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The NIH Guide announces scientific  
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INCREASED STIPENDS FOR JUNIOR AND SENIOR APPOINTEES TO MINORITY ACCESS TO RESEARCH CAREERS HONORS UNDERGRADUATE RESEARCH TRAINING GRANTS

P.T. 44; K.W. 0720005, 1014006

National Institutes of Health  
Alcohol, Drug Abuse, and Mental Health Administration

Effective October 1, 1990, the annual stipend level for all juniors and seniors receiving support through the Minority Access to Research Careers (MARC) Honors Undergraduate Research Training Grants made under Section 487 of the Public Health Service Act will increase 3.5 percent to \$6,732 per year.

Stipend level adjustments can be made only on the appointment date of the trainee. These stipend levels are effective only for awards made beginning with FY 1991 funds; no retroactive adjustments or supplementation of stipends may be made with MARC funds for awards made prior to October 1, 1990, or for any appointment made to a grant made with FY 1990 funds. These stipends apply only to juniors and seniors on awards made under the MARC Honors Undergraduate Program.

The new stipend levels are to be used in the preparation of future MARC institutional training applications. They will be administratively applied to all applications now in the review process.

WORLD AIDS FOUNDATION

P.T. 44; K.W. 0715008, 0502000

Fogarty International Center

The World AIDS Foundation (WAF), jointly sponsored by the U.S. Department of Health and Human Services and the Institut Pasteur of Paris, France, announces its intent to support research and education relating to AIDS in the developing world. The goal of the WAF is to facilitate information exchange and to assist developing countries to respond to the AIDS pandemic.

The WAF is particularly interested in projects that are catalytic, and, once in place, could have a multiplicative effect. The WAF is specifically interested in supporting:

- A) short-term, in-country training for clinicians, allied health professionals, and technicians;
- B) fellowships to support training for national experts;
- C) development and testing of new concepts and demonstrations for preventing the spread of HIV; and
- D) highly focused workshops that enhance the scientific process and transfer knowledge needed in the effort against HIV infections and AIDS.

The limit of any single funding request to the WAF is \$200,000.

Application Procedures:

Concept letters and applications may be prepared in either English or French. Applicants should submit concept letters for initial consideration. Following review of concept letters, applicants may be invited to submit complete proposals. The annual deadline for receipt of concept letters is April 1.

Concept letters, full applications, and inquiries concerning the programs of the WAF should be directed to either:

World AIDS Foundation  
Assistant Secretary for Health  
c/o Director, Fogarty International Center  
National Institutes of Health  
Building 31, Room B2C39  
Bethesda, MD 20892  
U.S.A.

or

World AIDS Foundation  
c/o Director  
Institut Pasteur  
28 rue du Docteur Roux  
75724 Paris, Cedex 15  
FRANCE

NOTICES OF AVAILABILITY (RFPs AND RFAs)

MUCOSAL IMMUNIZATION RESEARCH GROUP

RFP AVAILABLE: NIH-NIAID-DMID-91-31

P.T. 34; K.W. 0710070, 0740023

National Institute of Allergy and Infectious Diseases

The Enteric Diseases Branch, Division of Microbiology and Infectious Diseases, National Institute of Allergy and Infectious Diseases, requires one Mucosal Immunization Research Group (MIRG). The MIRG conducts preclinical research in animals to test and develop novel strategies for mucosal immunization against a variety of infectious agents. This work includes basic mucosal immunology as well as applied research on antigen delivery and immune enhancement.

RFP-NIH-NIAID-DMID-91-31 will be available on or about February 19, 1991. Responses are due April 19, 1991.

It is estimated that a level-of-effort contract will be awarded with incremental funding over a period of five (5) years. Any responsible offeror may submit a proposal that will be considered by the Government.

To receive a copy of this RFP, please supply this office with two self-addressed mailing labels. All inquiries must be in writing and addressed to the office below:

Mr. Carl Henn  
Contract Management Branch  
National Institute of Allergy and Infectious Diseases  
National Institutes of Health  
Control Data Building, Room 326P  
6003 Executive Boulevard  
Bethesda, MD 20892

This advertisement does not commit the Government to make an award.

ROLE OF ENHANCED CELL PROLIFERATION IN CHEMICAL CARCINOGENESIS

RFP AVAILABLE: NIH-ES-91-14

P.T. 34; K.W. 0715035, 0710040, 0755010, 0755020

National Institute of Environmental Health Sciences

The purpose of this contract is to provide the Government with the skills, experience, and facilities to perform experiments addressing the role of enhanced cell proliferation in chemical carcinogenesis. Studies designed to assess the extent of cell proliferation and cell death in rats and mice will be performed under similar conditions as the carcinogenicity studies of each chemical being evaluated (e.g., animal species and strain, route of exposure, dose, diet, environmental conditions). Standardized procedures will be utilized for necropsy and histology, clinical chemistry, immunohistochemistry, histopathological evaluations of stained tissue sections, stereological analyses of altered hepatic foci, and cell proliferation analyses using osmotic minipumps to deliver the DNA precursor label. It is expected that the results of these studies will provide greater insight on the role of chemically enhanced cell proliferation in chemical carcinogenesis and will provide guidance for risk assessment processes in determining how carcinogenicity data obtained in animal models should be extrapolated to assess the risk of human cancer due to exposure to nongenotoxic chemicals. The RFP for this 5-year competitive procurement will be released on or about February 25, 1991, and responses will be due by April 11, 1991. All responsible sources may submit a proposal that shall be considered. The Institute plans to make one award from this solicitation.

Requests must reference RFP NIH-ES-91-14 and must be forwarded to:

National Institute of Environmental Health Sciences  
Contracts and Procurement Management Branch  
ATTN: Thomas M. Hardee, Contracting Officer  
79 T.W. Alexander Drive, 4401 Building  
P.O. Box 12874  
Research Triangle Park, NC 27709  
Telephone: (919) 541-7893

NON-HUMAN PRIMATE MODEL TO STUDY THE EFFECTS OF VACCINES IN PREGNANT FEMALES AND THEIR OFFSPRING

RFP AVAILABLE: NIH-NIAID-DMID-91-34

P.T. 34; K.W. 0755020, 0740075, 0775020, 0715125

National Institute of Allergy and Infectious Diseases

The Respiratory Diseases Branch, Division of Microbiology and Infectious Diseases, National Institute of Allergy and Infectious Diseases (NIAID), has a requirement to develop and characterize a non-human primate animal model system to study the effects of vaccination of pregnant females on their offspring. The long-term goal of the research is to gather evidence for the safety and efficacy of maternal immunization during pregnancy for the protection of the newborn by placentally transferred antibody against frequent infant pathogens. The purpose of this research effort would be to provide baseline information, using a primate model, on several candidate vaccines for the maternal immunization approach. The theory is that bacterial, or viral antigens (e.g., type-specific capsular polysaccharides of GBS and Hib or purified surface proteins of RSV) can protect against systemic infection, and that antibody elicited by vaccination of women could confer protection to their infants through placental transfer. Maternal immunization could therefore be viewed as an approach that might provide short-term passive immunity, obviating the need for neonatal immunization when it is less likely to be effective. Indeed, there is circumstantial evidence that placentally transferred natural maternal antibody can afford protection to the offspring against infection with Group B Streptococcus types III, Ib, and Ia Hib, E. coli K1, N. meningitidis groups A and C, and RSV. Passive protection of newborns for the first few months of life would bring them into age range where subsequent vaccination could stimulate effective immunity.

This NIAID-sponsored project will take approximately five (5) years to complete. One cost-reimbursement level of effort contract is anticipated and that one award will be made. This is an announcement for an anticipated Request for Proposals (RFP). RFP-NIH-NIAID-DMID-91-34 shall be issued on or about February 15, 1991, with a closing date tentatively set for April 9, 1991.

Request for the RFP shall be directed in writing to:

Phillip Hastings  
Contract Management Branch  
National Institute of Allergy and Infectious Diseases  
National Institutes of Health  
Control Data Building, Room 326P  
6003 Executive Blvd.  
Bethesda, MD 20892

To receive a copy of the RFP, please supply this office with two-self addressed mailing labels. All responsible sources may submit a proposal that will be considered. All requests must be in writing. This advertisement does not commit the Government to award a contract.

COLLECTION AND TAXONOMY OF SHALLOW WATER MARINE ORGANISMS

RFP AVAILABLE: NCI-CM-27704-30

P.T. 34; K.W. 0780005, 0740012, 0740020

National Cancer Institute

The National Cancer Institute (NCI), Division of Cancer Treatment (DCT), Developmental Therapeutics Program (DCT), wishes to establish a contract for the collection and identification of marine organism samples from the Indo-Pacific region, for evaluation as sources of potential antineoplastic and

anti-AIDS agents, with the ultimate goal being the discovery of novel structural types that can be developed for the selective treatment of cancer and AIDS in humans. The successful offerors will be expected to provide qualified personnel, materials, and equipment for the collection, identification, storage, and shipping of 1000 marine samples per year to an NCI designated extraction facility. Collections will comprise approximately 0.3-1.5 kg (wet weight) of each sample, collected from depths safely accessed by SCUBA techniques, and each sample will be identified as far as possible at the time of delivery. Properly prepared voucher specimens of each organism will be collected for the purposes of unambiguous identification and for permanent deposition at a minimum of two (2) repositories designated by the NCI. The contractor will be expected to provide detailed documentation, including complete identification of each sample collected.

The collection team should include qualified taxonomists, personnel experienced in SCUBA techniques and marine organism collection. The Principal Investigator should be trained in marine biology, or a related field, and have at least five (5) years of experience in marine organism collection and identification. It is anticipated that recollections of up to 50 marine samples per year, in quantities of 10-50 kg, will be required. The number of initial small-scale collections will be reduced in proportion to the number and size of the large-scale recollections undertaken. Collections will include species from as wide a variety of families and phyla as possible. The collection will be heavily weighted for invertebrates with allowance for up to approximately 20 percent marine plants and with the specific exclusion of vertebrates. A list of species and genera extensively screened by NCI will be provided in order to aid in the determination of priorities in the collection program to the successful contractor. The contractor will be responsible for obtaining all necessary permits including visas, collecting, shipping and export permits from foreign governments and agencies, for delivery of samples and voucher specimens to facilities in the United States. Where necessary, the Government will provide letters of support. This is a recompetition of a contract with the Australian Institute of Marine Science. The Institute plans to make one award from this solicitation.

RFP No. NCI-CM-27704-30 will be issued on or about February 25, 1991, and proposals will be due approximately April 12, 1991.

Copies of the RFP may be obtained by sending a written request to:

Ms. Elsa B. Carlton, Contract Specialist  
National Institutes of Health  
National Cancer Institute  
Research Contracts Branch, TCS  
Executive Plaza South, Room 603  
9000 Rockville Pike  
Bethesda, MD 20892

#### MOLECULAR ANALYSES OF RADIATION-INDUCED GENETIC DAMAGE

RFA AVAILABLE: CA-91-07

P.T. 34; K.W. 1002028, 0725015, 1002019, 1002004

National Cancer Institute

Application Receipt Date: May 24, 1991

#### INTRODUCTION

The Division of Cancer Etiology of the National Cancer Institute invites applications from interested investigators for molecular studies on the mutagenic effects of ionizing radiation on mammalian DNA, in vitro and in vivo.

#### RESEARCH GOALS AND SCOPE

The purpose of this Request for Applications (RFA) is to encourage research to characterize the distributions of mutations induced in the DNA of mammalian cells exposed to ionizing radiations. The objective will be the quantitative analyses of mutations by their location and frequency of occurrence in defined DNA-targets (or chromosomal locations for large-scale genetic events) with sufficient sensitivity to be applied directly to small populations of somatic cells. Primary emphasis should be placed on basic studies with cultured mammalian cells, including human cells. Such research could involve a variety of genetic endpoints and techniques including the use of specific gene targets, repetitive DNA sequences, and chromosome-specific DNA probes.



This RFA will permit a wide range of research activities, including, but not limited to, the following studies:

- o To determine if mutation spectra based on point mutations, deletions, and/or other mutational endpoints may be uniquely characteristic of exposure to radiation and can be used to discriminate between cellular exposures to the different forms of ionizing radiation, between exposures to ionizing radiations versus exposure to other types of mutagens, or between mutations induced by exposure to ionizing radiation and those of spontaneous origin.
- o To determine the feasibility and merit of amplifying mutations directly from somatic cells without using genetic selection and subculturing to amplify mutated DNA for molecular analyses. In vivo studies should consider the possible complications that may result from clonal expansion of mutations in progenitor cells into populations of somatic cells.
- o To investigate mutational responses in radiation-exposed somatic cells as functions of varying doses and dose rates.
- o To compare and validate radiation-induced mutation spectra obtained with cultured cells exposed in vitro with mutation spectra obtained from somatic cells exposed in vivo.

#### IV. MECHANISM OF SUPPORT

This program will be supported through the National Institutes of Health (NIH) traditional research project grant (R01). The intent of this research initiative is to fund approximately 6 individual research grants, with total program costs not to exceed \$950,000 for the first year.

Copies of the RFA may be obtained from:

Dr. R.A. Pelroy, Ph.D.  
Radiation Effects Branch  
National Cancer Institute  
Executive Plaza North, Suite 530  
9000 Rockville Pike  
Bethesda, MD 20892  
Telephone: (301) 496-9326

#### PREDOCTORAL FELLOWSHIP AWARDS FOR MINORITY STUDENTS

RFA: GM-91-01

P.T. 22, FF; K.W. 0720005, 1014002

National Institute of General Medical Sciences

Application Receipt Date: May 10, 1991

#### PURPOSE AND BACKGROUND INFORMATION

The National Institute of General Medical Sciences (NIGMS) is accepting applications for individual National Research Service Award (NRSA) Predoctoral Fellowships for Minority Students. This program will provide fellowships for up to 5 years of support for research training leading to either the Ph.D. degree or the combined M.D./Ph.D. degrees in the biomedical sciences for highly qualified students from underrepresented minority groups. Support is not available for individuals enrolled in medical or other professional schools, unless they are enrolled in a combined M.D./Ph.D. degree program in biomedical research.

Since 1981, the Minority Access to Research Careers (MARC) Program of NIGMS has had a Predoctoral Fellowship Program that provides support for graduates of its various MARC Honors Undergraduate Research Training programs to attend graduate school in the biomedical sciences. The intent of the new NIGMS Minority Predoctoral Fellowship Program is to make graduate fellowships available to underrepresented minority graduates from all institutions, including the many minority undergraduate students who have participated in other NIH-sponsored programs preparing them for research careers. It is anticipated that, in this way, the number of applicants will be greatly increased, thus fulfilling the goal of increasing the number of minority students trained to pursue careers in biomedical research.



## ELIGIBILITY REQUIREMENTS

Eligibility for these awards is limited to students who are U.S. citizens, non-citizen nationals, and permanent residents from ethnic/racial groups that are underrepresented in research in the biomedical sciences. An applicant must currently be enrolled in a Ph.D. or M.D./Ph.D. graduate program in the biomedical sciences or have been accepted by and agreed to enroll in such a graduate program the following academic year. For the purpose of this announcement, underrepresented minority students are defined as individuals belonging to a particular ethnic or racial group that has been determined by the applicant's graduate institution to be underrepresented in biomedical or behavioral research at that institution. In making these awards, the NIH will give priority consideration to applications from Black, Hispanic, Native American, and Pacific Islander and other ethnic or racial group members who have been found to be underrepresented in biomedical or behavioral research nationally.

## MECHANISM OF SUPPORT

This Request for Applications (RFA) solicits applications for National Institutes of Health (NIH) individual fellowships under the auspices of the National Research Service Award Act. Prospective student applicants are strongly advised to seek the assistance of their research advisor or graduate program director in preparing the application. Except as otherwise stated in this RFA, awards will be administered under the PHS Grants Policy Statement and the Guidelines for National Research Service Awards.

For FY 1991, approximately \$1.5 million is available for this RFA. 50 to 75 fellowship awards are anticipated, if sufficient numbers of high quality applications are received. The total period of fellowship support requested in response to this RFA may not exceed 5 years. Continuation of the award beyond the first year is based on evidence of satisfactory progress in a graduate program by the applicant.

The receipt date for applications is May 10, 1991. The NIGMS will announce subsequent receipt dates at a later time.

## STIPENDS AND OTHER EXPENSES

The annual stipend for this Minority Predoctoral Fellowship is \$8,800. This stipend is provided to help meet the fellow's living expenses. A tuition and fee allowance is paid in accordance with NIH policy. Also provided annually is a \$2,000 institutional allowance that may be used for travel to scientific meetings as well as for laboratory and other expenses.

## PAYBACK REQUIREMENTS

Before individuals can receive an NRSA fellowship, they must sign an agreement that they will fulfill the payback requirements legislatively mandated under the NRSA. Recipients must agree to engage in health-related biomedical or health-related behavioral research and/or teaching for a period equal to the period of NRSA support in excess of 12 months. Details are found in Part V of the application instructions (PHS 416-1).

## REVIEW PROCEDURE

Upon receipt, applications will be reviewed by NIH staff for completeness and responsiveness to this announcement. Incomplete or non-responsive applications will be returned to the applicant without further consideration. Applications that are complete and responsive will be evaluated for scientific merit and training potential in accordance with the criteria stated below by an appropriate peer review group convened by the NIGMS. Applications may be subjected to preliminary review to determine their merit relative to other applications received in response to this RFA. The NIH will administratively withdraw from competition those applications judged to be noncompetitive and notify the applicant of such withdrawal. Those applications judged to be competitive will undergo further scientific merit review. The second level of review will be provided by the NIGMS Fellowship Overview Group.

## REVIEW CRITERIA

The review criteria include:

- o academic record and research experience of the applicant;
- o quality of the graduate program in which the applicant is already enrolled or plans to enroll;

- o qualifications and research/research training experience of the mentor (for advanced graduate students); and
- o scientific significance and originality of proposed research (for advanced graduate students).

#### METHOD OF APPLYING

The fellowship application form PHS 416-1 (revised 4/89) must be used in applying for these grants. These forms are available at most university business offices; from the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, 5333 Westbard Avenue, Westwood Building, Room 449, Bethesda, Maryland 20892; and from the NIH program administrators named below.

The applicant MUST follow all instructions in the application. In addition, the application MUST include each of the following:

- o an official copy of the results of either the Graduate Record Examination or the Medical College Admission Test (for M.D./Ph.D. applicants).
- o an official copy of the applicant's undergraduate transcript and, if applicable, an official copy of the applicant's graduate transcript.
- o a description of the graduate or combined degree program in which the applicant either is enrolled or has been admitted (Item 29a).

The Research Proposal, Item 29b, should be completed only by students who have developed thesis research plans.

A statement supporting this application prepared by the applicant's research advisor (if selected) or the graduate training program director must be included in Items 33-37. In addition, Item 35 must include (1) certification that the applicant has been accepted into the graduate training program and (2) a statement establishing the eligibility of the underrepresented minority individual for support under this program, including information on citizenship/residency status. Include in Item 33 the applicable tuition.

In Item 1 of the face page ("TITLE OF RESEARCH TRAINING PROPOSAL"), type MINORITY PREDOCTORAL FELLOWSHIP PROGRAM - NIGMS. In Item 3 of the face page ("PROGRAM ANNOUNCEMENT AREA"), type RFA GM-91-01. Failure to carry out these instructions could result in delayed processing of the application that would preclude the possibility of receiving a grant award.

Submit a signed, typewritten original of the application (including the Checklist, Personal Data form, at least three sealed reference letters, and all other required materials) and two (2) signed, exact, clear, single-sided photocopies of the application, in one package to:

DIVISION OF RESEARCH GRANTS  
National Institute of Health  
Westwood Building, Room 240  
Bethesda, MD 20892\*\*

Applications must be received by May 10, 1991. If an application is received after that date, it will be returned to the applicant.

If the application submitted in response to this RFA is substantially similar to a research grant application already submitted to the NIH for review, but has not yet been reviewed, the applicant will be asked to withdraw either the pending application or the new one. Simultaneous submission of identical applications will not be allowed, nor will essentially identical applications be reviewed by different review committees. Therefore, an application cannot be submitted in response to this RFA that is essentially identical to one that has already been reviewed. This does not preclude the submission of substantial revisions of applications already reviewed, but such applications must include an introduction addressing the previous critique.

APPLICATIONS SUBMITTED WITHOUT THE REFERENCE LETTERS WILL BE RETURNED WITHOUT REVIEW.

#### INQUIRIES

Written or telephone inquiries concerning this RFA are encouraged and should be directed to:

Dr. John C. Norvell            or  
Westwood Building  
Room 907  
National Institute of  
General Medical Sciences  
Bethesda, MD 20892  
Telephone: (301) 496-7260

Dr. Classie Hoyle  
Westwood Building  
Room 950  
National Institute of  
General Medical Sciences  
Bethesda, MD 20892  
Telephone: (301) 496-7941

#### SCHEDULE

Application Receipt Date: May 10, 1991  
Initial Review: June/July 1991  
Secondary Review: August 1991  
Anticipated Award Date: September 1991

Awards are made under authorization of the Public Health Service Act, Title IV, Part A (Public Law 78-410, as amended by Public Law 99-158, 42 USC 288 and 285) and administered under PHS grant policies and Federal Regulations 42 CFR Part 66. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

#### BASIC RESEARCH ON OSTEOPOROSIS

RFA AVAILABLE: AR-91-02

P.T. 34; K.W. 0705050, 0785050, 0760020, 0765030, 0760025, 0760075

National Institute of Arthritis and Musculoskeletal and Skin Diseases  
National Institute of Diabetes and Digestive and Kidney Diseases

Application Receipt Date: May 15, 1991

#### BACKGROUND

Osteoporosis, a condition in which bone mass is low, represents a major public health problem in the United States, exacting an enormous societal toll annually in morbidity and mortality. It affects more than 24 million Americans and is responsible for at least 1.3 million fractures each year. Moreover, the frequency of osteoporosis and osteoporosis-related fractures is expected to increase with the expansion of the elderly population in the upcoming decades.

Bone remodeling is regulated by a complex interplay of bone cells and factors that modulate the growth and functional activity of the cells. Although there has been an explosion of information on the nature of the bone forming and bone resorbing cells and numerous bone-active factors have been identified, the regulation of bone remodeling by mechanical, endocrine, and local factors, especially as they relate to osteoporosis, remains poorly understood.

Following a national scientific conference on RESEARCH ADVANCES IN OSTEOPOROSIS in February 1990, a meeting of leaders in basic and clinical osteoporosis research met to develop future research directions and opportunities. These research directions became part of a report that was requested last year by the Senate Appropriations Committee. The Report on HHS-wide Research, Education, and Health Promotion Activities in Osteoporosis also contained information on the status of current research in osteoporosis throughout the Department of Health and Human Services. A copy of this report may be requested by contacting Dr. Joan McGowan at the address listed below. As follow-up to the report to the Senate Appropriations Committee and to be responsive to current congressional interest and support for osteoporosis research, a Request for Applications (RFA) has been issued to solicit applications in the particular areas of basic research in bone biology that are specifically and directly applicable to osteoporosis.

#### RESEARCH GOALS AND SCOPE

Some of the basic research areas that were identified as highly promising research opportunities are: (1) the effect of local and systemic growth regulators and osteoinductive factors on bone metabolism relevant to osteoporosis; (2) the development of animal and cell culture models for osteoporosis; (3) the role of mechanical/gravitational stress in maintaining bone mass and preventing bone loss; (4) studies of the mechanism of action on bone of factors with therapeutic potential, such as fluoride, estrogen, and other hormones, bisphosphonates; (5) the roles of bone architecture and strength in osteoporotic fractures; and (6) identification, characterization, and molecular mechanisms of action of receptors for hormones, growth factors, and cytokines active in bone cells and relevant to the etiology of

osteoporosis. Applications addressing other topics directly and specifically pertinent to osteoporosis and osteoporosis-induced fractures are encouraged.

#### MECHANISM OF SUPPORT

The support mechanism for this RFA will be the the traditional, investigator-initiated research grant (R01). Approximately \$2,000,000 in total costs per year for three to five years will be committed by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), specifically to fund applications that are submitted in response to this RFA. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) will provide additional funds to support approximately two projects. The National Institute on Aging may receive secondary assignment on appropriate applications.

#### REVIEW PROCEDURES AND CRITERIA

Applications will be reviewed initially by the Division of Research Grants for completeness and will be assigned to a special NIAMS review group. Evaluation for responsiveness to the RFA is an NIAMS and NIDDK program staff function. Applications that are judged non-responsive will be returned to the applicant but may be submitted as investigator-initiated applications at the next receipt date. Those applications judged to be both responsive and competitive will be evaluated for scientific/technical merit by an appropriate initial review group convened by the NIAMS Review Branch. The second level of review by the National Advisory Councils of NIAMS, NIDDK and, in some cases, NIA will make recommendations regarding funding.

#### METHOD OF APPLYING

The research grant application form PHS 398 (revised 10/88) must be used in applying for these grants. These forms are available at most institutional business offices; from the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, Room 449, Westwood Building, 5333 Westbard Avenue, Bethesda, Maryland 20892.

Applications must be received by May 15, 1991. If an application is received after that date, it will be returned to the applicant.

If the application submitted in response to this RFA is substantially similar to a research grant application already submitted to the NIH for review, but has not yet been reviewed, the applicant will be asked to withdraw either the pending application or the new one. Simultaneous submission of identical applications will not be allowed, nor will essentially identical applications be reviewed by different review committees. Therefore, an application cannot be submitted in response to this RFA that is essentially identical to one that has already been reviewed. This does not preclude the submission of substantial revisions of applications already reviewed, but such applications must include an introduction addressing the previous critique.

#### INQUIRIES

Requests for copies of the full RFA may be obtained from:

Dr. Joan A. McGowan  
Bone Biology and Bone Diseases Program Director  
National Institute of Arthritis and Musculoskeletal and Skin Diseases  
5333 Westbard Avenue  
Westwood Building, Room 403  
Bethesda, MD 20892  
Telephone: (301) 496-7495

or

Dr. Ronald Margolis  
Director, Endocrinology Research Program  
Division of Diabetes, Endocrinology and Metabolic Diseases  
NIDDK/NIH  
5333 Westbard Avenue  
Westwood Building, Room 604  
Bethesda, MD 20892  
Telephone: (301) 496-7504

## CLINICAL AND EPIDEMIOLOGY RESEARCH ON OSTEOPOROSIS

RFA AVAILABLE: AR-91-03

P.T. 34; K.W. 0705050, 0785055, 0760020, 0760025, 0755030, 0745027

National Institute of Arthritis and Musculoskeletal and Skin Diseases  
National Institute of Diabetes and Digestive and Kidney Diseases

Application Receipt Date: May 15, 1991

### BACKGROUND

Osteoporosis is a disease characterized by low bone mass, microarchitectural deterioration of bone tissue, and a consequent increase in fracture risk. Osteoporosis represents a major public health problem in the United States, exacting an enormous societal toll annually in morbidity and mortality. It affects more than 24 million Americans and is responsible for at least 1.3 million fractures each year. Moreover the frequency of osteoporosis and osteoporosis-related fractures is expected to increase with the expansion of the elderly population in the upcoming decades.

Following a national scientific conference on RESEARCH ADVANCES IN OSTEOPOROSIS in February 1990, a meeting of leaders in basic and clinical osteoporosis research met to develop future research directions and opportunities. These research directions became part of a report that was requested last year by the Senate Appropriations Committee. The Report on HHS-wide Research, Education, and Health Promotion Activities in Osteoporosis also contained information on the status of current research in osteoporosis throughout the Department of Health and Human Services. A copy of this report may be requested by contacting Dr. Joan McGowan at the address listed below. As follow-up to the report to the Senate Appropriations Committee and to be responsive to current congressional interest and support for osteoporosis research, a Request for Applications (RFA) has been issued to solicit applications in the particular areas of clinical and epidemiologic research that are specifically and directly applicable to osteoporosis.

### RESEARCH GOALS AND SCOPE

This RFA is intended to foster and enhance research specifically directed to prevention and treatment strategies, as well as epidemiologic studies of osteoporosis. These areas include: 1) studies on maximizing bone mass in early life; 2) biochemical markers of bone remodeling; 3) non-invasive measurement of bone density/mass and structure; 4) further studies of sex hormone use in osteoporosis; 5) the role of exercise in prevention and treatment of osteoporosis; 6) development of hormone analogs with specific therapeutic application in osteoporosis; 7) therapeutic potential for growth factors; 8) incidence and etiology of osteoporosis in men and blacks; 9) etiology of juvenile and adult idiopathic osteoporosis; 10) additional research on risk factors; and 11) research on prevention strategies.

Other clinical and epidemiologic research applications in the field of osteoporosis are encouraged. In order to be considered responsive to this RFA, applications must be specifically directed to osteoporosis.

### MECHANISM OF SUPPORT

The support mechanism for this RFA will be the the traditional, investigator-initiated research grant (R01). Approximately \$2,000,000 in total costs per year for three to five years will be committed by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), specifically to fund applications that are submitted in response to this RFA. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) will provide additional funds to support approximately two projects. The National Institute on Aging may receive secondary assignment on appropriate applications.

### SPECIAL INSTRUCTIONS FOR INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH STUDIES

For projects involving clinical research, NIH requires applicants to give special attention to the inclusion of women and minorities in study populations. If women or minorities are not included in the study populations for clinical studies, a specific justification for this exclusion must be provided. Applications without such documentation will not be accepted for review.

## REVIEW PROCEDURES AND CRITERIA

Applications will be reviewed initially by the Division of Research Grants for completeness and will be assigned to a special NIAMS review group. Evaluation for responsiveness to the RFA is an NIAMS and NIDDK program staff function. Applications that are judged non-responsive will be returned to the applicant but may be submitted as investigator-initiated applications at the next receipt date. Those applications judged to be both responsive and competitive will be evaluated for scientific/technical merit by an appropriate initial review group convened by the NIAMS Review Branch. The second level of review by the National Advisory Councils of NIAMS, NIDDK and, in some cases, NIA will make recommendations regarding funding.

## METHOD OF APPLYING

The research grant application form PHS-398 (revised 10/88) must be used in applying for these grants. These forms are available at most institutional business offices and from the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, Room 449, Westwood Building, 5333 Westbard Avenue, Bethesda, Maryland 20892.

Applications must be received by May 15, 1991. If an application is received after that date, it will be returned to the applicant. If the application submitted in response to this RFA is substantially similar to a research grant application already submitted to the NIH for review, but has not yet been reviewed, the applicant will be asked to withdraw either the pending application or the new one. Simultaneous submission of identical applications will not be allowed, nor will essentially identical applications be reviewed by different review committees. Therefore, an application cannot be submitted in response to this RFA that is essentially identical to one that has already been reviewed. This does not preclude the submission of substantial revisions of applications already reviewed, but such applications must include an introduction addressing the previous critique.

## INQUIRIES

Copies of the full RFA may be obtained from:

Dr. Joan A. McGowan  
Bone Biology and Bone Diseases Program Director  
National Institute of Arthritis and Musculoskeletal and Skin Diseases  
5333 Westbard Avenue  
Westwood Building, Room 403  
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Telephone: (301) 496-7495

or

Dr. Ronald Margolis  
Director, Endocrinology Research Program  
Division of Diabetes, Endocrinology and Metabolic Diseases  
NIDDK/NIH  
5333 Westbard Avenue  
Westwood Building, Room 605  
Bethesda, MD 20892  
Telephone: (301) 496-7504

## EFFECTIVE DISSEMINATION OF HEALTH SERVICES RESEARCH FINDINGS AND MEDICAL PRACTICE GUIDELINES

RFA AVAILABLE: AHCPR-91-01

P.T. 16; K.W. 0730050, 0730000, 0403004

Agency for Health Care Policy and Research

Application Receipt Dates: April 26, June 1, October 1, 1991, and February 1, 1992

**BACKGROUND:** The Agency for Health Care Policy and Research (AHCPR) invites applications to conduct applied research on effective dissemination of clinical knowledge and medical practice guidelines to affect changes in practitioner and consumer behavior, improve patient outcomes and, thereby, improve the effectiveness, quality, and appropriateness of health care. "Effective dissemination" encompasses the broader concept of diffusion as well as the actual distribution of knowledge and new information. Additionally,

the process through which target groups become aware of, receive, accept, and utilize disseminated information and knowledge is reflected in this term.

**PURPOSE AND OBJECTIVES:** This Request for Applications (RFA) solicits new grant applications on issues dealing with the ways in which scientific information can be presented and disseminated to foster its assimilation and use by health care providers and patients and, ultimately, to improve the effectiveness, quality, and appropriateness of medical care. The process and structural factors influencing dissemination and assimilation need to be examined. Studies are encouraged that evaluate the dissemination of, and outcomes associated with, clinical practice guidelines or parameters assisted by AHCPR and other public and private entities. It also encourages the assessment and use of models and techniques that effectively disseminate clinical information and practice guidelines.

**ELIGIBILITY:** Applicants must be public entities or nonprofit organizations and institutions. Proposed Principal Investigators must have demonstrated expertise in dissemination of health services research findings, clinical research findings, or medical practice guidelines. Applicants must also have demonstrated (1) capability to conduct and manage applied research or demonstration and evaluation projects in the area(s) that will be the subject of the dissemination project; and (2) expertise in communications.

**LENGTH OF SUPPORT:** Projects will vary from one to three years in length. Project lengths could be up to five years in rare cases.

**MECHANISM OF SUPPORT:** All projects will be funded as research grants (R01). The earliest start date for funded projects with under \$250,000 total direct costs will be September 30, 1991. The earliest start date for funded projects with total direct costs greater than \$250,000 will be December 1, 1991.

Approximately four to ten grant awards will be issued during FY 1991 and FY 1992 depending upon the number and cost of approved applications. It is expected that up to \$4 million will be spent. Applications for dissemination research grants in subsequent years will compete equally for funding with other applications to AHCPR.

**PREPARATION OF APPLICATIONS:** Each application must be submitted in accordance with the instructions of form PHS 398 (rev. 10/88). State and local governments using form DHHS 5161 must submit an original and two copies of the application. The following requirements must be discussed in the Project narrative in addition to the requirements specified in the application kit:

#### Specific Aims

- o Where appropriate, the long-term objectives of the project must specify the product(s) to be disseminated and the audiences to be targeted.
- o The dissemination methods and questions to be addressed should be discussed in terms of ascertaining the effects of dissemination on behavior change, characteristics or effectiveness of dissemination techniques, or the development of an innovative dissemination model.

#### Progress Report/Preliminary Studies

- o Prior studies conducted by the Principal Investigator pertaining to dissemination, health services research (especially in the areas which AHCPR has ongoing work), or communications research that will contribute to the proposed project should be described.

#### Experimental Design and Methods

- o The specific dissemination model that will be used or developed in the project should be explicitly addressed in terms of: audiences; type of product or the knowledge to be disseminated; technique of dissemination; characteristics or variables of dissemination to be used and/or examined; and the relationship of the project to the structure of the health care system, clinical management, health care outcomes, and health status.

**REVIEW PROCEDURES AND CRITERIA:** Applications must be submitted to:



Application Receipt Office  
Division of Research Grants  
National Institutes of Health  
Westwood Building, Room 240  
Bethesda, MD 20892\*\*

Applications will be referred to an AHCPR study section for initial review. Applications requesting total direct costs in excess of \$250,000 will also be reviewed by the National Advisory Council for Health Care Policy, Research, and Evaluation.

Applications will be reviewed in accordance with the standard AHCPR peer review procedures. In addition, the following criteria will be considered: ability of the project's results to be applied to the dissemination of AHCPR products now and in the future; adherence of the project approach to accepted principles of communications and dissemination; and ability to analyze the effects of dissemination on behavior change among practitioners and consumers.

APPLICATION PROCEDURES: Those considering an application to this RFA are strongly encouraged to discuss their project with AHCPR program administrators in advance of formal submission.

Use application form PHS 398 (rev. 10/88) (State and local governments may use form DHHS 5161). These forms may be secured from the Office of Scientific Review, Agency for Health Care Policy and Research, Room 18A-20, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857 (telephone 301-443-3091) and from most institutional business offices.

Type in line 2 of the face page of the application the words "RFA AHCPR-91-01: AHCPR Dissemination Effectiveness" and use the RFA label in the application package.

The original and 6 copies of the application must be submitted to the Division of Research Grants as directed in the application instructions. State and local governments using form DHHS 5161 must submit an original and two copies of the application.

INQUIRIES: For assistance, consultation on program requirements, and for the full RFA contact:

Margaret VanAmringe  
Director, Center for Research Dissemination and Liaison  
5600 Fishers Lane, Room 18A-10  
Rockville, MD 20857  
Telephone: (301) 443-2904

For budgetary/administrative information, contact:

Ralph Sloat  
Grants Management Officer  
Agency for Health Care Policy and Research  
5600 Fishers Lane, Room 18A-27  
Rockville, MD 20857  
Telephone: (301) 443-4033

This program is described in the Catalog of Federal Domestic Assistance No. 93.180 and 93.226. Executive Order 12372 does not apply to AHCPR grant programs.

#### MINORITY DISSERTATION RESEARCH GRANTS IN AGING, 1991

RFA AVAILABLE: AG-91-07

P.T. 34, FF; K.W. 0710010, 0720005

National Institute on Aging

Application Receipt Date: April 29, 1991

Small grants (R03) to support doctoral dissertation research will be available in 1991 for underrepresented minorities. (1) Grant support is designed to aid the research of new minority investigators and to encourage individuals from a variety of academic disciplines and programs to study problems in aging. Specific research topics should be discussed with the National Institute on Aging (NIA). The interests of the programs are given in the full Request for Applications (RFA). Dissertation research grants will be administered in accordance with the U.S. Code Annotated, Title 42, Part B, Section 284.

Awards will depend on the availability of funds. NIA expects to fund up to 20 dissertation research projects in 1991.

(1) Underrepresented minority investigators are defined as individuals belonging to a particular ethnic or racial group that has been determined by the grantee institution to be underrepresented in biomedical or behavioral research at that institution. NIA will give priority to projects from African-Americans, Native Americans, Hispanics, Pacific Islanders, or other ethnic or racial group members who have been found to be underrepresented in geriatric and gerontology research nationally.

#### ELIGIBILITY

The applicant investigator applying for a dissertation research grant must be an individual from an underrepresented minority group enrolled in an accredited doctoral degree program in the biomedical, social, or behavioral sciences and must have approval of the dissertation proposal by a named committee. The student must also be conducting or intending to conduct dissertation research on issues related to aging. Research topics should fit within one or more of the areas described below for each individual program (see National Institute on Aging Contacts below).

The applicant must be a registered doctoral candidate in resident or nonresident status. All requirements for the doctoral degree other than the dissertation must be completed by the time of the award. This information must be verified in a letter of certification from the thesis chairperson and submitted with the grant application (see Application Procedures).

The applicant institution must be domestic and will administer the grant on behalf of the proposed investigator. The applicant investigator for dissertation research grant support must be a citizen of the United States or hold a permanent resident visa. The performance site may be domestic or foreign.

#### SCOPE OF AWARDS

Applicant investigators should request support for the amount of time necessary to complete the dissertation. However, a dissertation research grant usually is awarded for a period of 12 months or less but may be awarded for up to 24 months. The total direct costs of the entire project may not exceed \$25,000. A proposal that exceeds this amount will be returned. Allowable costs include the investigator's salary (not to exceed \$10,000); direct research project expenses such as travel, data processing, and supplies; and dissertation costs. No tuition nor permanent equipment is allowed.

#### SPECIAL INSTRUCTIONS FOR INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH STUDIES

For projects involving clinical research, NIH requires applicants to give special attention to the inclusion of women and minorities in study populations. If women or minorities are not included in the study populations for clinical studies, a specific justification for this exclusion must be provided. Applications without such documentation will not be accepted for review.

#### HOW TO APPLY

The full RFA and special guidelines for dissertation grant applications should be requested from the Office of Extramural Affairs (see address below). The application must be submitted on form PHS 398 (revised 10/88, reprinted 9/89) available from the university research office and the Division of Research Grants, 5333 Westbard Avenue, Westwood Building, Room 240, Bethesda, Maryland 20892, telephone (301) 496-7441. The special instructions described here and in the application kit must be followed. Applications will be assigned to the NIA for review and possible funding.

Applications must be received by April 29, 1991, and must be sent directly to:

Division of Research Grants  
National Institutes of Health  
Westwood Building, Room 240  
Bethesda, MD 20892\*\*

The applicant must submit the original and four copies of the completed application, which includes a detailed narrative project description (not to exceed 10 pages) and letters. An additional two copies must be sent to:

Grants and Contracts Management Office  
National Institute on Aging  
Building 31, Room 5C07  
Bethesda, MD 20892  
Att: Minority Dissertation

A letter from the faculty committee or university official directly responsible for supervising the development and progress of the dissertation research must be submitted with the application. Details of the letter are given in the full RFA.

#### REVIEW PROCESS

Dissertation research grants are competitive. A mail review will be conducted. Review results and funding decisions will be announced within 5 months after the submission date. Final funding decisions are based on the recommendations of the reviewers, the relevance of the project to NIA priorities, and the availability of funds.

#### NATIONAL INSTITUTE ON AGING CONTACTS

Interested applicants should request the full RFA, additional guidelines for preparing the application, and discuss the suitability of the mechanism by letter or by telephone with the person named below. The applicant also will be referred to the relevant NIA program director to discuss the suitability of the research topic.

Phyllis B. Eveleth, Ph.D.  
Deputy Associate Director and Training Officer  
Office of Extramural Affairs  
National Institute on Aging  
Building 31, Room 5C02  
Bethesda, MD 20892  
Telephone: (301) 496-9322

#### COOPERATIVE AGREEMENTS FOR PREVENTION CLINICAL TRIALS UTILIZING INTERMEDIATE ENDPOINTS AND THEIR MODULATION BY CHEMOPREVENTIVE AGENTS

RFA AVAILABLE: CA-91-08

P.T. 34; K.W. 0755015, 0740018, 0715035, 0710095

National Cancer Institute

Letter of Intent Receipt Date: April 1, 1991  
Application Receipt Date: May 24, 1991

#### PURPOSE

The Division of Cancer Prevention and Control (DCPC), National Cancer Institute (NCI), invites applications for cooperative agreements to support clinical trials directed toward examining the role of various chemopreventive agents and/or diet in the prevention of cancer. This is a follow-up to earlier Requests for Applications (RFAs) that requested grant applications, and then later, cooperative agreement applications in this area.

#### RESEARCH OBJECTIVES

The major objective of this solicitation is to encourage cancer chemoprevention clinical trials that utilize biochemical and/or biological markers to identify populations at risk and/or to provide intermediate endpoints that may predict later reduction in cancer incidence rates.

These studies may be developed in phases, including a pilot phase, that could later proceed to a full-scale intervention. The main emphasis should be on small, efficient studies aimed at improving future research designs of chemoprevention trials, providing biologic understanding of what is happening in the trials, or providing better, more quantitative and more efficient endpoints for these trials. After successful completion of the pilot phase (i.e., demonstrated modulation of marker endpoints by the intervention), subsequent studies can include Phase III clinical trials involving the designated agent, the utilization of the monitoring test system, and a cancer incidence or mortality endpoint.

Investigators may apply at this time for the pilot phase or submit an application for both phases. However, if the application is for the pilot phase only, the proposed study must describe its relevance to a clinical

application and utilize a chemopreventive agent, marker test system, and study population that could later be the subject of a full-scale, double-blind, randomized, risk-reduction clinical trial.

#### MECHANISM OF SUPPORT

Applicants funded under this RFA will be supported through the cooperative agreement mechanism. An assistance relationship will exist between NCI and the awardees to accomplish the purpose of the activity. The recipients will have primary responsibility for the development and performance of the activity. However, there will be government involvement with regard to: (1) assistance securing an Investigational New Drug (IND) approval from the Food and Drug Administration (FDA), (2) monitoring of safety and toxicity, (3) coordination and assistance in obtaining the chemopreventive agent, and (4) quality assurance with regard to the clinical chemistry aspects of the study. Awards will not be made until all arrangements for obtaining the IND, agent, and its delivery are completed. Final awards will also consider not only the cost of the clinical trial but also the cost of the agent and its formulation if necessary.

This RFA solicitation represents a single competition with a specified deadline of May 24, 1991, for receipt of applications. All applications received in response to the RFA will be reviewed by the same NCI Initial Review Group.

To ensure their review, applications must be received by May 24, 1991. Applications received after that date will not be considered under this RFA.

#### SPECIAL INSTRUCTIONS FOR INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH STUDIES

For projects involving clinical research, NIH requires applicants to give special attention to the inclusion of women and minorities in study populations. If women or minorities are not included in the study populations for clinical studies, a specific justification for this exclusion must be provided. Applications without such documentation will not be accepted for review.

#### INQUIRIES

Inquiries and requests for the full RFA may be directed to:

Marjorie Perloff, M.D.  
Chemoprevention Branch  
Executive Plaza North, Suite 201  
National Institutes of Health  
9000 Rockville Pike  
Bethesda, MD 20892-4200  
Telephone: (301) 496-8563

#### CLAUDE D. PEPPER OLDER AMERICANS INDEPENDENCE CENTERS

RFA AVAILABLE: AG-91-05

P.T. 04; K.W. 0710010, 0745027, 0414005

National Institute on Aging

Letter of Intent Due: April 15, 1991  
Application Receipt Date: May 17, 1991

**BACKGROUND, GOALS, AND SCOPE:** Millions of older Americans suffer from loss of abilities needed to live a fully independent life. Loss of independence imposes enormous personal and financial burdens on older persons and their families. Dependence is not inevitable in old age. It results from disabling conditions that are potentially, if not currently, preventable or reversible. The development and testing of interventions to reduce disability and increase independence thus offers immense benefits and potential savings in health care costs. In response to this need, Congress amended the Public Health Service Act in 1990 to authorize the establishment of Claude D. Pepper Older Americans Independence Centers (OAICs). The overall goals of the OAIC program are: to develop and test interventions to increase or maintain abilities needed for independence of older persons and to train researchers capable of leading and conducting research programs in the above activities. OAICs will support:

**INTERVENTION STUDIES:** These studies are the major research components of OAICs. At least one approved intervention research project is required for

approval of an OAIC. Proposed intervention studies must test efficacy of interventions to prevent or ameliorate functional impairments contributing to loss of independence. Each proposed intervention study should also include planned investigations of mechanisms underlying the intervention's effects (or lack of effects) on functional status, factors affecting recruitment into the study, participants' compliance once enrolled, cost-effectiveness, and effects on health care utilization of the intervention(s) tested.

Examples of study topics include:

- o interventions to prevent or reduce frailty and physical performance disabilities, cognitive disability, affective disorders, sensory disabilities, and/or co-morbidity associated with these conditions;
- o interventions to reduce risk of disabling events such as hip fractures and strokes, and impairments following these events;
- o interventions to prevent or reduce disabilities in complex functions involving combined motor, sensory, and cognitive performance;
- o interventions to prevent or reduce disabling side effects from medication use;
- o interventions to prevent, lessen, or shorten temporary disability from exacerbation or complications of chronic diseases of older persons;
- o interventions to prevent or reduce disabling sequelae of menopause and associated estrogen deficiency;
- o combined intervention strategies to prevent or ameliorate disabilities in older persons with multiple impairments.

#### SPECIAL INSTRUCTIONS FOR INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH STUDIES

For projects involving clinical research, NIH requires applicants to give special attention to the inclusion of women and minorities in study populations. If women or minorities are not included in the study populations for clinical studies, a specific justification for this exclusion must be provided. Applications without such documentation will not be accepted for review.

**INTERVENTION DEVELOPMENT STUDIES:** OAICs will also support intervention development studies to identify, develop, or refine potential interventions to preserve or increase independence. Types of such studies include preliminary tests of therapies to test their effects on physiologic and/or behavioral factors known to affect functional status, and studies to identify or confirm reversible or preventable risk factors for disability and/or disabling events. Large-scale epidemiologic studies are outside the scope of this RFA.

**RESEARCH RESOURCES CORES:** Applicants may request core resource support to enhance the quality of OAIC research projects, i.e., Intervention Studies, Intervention Development Studies, and Pilot Research Projects.

**RESEARCH DEVELOPMENT CORE:** This core will provide salary and other support for junior faculty and research associates to acquire abilities in all phases of research to develop interventions that enhance independence, including clinical trials, studies of mechanisms underlying treatment response, and cost-effectiveness/health care utilization studies. The Research Development Core will also support pilot research projects on topics related to the activities of the OAIC.

**DEMONSTRATION AND INFORMATION DISSEMINATION PROJECTS:** OAICs must include activities to translate findings from their research into health care practice.

**LEADERSHIP/ADMINISTRATIVE CORE:** Applicants may request funds for the OAIC Director, OAIC Administrator, and support staff. The OAIC Director should be a scientist who can provide effective administrative and scientific leadership and coordination with OAIC intervention studies. An OAIC Administrator who will assist the Director in managing the Center, addressing issues of fiscal management and compliance with institutional, PHS, NIH, and NIA policies, must be identified.

**MECHANISM AND SCALE OF SUPPORT:** Older Americans Independence Centers will be supported through comprehensive center grants (P60). The total costs (direct

plus indirect) requested per application for the first year may not exceed \$1,500,000. Plans are to make up to 3-4 awards depending upon availability of funds. Up to \$3.9 million (total cost) for first-year expenses, and additional approved expenses for up to five years, will be committed in Fiscal Year 1991 to fund applications submitted in response to this RFA, subject to receipt of high-quality applications and availability of funds.

**REVIEW PROCEDURES AND CRITERIA, AND METHOD OF APPLYING:** Applications will be received by the NIH Division of Research Grants and assigned to NIA. Responsive applications will be assigned to a special institute review group for review. Customary scientific review criteria will be applied, including significance of the research project to the goals of the RFA. A complete copy of the RFA and program guidelines may be obtained from the NIA contact listed below. Applications must be submitted on the standard PHS 398 (rev. 10/88, reprinted 10/89) application form. The deadline for receipt of applications is May 17, 1991. On item 2 of the face page of the application, applicants should enter: NIA RFA--Claude Pepper Older Americans Independence Center, AG-91-05. The RFA label available in the application form PHS 398 must be affixed to the bottom of the face page and placed on top of the entire package. Failure to use this label could result in delayed processing of the application and prevent it from reaching the review committee in time for review.

A complete copy of the RFA and program guidelines may be obtained from:

Stanley L. Slater, M.D.  
Geriatrics Program, NIA  
Building 31, Room 5C27  
Bethesda, MD 20892  
Telephone: (301) 496-6761

#### ONGOING PROGRAM ANNOUNCEMENTS

##### MECHANISMS OF HIV PATHOGENESIS IN PEDIATRIC POPULATIONS

PA: PA-91-25

P.T. 34; K.W. 0715008, 0765033, 0745027, 0770005, 0715125, 0710070

National Institute of Allergy and Infectious Diseases

Application Receipt Dates: May 1, September 1, January 2

##### PURPOSE

The National Institute of Allergy and Infectious Diseases (NIAID) is designated as the lead institute for the investigation of the pathogenesis, prevention, and treatment of the human immunodeficiency virus (HIV) responsible for the acquired immunodeficiency syndrome (AIDS). HIV-infected women as well as children born to HIV-infected women are the fastest growing populations of AIDS patients. The clinical manifestations of pediatric AIDS differ from those seen in adults. Recurrent bacterial infections, lymphocytic interstitial pneumonitis and encephalopathy, as well as neurological and physical growth deficits, are commonly observed in children with HIV infection. Immune dysfunction is found in children with greater than 1500 CD4 T cells/mm<sup>3</sup>. Compared to adults, opportunistic infections and AIDS symptoms appear much earlier after infection in most children, with 50 percent diagnosed before one year of age and 82 percent within the first three years. Little is known concerning the mechanisms of pathogenesis of HIV infection in the immature host, and this lack of knowledge makes it difficult to define effective treatment strategies.

##### RESEARCH OBJECTIVE

The objective of this program announcement is to stimulate research on the mechanisms of HIV pathogenesis in hosts with developing immune and neurological systems.

Applications that focus on specific strategies to determine the mechanisms of HIV pathogenesis in pediatric populations are encouraged. These strategies may include, but are not limited to, the following areas:

1. Determine the cells/organs harboring HIV, the time and mode of infection (in utero, perinatal, breast milk), the route and mechanisms of viral spread, cell tropism, and genetic variation in pediatric HIV infection.

2. Determine if there is transfer of maternal immunity to the fetus, and if so, define the parameters (e.g., viral load, time, mechanism). Identify strategies to induce or amplify protective immune response(s) in immunosuppressed individuals.
3. Define the mechanisms for the immunologic abnormalities in pediatric populations.
  - A. Abnormalities in humoral immunity: Which regulatory mechanism(s) are impaired? Which regulatory mechanisms determine whether immunoglobulin levels are elevated or deficient?
  - B. Abnormalities in cellular immunity.
  - C. Abnormalities in antigen presenting cells.
  - D. Abnormalities in regulation, production, and/or expression of cytokines and/or lymphokines.
4. Define the cellular factors in the immature host that interact with viral regulatory elements.
5. Define the mechanisms for neurologic abnormalities and neuropathology in pediatric populations.
6. Define the factors and co-factors influencing/causing lymphocytic interstitial pneumonitis and the mechanisms of pathogenesis.
7. Define the pathogenic mechanisms that allow recurrent bacterial infections, viral infections (e.g., EBV, CMV, JC), fungal, and other opportunistic infections in children with HIV infection.
8. Define the host and viral factors that determine the accelerated course of HIV disease progression in some infants and children and that allow latency in other children for many years.
9. Define appropriate animal models for the study of pediatric AIDS.

The approaches outlined above are not intended to be comprehensive nor are they required. All research strategies that will lead to insights into the mechanism of pathogenesis in pediatric HIV infection are encouraged under this program announcement.

#### MECHANISM OF SUPPORT

The NIAID encourages investigator-initiated research on topics relevant to pediatric AIDS. This program announcement invites R01 applications from investigators who wish to play an active role in defining the direction of such research. Although no funds are specifically set aside for funding grants submitted in response to this program announcement, the NIH regards high quality research in pediatric AIDS as an area of high priority. The total project period for applications submitted in response to this program announcement should not exceed five years for domestic institutions and three years for foreign institutions.

#### ELIGIBILITY

Applications may be submitted by nonprofit or for-profit organizations and by public or private entities such as universities, colleges, hospitals, laboratories, units of State or local governments, and eligible agencies of the Federal Government. Minority individuals and women are encouraged to apply. Both foreign and domestic institutions are eligible to apply.

#### SPECIAL INSTRUCTIONS TO APPLICANTS REGARDING IMPLEMENTATION OF NIH POLICIES CONCERNING INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH STUDY POPULATIONS

NIH and ADAMHA policy is that applicants for NIH/ADAMHA clinical research grants and cooperative agreements will be required to include minorities and women in study populations so that research findings can be of benefit to all persons at risk of the disease, disorder or condition under study; special emphasis should be placed on the need for inclusion of minorities and women in studies of diseases, disorders and conditions which disproportionately affect them. This policy is intended to apply to males and females of all ages. If women or minorities are excluded or inadequately represented in clinical research, particularly in proposed population-based studies, a clear compelling rationale should be provided.



The composition of the proposed study population must be described in terms of gender and racial/ethnic group. In addition, gender and racial/ethnic issues should be addressed in developing a research design and sample size appropriate for the scientific objectives of the study. This information should be included in the form PHS 398 in Section 2, A-D of the Research Plan AND summarized in Section 2, E, Human Subjects. Applicants/offerors are urged to assess carefully the feasibility of including the broadest possible representation of minority groups. However, NIH recognizes that it may not be feasible or appropriate in all research projects to include representation of the full array of United States racial/ethnic minority populations (i.e., Native Americans (including American Indians or Alaskan Natives), Asian/Pacific Islanders, Blacks, Hispanics).

The rationale for studies on single minority population groups should be provided.

For the purpose of this policy, clinical research includes human biomedical and behavioral studies of etiology, epidemiology, prevention (and preventive strategies), diagnosis, or treatment of diseases, disorders or conditions, including but not limited to clinical trials.

The usual NIH policies concerning research on human subjects also apply. Basic research or clinical studies in which human tissues cannot be identified or linked to individuals are excluded. However, every effort should be made to include human tissues from women and racial/ethnic minorities when it is important to apply the results of the study broadly, and this should be addressed by applicants.

For foreign awards, the policy on inclusion of women applies fully; since the definition of minority differs in other countries, the applicant must discuss the relevance of research involving foreign population groups to the United States' populations, including minorities.

If the required information is not contained within the application, the application will be returned.

Peer reviewers will address specifically whether the research plan in the application conforms to these policies. If the representation of women or minorities in a study design is inadequate to answer the scientific question(s) addressed AND the justification for the selected study population is inadequate, it will be considered a scientific weakness or deficiency in the study design and will be reflected in assigning the priority score to the application.

All applications for clinical research submitted to NIH are required to address these policies. NIH funding components will not award grants or cooperative agreements that do not comply with these policies.

#### REVIEW PROCEDURES

Although most applications in response to this announcement are expected to be assigned to the NIAID, whenever there is inter-institute programmatic overlap in the proposed research, the PHS Referral Guidelines will prevail in assignment of applications to the institutes. Applications will be reviewed for scientific and technical merit in accordance with the usual NIH peer review procedures by the Division of Research Grants (DRG) study sections specially constituted to review AIDS grant applications. Following study section review, the applications will receive a second-level review by an appropriate national advisory council. The earliest award date for successful applications will be no more than six months from the receipt date.

#### AWARD CRITERIA

Applications will compete for available funds with all other approved applications. The following will be considered in making funding decisions:

- o Quality of the proposed project as determined by peer review
- o Availability of funds
- o Balance among research areas

Applications from institutions that have a General Clinical Research Center (GCRC) funded by the NIH National Center for Research Resources may identify the GCRC as a resource for conducting the proposed research by including a letter of agreement from either the GCRC program director or Principal Investigator.

## METHOD OF APPLYING

Applications must be submitted on the grant application form PHS 398 (rev. 10/88) and will be accepted at the regular application deadlines as indicated below. The relevant dates for applications for AIDS-related research are:

Receipt Date	Initial Review	Council Review - Earliest Award
May 1	June/July	September/October - Nov. 1
September 1	October/November	January/February - March 1
January 2	February/March	May/June - July 1

Application kits are available at most institutional business and grant/contract offices and may be obtained from the Office of Grants Inquiries, Division of Research Grants, Westwood Building, Room 449, National Institutes of Health, Bethesda, Maryland 20892. The title and number of this announcement, MECHANISMS OF HIV PATHOGENESIS IN PEDIATRIC POPULATIONS, PA-91-25, must be typed in item 2 on the face page of the application.

The completed original application and twenty-three copies must be sent or delivered to:

Division of Research Grants  
Westwood Building, Room 240  
National Institutes of Health  
5333 Westbard Avenue  
Bethesda, MD 20892\*\*

## INQUIRIES

Requests for further information may be directed to:

Gregory Milman, Ph.D., Chief  
Pathogenesis Branch/DAIDS  
National Institute of Allergy and Infectious Diseases  
6003 Executive Blvd., Room 242P  
Bethesda, MD 20892  
Telephone: (301) 496-8378  
FAX: (301) 480-5703

This program is described in the Catalog of Federal Domestic Assistance No. 93.856 - Microbiology and Infectious Disease Research and 93.855 - Allergy, Immunology and Transplantation Research. Grants are awarded under the authority of the Public Health Service Act, Title IV, Section 301 as amended, Public Law 78-410, Public Law 97-219; Public Law 99-158; Public Law 99-500; and Report 99-711 to accompany HR 5233 and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

## ERRATUM

### MULTICENTER COOPERATIVE AGREEMENT FOR STUDYING NEURAL TUBE DEFECTS IN MUTANT MICE

RFA: HD-91-09

P.T. 34; K.W. 0710030, 1002004, 1002019, 1002059, 0755030

National Institute of Child Health and Human Development

The number assigned to the above RFA (RFA HD-91-01), which appeared in the February 1 issue of the NIH Guide for Grants and Contracts (Vol. 20, No. 5), is in error. It should be changed to 'RFA 91-HD-09'.

\*\*THE MAILING ADDRESS GIVEN FOR SENDING APPLICATIONS TO THE DIVISION OF RESEARCH GRANTS OR CONTACTING PROGRAM STAFF IN THE WESTWOOD BUILDING IS THE CENTRAL MAILING ADDRESS FOR THE NATIONAL INSTITUTES OF HEALTH. APPLICANTS WHO USE EXPRESS MAIL OR A COURIER SERVICE ARE ADVISED TO FOLLOW THE CARRIER'S REQUIREMENTS FOR SHOWING A STREET ADDRESS. THE ADDRESS FOR THE WESTWOOD BUILDING IS:

5333 Westbard Avenue  
Bethesda, Maryland 20816

\*U.S.G.P.O.:1991-281-826:20033