

# NIH Guide for Grants and Contracts

Vol. 12, No. 11, November 11, 1983

U.S. DEPARTMENT OF HEALTH  
AND HUMAN SERVICES

## IN THIS ISSUE:

### Announcement

- Availability of Request for Cooperative Agreements  
Applications: RFA 84-CA-01 - A Phase III  
Trial of a Low Fat Diet in Women at Increased  
Risk for Breast Cancer ..... Page 1
- National Cancer Institute  
Index - CANCER

### Notice of Availability: RFA - 84-AMHL-01

- The Genetic and Metabolic Defects Underlying  
Cystic Fibrosis ..... Page 2
- National Institute of Arthritis, Diabetes,  
and Digestive and Kidney Diseases
- National Heart, Lung, and Blood Institute  
Index - ARTHRITIS, DIABETES, AND  
KIDNEY DISEASES  
HEART, LUNG, AND BLOOD INSTITUTE

### Announcement

- Availability of Request for Applications: (RFA)  
NIH-NHLBI-DHVD-84-C-J - Aspects of Inflammatory  
Processes in Atherogenesis ..... Page 4
- Division of Heart and Vascular Diseases
- National Heart, Lung, and Blood Institute  
Index - HEART, LUNG, AND BLOOD INSTITUTE

### Announcement

- Availability of Request for Applications: RFA  
NIH-NHLBI-DHVD-84-G-I - Pathogenesis of Essential  
Hypertension: Neurobiological and Molecular Bio-  
logical Approaches ..... Page 5
- Division of Heart and Vascular Diseases
- National Heart, Lung, and Blood Institute  
Index - HEART, LUNG, AND BLOOD INSTITUTE

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

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

### Have You Moved?

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

Announcement

Availability of Request for Applications: RFA  
84-AM-01 - Digestive Diseases Core Centers.....Page 6  
National Institute of Arthritis, Diabetes, and  
Digestive and Kidney Diseases  
Index - ARTHRITIS, DIABETES, AND  
DIGESTIVE AND KIDNEY DISEASES

Announcement

Biomedical Research Support Grant Applications  
for Fiscal Year 1984 .....Page 8  
Division of Research Resources  
Index - RESEARCH RESOURCES

Announcement

Biomedical Research Support Shared  
Instrumentation Grants .....Page 10  
Division of Research Resources  
Index - RESEARCH RESOURCES

Announcement

Availability of Senior International  
Fellowships for 1984-85 .....Page 15  
John E. Fogarty International Center for  
Advanced Study in the Health Sciences  
Index - FOGARTY INTERNATIONAL CENTER

Announcement

Special Emphasis Research Career Award for  
Social and Behavioral Scientists in ✓  
Behavioral Geriatrics Research .....Page 17  
National Institute on Aging  
Index - AGING

Announcement

Health Behaviors and Aging: Behavioral ✓  
Geriatrics Research .....Page 24  
National Institute on Aging  
Index - AGING

Announcement

Social Environments Influencing Health and ✓  
Effective Functioning in the Middle  
and Later Years.....Page 29  
National Institute on Aging  
Index - AGING

Announcement

Preventive Cardiology Academic Award .....Page 35  
Division of Heart and Vascular Diseases  
National Heart, Lung, and Blood Institute  
Index - HEART, LUNG, AND BLOOD INSTITUTE

Announcement

Protection of the Immature Myocardium During  
and Following Cardiac Surgery .....Page 37  
National Heart, Lung, and Blood Institute  
Index - HEART, LUNG, AND BLOOD INSTITUTE

Announcement

Mechanisms of Biobehaviorally Induced Ventricular  
Arrhythmias and Sudden Cardiac Death .....Page 39  
National Heart, Lung, and Blood Institute  
Index - HEART, LUNG, AND BLOOD INSTITUTE

Announcement

Biobehavioral Sequellae of Antihypertensive Therapies .....Page 41  
National Heart, Lung, and Blood Institute  
Index - HEART, LUNG, AND BLOOD INSTITUTE

Special Research Grant Announcement

Clinical Research Centers on Psychopathology  
of the Elderly .....Page 44  
Alcohol, Drug Abuse, and Mental  
Health Administration  
National Institute of Mental Health  
Index - ALCOHOL, DRUG ABUSE, AND MENTAL  
HEALTH ADMINISTRATION  
NATIONAL INSTITUTE OF MENTAL HEALTH

Notice

Availability of Monographs on Destruction and  
Disposal of Laboratory Carcinogens .....Page 51  
National Institutes of Health  
Index - NATIONAL INSTITUTES OF HEALTH

Notice

One-Day Workshop to Discuss Ethical and Legal  
Issues Involving Human Subjects in Biomedical  
and Behavioral Research .....Page 53  
Food and Drug Administration  
The Hastings Center  
National Institutes of Health  
Index - FOOD AND DRUG ADMINISTRATION  
NATIONAL INSTITUTES OF HEALTH

Announcement

New Investigator Nursing Research Awards ..... Page 54  
Department of Health and Human Services  
Public Health Service  
Health Resources and Services Administration  
Index - NURSING, DIVISION OF

Announcement

Grants for Utilization of Research in Nursing  
Practice, Nursing Services Administration,  
and Nursing Education ..... Page 56  
Department of Health and Human Services  
Public Health Service  
Health Resources and Services Administration  
Index - NURSING, DIVISION OF

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR COOPERATIVE AGREEMENT APPLICATIONS: RFA

84-CA-01

A PHASE III TRIAL OF A LOW FAT DIET IN WOMEN AT INCREASED  
RISK FOR BREAST CANCER

NATIONAL CANCER INSTITUTE

Letter of Intent Receipt Date: January 1, 1984

Application Receipt Date: February 1, 1984

The Division of Resources, Centers and Community Activities (DRCCA), and the Division of Cancer Treatment (DCT), National Cancer Institute (NCI), invite applications for cooperative agreements to support participation in a multi-institutional randomized clinical trial of a low fat diet (20% of calories) aimed at reducing the incidence of breast cancer in women at increased risk for breast cancer. The investigators will identify, enroll and follow participants in this trial using a protocol developed jointly by the investigators and NCI staff.

Applications are solicited to fund participants in three categories: 1) clinical units, 2) nutritional coordinating unit(s), and 3) a statistical coordinating unit. Applicants may apply for more than one category (clinical, nutrition, statistical), but the applications should be cast as separate documents for review. The requirements for each of these units are outlined in the complete RFA.

The trial, a single protocol, will be initiated in three stages. The first stage will involve a meeting between the investigators and NCI staff for the purpose of writing the protocol for this study. The second stage will be a feasibility study, during which the protocol will be implemented at three institutions (selected on the basis of priority score and accrual potential) with particular emphasis on documenting protocol adherence in the study and control groups. In stage three the protocol will be implemented in all remaining clinical units.

Copies of the complete Request for Applications and additional information may be obtained from:

Ritva Butrum, Ph.D.  
Diet and Cancer Branch  
Blair Building - Room 619  
National Cancer Institute  
Bethesda, Maryland 20205

Telephone: (301) 427-8753

To ensure their review, applications should be received by February 1, 1984.

**NOTICE OF AVAILABILITY: RFA****84-AMHL-01****THE GENETIC AND METABOLIC DEFECTS UNDERLYING CYSTIC FIBROSIS****NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, AND DIGESTIVE AND  
KIDNEY DISEASES****NATIONAL HEART, LUNG, AND BLOOD INSTITUTE**

Application Receipt Date: March 15, 1984

Letters of Intent Receipt Date: February 15, 1984

The National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK) and the National Heart, Lung and Blood Institute (NHLBI) invite investigator-initiated research grant applications to define and characterize the basic metabolic defect(s) associated with the etiology and pathogenesis of cystic fibrosis (CF).

It is the intention of the sponsoring Institutes to facilitate research on the CF defect by increased funding of:

1. Studies leading to the identification of the CF defect(s) at the genetic level.
2. Investigations directly focused on the expression and the secondary consequences of genetic defect(s).
3. Studies of normal structure and/or function which may be directly relevant to the defect(s) or its expression in CF.

Interdisciplinary approaches will be needed for this study requiring expertise in such areas of biomedical research as biochemistry, biophysics, cell biology, genetics, immunology, metabolism, molecular biology, pathology, and physiology.

The mechanism of support for this program will be the grant-in-aid. Prospective applicants are encouraged to submit a one-page letter of intent that includes a brief synopsis of the proposed research and identification of all participating Institutions.

This program is described in the Catalog of Federal Domestic Assistance No. 13.847, Diabetes, Endocrinology, and Metabolism, and 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 Health Systems Agency Review.

Such letters are requested only for the purpose of obtaining an indication of the number and scope of applications to be received.

Applications in response to this solicitation will be reviewed on a nationwide basis and in accord with the usual NIH peer review procedures. The factors to be considered in the evaluation of scientific merit of each application will be similar to 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(s); the adequacy of the experimental design; the suitability of the facilities; and the appropriateness of the requested budget to the work proposed.

Letters of intent should be submitted no later than February 15, 1984. Applications must be received by March 15, 1984. Any applications not received by this date will be considered ineligible for this special solicitation.

<u>APPLICATION RECEIPT</u>	<u>INITIAL REVIEW</u>	<u>COUNCIL REVIEW</u>	<u>EARLIEST START DATE</u>
Mar 15, 1984	Jun/Jul, 1984	Sept, 1984	Dec 1, 1984

For copies of the complete RFA, and/or further information, investigators are encouraged to contact one or both of the following offices:

Dr. Valerie Setlow  
 Assistant to the Director,  
 Division of Diabetes, Endocrinology,  
 and Metabolic Diseases  
 National Institute of Arthritis, Diabetes,  
 and Digestive Diseases  
 Westwood Building, Room 620  
 Bethesda, Maryland 20205

Telephone: (301) 496-7888

Dr. J. Sri Ram  
 Chief, Airways Diseases Branch  
 Division of Lung Diseases  
 National Heart, Lung, and Blood Institute  
 Westwood Building - Room 6A17  
 Bethesda, Maryland 20205

Telephone: (301) 496-7332

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS (RFA)

NIH-NHLBI-DHVD-84-G-J

ASPECTS OF INFLAMMATORY PROCESSES IN ATHEROGENESIS

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 2, 1984

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 currently available from staff of the NHLBI.

This program will support basic research to define and determine the extent to which processes characteristic of inflammation and the inflammatory responses to tissue injury participate in the pathogenesis of atherosclerotic changes. It is expected that the research projects will encompass a variety of approaches (morphological, biochemical, immunological, molecular, etc.) and will require expertise from a wide variety of disciplines including pathology, immunology, cell biology, hematology, biochemistry, microbiology, and veterinary medicine.

Request for copies of the RFA should be addressed to:

Bernard J. Krask, Ph.D.  
Division of Heart and Vascular Diseases  
National Heart, Lung, and Blood Institute  
Federal Building - Room 4C-12  
7550 Wisconsin Avenue  
Bethesda, Maryland 20205

Telephone: (301) 496-1978



ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

NIH-NHLBI-DHVD-84-G-I

PATHOGENESIS OF ESSENTIAL HYPERTENSION: NEUROBIOLOGICAL AND MOLECULAR  
BIOLOGICAL APPROACHES

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 2, 1984

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

The proposed program, "Pathogenesis of Essential Hypertension: Neurobiological and Molecular Biological Approaches", will provide support for approximately six research projects for a period of three to 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 multidisciplinary investigation(s) of the basic mechanisms of blood pressure regulation and causes of hypertension utilizing neurobiological and molecular biological approaches. The ideal staff of these grants will consist of anatomists, pathologists, physiologists, pharmacologists, molecular biologists, behavioral scientists, and basic science and clinical hypertension researchers.

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

84-AM-01

DIGESTIVE DISEASES CORE CENTERS

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

Application Receipt Date: March 15, 1984

The National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases (NIADDK) invites applications for Digestive Diseases Core Centers to be initiated in Fiscal Year 1984. The centers component of the Digestive Diseases Program of the NIADDK is being expanded at the recommendation of the National Digestive Diseases Advisory Board and of Institute staff.

The objectives of the Core Center are to bring together, on a cooperative basis, clinical and basic science investigators in a manner which will enhance and extend the effectiveness of research being conducted in the field of digestive diseases. Within the research activities of the Center should be research that is relevant to the underlying cause, mechanism, diagnosis, early detection, prevention, control and treatment of digestive diseases and related physiological, pathophysiological, congenital or metabolic disorders resulting from such diseases. The focus can be a disease such as pancreatitis, functional bowel disease, inflammatory bowel disease, chronic hepatitis; an organ such as liver, esophagus, large bowel; a process such as absorption, secretion, motility or an appropriate combination thereof which may also include areas of relevant technology.

The Core Center grant is a mechanism designed to enhance and extend the effectiveness of a group of related projects and investigators that are already funded through other mechanisms such as Research Project Grants or Research Program Projects. In this respect the Core Center mechanism builds upon an established base of research excellence. The Core Center grant may provide funds for (1) core resources such as tissue culture, immunoassay or biostatistics units which must be utilized by at least two or more center participants, (2) pilot/feasibility projects to encourage new investigators or investigators from other fields to pursue new and innovative ideas to a point where they can compete for independent support; in addition, temporary salary support for one named new investigator in a specified area of research and with a defined pilot/feasibility project may be requested for up to 24 months, with subsequent individuals to be named and reviewed by the Center's Advisory Board and the NIADDK,

This program is described in the Catalog of Federal Domestic Assistance No. 13.848, Digestive Diseases and Nutrition. 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 CFR Part 74. This program is not subject to Health Systems Agency review.

Institutions that have the necessary foundation of multidisciplinary digestive diseases-related research are encouraged to apply for the Digestive Diseases Core Center whether or not they previously had an Exploratory Grant. At least fifty percent of the support for the on-going research projects should be from the NIADDK and the remainder should be highly relevant to the overall goal of the Core Center grant. Foreign institutions are not eligible for application. As the Centers Program develops, some attention will be given to program balance with respect to scientific area.

NIADDK expects to award 3 to 6 Digestive Diseases Core Center grants in Fiscal Year 1984 on a competitive basis. An average Center may include about 10 to 12 pilot/feasibility projects and 6 to 8 core units with a direct cost of up to approximately \$500,000. However, the actual size of the Center will vary depending on the needs of the Center. The anticipated awards are contingent upon the availability of appropriated funds. Depending on appropriations, it is expected that additional Core Center applications will be solicited in Fiscal Year 1985. The general description of a Core Center, copies of Core Center Guidelines, and consultation may be obtained from:

Dr. Kirt Vener  
Esophageal, Gastric and Colonic  
Diseases Program  
National Institute of Arthritis, Diabetes,  
and Digestive and Kidney Diseases  
Bethesda, Maryland 20205

Telephone: (301) 496-7821

Dr. G.G. Roussos  
Intestinal and Pancreatic Diseases Program  
National Institute of Arthritis, Diabetes,  
and Digestive and Kidney Diseases  
Bethesda, Maryland 20205

Telephone: (301) 496-7121

Dr. Sarah C. Kalser  
Liver and Biliary Diseases Program  
National Institute of Arthritis, Diabetes,  
and Digestive and Kidney Diseases  
Bethesda, Maryland 20205

Telephone: (301) 496-7858

Applications for grants for Digestive Diseases Core Centers will be evaluated in national competition by the NIH grant peer review process. Applications will be reviewed initially by a special review committee convened by the NIADDK, and subsequently by the National Arthritis, Diabetes, and Digestive and Kidney Diseases Advisory Council. The special receipt date for submission is March 15, 1984, with earliest funding September 1984.

## ANNOUNCEMENT

### BIOMEDICAL RESEARCH SUPPORT GRANT APPLICATIONS FOR FISCAL YEAR 1984

#### DIVISION OF RESEARCH RESOURCES

Application Receipt Date: January 1, 1984

#### I. BACKGROUND

The Biomedical Research Support Grant (BRSB) 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 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 1983 (October 1, 1982 through September 30, 1983). 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.

#### III. AWARD CONDITIONS

The BRSB award is for one year and must be renewed annually. The start date is April 1. It is estimated that approximately 530 BRSB awards will be made in FY 1984.

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

The BRSB 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 Health Systems Agency review.

IV. METHOD OF APPLYING

BRSB application kits (Form NIH-147-1) will be mailed on or about November 25 to institutions that, according to NIH records, are eligible to apply for a BRSB.

Completed BRSB applications must be received by January 1, 1984.

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  
Telephone: (301) 496-5131.

## ANNOUNCEMENT

### BIOMEDICAL RESEARCH SUPPORT SHARED INSTRUMENTATION GRANTS

#### DIVISION OF RESEARCH RESOURCES

Application Receipt Date: February 15, 1984

#### I. BACKGROUND

The Division of Research Resources (DRR) is continuing its competitive Biomedical Research Support (BRS) Shared Instrumentation Grant Program initiated in Fiscal Year 1982. The program was established in recognition of the long-standing need in the biomedical research community to cope with rapid technological advances in instrumentation and the rapid rate of obsolescence of existing equipment. The objective of the program is to make available, to institutions with a high concentration of NIH-supported biomedical investigators, research instruments which can only be justified on a shared-use basis and for which meritorious research projects are described.

Eligible institutions may submit more than one application for different instrumentation in the Fiscal Year 1985 review cycle.

#### II. RESEARCH GOALS AND SCOPE

This program is designed to meet the special problem of acquisition and updating of expensive shared-use instruments which are not generally available through other NIH mechanisms, such as the regular research, program project and center grant programs, the Biomedical Research Support (BRS) Grant Program and other DRR programs such as Animal Resources and the Biotechnology Resources Program. Proposals for the development of new instrumentation will not be considered.

This program is described in the Catalog of Federal Domestic Assistance No. 13.337, Biomedical Research Support. Awards will be made under the authority of the Public Health Service Act, 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 42 CFR Part 74. This program is not subject to Health Systems Agency review.

### III. ELIGIBILITY

The BRS Shared Instrumentation Grant Program is a subprogram of the BRS Grant Program of DRR. Awards are made under the authority of the BRS program and are made to institutions only, not to individuals. Therefore, eligibility is limited to institutions which receive a BRS grant award. Awards are contingent on the availability of funds.

### IV. MECHANISM OF SUPPORT

BRS Shared Instrumentation Grants provide support for expensive state-of-the-art instruments utilized in biomedical research. Applications are limited to instruments that cost at least \$100,000 per instrument or system. Types of instrumentation supported include, but are not limited to, nuclear magnetic resonance systems, electron microscopes, mass spectrometers, protein sequencer/amino acid analyzers and cell sorters. Support will not be provided for general purpose equipment or purely instructional equipment. Proposals for "stand alone" computer systems will only be considered if the instrument is solely dedicated to the research needs of a broad community of NIH-supported investigators.

Awards will be made for the direct costs of acquisition of new, or the updating of existing, research instruments. The institution must meet those costs (not covered in the normal purchase price) required to place the instrumentation in operational order as well as the maintenance, support personnel and service costs associated with maximum utilization of the instrument. There is no upper limit on the cost of the instrument, but the maximum award is \$300,000. Grants will be awarded for a period of one year and are not renewable. Supplemental applications will not be accepted. The program does not provide indirect costs or support for construction or alterations and renovations. Cost sharing is not required. If the amount of funds requested does not cover the total cost of the instrument, an award will not be made unless the remainder of the funding is assured. Description of the proposed co-funding must be presented with the application. Assurance of co-funding, signed by an appropriate institutional official, must be presented to DRR prior to the issuance of an award. The shared instrument will not be transferable outside of the institution to which it is awarded.

A major user group of three or more investigators should be identified. Each major user must have NIH peer-reviewed research support at the time of the award. The application must show a clear need for the instrumentation by projects supported by multiple NIH research awards and demonstrate that these projects will require at least 75% of the total usage of the instrument. Major users can be individual researchers, or a group of investigators within the same department or from several departments at the applicant institution. NIH extramural awardees from other institutions may also be included.

If the major user group does not require total usage of the instrument, access to the instrument can be made available to other users upon the advice of the advisory committee. These users need not be NIH awardees but priority should be given to NIH supported scientists engaged in biomedical research.

A progress report will be required for each of the three years following receipt of the award. The report must describe the use of the instrument, listing all users, and indicate the value of the instrumentation to the research of the major users and to the institution as a whole.

#### V. ADMINISTRATIVE ARRANGEMENTS

Each applicant institution must propose a Principal Investigator who can assume administrative/scientific oversight responsibility for the instrumentation requested. An internal advisory committee to assist in this responsibility should also be utilized. It is expected that in most cases, the BRS Program Director and extant BRS advisory apparatus, augmented with members having technical and scientific expertise regarding the instrumentation requested, can serve this function. However, there may be circumstances where other existing or proposed arrangements are more appropriate for the applicant institution.

In any event, the Principal Investigator and the advisory group are responsible for the development of guidelines for shared use of the instrument, for preparation of all reports required by the NIH, for relocation of the instrument within the grantee institution if the major user group is significantly altered and for continued support for the maximum utilization and maintenance of the instrument in the post award period.

A plan should be proposed for the day-to-day management of the instrument including designation of a qualified individual to supervise the operation of the instrument and to provide technical expertise to the users. Specific plans for sharing arrangements and for monitoring the use of the instrument should be described.

#### VI. REVIEW PROCEDURES AND CRITERIA

Applications are reviewed by specially convened initial review groups of the Division of Research Grants (DRG) for scientific and technical merit and by the National Advisory Research Resources Council of the DRR for program considerations. Funding decisions are the responsibility of the DRR and will not be made prior to November 1, 1984.

Criteria for review of applications include the following:

1. The extent to which an award for the specific instrument would meet the scientific needs and enhance the planned research endeavors of the major users by providing an instrument that is unavailable or to which availability is highly limited.
2. The availability and commitment of the appropriate technical expertise within the major user group or the institution for use of the instrumentation.
3. The adequacy of the organizational plan and the internal advisory committee for administration of the grant including sharing arrangements for use of the instrument.



4. The institution's commitment for continued support of the utilization and maintenance of the instrument.
5. The benefit of the proposed instrument to the overall research community it will serve.

## VII. METHODS OF APPLYING

### A. Application Format

Applications are to be submitted on the standard PHS research grant application form (PHS-398, Rev. 5/82) available from most institutional business offices or the Division of Research Grants (DRG), National Institutes of Health (NIH). Instructions supplied with these forms should be followed except for the following:

1. Face page of the application -
  - a. Item 1. The instrument requested should be named in the title of the proposal.  
  
(Note at the bottom of the face page if a duplicate application has been sent to another agency.)
  - b. Item 2. Write in **"DRR-BRS SHARED INSTRUMENTATION GRANT."**
  - c. Item 6. Write in December 1, 1984 - November 30, 1985.
  - d. Item 12. Complete Item 12 and type in the institution's BRS grant number.
2. Application page 2. Identify the Principal Investigator, the major user group and the complete grant number(s) for each of the users currently active NIH research support.
3. Application page 4. A detailed breakdown of the direct costs requested will be shown on the budget page. Provide a complete description of the instrument including manufacturer, model number and cost including tax and import duties, if applicable. If possible, the model chosen should be justified by comparing its performance with other available instruments.
4. Application page 5. Budget Estimates for All Years. Not applicable; do not submit.
5. Biographical Sketch. In addition to the personnel listed on page 2, include a biographical sketch of the person(s) who will be in charge of maintenance and operation of the instrument and a brief statement of the qualifications of the individual. Biographical sketches should not exceed 2 pages for each individual.

6. Section 2 of the application. Provide information relative to the points identified under criteria for review including:
- a. A description of similar instruments existing at the institution or at nearby institutions and a justification why new or updated equipment is needed. A clear justification should be given for the choice of the instrument and ancillary accessories requested.
  - b. A description, by each major user, of the research project for which the instrumentation is required. The description need not be of the detail of a regular research grant application (should not exceed 4 pages per major user) but should point out the benefit of the proposed instrument to the research objectives of each major user. An estimate of the percentage use of each project should be given. If there are more than four major users, set up a table listing the names of the users, the NIH grant number, the estimated percentage use and the title of each research project.
  - c. A description of the organizational plan including the internal advisory committee for administration of the grant.
  - d. A specific plan and a statement of institutional commitment to operate and maintain the instrument for its useful life at the same utilization level after termination of the three-year reporting period to DRR.

B. Application Procedure

Applications must be received by February 15, 1984. Applications received after this date will not be accepted for review in this competition. The original and four copies should be sent to:

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

Inquiries and two copies of the application should be addressed to:

Biomedical Research Support  
Grant Program  
Division of Research Resources  
Building 31 - Room 5B23  
National Institutes of Health  
Bethesda, Maryland 20205

Telephone: (301) 496-6743

ANNOUNCEMENT

AVAILABILITY OF SENIOR INTERNATIONAL FELLOWSHIPS FOR 1984-85

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

Application Receipt Date: January 15, 1984

The John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC) announces the availability of senior postdoctoral fellowships to U.S. health scientists who wish to conduct collaborative research abroad. The purpose of these fellowships is to enhance the exchange of 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.

**II. APPLICATION AND SELECTION**

The next receipt date for Senior International Fellowship applications is January 15, 1984. Please note that normally there is only one receipt date each year for the Senior International Research application and that date is June 1. This is a one-time only announcement.

All applications are reviewed for scientific merit by the National Institutes of Health (NIH). Fellowship awards are made for periods of three to twelve months. A fellowship can 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 November 1, 1983 and January 6, 1984 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  
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

SPECIAL EMPHASIS RESEARCH CAREER AWARD

FOR SOCIAL AND BEHAVIORAL SCIENTISTS IN

BEHAVIORAL GERIATRICS RESEARCH

THE NATIONAL INSTITUTE ON AGING

The National Institute on Aging (NIA) solicits applications for **SPECIAL EMPHASIS RESEARCH CAREER AWARDS (SERCA)** from eligible institutions for interdisciplinary training and research support of social and behavioral scientists seeking careers in behavioral geriatrics research.

I. BACKGROUND

Behavioral geriatrics research is an emerging area of behavioral medicine which is undertaking the development and integration of social/behavioral and biomedical science knowledge relevant to health promotion and the prevention and treatment of disease in the middle and later years. Research in this area is concerned with a wide range of health-related behaviors and attitudes, that are influenced by the environment, and that interact with biological, psychological, and social aging processes to promote or inhibit health and effective functioning as people grow older. Not only are the health behaviors and attitudes of middle-aged and older people themselves involved, but also those of formal health-care providers and of family and friends. These behaviors and attitudes include medical beliefs about the nature of the aging processes. They also include behaviors believed by older people to promote health and functioning, as well as "illness behaviors" that involve how older individuals monitor their bodily functioning; how they define and interpret symptoms perceived as abnormal; whether they consult with non-professional relatives and friends; whether they take or fail to take remedial action, utilize formal health-care systems, or comply with prescribed regimens; and how they approach death. Behavioral geriatrics research seeks scientific understandings of how health behaviors and attitudes are acquired, how they are affected by the social contexts of daily living, how they change or remain stable as people grow older, how they are linked with physiological and psychological aging processes to influence morbidity and mortality, and how they can be modified as relevant new scientific knowledge is acquired.

Many of the interdisciplinary concerns of behavioral geriatrics research are not new. What is new is the special dynamic emphasis on the interaction of biomedical and psychosocial aging processes to affect health and functioning as people grow older. This emphasis requires formulation of new research hypotheses, design of innovative research techniques, and training of researchers who can work in interdisciplinary teams.

---

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.

The concerns of behavioral geriatrics research have risen to national prominence as the numbers of older people increase and the significance for health of behavior, social context, and lifestyle becomes increasingly clear. Interdisciplinary research is essential to provide the knowledge base for behavioral geriatrics. It is needed to specify how particular health-related behaviors and attitudes and particular social contexts promote or impede health maintenance in the middle and later years, how they interact with physiological aging processes, and how they influence the effectiveness of health care for older people. 1/

Most immediately, investigators are needed who have the appropriate training and experiences to design and conduct such interdisciplinary research on health behaviors and aging, who can define the common ground between psychosocial and biomedical approaches, and who can speak each other's scientific language. This need for geriatric researchers with biobehavioral backgrounds will predictably increase as both social/behavioral and geriatric research programs develop in schools of medicine and public health, in behaviorally oriented biological and medical research laboratories, and in the wide range of institutions and agencies concerned with science-based health care of older people.

## II. PURPOSE OF THE AWARD

The NIA Special Emphasis Research Career Award (SERCA) in behavioral geriatrics research speaks to this need. The award offers an opportunity for established social and behavioral scientists to acquire supplementary biomedical research training and interdisciplinary research experience in order to pursue an interdisciplinary research career in aging and the promotion of health. The award provides support for a three-year program of full-time research training and interdisciplinary research experience in a clinical or biomedical setting. Three components (as specified under III and IV below) are involved in the award:

1. Full-time salary and modest research support to a qualified researcher with a background in social or behavioral research on aging or potentially relevant to aging, and with commitment to acquiring selected biomedical knowledge, experience, and skills needed to further interdisciplinary research in behavioral geriatrics;
2. A three-year program of activity that includes selected biomedical research training (development phase) and the initiation and implementation of a research project in behavioral geriatrics research (project phase);
3. Sponsorship by a domestic institution that offers superior opportunities in the appropriate biomedical areas, and that demonstrates commitment to support the program of activity by providing an advisor, a collaborator in the research, and has the appropriate training and research facilities.

1/ See "Health Behaviors and Aging: Behavioral Geriatrics Research," NIH Guide for Grants and Contracts, in press.

The award aims at a close and extended working relationship between a social or behavioral scientist (the awardee) and one or more highly qualified biomedical or biobehavioral scientists. This relationship should optimize the opportunity for interdisciplinary communication and collaboration in research on aging and health. For the awardee, the relationship should develop the capacity to apply the knowledge and research methods of his (her) discipline to issues in behavioral geriatrics research requiring complementary biological or medical understanding. For the sponsoring institution, the relationship should stimulate awareness among biomedical scientists of the potential for interdisciplinary research.

In contrast to many other NIH awards which encourage the development of skills in a single discipline, this award allows in-depth exposure to a related second discipline. The NIA anticipates that this SERCA program will play a significant role in the development of interdisciplinary researchers needed to address the challenging biobehavioral problems of health promotion, disease prevention, and care of older people.

### III. PROVISIONS OF THE AWARD

The NIA-SERCA award is made to eligible institutions for support of a special working relationship between awardee and institution as specified below.

#### A. Plan of Work

Developmental Phase: During the first year or two the awardee is expected to develop capabilities for conducting interdisciplinary research on aging and health promotion in a clinical or other biomedical setting.

The awardee's activities may include participation in formal courses, ongoing research, workshops, symposia, scientific and professional meetings, as well as involvement in care of older patients to the extent that this will strengthen research skills. Included in the plan should be exposure to at least one biomedical specialty (excluding psychiatry), such as general or geriatric medicine, immunology, neurology, neuroendocrinology, pharmacology, or nutrition. These activities should be oriented around an area of research in behavioral geriatrics in which, subsequent to the grant period, the awardee contemplates the future development of a research program.

It is expected that the awardee's time will be largely devoted to the selected biomedical activities. However, a portion (up to 25%) of time should make use of his/her own disciplinary background (e.g., through teaching, advising on research) as a special contribution of the NIA SERCA program to the interdisciplinary relationship with the sponsor.

Project Phase: Beginning as early as possible, the awardee is expected to engage with his/her advisor or another biomedical/biobehavioral collaborator in a research project. This project, which should be designed as a possible basis for more extended research, can take such forms as (but not limited to): an exploratory or feasibility study, a test of a new technique, or development of a new biobehavioral measure.

The project, preferably interdisciplinary, must focus on a topic with clear implications for the linkages between health-related attitudes or behaviors and health outcomes (or prevention of disease) in older people.

B. Relationship to Institution

Throughout the grant period, the sponsoring institution (which may be the applicant's own institution) is expected to arrange significant working relationships with the awardee through an advisor who will sponsor and oversee the proposed program, and who will make sure that the awardee will receive the proper experience for a future career of interdisciplinary research in behavioral geriatrics.

The advisor must be a biomedical scientist or a social/behavioral scientist with extensive interdisciplinary research experience at the interface of the biomedical and social/behavioral sciences. A background in aging, though desirable, is not essential.

During the grant, the advisor (or another qualified biomedical scientist) is expected to work with the awardee on the research project, as a consultant or preferably as a collaborator.

The sponsoring institution will facilitate the program in every way possible, providing space, resources, and other support insofar as feasible. Indeed, such collaborative work, and the opportunity to plan a future program of interdisciplinary research, may be a in the NIA-SERCA award.

While the program should be situated primarily at a single institution, travel to and stays at other institutions for relevant research and training experiences are permissible.

C. Duration

This award is for continuous support of biomedical research training and interdisciplinary research over a period of three consecutive years.

The award is non-renewable. However, development of a separate and subsequent grant application for research (e.g., for expansion of the research project) or training would be a desirable outcome of the award.

D. Allowable Award Costs

The NIA-SERCA grant is made annually to the sponsoring institution for the purpose of supporting the awardee's biomedical research training and the interdisciplinary research project. Costs allowed may include:

Awardee's Salary

Up to a maximum of \$30,000 from SERCA funds for full-time salary support may be requested. In addition, fringe benefits will be provided on that part of the salary paid from SERCA. Institutional supplementation is permitted. (See Supplementary Guidelines for further details.)



### Research Support

In addition to the awardee's salary, up to a maximum of \$8,000 in each of the first two years and up to a maximum of \$20,000 in the third year may be requested for research expenses: e.g., data collection, analysis costs, technical assistance, consultant costs, domestic travel, patient care expenses, publication costs, and other appropriate expenses which are essential to the proposed program. (If the research is started in the second year, small adjustments in research support may be requested.)

### Tuition

If essential to the awardee's individual development program, funds for tuition for training courses may be requested.

## IV. CRITERIA FOR ELIGIBILITY

### A. The Candidate

1. The candidate must hold a Ph.D. or equivalent professional degree in a social or behavioral science (e.g., psychology, sociology, anthropology).
2. By the beginning date of the award, the candidate must have a minimum of three years post-doctoral research experience. This experience should include evidence of (a) clear intention to pursue research on aging and (b) interest in a scientific area that can be furthered through exposure to complementary biomedical approaches.
3. The candidate must agree to inform the NIA for a period of five years subsequent to completion of the award about his/her research activities, publications, grants or contracts, and academic status; and must agree to attend any scheduled meetings of awardees at NIA.
4. The candidate must be a citizen or noncitizen national of the United States or its possessions and territories or must have been lawfully admitted to the United States for permanent residence at the time of application.
5. Applications from minority candidates are especially solicited.

### B. The Program of Activity

1. The candidate's program of activity must be fully described in terms of adequately providing biomedical training and interdisciplinary experience relevant to research in behavioral geriatrics.
2. For the research project, the general area must be defined and the research plan described in the grant application, although full details must be formulated (or re-formulated--see Supplementary Guidelines) during the first two years of the grant period.

C. The Sponsoring Institution

1. The sponsoring institution must nominate the candidate on the basis of qualifications, interests, accomplishments, motivation, and potential for an interdisciplinary research career in behavioral geriatrics. The institution may also take into account the contribution to be made by the candidate to their own interdisciplinary interests.
2. Evidence of the commitment of the institution to the candidate's research development must be provided (covering the advisor, space, resources, etc.). The sponsoring institution may or may not be the applicant's current employer. It is not essential for the sponsoring institution to commit itself to eventual placement of the candidate on its permanent faculty.
3. The background, qualifications, and commitment of the major biomedical advisor must be described.

V. APPLICATION AND REVIEW PROCEDURES

Applications should be submitted on Form PHS 398, available at most institutional business offices or from the Division of Research Grants (DRG) NIH.

A. Staff Contact and Supplementary Guidelines

Prospective applicants need to obtain Supplementary Guidelines and instructions, and to discuss their eligibility and proposed program of activities by contacting:

Behavioral Sciences Research (SERCA)  
National Institute on Aging  
Building 31 - Room 4C32  
Bethesda, Maryland 20205

Telephone: (301) 496-3136

B. Submission of Application

Applications should be carefully written to convey the maximum information to reviewers, in the clearest possible form, and with the minimum of verbiage. Follow the "Supplementary Guidelines for Preparing Application, NIA-SERCA." (See V.A. above) Mail the completed application and six copies to:

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

C. Application Receipt and Review Schedule

NIA-SERCA applications will be received three times per year according to the following schedule:

<u>APPLICATION RECEIPT</u>	<u>COUNCIL REVIEW</u>	<u>START DATE</u>
February 1	Sep/Oct	December 1
June 1	Jan/Feb *	April 1 *
October 1	May *	July 1 *

\* of the year following application receipt

D. Review of Applications

Review of the applications for scientific and technical merit will be conducted by the Aging Review Committee, NIA. In this review, particular attention will be given to the candidate's prior training and experience; clear intention to pursue aging research; career potential in behavioral geriatrics research; research career development plans; proposed research; environment; publications; and other relevant information. The application must demonstrate that the award will enhance the candidate's development as an interdisciplinary investigator in behavioral geriatrics research, and the sponsoring institution must show commitment to providing the adequate degree of support.

The initial review will result in recommendations for consideration by the National Advisory Council of the National Institute on Aging. Applications recommended for approval by the Advisory Council will be considered for funding on the basis of the overall merit of the proposal as determined by the Aging Review Committee, relevance of the proposal to the research objectives of the Institute, and availability of funds.

## ANNOUNCEMENT

### HEALTH BEHAVIORS AND AGING: BEHAVIORAL GERIATRICS RESEARCH

#### THE NATIONAL INSTITUTE ON AGING

##### I. INTRODUCTION

The National Institute on Aging (NIA) invites qualified researchers to submit applications for research and research training on those health-related behaviors and attitudes of older people, their families, and significant others, that can affect health and functioning as people grow older. Studies are sought which extend scientific understanding of: how older people's health behaviors and attitudes develop under varying social conditions; how they relate to health promotion and disease prevention, care and treatment of disease, rehabilitation, or death; and how they can be modified as relevant new scientific knowledge is developed.

This announcement of NIA's special initiative on health behaviors and aging supplements, but does not replace, NIA's broad announcement on **HEALTH AND EFFECTIVE FUNCTIONING IN THE MIDDLE AND LATER YEARS**. See NIH Guide for Grants and Contracts, Vol. 12, No. 6, June 17, 1983, pp. 10-15; see also pp. 5-9.

##### II. BACKGROUND

A variety of studies in the United States and other countries have demonstrated the importance of social and behavioral factors in the causes, prevention, diagnosis, treatment, and recovery from illness in later life, as well as in the maintenance of health over the life course. An often-quoted report from the Surgeon General states that society will achieve its health goals primarily through changes in behavior. To specify such a global statement, research is needed on how particular behaviors and attitudes influence the health of people as they grow older, and how particular social conditions affect the development and potential modification of these behaviors and attitudes. These issues are addressed in the emerging area of behavioral geriatrics research, which is undertaking the development and integration of social/behavioral and biomedical science knowledge relevant to health promotion and the prevention and treatment of disease in the middle and later years. Behavioral geriatrics research concerns older people's use of three levels of health care, the first two of which are emphasized in the present announcement: (1) self care, consisting of the decisions and actions that older individuals take to maintain and improve their health and functioning, and to prevent and treat disease; (2) informal or lay care, provided by those not employed for this purpose, including: family care; care by friends and neighbors; volunteer

---

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, Section 472, 42 USC 2891-1, and administered under PHS grants policy and Federal Regulations 42 CFR Part 66, and 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.

help (by unpaid members of voluntary organizations); and mutual aid from others with similar health problems; (3) formal care--to be developed more fully in a later announcement--that is provided by organized health services and specially trained practitioners (physicians, nurses, and other health professionals). As defined by the World Health Organization, health behaviors involved in both self care and informal care are those believed to be relevant to health or disease in older people--whether or not the utility of these behaviors has actually been demonstrated. Health behaviors include not only those believed to promote health and functioning, but also "illness behaviors" that involve: how older individuals monitor their bodily functioning; how they define and interpret symptoms perceived as abnormal; whether they consult with non-professionals, relatives, and friends; whether they take or fail to take remedial action, utilize formal health-care systems, or comply with prescribed regimens; and how they approach death.

Background readings useful for exploring this area of behavioral geriatrics research include the following:

Kasl, Stanislav V. and Berkman, Lisa F. "Some Psychosocial Influences on the Health Status of the Elderly: The Perspective of Social Epidemiology," in James L. McGaugh and Sara B. Kiesler (eds.), Aging: Biology and Behavior, pp. 345-385. New York: Academic Press, 1981.

Mechanic David (ed.). Handbook of Health, Health Care, and the Healthprofessions, Chapters in Part V and Chapter 32. New York: The Free Press, 1983.

Riley, Matilda White and Bond, Kathleen. "Beyond Ageism: Postponing the Onset of Disability," in Matilda Riley, Beth Hess, and Kathleen Bond (eds.), Aging in Society: Selected Reviews of Recent Research, pp. 243-252. New Jersey: Lawrence Erlbaum Associates, 1983.

### III. SPECIFIC OBJECTIVES

The NIA seeks applications on the nature of older people's health behaviors and attitudes, and those of their relatives and significant others, as these behaviors and attitudes can promote or inhibit health and effective functioning in the middle and later years. Research is needed to specify how particular health behaviors and attitudes are acquired or changed as people grow older, how they are influenced by social contexts, how they relate to etiology or pathogenesis of particular diseases, how they interact with physiological and psychological aging processes to affect particular health outcomes, and how they influence the need for health care services or institutionalization.

The following are offered as illustrations of appropriate topics for research. Accepted referral guidelines will be followed in assigning applications to NIA or to other Institutes. Applications need not, however, be limited to these issues.

#### Nature and Sources of Health Behaviors and Attitudes

- o How do social conditions and social relationships at work, in the family, and in the community influence the development and maintenance of health behaviors and attitudes as people grow older?

- o To what extent do older people turn for health information or advice about particular health problems to a relative or friend? What is the nature of older people's interactions about their health problems with relatives or friends?
- o How do particular health behaviors and attitudes of older people derive from cultural explanations of symptoms? From popular stereotypes of inevitable aging decline? From their earlier illness experience? From their intuitive models of their own bodily functioning? From the mass media?
- o How and under what specific conditions do the health behaviors, attitudes, beliefs, and knowledge of older people vary by sex, education, race, or ethnic background? How do they vary from one type of society to another? Or from one cohort to another as society changes?

#### Relation between Health Attitudes and Behaviors

- o How do older people's beliefs about the nature of particular illnesses affect the preventive behaviors they actually engage in? How do self-assessments of their health affect their behavioral functioning in activities of daily life?
- o How and to what extent can awareness of healthful practices be converted into sustained health behaviors?
- o How do older people's use of self care and reliance on family or significant others increase or reduce their demand for formal health care services?

#### Linkages between Health Behaviors and Attitudes and Health-related Outcomes

- o What psychological mechanisms (e.g., self-esteem, sense of personal control, forms of coping) link particular health behaviors and attitudes to health or disease outcomes in old age?
- o What biological mechanisms and age-related changes (e.g., in neural, immunological, endocrine, and other physiological systems) link particular health behaviors and attitudes to health or disease outcomes in old age?
- o How do the changing social environments and relationships of older people interact with health behaviors and attitudes to influence health or disease outcomes in old age?
- o How is it that, although most older people have one or more physical disabilities, most are nevertheless able to continue to perform their major activities?

#### Methodological Issue

- o What measures of health behaviors and attitudes can be devised to improve predictions of health outcomes of older patients? How well do

behavioral measures, as compared with conventional biological indicators, predict health outcomes?

- o How can multivariate methods of longitudinal and cohort analysis be used to study age-related changes and stabilities in health attitudes and behaviors as they relate to health outcomes?
- o How can methods currently used in other areas of behavioral research (e.g., in communications research or operant conditioning) be adapted for modifying older people's health behaviors and attitudes?

#### IV. REVIEW CRITERIA

Applications compete on the basis of scientific merit with all applications before NIA. The review criteria are the traditional considerations underlying scientific merit. Research applications need not be limited to any particular methodology of data collection or analysis. Designs may take the form of field or laboratory experiments; of quasi-experiments or cross-cultural comparisons; of cross-sectional, longitudinal, or cohort-comparative studies. (Demonstration or evaluation projects do not fall within this announcement unless the research design is systematically related to a conceptual model, to testable hypotheses, and to generalizable results.) Measures can range from standardized test batteries, to carefully specified qualitative indicators, to physiological procedures. Special attention should be given to systematic representation of definable populations in the community or society as a whole; or to careful specification of the sampling biases (e.g., from sociocultural factors, severity of symptoms) if special populations are selected from clinics, hospitals, nursing homes, HMO listings, or similar. NOTE: Special encouragement is given to multidisciplinary teams of investigators who combine the knowledge and skills for relating relevant aspects of social/behavioral and biomedical sciences.

#### V. APPLICATION SUBMISSION AND REVIEW

Investigators considering submitting an application in response to this announcement are strongly encouraged to discuss their project and the range of available grant mechanisms with NIA staff in advance of formal submission. This can be done either through a telephone conversation or through a brief written (4-5 pages) research prospectus.

Applicants should use the regular research project and program project grant application form (PHS 398), which is available at the applicant's institutional Application Control Office or from the Office of Grants Inquiries, Division of Research Grants (DRG) NIH, (Telephone: (301) 496-7441). In order to expedite the routing of applications within NIH, please (1) check the box on the application face sheet indicating that your proposal is in response to this announcement and print (next to the checked box) **NIA HEALTH BEHAVIORS AND AGING** and (2) enclose a cover letter repeating that your application is in response to this announcement.

Mail the cover letter and the completed application (with 6 copies) to:

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

Receipt dates for Research Project Grant and New Investigator Award applications are: March 1, July 1, and November 1; for others, including Postdoctoral Fellow and Program Project applications: February 1, June 1, and October 1.

Address requests for additional information, research prospectuses, and/or letters of intent to:

National Institute on Aging  
Behavioral Sciences Research  
Attention: "Health Behaviors and Aging"  
Building 31C - Room 4C32  
Bethesda, Maryland 20205

Telephone: (301) 496-3136



ANNOUNCEMENTSOCIAL ENVIRONMENTS INFLUENCING HEALTH AND EFFECTIVE FUNCTIONING IN  
THE MIDDLE AND LATER YEARS

## THE NATIONAL INSTITUTE ON AGING

## I. INTRODUCTION

The National Institute on Aging (NIA) invites qualified researchers to submit grant applications for research projects designed to identify specific modifications of the social environment--at work, in the household, or in the community--that may improve the health or the effective functioning of middle-aged and older persons. Studies are sought which extend scientific understanding of how and why particular interventions or variations in the social context may have positive or negative consequences for particular outcomes of the aging process. A broad range of research designs will be useful, including field experiments and correlational studies pointing to possible interventions (see Section V). Each study must rest upon hypotheses that specify the effects of particular social environments on health or functioning in the middle and later years, or that examine particular mechanisms mediating these effects. NIA does not support demonstration or evaluation projects except as these may be built into systematic and generalizable studies that are clearly grounded in relevant theory and are designed to add to the scientific knowledge base.

This announcement of NIA's special initiative on interventions in the Social environments of aging supplements, but does not replace, NIA's broad announcement of **HEALTH AND EFFECTIVE FUNCTION IN THE MIDDLE AND LATER YEARS**. See See NIH Guide for Grants and Contracts, Vol. 12, No. 6, June 17, 1983, pp. 10-15; see also pp. 5-9.

## II. BACKGROUND

The social and behavioral sciences show that aging is not entirely immutable, but consists of highly variable social and psychological, as well as biological, processes. For some people aging means healthy, effective, fulfilling lives, while for others aging means chronic ill health, prolonged disability, loneliness, disengagement from affairs. Such differences in the ways people age are influenced not only by biology, but also by the social environments in which they lead their daily lives--by the work they do, the people they interact with, the household and community they live in. Research is needed to examine the potential

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, Section 472, 42 USC 2891-1, and administered under PHS grants policy and Federal Regulations 42 CFR Part 66, and 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.

for modifying these social environments toward the goal of enhancing health and functioning throughout the middle and later years by preventing, postponing, or reversing many disabilities currently associated with growing old.

Clearly, this potential for optimizing the aging process cannot be fully realized simply through global imperatives to individuals to eat, drink, and exercise properly and to comply with medical regimens; nor through societal provision of safer highways and cleaner air and water. The quality of aging depends also on the multiple and changing roles people perform in their daily lives--on the nature of their family relations, the rewards and punishments from work, the responsibilities of job and household, the opportunities for productive activity in retirement, the support they receive from other people and their own opportunities to give support. In short, research is needed on how the quality of aging is affected by the subtle and continuing interplay between individuals growing older and the beneficial or adverse circumstances in the day-to-day social situations they face in a changing society.

Useful readings may be found in the following sources: Brim, O.G. and Kagan, J. Constancy and Change in Human Development. Cambridge, Massachusetts: Harvard University Press, 1980; Kiesler, S.B., Morgan, J.N., Oppenheimer, V.K. Aging: Social Change. New York, New York: Work and Personality: An Inquiry into the Impact of Social Stratification. Norwood, New Jersey: Ablex Press, 1983; Riley, M.W., Hess, B.B. and Bond, K. Aging in Society. Hillsdale, New Jersey: Erlbaum Associates, 1983.

### III. SPECIFIC OBJECTIVES

The NIA seeks research grant applications that can increase specific understanding of how particular modifications in the social environments of people's daily lives can improve the quality of the aging process in the middle and later years. Particular studies should focus on selected aspects of three sets of interrelated variables--as variables in set (1) may be related to those in set (2), and potentially mediated through those in set (3):

#### A. Social Environments

Social contexts and social relationships at work, at home, or in the community (e.g., support networks, household and living arrangements, financial resources, opportunities for participation in paid work and in family and community activities). Examples of realistic interventions include education of the people involved, social support from an outside agency, physical alterations affecting the social environment, or creation of new roles by older people themselves.

#### B. Aging Outcomes

Preventing, postponing, or reversing disabilities currently associated with later life. Examples of positive outcomes include maintaining health and well-being, functioning effectively in daily activities and social relationships, avoiding or offsetting deterioration in cognition or memory, etc.

### C. Linkages

Intervening mechanisms that link (1) social environments with (2) aging outcomes. Such mechanisms may be psychological (e.g., coping, self-esteem, sense of personal control) or physiological (e.g., reactions to environmental stressors through neural, sensorimotor, endocrine, immunological, and other systems which can impact directly on health and functioning).

Such sets of variables and their interrelationships suggest many researchable issues within the realm of optimizing the aging process through interventions in social environments. The following are offered as illustrations. Accepted referral guidelines will be followed in assigning applications to NIA or to other Institutes. Applications need not, however, be limited to these issues.

#### Work

A few surveys and laboratory studies have begun to suggest how certain characteristics of the job--many of them amenable to social interventions--have striking effects on the aging process. For example, as people grow older, their intellectual functioning and potentially their physical well-being can be improved through complexity of the job, lack of routinization, and freedom from close supervision. Moreover, their job performance can be enhanced through provision of social or economic incentives and opportunities for practice. More research in situations of daily life is needed to specify ways in which the work environment might be modified so as to maintain health and functioning as workers grow older. For example:

- o The effects of training programs on the aging person's learning of new skills and new strategies for approaching a task.
- o How different methods of introducing technological changes, as in electronic office technology, affect health and functioning of aging workers (e.g., by altering utilization of work skills, interaction with co-workers, or feelings of competence and autonomy).
- o How incentives to managers alter their practices in dealing with older workers, evaluating them for promotion or termination, and encouraging their continued productivity
- o Structuring of work roles to accommodate older workers with particular disabilities or health problems.
- o Self-initiated productive roles of unemployed (retired) older people, and the consequences for quality of life.

#### Household

Increased longevity is transforming family life so that most family members live to old age, many families consist of four (even five) generations, and many older persons, particularly women, live alone. Research is needed on ways and means of maintaining independent functioning under a variety of different household and living conditions. Some studies explore the effects on functioning of mundane but widely overlooked technological interventions;

others investigate how problem behaviors associated with illnesses of old age can be modified by training supportive family members to provide reinforcements in everyday interactions. More research is needed on such topics as:

- o Conditions under which informal care systems operate most effectively to maintain frail older people in their homes. How formal support services can operate to optimize independent (non-institutional) living for older people.
- o How different living arrangements (e.g., living alone or in shared or cooperative housing) affect older people's social support, instrumental help, economic resources, and ability to function outside of institutions.
- o Effects on old people's functioning of houses designed to facilitate the tasks (e.g. meal preparation, bathing) which are instrumental to everyday living. How technological or architectural changes can be introduced into the homes of older people to increase, rather than threaten, self-esteem and feelings of personal efficacy.

#### Community

For the wide range of possible community interventions, from provision of home care services to involvement of older people as volunteers, basic research is needed to specify the optimum social conditions and the long range consequences for health and effective functioning. E.g., research might design small-scale interventions in community environments in such areas as:

- o The influence of age-segregated housing on health and functioning of older people.
- o The influence of congregate meals on older people's social interaction, morale, and nutrition.
- o The design of neighborhoods and other residential settings that affect helping patterns among neighbors.
- o How technological changes in communications can affect older people's social interactions and continuing ability to function (e.g., will ordering of groceries by TV reduce social contacts as well as aid the frail elderly?)
- o How local media coverage of crime influences older people's fear of crime and, as a possible consequence, their social participation and well-being.
- o How various community characteristics (e.g., provision of transportation, respite care, or opportunities for older people's participation in community decision-making) influence older people's use of health care, their social participation, or their intergenerational relationships.

#### IV. RESEARCH CRITERIA

Applications compete on the basis of scientific merit with all applications before NIA. Research applications need not be limited to any particular methodology of data collection or analysis. Designs may take the form of carefully controlled field or laboratory experiments; of quasi-experiments or cross-cultural comparisons making use of "naturally occurring" social interventions; of longitudinal or cross-sectional correlational studies that can provide clues to possible interventions; or of simulation models showing the health outcomes of alternative social interventions. Measures can range from standardized test batteries, to carefully specified qualitative indicators, to physiological procedures. In experimental designs, the independent variable must be constructed to specify precisely what social conditions are being manipulated. Ingenuity must be used to hold the design within reasonable limits of time and cost (as by identifying existing sites for experimentation or, when appropriate, by re-analysis of available data). Demonstration or evaluation projects are acceptable only when the research design is systematically related to a conceptual model, to testable hypotheses, and to generalizable results.

NOTE: Encouragement is given to multidisciplinary teams of researchers who combine the knowledge and skill for relating social interventions to the biomedical, behavioral, or social measures of aging outcomes and to the linking mechanisms chosen for scrutiny.

#### V. APPLICATION SUBMISSION AND REVIEW

Researchers considering submitting an application in response to this announcement are strongly encouraged to discuss their project and the range of available grant mechanisms with NIA staff in advance of formal submission. This can be done either through a telephone conversation or through a brief written (4-5 pages) research prospectus.

Applicants should use the regular research project and program project grant application form (PHS 398), which is available at the applicant's institutional Application Control Office or from the Office of Grants Inquiries, Division of Research Grants (DRG) NIH, (Telephone: (301) 496-7441). In order to expedite the application form's routing within NIH, please (1) check the box on the application form's face sheet indicating that your proposal is in response to this announcement and print (next to the checked box) **NIA SOCIAL ENVIRONMENTS** and (2) enclose a cover letter repeating that your application is in response to this announcement.

Mail the cover letter and the completed application (with 6 copies) to:

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

Receipt dates for Research Project Grant and New Investigator Award applications are: March 1, July 1, and November 1; for others, including Postdoctoral Fellow and Program Project applications: February 1, June 1, and October 1.

Address requests for additional information, research prospectuses, and/or letters of intent to:

Behavioral Sciences Research  
Attention: "Social Environments"  
National Institute on Aging  
Building 31C - Room 4C32  
Bethesda, Maryland 20205

Telephone: (301) 496-3136.

ANNOUNCEMENT

PREVENTIVE CARDIOLOGY ACADEMIC AWARD

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 2, 1984

The Division of Heart and Vascular Diseases (DHVD) 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:

1. 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.
2. Develop promising faculty whose interest and training are in preventive cardiology teaching, research, and practice.

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, 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.

3. Develop established faculty who have a major commitment to and possess educational skills for teaching preventive cardiology.
4. Facilitate interchange of educational ideas and methods applicable to teaching preventive cardiology among awardees and institutions.
5. 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:

Dr. William T. Friedewald  
Associate Director  
Clinical Applications and Prevention Program  
Division of Heart and Vascular Diseases  
National Heart, Lung, and Blood Institute  
Federal Building - Room 212A  
Bethesda, Maryland 20205

Telephone: (301) 496-2533



ANNOUNCEMENT

PROTECTION OF THE IMMATURE MYOCARDIUM DURING AND FOLLOWING

CARDIAC SURGERY

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

The National Heart, Lung and Blood Institute (NHLBI) supports a number of research programs related to Congenital Heart Disease. Pediatric cardiology is an important sector of several programs in the Division of Heart and Vascular Diseases (DHVD) and this program announcement is intended to focus attention on one important area of investigation.

Open heart surgery for correction of serious life threatening cardiac defects in infants and children has become a very common daily practice. To facilitate repair of most defects in infancy, ischemic arrest of the heart has become a standard operating technique. The primary repair of isolated congenital defects such as ventricular defects usually requires a relatively brief period of ischemic arrest. The post-operative course of these infants is usually uncomplicated. For the primary repair for complex congenital heart malformations, the period of ischemic arrest frequently is considerably longer. The post-operative course of these infants may be complicated by low cardiac output or acute cardiac failure.

The cause of post-operative cardiac failure in these infants is unclear, although it is probably multi-factorial. The pre-operative condition of the infant and the complexity of the cardiac defects undoubtedly are incremental risk factors, although the mechanisms by which these two factors result in post-operative failure are not well understood. The patient's age and the ischemic arrest period are factors which also contribute to post-operative cardiac failure. Cardiac function and metabolism of the newborn and infant differ from that of the adult. Very little is known about myocardial protection in the newborn and infant during and following myocardial ischemia. This lack of knowledge contributes to the relatively high mortality with open heart surgery on infants.

Although significant research has been directed at cardioplegia in the adult, there remains a paucity of information which would allow the development of an age-dependent framework for techniques of myocardial preservation in the immature heart. The latter framework is imperative to advance further the effective treatment of labile and fragile newborns undergoing cardiac surgery.

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 Health Systems Agency review.

Fundamental knowledge is needed to gain a greater understanding of how to protect the immature heart during periods of hypoxia and ischemia. Studies which would lead to a greater understanding of cardioplegia in the immature heart might include:

- o developmental changes in myocardial function and ionic exchange;
- o developmental changes in myocardial metabolism;
- o effect of myocardial ischemia on cardiac function and metabolism in the neonate; and
- o consequences of reperfusion; protection from reperfusion injury.

The intent of this announcement is to emphasize the importance of the problem and to invite the co-operation of clinical and basic science investigators to address and solve this multi-faceted problem.

The above topics are intended to provide examples only and do not preclude the submission of applications involving other research approaches to the issues under consideration.

#### Application Submission and Review

Application receipt dates for new applications 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 **"Protection of the Immature Myocardium During and Following Cardiac Surgery"** 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:

Zena McCallum  
Cardiac Diseases Branch  
Division of Heart and Vascular Diseases  
National Heart, Lung, and Blood Institute  
National Institutes of Health  
Federal Building - Room 3C06  
Bethesda, Maryland 20205

Telephone: (301) - 496-1081

ANNOUNCEMENT

MECHANISMS OF BIOBEHAVIORALLY INDUCED VENTRICULAR ARRHYTHMIAS  
AND SUDDEN CARDIAC DEATH

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

The National Heart, Lung, and Blood Institute (NHLBI), through the Division of Heart and Vascular Diseases (DHVD) has a continuing interest in basic research relevant to establishing the mechanisms of biobehavioral influence on disturbances of cardiac rhythm. The objective of this program announcement is to encourage the submission of scientifically meritorious applications seeking to elucidate the role of environmental stressors in modifying neural and endocrine influences on cardiovascular function and contributing to malignant arrhythmias. A program announcement is designed to focus attention upon a specific topic or problem, and applications will be considered for the regular research grant program assigned to NHLBI.

The incidence of sudden cardiac death (SCD) in the United States is approximately 350,000 annually. The vast majority of cases have been shown to involve ventricular fibrillation as the terminal event, with psychophysiological factors believed to play a role in a significant number of cases. Since evidence relating behavioral stress to cardiovascular pathology and SCD in animal models is expanding, this announcement seeks to encourage development of additional methodology which would allow systematic analysis of the underlying mechanisms, and possibly the efficacy of various forms of intervention. Useful strategies might include, but are not restricted to, classical and operant conditioning techniques, avoidance conditioning, approach-avoidance conflicts, sensory discrimination learning under various motivational states, or combinations of such procedures.

Especially needed is a clarification of the role of biobehavioral influences of a chronic nature and those whose neurophysiological, endocrine, or metabolic sequelae tend to persist beyond the duration of the stressful episode. These include autonomic nervous system effects on lipid and glycogen mobilization, renin secretion, adrenomedullary function and lipid metabolism, as well as morphological or neurohumoral changes in neural pathways and nuclei influencing cardiovascular functions.

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 Health Systems Agency review.

In developing approaches to this problem, applicants are encouraged to consider various properties of animal models which contribute to their utility. These might include, but need not be limited to, the following:

- o Do the behavioral manipulations employed lead to demonstrable and replicable changes in endocrine profiles, electrocardiographic manifestations, cardiac or vascular morphology, hemodynamic factors, or other measures associated with increased incidence of ventricular arrhythmias?
- o Is the time course of development of these changes so accelerated as to preclude systematic study of the development of pathology?
- o Since behavioral stress can lead to differing outcomes depending on, for example, the availability of coping responses, is adequate consideration given to stimulus and response variables, species specificity, sex, age, and life history of the animals?

#### APPLICATION SUBMISSION AND REVIEW

Application receipt dates for new applications are the regular receipt dates of March 1, July 1, and November 1. Applications received after any one receipt date are considered and reviewed together with those received by the next receipt date. 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 applicant's 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 **"Mechanisms of Biobehavioral Arrhythmias"** under item 2 on page 1 of those grant applications relating to the topics identified herein. Mail the completed application to:

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

Applications received in response to this Announcement will be assigned for review and funding considerations according to established guidelines in the NIH Handbook for Referral.

Peter G. Kaufmann, Ph.D.  
Federal Building - Room 604  
7550 Wisconsin Avenue  
Bethesda, Maryland 20205

Telephone: (301) 496-9380

ANNOUNCEMENT

BIOBEHAVIORAL SEQUELLAE OF ANTIHYPERTENSIVE THERAPIES

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

The National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) supports meritorious research related to the development, treatment and control of hypertension. Through this program announcement the Institute wishes to encourage research to identify potential cognitive and/or behavioral sequelae resulting from pharmacologic and non-pharmacologic treatments to lower blood pressure.

Recent findings in major clinical trials concerning hypertension suggest that upwards of 60 million adult Americans may be at risk for complications arising from elevated blood pressure. Several issues require additional study such as at what blood pressure level to initiate pharmacologic therapy, the efficacy of non-pharmacologic therapies in their various forms, whether children, adolescents and the elderly should be included in therapy programs. The Hypertension Detection and Followup Program has demonstrated significant reductions in morbidity and mortality, however, which support the desirability of intervention in the hypertensive process in a significant proportion of the general population. Given this recommendation of increased efforts to control all forms of hypertension (mild, as well as moderate and severe), the effect of various pharmacologic and non-pharmacologic therapies on other functional systems (e.g., cognitive, behavioral, perceptual-motor) needs to be better understood.

Effects of antihypertensive therapy on one's ability to carry out normal daily functions have significant implications for compliance with medical regimens. Studies have noted upwards of 50% of patients discontinuing pharmacologic therapy within six months, in part due to adverse effects on daily functioning. As the various antihypertensive drugs have different chemical structures affecting different physiologic systems, the effects on central nervous system function can be expected to vary greatly, as well. In general, however, measurements of speed of learning (acquisition of skill), memory (long and short term), reaction time tasks of varying levels of complexity (perceptual-motor performance) can help to elucidate subtle changes in central nervous system function attributable to treatment effects of antihypertensive regimens.

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 Health Systems Agency review.

Mixed findings dominate the sparse literature in this area. Performance studies comparing medicated vs. unmedicated hypertensive patients, for example, suffer from inadequate matching of patients on age, sex and intelligence variables as well as medication dosage, compliance, duration of hypertension, etc. Subtle changes in memory, for example, may be masked by uncontrolled variance from any of the above factors.

Both acute and chronic sequelae of various antihypertensive drugs need to be better understood in terms of their differential effects on behavioral and cognitive function. Findings from the limited number of studies in this area are contradictory with some research suggesting that effective pharmacologic intervention may lower the risk of developing impairments in memory processes and attentional mechanisms, while other studies conclude that such therapies may produce a compounding effect on the deficit identified.

Although the effect of vasodilators and diuretics on behavioral and cognitive performance should be considered, the CNS depressants, alpha adrenergic and beta-blocking agents, eg., reserpine, methyldopa, propranolol and related drugs are particularly in need of study. These drugs which both stimulate and block central and peripheral receptors have highly varied effects on CNS functioning. Most studies to date have used normotensive humans or animals as subjects. Newly diagnosed hypertensive patients would appear to be particularly suitable candidates for these studies.

Controlled studies involving non-pharmacologic therapies, or combinations of pharmacologic and non-pharmacologic regimens are particularly pertinent to this announcement. Diet/weight reduction, exercise, and relaxation/biofeedback therapies, singly or in combination with each other and/or pharmacologic regimens are examples of treatment approaches which could be assessed in terms of behavioral and cognitive deficit or improvement associated with changes in blood pressure. Investigation of interaction effects of such demographic variables as age, sex, diet, family history, severity and duration of hypertension and smoking history, with the main independent variables is also encouraged in these studies.

#### APPLICATION SUBMISSION AND REVIEW

Application receipt dates for new applications are the regular application receipt dates of March 1, July 1, and November 1. Applications received after any one receipt date are considered and reviewed together with those received by the next receipt date. 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 applicant's 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 "Biobehavioral Sequellae of Antihypertensive Therapies" 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

Applications received in response to this announcement will be assigned for review and funding considerations according to established guidelines in the NIH Handbook for Referral. Additional information may be obtained by contacting:

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

Telephone: (301) 496-9380

SPECIAL RESEARCH GRANT ANNOUNCEMENT

CLINICAL RESEARCH CENTERS ON PSYCHOPATHOLOGY OF THE ELDERLY

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

NATIONAL INSTITUTE OF MENTAL HEALTH

I. BACKGROUND

In view of the degree of mental disorders in old age, the relative underdevelopment of clinical research on these disorders, and the urgent need to increase the meager knowledge base regarding the most common mental illnesses of later life, NIMH has developed a program of support for Clinical Research Centers on Psychopathology of the Elderly (CRC/PE) as a key mechanism for advancing knowledge in the mental and emotional disorders of senescence. These centers are to give attention to the phenomenological nature and assessment of psychiatric symptoms in the elderly, and their course and etiology. They also may have a concomitant focus on psychodynamic, behavioral, and somatic modes of treatment oriented to the special needs of older populations with mental and emotional disorders.

II. PURPOSE

The CRC/PE program is intended to provide stable, sustained support to a limited number of centers, each comprised of a core group of investigators who have access to elderly clinical populations, for the development of integrated sets of innovative, multidisciplinary, and indepth clinical research studies on the mental disorders of later life. Centers are expected to have a specific theme or problem focus. It is anticipated that such centers will provide a milieu which encourages creative thinking about promising hypotheses; a resource for the development of new clinical researchers; and an environment which will assure the highest quality research and leadership in the chosen areas of investigation.

III. SETTING AND SUBSTANTIVE FOCUS

A CRC/PE will be situated in a clinical treatment setting with demonstrable interest in the study of mental health and aging. A center is expected to have a treatment milieu in which clinicians and behavioral and biological scientists can interact and study problems of etiology, classification, assessment, mechanisms, course, and psychotherapeutic and/or somatic treatment of particular mental disorders common in later life.

Each center must be characterized by an intensive clinical approach to the study of older patients under controlled hospital (i.e., diet and drugs) and/or community

This program is described in the Catalog of Federal Domestic Assistance No. 13.242, Mental Health Research Grants. 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.



outpatient conditions. For example, one center might be located in a hospital associated with a major university and investigate important scientific theories concerning the etiology and treatment of a group of mental disorders common to late life. Another center might be located in a community catchment area facilities in which psychological, sociocultural, and biological studies of the elderly would be carried out in the context of an outpatient unit. A CRC/PE will provide the structure for bringing basic science advances into the context of gerontologic patient-oriented studies and clinical application.

Each center should develop its own program from areas of strength in accordance with its own resources, talents, opportunities, objectives, and constraints. While there is no one prescribed model for the development of the center, each center should provide a rich clinical-experimental environment wherein hypothesis testing and hypothesis finding can unfold in the context of both pilot and more intensive studies, and wherein new methodologies and instruments can be initially formulated, tested, and developed. The substantive focus at each center must be problem oriented, comprehensive, and integrative and must span at least two or more disciplines, for example, psychology and biology.

Each center is expected to focus on a particular mental disorder or on a constellation of mental disorders, with onset in either early or late life, and may, in addition, study a related treatment intervention or group of treatment interventions, adjusted or formulated specifically for use with older populations. Although it is expected that the focus of the CRC/PE will be on the major types of psychopathology in old age (e.g., affective and/or organic mental disorders), investigators are strongly encouraged to complement this focus with an emphasis on concomitant mental and emotional disorders which occur with high frequency in late life (e.g., anxiety states, phobias, paranoia, hypochondriasis, and personality disorders). While the major research focus is expected to be on psychopathology in elderly clinical human populations, a minor focus on basic research studies in human and animal populations can also be included if justified by direct clinical relevance.

#### IV. ELIGIBLE APPLICANTS

The CRC/PE applicant must be a mental health clinical treatment facility with research capability and appropriate laboratory resources. Eligible applicants include any nonprofit or for profit organization, such as universities, colleges, medical schools, research centers, hospitals, community treatment agencies; units of State or local government; or authorized units of the Federal Government.

#### V. CRC/PE ADMINISTRATIVE ELEMENTS

A CRC/PE is expected to have the following:

1. An organizational plan to coordinate all research activities.
2. A well-qualified clinical research director of the center program serving on a full-time basis as principal investigator.
3. Sufficient administrative support and distinctiveness from its parent institution to fulfill its program objectives.

4. Sufficient staff, space, facilities, patients, and other study populations to ensure successful operation of the center.
5. An established mechanism to ensure adequate planning, monitoring, and evaluation of the center's program.

## VI. APPLICATION CHARACTERISTICS

The overall objectives and goals of the center must be clearly defined. The methods used to obtain these goals and objectives must be clearly spelled out, and areas of future development must be indicated and justified.

The Principal Investigator will be the full-time director of the center and will provide scientific leadership for the program. He/she should have responsibility for the scientific, administrative, and operational aspects of the center and for the overall development of the center as a valuable resource to the parent institution and the scientific and clinical communities. The director should be an experienced investigator who has made major contributions to clinical research related to psychopathology of the elderly. He/she should have a significant interest in gerontology, possess appropriate administrative skills, and be capable of assuring the highest standards of clinical investigation, treatment, and care.

A center is expected to have an administrative structure that will facilitate coordination among center personnel and promote efficiency of operation and sound financial practices. The center director is responsible for the planning and coordination of the center program, preparation of the budget, control of expenditure, staff appointments, and space allocation. The center director should have sufficient authority to establish the necessary administrative and management procedures for carrying out the center's total responsibility.

Each center should have sufficient inpatient and/or outpatient facilities for older psychiatric patients which will give the program cohesion, identification, and suitability for carrying out clinical aging research. Such inpatient and/or outpatient facilities as are necessary will be committed for this purpose. The type and number of older patients (inpatients, outpatients) will vary at each center, depending upon the research interests and requirements of the investigators using the center.

Methods for integration of the CRC/PE with other facilities of the applicant institution and the scientific and clinical community must be specified. The center's access to training facilities, liaison with other departments within the applicant institution, and its position of clinical and scientific excellence in the surrounding community must be demonstrated.

While the primary purpose of each center will be to carry out clinical research on the mental disorders of later life and their treatment, important byproducts of the research effort will be the training and advanced development of scientists, clinicians, and technicians in the complex techniques and advanced theories of mental health-related research and the special problems encountered in the systematic investigation of psychopathology in older populations. Accordingly, each center should specify its relationships with psychiatric residency, clinical psychology training programs, basic science departments in medical schools, and/or relevant behavioral science departments in graduate schools. While a center should

be appropriately involved in training scientists and clinicians, funds from the CPC/PE grant may not be used to support training activities. Funds to support research training may be sought under the National Research Service Award program.

In addition, each center must provide supervised research experiences for at least two preceptees annually, to be selected from the mental health, aging, and related disciplines. (Precepteeships are defined as supervised work experience.) Funds for these precepteeships may be included in the requested budget.

Each center is responsible for the appointment of a scientific advisory committee which will oversee the substantive work of the center.

The center's overall program plan must include appropriate dissemination activities, for example, preparing manuscripts for publication in appropriate scientific and professional outlets, preparing detailed assessment or treatment manuals, providing consultation to agencies and groups seeking to develop research in the psychopathology of later life, and participating and taking leadership in workshops, conferences, and meetings designed to share established aging clinical research methods and knowledge with other researchers and interested agencies and groups.

## VII. FUNDING AND CONDITIONS OF SUPPORT

Funds may be requested for core support of the center and for specific research projects. Core support costs may include salaries of core personnel, including the center director, and research resources to be shared across projects such as inpatient bed costs, outpatients costs, and cost of general consultation, e.g., statistical, computer science, etc. Funds to support service costs may be requested only to the extent they are necessary to carry out research and are not available from other sources. The application must contain a specific justification for such funds in terms of the proposed research objectives and design. Allowable project costs may include salaries of investigators, specialized consultation costs, supplies, equipment, travel, and other allowable costs directly associated with the proposed research.

Application can be made for a maximum amount of \$350,000 (direct cost) per annum, and for a maximum period of 5 years. Renewal of the award beyond 5 years will be contingent upon satisfactory review of a competing continuation application by a peer review committee and the National Advisory Mental Health Council, and upon availability of funds.

## VIII. PREAPPLICATION PROCEDURES

Potential applicants are encouraged to submit a letter of intent no later than December 1, 1983, and no longer than 12 pages to:

Dr. Nancy E. Miller, Chief  
 Clinical Research Centers on Psychopathology  
 of the Elderly  
 Center for Studies of the Mental Health  
 of the Aging  
 Division of Prevention and Special Mental  
 Health Programs, NIMH  
 Parklawn Building - Room 11C-03  
 5600 Fishers Lane  
 Rockville, Maryland 20857

Telephone: (301 443-1185)

Subsequently, letters of intent are requested at least 10 weeks prior to submission of an intended CRC/PE grant application. Letters of intent should summarize the present state of planning and development for establishing the proposed center by providing the following information:

1. The center's objectives and justification.
2. A brief description of the administrative structure and research plans, including intended patient populations and methods to be used to reach objectives of the program.
3. An estimated first-year budget for the center.
4. A list of the key scientific staff--named and to-be-named--who will participate in the center, including titles, clinical or research roles, disciplines of investigators, and percentage of time.
5. Relevant current and pending research, training, and service grant support which will be available to the center program.
6. Information about resources and facilities available to the center.

Appropriate NIMH staff will be assigned to study each letter of intent. Staff will review the preliminary plan and consult with potential applicants regarding program relevance and purpose so that subsequent, formal applications will comply with administrative requirements, meet program standards, and contain sufficient information to permit an adequate review. Applicants should not construe such consultation as assurance of favorable review.

Guidelines for the application format are available from Dr. Nancy E. Miller.

#### IX. APPLICATION KITS

State and local government agencies should use form PHS 5161. All other CRC/PE applicants should use form PHS 398 (Rev. 5/82). Application kits are available in university grants offices or from the following:

Grants Operations Section  
 National Institute of Mental Health  
 Parklawn Building - Room 7C-05  
 5600 Fishers Lane  
 Rockville, Maryland 20857

Instructions for applicants are included in the kit.

X. GRANT REVIEW PROCEDURES

CRC/PE grant applications are reviewed for scientific and technical merit by an initial review group (IRG) composed primarily of non-Federal scientific experts and by the National Advisory Mental Health Council. By law, only applications recommended for approval by the Council may be considered for funding. Summaries of IRG recommendations are sent to applicants as soon as possible after the Council has completed its review.

XI. REVIEW SCHEDULE

Initial Review Schedule

<u>Application Receipt Date</u>	<u>Initial Review Committee</u>	<u>National Advisory Mental Health Council</u>	<u>Earliest Possible Funding</u>
March 1, 1984	June 1984	September 1984	September 1984

Subsequent Review Schedule

<u>Application Receipt Date</u>	<u>Initial Review Committee</u>	<u>National Advisory Mental Health Council</u>	<u>Earliest Possible Funding</u>
July 1	October/November	January/February	April
November 1	February/March	May	July 1
March 1	June	September	December 1

XII. REVIEW CRITERIA

In the review of CRC/PE grant proposals, the IRG will consider:

1. Potential contribution to mental health/public health knowledge.
2. Scientific and technical merit, including significance and innovativeness, of the proposed research program.
3. The state of knowledge in the field.
4. Level of training, experience, competence, and productivity of research personnel.
5. Level of training, experience, competence, productivity, commitment, and authority of the center director (Principal Investigator).
6. Staff balance and synergistic potential for collaboration and cooperation among investigators from various disciplines.
7. Availability of sufficient number and kinds of research subjects and materials for study.

8. Capacity of the proposed center to provide a variety of quality preceptorship and training opportunities.
9. Adequacy of facilities and general environment for conduct of the proposed research program.
10. Adequacy of the center's administrative staff, management systems, and organizational structure.
11. Potential for the proposed clinical research center to become a regional or national resource.
12. Appropriateness of budget estimates for proposed center activities.

### XIII. AWARD CRITERIA

In addition to scientific merit as determined by the IRG, NIMH program balance and the availability of funds will be taken into account in making award decisions.

### XIV. NIMH ROLE

In view of the special significance of this program, a Project Officer from the Center for Studies of the Mental Health of the Aging will be responsible for monitoring the program and for continuing liaison with each CRC/PE director. He/she will also serve as resource consultant to the center and will keep the Institute informed as to its progress and development.

NOTICE

AVAILABILITY OF MONOGRAPHS ON DESTRUCTION AND  
DISPOSAL OF LABORATORY CARCINOGENS

The National Institutes of Health (NIH) maintains a strong commitment to supporting basic biomedical research through its extramural programs. A significant number of these projects involve the use of chemical carcinogens. The use of these agents inevitably results in the production of waste products containing chemical carcinogens. The production of such waste products and the potential contamination require the development and use of effective destruction methods designed specifically for laboratory application to ensure safe and environmentally sound disposal practices.

To begin the development and compilation of these methods, the Division of Safety, NIH, is supporting a research program at the International Agency for Research on Cancer to produce an authoritative series of monographs that detail validated methods for destruction and disposal of carcinogenic waste from biomedical research laboratories. In developing these in-lab methods the following guiding criteria were used so that, ideally, each recommended method would:

- o Completely destroy the toxic material, with no detectable material remaining in any reaction mixture;
- o Be safe and irreversible;
- o Produce only innocuous materials (and products);
- o Be simple to verify in terms of effectiveness;
- o Require equipment and chemicals that are readily available, inexpensive, and simple to use;
- o Not require elaborate operations nor reagents that have shelf life limitations;
- o Be easy to reliably perform and require minimal time; and
- o Be applicable to a wide variety of media commonly used in the research laboratory.

To date, validated disposal methods have been developed for aflatoxins, N-nitrosamines, hydrazines, N-nitrosamides and polycyclic aromatic hydrocarbons. Current research is directed at the development of disposal methods for aromatic amines and halogenated ethers.

To help disseminate these validated methods and to encourage individual scientists and laboratories to engage in research in this area, the Division of Safety is making available to NIH awardees who use these compounds, single copies of each monograph (while

supplies last). Requests for a monograph(s) should include the name of principal investigator, contract/grant/cooperative agreement number, awarding Institute of NIH and title of award. Requests should be sent to:

Division of Safety  
National Institutes of Health  
9000 Rockville Pike  
Building 13 - Room 2E43  
Bethesda, Maryland 20205



NOTICE

ONE-DAY WORKSHOP TO DISCUSS ETHICAL AND LEGAL ISSUES INVOLVING  
HUMAN SUBJECTS IN BIOMEDICAL AND BEHAVIORAL RESEARCH

FOOD AND DRUG ADMINISTRATION  
THE HASTINGS CENTER  
NATIONAL INSTITUTES OF HEALTH

A one-day workshop, jointly sponsored by the National Institutes of Health, (NIH), Food and Drug Administration (FDA), and the Hastings Center, will be held at the following location:

New York University  
Loeb Student Center Auditorium  
566 La Guardia Place  
New York, New York

The meeting date is scheduled for December 12, 1983. The meeting will convene at 9:00 a.m. and adjourn at 5:30 p.m.. The purpose of the meeting is to discuss the ethical and legal issues involving human subjects in biomedical and behavioral research. The meeting will address topics including the authority and scope of the Institutional Review Boards (IRB), review the concept of informed consent, new regulations governing research involving children (which were promulgated on March 8, 1983), the role of the FDA in monitoring research, and ethical questions involving the use of animals in research.

There will be no registration fee, and the workshop is open to everyone with an interest in research. The meeting should be of special interest to those persons currently serving or about to begin serving as a member of an IRB. Those wishing to attend must contact:

Dr. Caplan  
Box 12  
The Hastings Center  
360 Broadway  
Hastings-on-Hudson, New York, 10706

prior to December 9, 1983, for further information and registration materials.

NIH/FDA also have planned regional workshops in other parts of the United States. For further information regarding these workshops contact:

Ms. Roberta Garfinkle  
Education Program Coordinator  
Office for Protection from Research Risks  
National Institutes of Health  
Bethesda, Maryland 20205.

## ANNOUNCEMENT

### NEW INVESTIGATOR NURSING RESEARCH AWARDS

**DEPARTMENT OF HEALTH AND HUMAN SERVICES  
PUBLIC HEALTH SERVICE  
HEALTH RESOURCES AND SERVICES ADMINISTRATION**

The Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration (HRSA), announces that applications for New Investigator Nursing Research Awards will be accepted under the authority of Section 301 of the Public Health Service Act.

Section 301 authorizes the Secretary to award grants to enlarge the body of scientific knowledge that underlies nursing practice, nursing education, and nursing services administration; and to strengthen these areas through utilization of such knowledge.

The New Investigator Nursing Research Award program is designed to encourage new investigators in nursing to develop their research interests and capabilities in research pertinent to nursing practice, nursing education, and nursing services administration, and to encourage small studies of high quality.

Eligible applicants are any individual, corporation, public or private institution or agency, or other legal entity. Principal investigators of these projects must be individuals who have not previously been principal investigators on a Public Health Service (PHS) supported research project. Exceptions may be granted to individuals who are changing their field of scientific endeavor. If there are questions, applicants should consult with Division of Nursing staff concerning the choice of application best suited to their needs.

To receive support, programs must meet the requirements of regulations for nursing research support programs, 42 CFR Part 52, and 45 CFR Part 74.

Research grant application kits, PHS 398, Rev. 5/82, are available through the research offices of most institutions.

Application materials are being provided without final action on the Fiscal Year 1984 budget. Funds for this program are expected to be available from FY 1984 appropriations for nursing research, and awards are contingent upon the availability of funds.

---

This program will be listed at 13.361 in the Catalog of Federal Domestic Assistance. It is not subject to the provisions of Executive Order 12372, Intergovernmental Review of Federal Programs, or 45 CFR Part 100.

Applications should be submitted

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

Three review cycles are held each year with application deadline dates of March 1, July 1, and November 1. Applications must be received by the above dates. A package carrying a legible proof-of-mailing date assigned by the carrier and which is no later than one week prior to the receipt date, is also acceptable. If the receipt date falls on a weekend, it will be extended to Monday; if the date falls on a holiday, it will be extended to the following work day.

For specific guidelines and further information contact:

Division of Nursing  
Bureau of Health Professions  
Health Resources and Services Administration  
Parklawn Building - Room 5C-09  
5600 Fishers Lane  
Rockville, Maryland 20857

Telephone: (301) 443-6315

Questions regarding grants policy should be directed to:

Grants Management Officer  
Bureau of Health Professions  
Health Resources and Services Administration  
Parklawn Building - Room 8C-22  
5600 Fishers Lane  
Rockville, Maryland 20857

Telephone: (301) 443-6915

**ANNOUNCEMENT****GRANTS FOR UTILIZATION OF RESEARCH IN NURSING PRACTICE, NURSING SERVICES ADMINISTRATION, AND NURSING EDUCATION****DEPARTMENT OF HEALTH AND HUMAN SERVICES  
PUBLIC HEALTH SERVICE  
HEALTH RESOURCES AND SERVICES ADMINISTRATION**

The Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration (HRSA), announces that applications are being accepted for grants for Utilization of Research in Nursing Practice, Nursing Services Administration, and Nursing Education, under the authority of Section 301 of the Public Health Service Act.

Section 301 authorizes the Secretary to award grants to enlarge the body of scientific knowledge that underlies nursing practice, nursing education, and nursing services administration; and to strengthen these areas through utilization of such knowledge. The Division of Nursing, therefore, wishes to encourage additional activities which will advance research utilization, by stimulating the development of innovative approaches to bridging the gap between the generation of knowledge through research and the utilization of such knowledge in nursing practice, nursing services administration, and nursing education. To receive support, programs must meet the requirements of regulations for nursing research support programs, 42 CFR Part 52, and 45 CFR Part 74.

Eligible applicants are any individual, corporation, public or private institution or agency or other legal entity.

Research grant application kits, PHS 398, Rev. 5/82, are available through the research offices of most institutions.

Application materials are being provided without final action on the Fiscal Year 1984 budget. Funds for this program are expected to be available from FY 1984 appropriations for nursing research, and awards are contingent upon the availability of funds.

Applications may be submitted to:

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

This program will be listed at 13.361 in the Catalog of Federal Domestic Assistance. It is not subject to the provisions of Executive Order 12372, Intergovernmental Review of Federal Programs, or 45 CFR Part 100.

Three review cycles are held each year with application deadline dates of February 1, June 1, and October 1. Applications must be received by the above dates. A package carrying a legible proof-of-mailing date assigned by the carrier and which is no later than one week prior to the receipt date, is also acceptable. If the receipt date falls on a weekend, it will be extended to Monday; if the date falls on a holiday, it will be extended to the following work day.

For specific guidelines and further information contact:

Nursing Research Support Section  
Nursing Research and Analysis Branch  
Division of Nursing  
Bureau of Health Professions  
Health Resources and Services Administration  
Parklawn Building - Room 5C-09  
5600 Fishers Lane  
Rockville, Maryland 20857

Telephone: (301) 443-6315

Questions regarding grants policy should be directed to:

Grants Management Officer  
Bureau of Health Professions  
Health Resources and Services Administration  
Parklawn Building - Room 8C-22  
5600 Fishers Lane  
Rockville, Maryland 20857

Telephone: (301) 443-6915