information. Although a site visit may be made, each proposal should be complete in itself, and should be prepared as if no visit is expected.
- B. Review Criteria: The factors to be considered in the evaluation of the scientific merit of each application will be those used in the review of traditional research-project grant applications, including the novelty, originality, and feasibility of the approach; the training, experience, and research competence of the investigator; the adequacy of the research design; the suitability of the facilities; scientific and administrative leadership of the applicant; institutional commitment; academic environment; and the appropriateness of the requested budget to the work proposed. As with any award of this nature, the scientific qualifications, demonstrated administrative ability, and total commitment of the principal investigator and institution to the proposal will be important factors in judging the overall merit of the application. An additional criterion will be the importance of the proposed research to the objectives of this RFA.

### V. METHOD OF APPLYING

- A. Format for Application: Submit the application on form PHS 398, the application form for the traditional research-project grant. This form is available in an applicant institution's office of sponsored research or business office, or from the Division of Research Grants (DRG) of the NIH. Use the

conventional format for a research-project grant application (please observe page limitations) and ensure that the points identified in the section on review procedure and criteria are fulfilled. To identify these applications as being in response to the RFA, check "yes" on item 2 of page 1 of the application and enter the title: **"ALZHEIMER DISEASE RESEARCH CENTERS"** and the RFA number **84-AG-01**. Guidelines for ADRC Applicants are available from NIA. See section on "Inquiries."

- B. **Application Procedure:** Although not a prerequisite for applying, potential applicants are encouraged to submit to the program administrator indicated below a non-binding letter of intent to apply, post-marked no later than February 15, 1984. The letter of intent does not influence review or funding decisions, but it will enable the NIA to plan the review, and will ensure that each potential applicant receives relevant program information prior to expending considerable effort in application preparation.

Send or deliver the completed application and four (4) signed, exact photocopies of it to:

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

In addition, at the same time two informational copies should be sent under separate cover to:

Chief, Scientific Review Office  
Office of Planning and Extramural Affairs  
National Institute on Aging  
National Institutes of Health  
Building 31 - Room 5C-12  
Bethesda, Maryland 20205

The deadline for receipt of applications by the NIH Division of Research Grants is March 20, 1984. Applications after this date will not be considered. Logistics and managerial practicality necessitate that only applicant institutions in the United States will be eligible. Additional information and copies of more detailed guidelines which outline the ADRC requirements and the method of applying can be obtained from NIA.

C. **Inquiries**

Inquiries regarding this announcement or requests for guidelines may be directed to the program administrator:

Zaven S. Khachaturian, Ph.D.  
Chief, Physiology of Aging Branch  
Biomedical Research and Clinical Medicine Program  
National Institute on Aging  
National Institutes of Health  
Building 31C - Room 5C-27  
Bethesda, Maryland 20205

Telephone: (301) 496-9350

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

BIOCHEMICAL EPIDEMIOLOGY

84-CA-02

NATIONAL CANCER INSTITUTE

Application receipt date: May 15, 1984

I. BACKGROUND

Although a significant proportion of human cancers are thought to be attributable to life style and other environmental factors and therefore potentially preventable, the task of identifying the effects of specific factors and evaluating their relative importance is an enormous one. The process of induction and progression of human cancer is exceedingly complex; multiple exposure to a variety of agents over time is the rule rather than the exception, past exposure is difficult to assess, host factors which may influence susceptibility are poorly understood, and the importance of promoting and/or anticarcinogenic exposures in humans have not been adequately defined.

Epidemiologic studies have resulted in the identification of factors which appear to increase or decrease cancer risk and have suggested the importance of host-susceptibility factors. The usual epidemiologic techniques, however, have been limited in their ability to reach firm conclusions by the difficulties in defining past carcinogen exposure levels and susceptibility states, in measuring low levels of risk, in evaluating directly host environmental interactions, and in identifying dietary determinants of cancer. Fortunately, a variety of sensitive and specific laboratory methods are now becoming available which are likely to facilitate epidemiologic investigations by providing better measures of exposure to initiators, promoters, anticarcinogens and inhibitors of carcinogenesis. Increased collaboration between laboratory scientists and epidemiologists in the application of these emerging techniques would be highly desirable.

This program is described in the Catalog of Federal Domestic Assistance number 13.393, Cancer Cause and Prevention Research. Awards are under authorization of the Public Health Service Act, Section 301(c) and Section 402 (Public Law 78-410, as amended; 42 USC 241; 42 USC 282) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to Health Systems Agency Review.



Modifying factors related to diet and nutrition have been implicated in several epithelial cancers including those of the gastrointestinal tract and reproductive organs. Hence these types of cancer (among others) might be especially suitable for collaborative studies involving epidemiologists and experimentalists.

## II. GOALS AND SCOPE

The purpose of this RFA is to stimulate the development and/or use of objective measures of risk in epidemiologic studies of the etiology of human cancer.

Studies of interest include (1) pilot and feasibility studies which (a) are necessary to adapt laboratory procedures to epidemiologic use, (b) characterize the accuracy and validity of the tests, and/or (c) compare the laboratory procedures with more traditional methods of assessing risk factors; and (2) full-scale epidemiologic studies using well characterized laboratory procedures. These procedures may measure actual levels of substances directly involved in the carcinogenic process, may measure markers (substances closely correlated with carcinogenic events), or factors which influence susceptibility. Collaboration between epidemiologists and laboratory scientists is encouraged at all stages in the development and use of tests in order to promote the efficient transition of research effort from laboratory to field study, although level of involvement of the epidemiologist will vary from consultation to project direction depending upon the stage of test development.

Successful grant awardees under this RFA will be required to participate in an annual program meeting of one or two days' duration. The meeting will be held in Bethesda, Md., to review and assess overall progress. The respondents should request sufficient funds within the budget to accommodate expenses for one to two participants at this meeting.

## III. MECHANISM OF SUPPORT

This RFA will use the traditional National Institutes of Health research (NIH) project grant. Responsibility for the planning, direction and execution of the proposed research will be solely that of the applicant. The total project period for applications submitted in response to the present RFA should not exceed three years. The intent is to fund several individual research project grants, with total costs amounting to approximately \$1.0 million for the first year. This funding level is dependent on the receipt of a sufficient number of applications of high scientific merit. Although this program is provided for in the financial plans of the National Cancer Institute (NCI) the award of grants pursuant to this RFA is also contingent upon the availability of funds for this purpose. Renewal applications will compete with all other unsolicited applications received by the NCI. NIH policies governing regular research project grants, including cost sharing, apply to applications received in response to this request.

## IV. COPIES OF THE BIOCHEMICAL EPIDEMIOLOGY RFA

May be obtained from:

Dr. Genrose D. Copley  
Special Programs Branch  
Division of Cancer Cause and Prevention  
National Cancer Institute  
Landow Building - Room 8C-16  
Bethesda, Maryland 20205

Telephone: (301) 496-9600

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

COOPERATIVE AGREEMENTS FOR RISK REDUCTION CLINICAL TRIALS EXAMINING  
THE ROLE OF MICRO AND MACRONUTRIENTS IN THE PREVENTION OF CANCER

84-CA-03

NATIONAL CANCER INSTITUTE

Application Receipt Date: February 15, 1984

A prior announcement, "The Role of Micro and Macronutrients in the Prevention of Cancer" (NIH Guide for Grants and Contracts, Vol. 12, No. 5, May 20, 1983) invited investigators to submit applications for cooperative agreements to support risk reduction clinical trials directed at examining the role of micro and macronutrients in the prevention of cancer. The RFA is hereby reissued.

The Division of Resources, Centers, and Community Activities (DRCCA) of the NCI invites cooperative agreement applications to support risk reduction clinical trials directed at examining the role of micro and macronutrients in the prevention of cancer. These clinical trials, which exclude focus on skin cancer (except melanoma) are to be conducted among normal populations as well as those who are at high risk for cancer. Micronutrients include, but are not limited to: beta-carotene, vitamin A or analogs, vitamin C, selenium and alpha tocopherol. Macronutrients include fats, vegetables, fruits, cereals and fibers.

An applicant, if funded under this RFA, will be supported through the cooperative agreement mechanism in accordance with the policies of the Public Health Service (PHS) and National Institutes of Health (NIH).

The awardee will have the primary responsibility for the planning and direction of the proposed study. This will involve active participation and interaction with the NCI staff on both administrative and scientific program activities. NCI staff will periodically review progress to ensure that the project conforms to the conditions of the award.

Applicants are not restricted to those who responded to the May 1983 announcement.

The RFA is available from:

Windred F. Malone, Ph.D., M.P.H.  
Chemoprevention Branch  
Blair Building - Room 624  
National Cancer Institute  
Bethesda, Maryland 20205

Telephone: (301) 427-8643

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

SPECIALIZED CLINICAL RESEARCH CENTERS FOR PERIODONTAL DISEASES

84-DE-02

NATIONAL INSTITUTE OF DENTAL RESEARCH

Application Receipt Date: May 1, 1984

The National Institute of Dental Research (NIDR) invites applications for one or more new clinical research centers devoted to periodontal diseases. The NIDR is currently supporting three Specialized Clinical Research Centers for Periodontal Diseases at Forsyth Dental Center, Boston; State University of New York, Buffalo; and Virginia Commonwealth University, Richmond. The first two centers are in their seventh year of support and the third center in its sixth year. The objectives of the new center(s) are to accelerate the acquisition of new data for preventing, diagnosing, and treating periodontal diseases and to bring their resources, facilities, and manpower to bear on these problems in a concerted way. The center(s) will be expected to capitalize on the recent advances in microbiology, immunology, and pharmacology.

The main objective of the clinical research centers is to facilitate the application of basic research findings in the areas of pharmacology, microbiology, and immunology in clinical investigations of patients having periodontal disease. Even though these centers should emphasize studies of human patients, it is recognized that laboratory and animal studies may also be needed to aid in understanding the disease processes. Specifically, the center(s) should develop programs to accomplish some or all of the following prioritized objectives:

1. Develop preventive measures.
2. Develop diagnostic tests especially for periodontal disease activity.
3. Improve therapeutic techniques and regimens.
4. Establish the causative organisms in periodontal diseases.
5. Determine the host response to these causative organisms.

The substance of each research program may vary according to local expertise, interest, resources, and recruitment possibilities, but the projects developed by each center must relate to the above objectives. Applicants should attempt to develop a unique program which is complementary rather than duplicative of ongoing research. The Institution must be willing to make a commitment of resources and staff to ensure the development, operation, and function of the proposed center.

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

Dr. Samuel Kakehashi  
Extramural Programs  
National Institute of Dental Research  
Westwood Building - Room 519  
Bethesda, Maryland 20205

Telephone: (301) 496-7784

**ANNOUNCEMENT****AVAILABILITY OF REQUEST FOR APPLICATIONS (RFA)****MARKERS FOR PULMONARY ENDOTHELIAL INJURY AND REPAIR****84-HL-12-P****DIVISION OF LUNG DISEASES****NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date: April 30, 1984

The Division of Lung Diseases (DLD) National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the identification of markers for pulmonary endothelial injury and repair. The main objective of this special grant program is to identify markers of pulmonary endothelial injury and repair and to determine how these markers could be applied to predict the onset, course, and outcome of acute lung injury due to a variety of causes.

Projects should address the identification of biochemical markers of acute endothelial injury in the lung, such as the release of specific antigens from the damaged endothelium or the binding of specific molecules by the injured endothelium. Studies correlating changes in endothelial functions with markers for injury are also of interest. This announcement may be of particular interest to investigators with expertise in biochemistry, immunology, pharmacology, pathology, cellular physiology and toxicology.

A letter of intent is requested by February 15, 1984 and the deadline for receipt of applications is April 30, 1984. The earliest award date for successful applicants will be in September 1984. Requests for copies of this RFA should be addressed to:

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

Telephone: (301) 496-7034

ANNOUNCEMENT

AVAILABILITY OF REQUESTS FOR APPLICATIONS (RFA)

SPECIALIZED CENTERS OF RESEARCH IN TRANSFUSION MEDICINE NATIONAL  
RESEARCH AND DEMONSTRATION CENTER IN TRANSFUSION MEDICINE

84-HL-13-B

DIVISION OF BLOOD DISEASES AND RESOURCES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: June 15, 1984

The Division of Blood Diseases and Resources (DBDR) of the National Heart, Lung, and Blood Institute (NHLBI), NIH supports a comprehensive research program in Transfusion Medicine. This comprehensive research program is intended to be a multidisciplinary approach directed at improving the availability, safety and quality of blood and blood products for therapeutic uses. As part of this comprehensive program, the NHLBI announces a competition for Specialized Centers of Research (SCOR) in Transfusion Medicine and a competition for a National Research and Demonstration Center (NRDC) in Transfusion Medicine. Applications received in response to this request will participate in a single competition.

A National Research and Demonstration Center in Transfusion Medicine is conceived as an enhancement of the SCOR program. It must include basic and clinical research (the traditional SCOR components) along with demonstration and education research and an essential coordinating and integrating effort. APPLICANTS MAY APPLY FOR EITHER A NATIONAL RESEARCH AND DEMONSTRATION CENTER OR A SCOR. THE SUBMISSION OF A NATIONAL RESEARCH AND DEMONSTRATION CENTER APPLICATION MAY, IN SOME INSTANCES, RESULT IN THE AWARD OF A SCOR GRANT. In other words, the applicant institution may apply for support as a National Research and Demonstration Center but, after appropriate peer review, it may be approved only as a SCOR if the other components (Demonstration and Education Research and Integration) are found deficient.

The requirements and formats for applications submitted in response to this announcement and additional information regarding the characteristics of these mechanisms of support can be obtained from:

George J. Nemo, Ph.D.  
Chief, Blood Resources Branch  
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

### INTERMEDIATE VOLTAGE ELECTRON MICROSCOPY AND IMAGE ANALYSIS RESOURCES

#### BIOTECHNOLOGY RESOURCES PROGRAM

#### DIVISION OF RESEARCH RESOURCES

##### I. BACKGROUND INFORMATION

The Biotechnology Resources Program (BRP) of the Division of Research Resources (DRR) invites grant applications from interested institutions for support of resources in intermediate voltage electron microscopy and image analysis to be used in structure and function studies of whole cells and studies of substructural features of cells.

The purpose of the BRP is to make state-of-the-art technological capabilities available through a research resource to the biomedical research community on a regional or national shared basis. The program also emphasizes development of scientific technological capabilities and methodology to broaden the range of application of the technology in biomedical research. A complete resource encompasses five essential component activities: core research and development, collaborative research, service, training, and dissemination of results.

##### II. AREAS OF RESEARCH INTEREST

A number of new and increasingly sophisticated techniques for investigation of biologically important intracellular structures have been developed during the past two decades. One of these, intermediate voltage electron microscopy, is now at a stage of development in which it can be applied in biomedical research. The goal of this announcement is to encourage the development of regionally or nationally shared resources in the intermediate voltage range (300-500 KV) which are on the leading edge of this area of research. The research focus should be on the applications to determine how the cell establishes and maintains its three-dimensional organization, and how it controls its size and shape.

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This program is described in the Catalog of Federal Domestic Assistance No. 13.371, Biotechnology 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 Public Health Service grant policies and Federal Regulation 42 CFR Part 74. This program is not subject to Health Systems Agency review.

One component in the definition of a resource is core research and development. Examples of appropriate core projects include chemically probing the properties of the larger organizational entities that make up part of the cell, tilting of the specimen to facilitate three dimensional reconstruction of substructure, and methods for analysis of images obtained. Other appropriate core projects include development of methods to increase the applicability of intermediate voltage EM methods, for example, labeling the specimen with appropriate probe molecules to determine the functional relationships of non-periodic biological structure such as centrioles. Other topics of interest are new three dimensional imaging techniques for periodic structures.

Collaborative research and service applications from scientists in the geographical region served should be described in the application. These could include studies of the arrangement of nucleosomes in the chromatin strand, the structure and function of mitochondria and other particulate components of the cytoplasm, the three dimensional arrangement of filaments, microtubules and membranous components, the structure of the cytoplasmic matrix, or relationships among these subcellular elements, especially in large cells otherwise difficult to study at electron microscopic resolution. Studies relating to biochemistry of the cell and physiological changes occurring in cells as a consequence of a stimulus would be of potential interest. These examples are not intended to be exhaustive and other innovative proposals for user research projects will be considered.

### III. MECHANISM OF SUPPORT

The Program provides partial or full support for equipment, personnel, supplies and other allowable costs necessary for the establishment and operation of a resource. In addition to equipment funds and core research and development costs, salaries and other support needed to make the technology available to collaborative and service users are provided. Because of the benefits to be gained by the host institution, it is common for the institution to participate in the funding of a new resource.

### IV. APPLICATION PROCEDURES

Applications should be submitted on form PHS 398, application for research grant. Application kits should be available from institutional business offices or from the Division of Research Grants (DRG) NIH. Application deadlines are February 1, June 1, and October 1. The completed original application and six (6) copies should be sent to:

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

### V. PROGRAM GUIDELINES AND INQUIRIES

Detailed guidelines and special application instructions are available from the BRP. It is strongly recommended that prospective applicants discuss the proposed



- D. Studies relevant to staging of patients and identifying prognostic factors relevant to the treatment of cancer patients.
- E. Surgical supportive care.
- F. Regional chemotherapy or hyperthermia in which a surgical approach to the treatment site is a major aspect of the procedure.

In making this program announcement it is not the intent of the NCI to make or imply any delimitation of investigator-initiated research in the cancer field.

### III. APPLICATION PROCEDURE

Applications should be submitted on form PHS 398, which is available in the business or grants and contracts office at most academic and research institutions or from the Division of Research Grants (DRG), NIH. The title "**Surgical Oncology Research**" should be typed in section 2 of the first page of the application. Additionally a brief covering letter should accompany the application indicating it is being submitted in response to this program announcement.

The original and five 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

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In order to alert the DCT to the submission of the proposals with primary thrust directed to surgical oncology research, a copy of the covering letter and an additional copy of the application should be sent under separate cover to:

Ernest V. deMoss, M.D., M.P.H.  
Head, Surgery Section  
Clinical Investigations Branch  
Division of Cancer Treatment  
National Cancer Institute  
Landow Building - Room 4B04  
Bethesda, Maryland 20205

Telephone: (301) 496-4844

### IV. REVIEW PROCEDURES AND CRITERIA

Applications in response to this announcement will be reviewed on a nationwide basis in competition with each other, and in accord with the usual 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.

Where applicable to a particular project review criteria will consist of the following:

1. Relevance of the project to surgical oncology research and to the national cancer effort.
2. Feasibility of reaching the proposal's objectives.
3. Significance and adequacy of pilot data to the proposal's objectives.
4. Qualifications of the principle investigator and supporting personnel to achieve the project goals.
5. Adequacy of core facilities and basic equipment to support the project.
6. Availability of suitable patient and control populations if required.

For further information regarding this announcement and the review criteria for the P01 grant application and the R01 grant application, investigators are encouraged to contact Dr. Ernest V. deMoss at the address given above or telephone him at (301) 496-4844. New guidelines have been written for the Program Project Grant (P01) of the NCI and will be published in the NIH Guide to Grants and Contracts. Before submitting a P01 application, please discuss a letter of intent with Dr. deMoss.

## ANNOUNCEMENT

### HYPERTENSION IN PREGNANCY

#### **NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT**

#### **NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

The National Heart, Lung, and Blood Institute (NHLBI) supports a variety of research programs related to mechanisms, treatment, and prevention of hypertension. A significant amount of research on hypertension in pregnancy has been carried out in the past, but unfortunately major questions still remain unanswered.

The National Institute of Child Health and Human Development (NICHD) emphasizes high-risk pregnancy as a priority research area. Various aspects of hypertension which complicate pregnancy and its outcome are being studied by NICHD-supported investigators, including etiology, fetal hypoxia, and fetal growth retardation and related developmental problems.

This program announcement is intended by both Institutes to focus investigator attention on this important area. Applications in response to this announcement will be considered as applications for the regular research grant program without special set-aside funds.

It is estimated that hypertension in pregnancy accounts for 25,000 stillbirths and neonatal deaths, and 20% of maternal deaths annually in this country. Previous research has clarified some aspects of the problem. In particular, the etiology of pre-eclampsia (toxemia or pregnancy-induced hypertension) has been associated with uteroplacental ischemia, coagulation defects, immunological defects, alterations in synthesis and release of vasoactive substances, and changes in vasopressor responses. These findings have suggested future lines of research and may be relevant to other forms of hypertension which appear, or are detected, during pregnancy.

The objective of this program announcement is to encourage submission of scientifically meritorious research grant applications in such areas as the following:

- (1) The etiology and pathophysiology of pre-eclampsia/eclampsia, including methods to detect abnormal pathophysiology before the appearance of clinical hypertension.
- (2) Improved techniques to differentiate pre-eclampsia from other hypertensive disorders complicating pregnancy.
- (3) Effects of maternal hypertension on feto-placental physiology, especially with regard to growth, development and behavior of the fetus and infant.
- (4) Development of experimental animal models of the various types of hypertension in pregnancy.

- (5) Identification of characteristics which place women at higher risk of hypertension in pregnancy, and also of persistent or recurrent hypertension after pregnancy.
- (6) The efficacy and safety of newer types of antihypertensive medications during pregnancy.

The above topics are examples only and the proposed research need not be limited to them.

#### APPLICATION SUBMISSION AND REVIEW

Application receipt dates for this program announcement are the usual receipt dates for new applications: 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 the applicants' institutional application control office or from the Division of Research Grants (DRG) NIH.

In order to identify the response to this announcement, check "yes" and put "Hypertension in Pregnancy" under item 2 on 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

In accordance with existing NIH procedure, the DRG will assign each application to the appropriate study section for review. Applications judged to be responsive to this program announcement will be assigned to both the NHLBI and NICHD, with primary responsibility based on existing guidelines.

Additional programmatic information may be obtained by contacting:

Armando Sandoval  
Hypertension & 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

or

Donald McNellis, M.D.  
Pregnancy and Perinatology Section  
CNED, CRMC, NICHD  
National Institutes of Health  
Landow Building - Room 7C09  
9000 Rockville Pike  
Bethesda, Maryland 20205

Telephone: (301) 496-5575

ANNOUNCEMENT

SURFACTANTS FOR PERFLUORO CHEMICALS

**NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

The Division of Blood Diseases and Resources (DBDR), National Heart, Lung, and Blood Institute (NHLBI) encourages grant applications related to the synthesis and biological testing of novel, nontoxic surfactants to emulsify perfluorochemicals for intravenous use as oxygen carriers.

The DBDR sponsors fundamental and clinical research activities, supported by grants and contracts, related to the characterization, preservation and use of blood and its components. The Division also supports research related to the synthesis, screening and biological activity of oxygen-carrying red cell substitutes.

Perfluorochemicals are insoluble in water. Therefore, they must be emulsified and the resulting emulsion must be extremely stable if it is to be administered intravenously. Perfluorochemical emulsions have been shown to transport oxygen in laboratory animals; one commercially-prepared emulsion is currently undergoing clinical studies in humans. The product contains approximately 10 to 12 percent (v/v) perfluorochemicals in the final preparation. This concentration was chosen because emulsions containing higher concentrations of perfluorochemicals are unstable. In addition, as the concentration of perfluorochemicals in the emulsion increases, viscosity also increases making such preparations unsafe for clinical use. Nevertheless, high concentrations of perfluorochemicals are desirable because they require lower levels of administered oxygen to achieve therapeutic effects.

Highly concentrated emulsions of perfluorochemicals with low viscosity can be prepared, but the effective surfactants currently available are too toxic for intravenous use. Considerable evidence indicates that even the surfactant presently used in perfluorochemical emulsions is mildly toxic and causes transient complement activation and leukopenia. Although the reaction is usually very moderate and can be prevented by prior steroid treatment, elimination of this side effect would be desirable.

This announcement is intended to encourage investigator-initiated grant applications for studies to develop new, nontoxic surfactants that have appropriate properties for emulsifying perfluorochemicals. In addition, studies to evaluate the biological safety and efficacy of the resulting preparations are encouraged.

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This program is described in the Catalog of Federal Domestic Assistance No. 13.839, Blood Diseases and Resources. Awards will be made under the authority of the Public Health Service Act, Section 301 (42 USC 241) and administered under PHS grant policies and Federal regulations, most specifically 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to Health Systems Agency review.

Applicants should use the regular research grant application form (PHS 398). These applications are available at the institution's business office or central application control office, or may be requested by writing to Division of Research Grants (DRG) NIH. The receipt dates for applications submitted in response to this announcement are the usual dates for new research grant applications of March 1, July 1 and November 1.

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

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

Applications received in response to this announcement will be assigned for possible funding in accordance with NIH referral guidelines. All applications will be reviewed by the Study Section mechanism managed by the DRG and by the National Heart, Lung, and Blood Advisory Council or other appropriate advisory council. Applications recommended for approval will compete for available funds with all other approved applications.

Inquiries should be directed to:

Chief, Blood Resources Branch  
Division of Blood Diseases and Resources  
National Heart, Lung, and Blood Institute,  
National Institutes of Health  
Federal Building - Room 5C10  
7550 Wisconsin Avenue  
Bethesda, Maryland 20205

Telephone: (301) 496-1537.

ANNOUNCEMENT

SPECIAL EMPHASIS RESEARCH CAREER AWARD:

OCCUPATIONAL SAFETY AND HEALTH

DEPARTMENT OF HEALTH AND HUMAN SERVICES

CENTERS FOR DISEASE CONTROL

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

Application Receipt Date: March 16, 1984

The National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control (CDC), announces that competitive grant applications for Special Emphasis Research Career Awards to support occupational safety and health research will be accepted until March 16, 1984. Applications should specify a project start date of September 1, 1984.

I. PURPOSE

The CDC Special Emphasis Research Career Award (SERCA) is intended to:

- ..encourage qualified individuals in the early stages of their post-graduate medical and scientific careers to develop research interests and skills in the area of occupational safety and health;
- ..provide support for individuals to pursue a program of research in various disciplines related to occupational safety and health at domestic institutions which offer superior opportunities in these areas; and
- ..create a pool of highly qualified investigators with experience and skills in occupational safety and health for future roles in related areas of research.

The CDC Special Emphasis Research Career Award (SERCA) provides the opportunity for an individual with developing research interests to acquire experience and skill essential to the study of occupational safety and health.

II. AUTHORITY

These grants will be awarded and administered by NIOSH under the research and demonstration grant authority of the section 20(a) (1) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 669(a)(1)) and section 501 of the Federal Mine Safety and Health Act of 1977 (30 U.S.C. 951). Program regulations applicable to these grants are contained in Part 87 of Title 42, Code of Federal Regulations, "National Institute for Occupational Safety and Health Research and Demonstration Grants." Except as otherwise indicated, the basic grant administration policies of the Public Health Service are applicable to this program. Applications responsive to this announcement are not subject to Executive Order No. 12372, Intergovernmental Review of Federal Programs.



### III. PROVISIONS OF THE AWARD

This non-renewable award provides support for a three-year period for individuals engaged in full-time research and related activities. The latter may include research career development activities as well as involvement in patient care to the extent that it will strengthen research skills. The CDC SERCA grant, made to the awardee's parent institution, provides up to \$30,000 per year in direct costs including salary support plus fringe benefits. Research costs may include technical assistance, equipment, supplies, consultant costs, domestic travel, publication, and other costs. If the awardee already holds a NIOSH small grant, the amount of the SERCA award will be reduced by the amount of the small grant, up to a maximum reduction of \$10,000.

While working closely with an advisor, the awardee is expected to develop capabilities in fundamental, applied and/or clinical research in one of the following areas:

- (1) Occupational respiratory diseases
- (2) Occupationally-related musculoskeletal injuries
- (3) Occupational cancers
- (4) Occupationally-related traumatic injuries
- (5) Occupationally-related cardiovascular effects
- (6) Occupationally-related reproductive effects
- (7) Occupationally-related neurologic effects
- (8) Occupationally-related noise-induced hearing loss
- (9) Occupational skin disease
- (10) Occupational psychologic disorders
- (11) Engineering controls research
- (12) Respirator research

It should be noted that investigators may apply in any areas related to occupational safety and health in the above 12 categories. Applications responding to this announcement will be reviewed by staff for their responsiveness and relevance to occupational safety and health. Those considered non-responsive will be assigned in accordance with regular program guidelines. Potential applicants with questions concerning the acceptability of their proposed work should contact the individuals listed in this announcement.

The applicant must propose a research project of his/her own design which focuses on one of the above 12 areas and which is of such scope that, within three years, evidence of independent investigative capability will be present. At the completion of this three-year award the individual should be better able to compete in traditional NIOSH research grant award programs.

A multidisciplinary environment is encouraged; this may include such areas as epidemiology, biostatistics, toxicology, industrial hygiene, safety, ergonomics, physiology, engineering, various medical specialities, etc. Grantee Institutions are also encouraged to develop curricula in the research areas being proposed under these awards.

#### IV. ELIGIBILITY REQUIREMENTS

Candidates for the CDC SERCA Award must (1) hold a doctoral degree (e.g., D.D.S., D.O., D.V.M., M.D., Ph.D., Sc.D., etc.); (2) have a minimum of two years post-doctoral research experience; (3) not be in a tenured position or above the rank of associate professor; (4) be citizens or noncitizen nationals of the United States or its possessions or territories or must have been lawfully admitted to the U.S. for permanent residence at the time of application.

Eligible applicants may reside at a variety of institutions including non-profit and for-profit organizations. Thus, universities, colleges, research institutions and other public and private organizations including State and local governments and small, minority and or woman-owned businesses are eligible for these grants. For-profit organizations will be required to submit a certification as to their status as part of their application. Awards are made to institutions in the name of individual applicants.

Support under this program may not be requested to supplement research projects receiving Federal or non-Federal support (except as noted above for NIOSH small grants) or to provide interim support of projects under review by the Public Health Service (PHS). Applicants may, however, hold or apply for a research grant in another subject area. A grant application responsive to this announcement, but essentially the same as one submitted as a regular research grant application on the same topic, will not be accepted.

#### V. AVAILABILITY OF FUNDS

The total grant award may comprise direct costs of up to \$30,000 per year and additional indirect costs, as appropriate. The grants may be awarded for up to three years and will not be renewable. It is anticipated that the total annual amount available for grants under this program will be approximately \$400,000. The specific amount to be funded will, however, depend upon the merit and scope of the applications received and the availability of funds.

#### VI. CRITERIA FOR REVIEW

Applications will be initially reviewed by a designated scientific review group on the basis of the applicant's scientific achievements and growth, evidence of the applicant's demonstrated commitment to a research career, the scientific merit and significance of the proposed research project, scientific competence of the proposed principal investigator and supporting faculty (where appropriate) in relation to the type of research involved, feasibility of the project, likelihood of its producing meaningful results, appropriateness of the proposed budget, adequacy of the applicant's resources available for the project, and the supportive nature of the research environment.

A secondary review will also be conducted. Factors considered in the secondary review will include:

- o the results of the initial review
- o the significance of the proposed study to the research programs of NIOSH
- o National needs and program balance
- o policy and budgetary considerations

#### VII. LETTER OF INTENT

Prospective applicants are asked to submit a one-page letter of intent which includes a very brief synopsis of proposed areas of research and identification of any other participating institutions. This letter should be sent by February 17, 1984, to Dr. Roy Fleming at the address given under "For Further Information Contact:"; a letter is not required but will assist in the planning for the review. A letter of intent is not binding and will not enter into the review of any proposal subsequently submitted.

#### VIII. APPLICATION AND AWARD

Applications should be submitted on Form PHS-398 (revised May 1982) or PHS-5161-1 for State and local government applicants. Forms should be available from the institutional business offices or from:

Office of Grants Inquiries  
Division of Research Grants  
National Institutes of Health  
Westwood Building - Room 449  
5333 Westbard Avenue  
Bethesda, Maryland 20205

The original and six copies of the application must be submitted to the address below on or before the specified receipt date in accordance with the instructions in the PHS-398 packet:

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

In developing the application please note that the conventional presentation for grant applications should be used and the points identified under "Criteria for Review" must be fulfilled. The applicant should indicate that the application is being submitted in response to this announcement as noted in the Form PHS-398 instructions.

An applicant organization has the option of having specific salary and fringe benefit amounts for individuals omitted from the copies of the application that are made available to outside reviewing groups. If the applicant organization elects to

exercise this option, use asterisks on the original and six copies of the application to indicate those individuals for whom salaries and fringe benefits are being requested; the subtotals must still be shown. In addition, submit an additional copy of page four of Form PHS-398, completed in full with the asterisks replaced by the amount of the salary and fringe benefits requested for each individual listed. This budget page will be reserved for internal PHS staff use only.

The instructions in the Form PHS-398 packet should be followed concerning deadlines for either delivering or mailing the application. The application should be sent or delivered using the mailing label in the Form PHS-398 packet.

Awards will be made based on priority score ranking from the initial review and emphasis area, as well as availability of funds.

**IX. COST SHARING**

Grantees will be expected to cost share a minimum of five percent.

**X. FOR FURTHER INFORMATION CONTACT:**

Roy Fleming, Sc.D.  
Chief, Grants Administration and Review Branch  
National Institute for Occupational Safety and Health  
Centers for Disease Control  
1600 Clifton Road, N.E.  
Atlanta, Georgia 30333

Telephone: (404) 329-3343

or

Mr. Leo Sanders  
Grants Management Officer  
Centers for Disease Control  
1600 Clifton Road, N.E.  
Atlanta, Georgia 30333

Telephone: (404) 262-6575

(This program is described in the Catalog of Federal Domestic Assistance Program No. 13.262, Occupational Safety and Health Research Grants.)

## NIMH PHYSICIAN SCIENTIST AWARD

### NATIONAL INSTITUTE OF MENTAL HEALTH

The rapid progress being made in mental health clinical research has highlighted the need to increase the participation of physicians as research scientists in the mental health field. The multiplicity of new research findings, the emergence of new research technologies, and the greater complexity of research methodologies emphasize the need to provide physicians with the requisite grounding in basic and clinical research principles and experience so that they can effectively pursue careers in mental health research.

The National Institute of Mental Health (NIMH) announces the availability of a Physician Scientist Award which is intended to encourage newly trained physicians to develop independent research skills and experience in the biomedical and/or behavioral sciences. It is estimated that up to six awards will be made in Fiscal Year 1984.

#### I. PURPOSE

The primary purpose of the NIMH Physician Scientist Award is to enhance the development of physicians in research careers focused on the interface of the basic and clinical sciences.

The award will enable newly trained physicians to undertake up to five years of specialized study in basic and clinical sciences with a supervised research experience. The first two to three years of the program will include both didactic study and research conducted under the supervision of a sponsor who has extensive research experience in a fundamental science such as (but not limited to) biology, pharmacology, genetics, or psychology. The final two to three years will be devoted to either basic or clinical research under the continuing guidance of this sponsor.

#### II. ELIGIBILITY

- o For purposes of this announcement, an eligible applicant is a department of psychiatry or other medical science department in a U.S. college or university school of medicine, or other comparable institution, applying on behalf of a specific candidate.
- o A candidate must hold the M.D., D.O., or equivalent and must have completed at least two postgraduate years of clinical training by the time the award is made. A candidate, who has been a principal investigator on a Public Health Service (PHS) research grant, is not eligible.
- o A candidate should have had clinical training experience with psychiatric disorders, should demonstrate competence in clinical activities, and should provide evidence of a serious commitment to a research and academic career.
- o A candidate for an award must be a citizen or noncitizen national of the United States or must have been lawfully admitted to the United States for permanent residence at the time of application.

Applications for an NIMH Physician Science Award may not submit a concurrent application for a PHS Research Scientist Development Award, Academic Award, a Clinical Investigator Award, or a New Investigator Research Award.

### III. APPLICATION CHARACTERISTICS

For detailed information on content of the application characteristics, NIMH staff should be contacted for the complete announcement.

### IV. TERMS AND CONDITIONS OF SUPPORT

The five-year nonrenewable award is based on up to five full-time, 12-month appointments. All funds must be used on behalf of the original candidate. Support is divided into two distinct phases that relate to the individual's progress in becoming an independent investigator. It is required that a minimum of 75 percent effort must be devoted to the research development program. The balance of effort can be devoted to other clinical and teaching pursuits only if they are consonant with the program goal, i.e., the awardee's development into an independent research investigator.

It is desirable for individuals to complete both phases without interruption. In unusual circumstances, it may be permissible to interrupt the award and delay the start of Phase II in order to engage in further clinical training. In the event such a contingency arises, the awardee and the sponsor must justify the interruption to NIMH, and obtain the approval of the NIMH project officer. Although resumption of support under this program is contingent on the availability of funds, NIMH will make every effort to assure that funds will be made available to resume the award so that the candidate may complete the program.

The awardee and sponsor will be required to submit a special, detailed progress report at the end of Phase I as part of their application for continued support. This progress report and the application are to contain specific information concerning progress and accomplishments and, in particular, an appropriately detailed research plan and protocol for Phase II for administrative review and a decision on continuation of the award.

Awardees are requested to inform NIMH annually, for a period of five years subsequent to completion of the award, about academic status, publications, and research grants or contracts received.

Awards will be administered under PHS grants policy as stated in the PHS Grants Policy Statement.\*

\* Public Health Service Grants Policy Statement, DHHS Publication No. (OASH) 82-50-000 GPO-017-020-0090-1 (rev.) December 1, 1982, available for \$5.00 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

## V. ALLOWABLE COSTS

### A. Phase I. Formalized Basic Science Study (24-36 months)

1. **Salary:** The individual candidate's compensation is to be based on the sponsoring institution's salary scale for physicians at an equivalent experience level, but funding from this award for salary may not exceed \$30,000 per year per individual plus commensurate fringe benefits for essentially full-time (75-100) percent effort to the endeavor.\*\*
2. **Research and Development Support:** Up to \$10,000 per year may be requested for research project requirements and related support, e.g., technical personnel costs, supplies, equipment, candidate travel, medical insurance premiums, and tuition for necessary courses.
3. **Sponsor's Support:** A sum of up to 10 percent of the primary sponsor's salary and commensurate fringe benefits may be requested annually.

### B. Phase II. Intensive Research (24-36 Months)

1. **Salary:** Same as Phase I.
2. **Research and Development Support:** Up to \$20,000 per year may be requested for support of research project requirements and related costs as outlined for Phase I. Individuals entering Phase II are encouraged to apply for separate additional research grant support, if needed, which may be applied for and held with no reduction in the \$20,000 provided as research support under this award.
3. **Sponsor's Support:** A sum of up to 10 percent of the primary, or the secondary, sponsor's salary and commensurate fringe benefits may be requested; alternatively, with appropriate justification, five percent of the primary sponsor's salary and five percent of the secondary sponsor's salary and fringe benefits may be requested. Under no circumstances may salary be requested for a total of more than 10 percent of one person's time.
4. **Indirect Costs (Phase I and II):** Funds will be provided for the reimbursement of actual indirect costs at a rate of up to, but not exceeding eight percent of the total direct costs of each award, exclusive of tuition, fees, and expenditures for equipment.

\*\* NIMH policy encourages supplementation from nongovernment sources, e.g., academic departments, voluntary or professional organizations.

## VI. CONSULTATION AND APPLICATION PROCEDURES

Potential applicants are urged to seek preapplication consultation from NIMH staff. NIMH is interested in applications from all well-qualified individuals; women and minority candidates in particular are encouraged to apply.

The regular research grant application form PHS 398 (rev. 5/82) must be used in applying for these awards. State and local agencies should use form PHS 5161. Staff consultation, information, and applications kits may be obtained from:

Dr. Louis A. Wienckowski  
Research Resources Branch  
Division of Extramural Research Programs  
National Institute of Mental Health  
Parklawn Building - Room 10-105  
5600 Fishers Lane  
Rockville, Maryland 20857

Telephone: (301) 443-4347

**NIMH Physician Scientist Award** should be typed in item 2 of the face page of the application form.

The signed original and six (6) copies of the completed application should be sent to:

Division of Research Grants  
National Institutes of Health  
5333 Westbard Avenue  
Bethesda, Maryland 20205

## VII. REVIEW PROCESS AND CRITERIA

Applications will undergo peer review for scientific and technical merit by Initial Review Groups (IRGs) consisting primarily of non-Federal technical and scientific experts. Applications must also be recommended for approval by the National Advisory Mental Health Council.

Particular attention will be given to the following:

- o Candidate's qualifications and potential for developing into a productive scientist.
- o Sponsor's research productivity and experience in developing young investigators.
- o Quality of the environment, including the presence of active research programs and availability of senior investigators for advice and consultation.
- o Scientific developmental merit of the research program.



## VIII. AWARD CRITERIA

Applications recommended for approval by the National Advisory Mental Health Council will be considered for funding on the basis of the following:

- o Overall merit of the proposal to the research objectives of NIMH.
- o Program balance.
- o Priority given to research career development at the interface of basic/clinical science.
- o Availability of funds.

## IX. RECEIPT AND REVIEW SCHEDULE

<u>Receipt of Application</u>	<u>Initial Review</u>	<u>Advisory Council Review</u>	<u>Earliest Award Date</u>
<u>Initial Review Schedule</u>			
February 15, 1984	April 1984	May 1984	July 1, 1984
<u>Subsequent Review Schedule</u>			
July 1 November 1 March 1	October/November February/March June	January/February May September/October	April July December

CLINICAL INVESTIGATOR AWARD

**NATIONAL INSTITUTE OF MENTAL HEALTH**

The National Institute of Mental Health (NIMH) is seeking applications for the Clinical Investigator Award. It is estimated that approximately six such awards will be made in Fiscal Year 1984.

I. PURPOSE

The purpose of the Clinical Investigator Award is to develop clinician-scientists and to encourage them to enter specific areas of mental health research. The award, prompted by the need for clinician investigators in important areas of mental health research, is intended to encourage qualified physicians, clinical psychologists, social workers, or nurses to pursue careers in mental health-relevant research, particularly in the areas specified in this announcement. The award is expected to facilitate an awardee's transition to independent researcher by providing up to three years of support for intensive supervised research in these areas under the guidance of a preceptor who is an outstanding, active researcher and who has the knowledge, background, and research experience required to be a mentor in the field.

II. ELIGIBILITY

A. Applicant Institution

For purposes of this announcement, an applicant is a public or private organization or institution, nonprofit or for-profit, engaged in health-related research and located in the United States or its territories and possessions. Such an institution may make application on behalf of a candidate who holds the M.D. or D.O. degree or a clinically credentialed psychologist, social worker, or nurse. Psychologist, social worker, or nurse candidates must hold the doctorate.

B. Candidate

A candidate must have at least two years of clinical training or experience at the postdoctoral level by the time the award is made. The award is not intended to support the further development of individuals who have had extensive research experience; NIMH provides support for these individuals through other programs. A candidate who has been a principal investigator on a Public Health Service (PHS) research grant is not eligible. A nominee must be a U.S. citizen or have been lawfully admitted to the United States for permanent residence.

C. Concurrent Application

A candidate for this award may not concurrently apply for any PHS Research Scientist Development Award, an award under the National Research Service Award Act, a Physician Scientist Award, or other similar award.

### III. AREAS OF INTEREST

This award is designed primarily to increase the number of clinical researchers in areas of special need; applications are particularly encouraged and priority will be given for support of research career development in the following areas:

- o Schizophrenia and major affective disorders, including research on genetic factors, diagnostic assessment, pathophysiology, treatment development and assessment.
- o Childhood and adolescent psychopathology, including research on genetic factors, diagnostic assessment, pathophysiology, treatment development and assessment.
- o Clinical epidemiology and clinical services research, including research on the distribution of clinically defined mental disorders in specific clinical settings such as ambulatory medical clinics and State mental hospitals.
- o Post-traumatic disorders occasioned by emergencies, including research on sexual assault and natural or manmade disasters in order to assess the short- and long-term psychological and behavioral sequelae for individuals and groups.

### IV. APPLICATION CHARACTERISTICS

For detailed information on content of the research plan section of the application, NIMH staff should be contacted for the complete announcement.

### V. TERMS AND CONDITIONS OF SUPPORT

The Clinical Investigator Award is for a maximum, nonrenewable period of three years. Support is based on a full-time, 12-month staff appointment. Salary support may be requested up to a maximum of \$30,000 annually. The proposed salary must be within the established structure of the grantee institution for persons of equivalent qualifications, experience, and rank. For any candidate whose salary is in excess of \$30,000, the institution must provide an assurance in the application that it will supplement the award from non-Federal funds. The institution providing the additional support, however, may not require additional duties or responsibilities from the candidate which would interfere with the purpose of the award. It is expected that the clinical investigator awardee will spend at least 80 percent of his/her time in research and other research career development activities during the period, with the remainder being divided among other related academic activities such as teaching, pertinent clinical training, and administrative activities. Up to a total of \$15,000 annually may be requested for supplies, tuition, equipment, travel, etc., necessary for the awardee's research career development program. An awardee is encouraged to apply for mental health small grant or regular research grant support, as appropriate.

Funds will be provided for the reimbursement of indirect costs at a rate not to exceed eight percent of the total allowable direct costs. When requested, the grantee institution's share of the fringe benefits may be paid as a direct cost (if not treated as an indirect cost) on that portion of the employee's salary provided by the award.

An awardee is requested to inform NIMH annually for a period of five years subsequent to completion of the award about academic status, publications, and research grants or contracts received.

Awards will be administered under PHS grants policy as stated in the Public Health Service Grants Policy Statement.\*

## VI. CONSULTATION AND APPLICATION PROCESS

Potential applicants are urged to seek preapplication consultation with NIMH staff. NIMH is interested in applications from all well-qualified individuals. Women and minority candidates in particular are encouraged to apply.

The regular research grant application form PHS 398 (rev. 5/82) must be used in applying for these awards. State and local agencies should use form PHS 5161.

Staff consultation, further information, and application kits (including general instructions) are available from:

Louis A. Wienckowski, Ph.D.  
Research Resources Branch  
Division of Extramural Research Programs  
Parklawn Building - Room 10-104  
5600 Fishers Lane  
Rockville, Maryland 20857

Telephone: (301) 443-4347

**NIMH Clinical Investigator Award** should be typed on line 2 of the face page of the application form.

The signed original and six (6) copies of the completed application should be sent to:

Division of Research Grants  
National Institutes of Health  
5333 Westbard Avenue  
Bethesda, Maryland 20205

## VII. REVIEW PROCESS AND CRITERIA

Applications will undergo peer review for scientific and technical merit by Initial Review Groups (IRGs) consisting primarily of non-Federal technical and scientific

\* Public Health Service Grants Policy Statement, DHHS Publication No. (OASH) 82-50-000 GPO-017-020-0090-1 (rev.) December 1, 1982, available for \$5.00 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

experts. Applications will receive a secondary review for scientific and technical merit and policy considerations by the National Advisory Mental Health Council. Only applications recommended for approval by the Council can be considered for funding.

IRGs will give particular attention to the following:

- o Candidate's potential for and commitment to a career in research.
- o Overall merit of the candidate's 3-year plan for research career development in the proposed area of research.
- o Past research productivity of the preceptor and the ability and plans of the preceptor to guide the candidate in his/her proposed career development.
- o Quality and extent of the candidate's previous clinical and research training and experience.
- o Institution's ability to provide quality facilities, resources, and opportunities necessary to the candidate's research development as indicated in the application, and quality of the faculty in the department relative to the areas of study.

#### VIII. AWARD CRITERIA

In making decisions to fund applications recommended for approval by the Council, Institute staff will use the following criteria:

- o Overall merit of the proposal as determined by the review committee.
- o Relevance of the proposal to the research program priorities listed in this announcement.
- o Program balance.
- o Availability of funds.

#### IX. RECEIPT AND REVIEW SCHEDULE

<u>Receipt of Application</u>	<u>Initial Review</u>	<u>Advisory Council Review</u>	<u>Earliest Award Date</u>
	<u>Initial Review Schedule</u>		
February 15, 1984	April 1984	May 1984	July 1, 1984
	<u>Subsequent Review Schedule</u>		
July 1 November 1 March 1	October/November February/March June	January/February May September/October	April July December