

# NIH GUIDE

For Grants  
and  
Contracts

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NOTICES

REVISED GUIDELINES FOR CORE GRANTS

P.T. 34; K.W. 1002046, 0710030, 0715100

National Eye Institute

The National Eye Institute (NEI) has recently revised its application guidelines for Core Grants for Vision Research (P30). The objectives of the NEI Core Grant Program are: (1) to enhance an institution's environment for vision research; (2) to attract scientists of diverse disciplines to engage in vision research; and (3) to facilitate multidisciplinary and/or collaborative studies of the visual system and its disorders. To be eligible for Core Grants, institutions must have at least four NEI-supported investigators, each with at least two years of committed support remaining on a regular research grant (R01), FIRST award (R29), or MERIT award (R37) at the time of submission of the application. The NEI currently provides up to \$750,000 direct costs over a 5-year period in support of a Core Grant. An exception to this limit may be made for applications requesting a Clinical Vision Research Development module. Applications that specifically include such a module may request up to \$1,050,000 direct costs over a 5-year period. The NEI has one receipt date for Core Grants; June 1 of each year. Copies of the new guidelines may be obtained by writing to:

NEI Core Grant Program Director  
National Eye Institute  
Building 31, Room 6A48  
Bethesda, Maryland 20892  
Telephone: (301) 496-5884

REVISED GUIDELINES FOR INSTITUTIONAL TRAINING GRANTS

P.T. 44; K.W. 0720005, 1014002

National Eye Institute

The National Eye Institute (NEI) has recently revised its application guidelines for National Research Services Award (NRSA) Institutional Training Grants (T32). Emphasis is placed on: (1) enhancing fundamental training in basic disciplinary areas at the predoctoral level, where an introduction to vision research opportunities would be expected; and (2) using more specialized fundamental training at the postdoctoral level to help meet national research priorities in vision research. NEI research priorities are described in "Vision Research -- A National Plan: 1983-1987" and the recently published "1987 Evaluation and Update". Copies of these documents are available from:

Associate Director for Planning and Reporting  
National Eye Institute  
Building 31, Room 6A27  
Bethesda, Maryland 20892

The NEI has one receipt date for institutional training grants; January 10 of each year. The revised institutional training grant guidelines are available from:

NEI Training Program Director  
National Eye Institute  
Building 31, Room 6A48  
Bethesda, Maryland 20892

Applicants are encouraged to contact the NEI Training Program Director at 301/496-5884 prior to submission of an application.

DATED ANNOUNCEMENTS (RFPs AND RFAs)

STATISTICAL AND DATA ANALYSIS CENTER FOR THE AIDS CLINICAL TRIALS GROUP

RFP AVAILABLE: RFP-NIH-NIAID-AIDSP-89-8

P.T. 34; K.W. 1004008, 1010013, 0755015

National Institute of Allergy and Infectious Diseases

The Treatment Research Branch of the AIDS Program, National Institute of Allergy and Infectious Diseases, NIH, is planning to re compete the current AIDS Clinical Trials Coordinating Center contract. The emphasis of this activity is changing from a data collection and management activity to a statistical and data design and analysis activity. The purpose of the new five-year contract is to provide extensive biostatistical expertise and data management coordination to the AIDS Clinical Trials Group (ACTG).

ACTG clinical trials are currently being conducted by 34 funded sites designated as AIDS Clinical Trials Units (ACTUs). Some of the awards are to groups of institutions, with a total of over 55 clinical sites located throughout the United States participating in ACTG trials. These sites are each involved in the evaluation of potential therapies for HIV infection. As of July 1, 1988, 37 protocols were active, an additional 39 protocols were pending or in development, and over 4,000 patients had been enrolled in ACTG clinical trials, including a number of large-scale multicenter Phase III studies. It is anticipated that the ACTG will continue to expand over the next several years. The number of clinical sites may increase significantly, possibly to a total of 85 to 90 participating sites. By 1990 it is expected that over 10,000 patients will be enrolled in approximately 100 active protocols at any given time, with about 75 percent of the patients enrolled in Phase III studies.

Necessary functions relevant to this activity include the ability to: provide scientific leadership with regard to experimental design, sample size, protocol feasibility, data analysis, and other statistical issues involving protocol development, implementation and analysis; perform interim and final statistical analyses and be substantially involved in the writing of scientific papers; conduct methodological research on the efficient design, conduct and analysis of ACTG clinical trials; perform cross-study analyses to identify new leads regarding prognostic factors and late treatment effects; give formal presentations at each ACTG national meeting on issues related to the design, conduct and analysis of ACTG studies; serve on relevant ACTG committees; provide for central registration of patients and for randomization where appropriate; identify information to be included in protocol-specific research records, develop study forms, and define the computerized database; provide for computer processing, storage and retrieval of data at a central data management facility using a commercial (nonproprietary) database management system based on the relational model of database management and incorporating the industry-standard SQL language; design and implement quality assurance procedures to evaluate the validity and completeness of data collected; design and implement data entry procedures to provide for the efficient transfer of data to a central facility using either a distributed and/or centralized approach; provide for electronic mail to facilitate communication among ACTG participants; provide appropriate training; prepare operations manuals and related material; and develop a detailed work plan for the transition phase.

To perform the required work, the contractor must be able to provide: experience serving as a statistical and data analysis center for complex multicenter, multi-protocol clinical trial research efforts; Ph.D.-level statisticians with experience and expertise in sophisticated statistical techniques required for the analysis of clinical trials; experience in active collaborations with clinicians in the design, conduct and analysis of clinical trials; experience in AIDS-related research studies; access to a large-capacity computer facility; and experience in the various activities described above.

This NIAID-sponsored project will take approximately five years to complete. A cost-reimbursement contract is anticipated. NIAID expects to make one award.

This is an announcement for an anticipated Request for Proposal (RFP). RFP-NIH-NIAID-AIDSP-89-8 shall be issued on or about October 10, 1988, with a closing date tentatively set for December 13, 1988.

Requests for the RFP shall be directed in writing to:

Brenda Velez  
Contract Management Branch  
Westwood Building, 5333 Westbard Avenue, Room 707  
National Institute of Allergy and Infectious Diseases  
National Institutes of Health  
Bethesda, Maryland 20892  
Telephone: (301) 496-7117

To receive a copy of the RFP, please supply this office with three self-addressed mailing labels. All responsible sources may submit a proposal which will be considered.

This advertisement does not commit the Government to award a contract.

CANCER CENTER MINORITY ENHANCEMENT AWARDS

RFA: 88-CA-11

P.T. 04, FF; K.W. 0715035, 0710030, 0745020, 0745055, 0415000, 0710095

National Cancer Institute

CHANGE IN RECEIPT DATE: September 15, 1988

The April 29 issue of the NIH Guide for Grants and Contracts (Vol. 17, No. 16) included a notice of availability of a request for applications (RFA) on the above topic. Please note that the receipt date for applications in response to this RFA should be September 15, 1988 instead of August 2. Questions and requests for the complete RFA may be addressed to:

Lemuel A. Evans, Ph.D.  
Director, Comprehensive Minority Biomedical Program  
Building 31, Room 10A04  
9000 Rockville Pike  
Bethesda, Maryland 20892  
Telephone: (301) 496-7344

NATIONAL COOPERATIVE NATURAL PRODUCTS DRUG DISCOVERY GROUPS

RFA AVAILABLE: 88-CA-17

P.T. 34; K.W. 0740020, 0755025, 0750025, 0755020

National Cancer Institute

Letter of Intent Date: October 21, 1988

Application Receipt Date: December 9, 1988

In FY 1983 and 1984 NCI requested applications for National Cooperative Drug Discovery Groups whose goal was the discovery of improved cancer treatment on the basis of novel mechanism of drug action (Vol. 12, No. 7, July 1983, and Vol. 13, No. 9, August 3, 1984). In 1986, the program requested applications focused on exploitation of specific and unique characteristics of lung and colon cancer (Vol. 15, No. 20, October 3, 1986). The NCDDG approach to modern anticancer treatment discovery was broadened further in August 1987 by RFAs inviting applications for the creation and evaluation of both general mechanism of action based and specific disease-oriented anticancer treatments as well as for the development of innovative preclinical models for determining antitumor selectivity.

SUMMARY

The National Cancer Institute (NCI) announces the availability of an RFA for the funding of National Cooperative Natural Products Drug Discovery Groups (NPDDGs) to stimulate the scientific community to select and isolate on a rational basis, new potential anticancer treatments from natural sources and to evaluate them in preclinical models designed to select those with the most favorable prognosis for clinical usefulness. This program is designed to assist leading investigators in diverse scientific disciplines to interact as a unit, regardless of their individual institutional affiliations or prior direct involvement in cancer related research. The purpose is to mobilize, with NCI support, the outstanding talents required for exploitation and extrapolation of leads from fundamental studies to the discovery of improved

anticancer treatment. An NPDDG is envisioned as being composed of a Principal Investigator and a number of Program Leaders who will conduct interdependent and synergistic preclinical laboratory programs to identify and isolate novel anticancer leads from natural sources, conduct preclinical tasks required to select materials worthy of development based on activity in pertinent laboratory models as perceived by the Group, and provide the basis for identifying new agents and strategies for development to clinical trial. A NPDDG may be made up of scientists in academic, non-profit research, and commercial organizations.

Awards will be made as cooperative agreements. Assistance via cooperative agreement differs from all research grants in that the cooperative agreement funding mechanism anticipates substantial NCI staff participation during performance. However, the applying Group must define its objectives in accord with its own interests and perceptions of approaches to the discovery of new models. The role of NCI as a member of the Group is described in the RFA. Essentially, the extramural NCI staff concerned with the administration of grants and contracts will apply its experiences and appropriate resources to facilitate and stimulate the realization of Group objectives. The active participation of industry is encouraged because it will allow this segment of the scientific community to contribute its considerable intellectual and material resources.

The Principal Investigator's (PI's) institution will be responsible for the Group's application. Awards will be made to the applicant institution on behalf of the Group as a whole and not to individual Laboratory Programs within the Group. The PI's institution will provide a Central Operations Office for the Group and will be responsible for the performance of the entire Group and be accountable for the funds awarded.

NCI plans to make multiple awards for project periods of up to five years and has set aside three million dollars for the initial year's funding.

The RFA label obtained from the NCI staff person named below or from grant application Form PHS 398 (Revised 9/86) must be affixed to the bottom of the face page. Failure to use this label could result in delayed processing of your application such that it may not reach the review committee in time for review.

For further information and a copy of the RFA contact:

J.A.R. Mead, Ph.D.  
Program Director, NPDDGs  
Executive Plaza North, Suite 832  
Grants and Contracts Operations Branch  
Developmental Therapeutics Program  
Division of Cancer Treatment  
National Cancer Institute  
Bethesda, Maryland 20892

IDENTIFICATION AND EVALUATION OF MOLECULAR PROBES FOR PATHOLOGICAL CLASSIFICATION OF HUMAN ASTROCYTOMAS

RFA FOR COOPERATIVE AGREEMENT AVAILABLE: 88-CA-18

P.T. 34; K.W. 1002058, 1002015, 1002008, 1002004, 0710075

National Cancer Institute

Application Receipt Date: January 16, 1989

Letter of Intent Receipt Date: October 17, 1988

The Diagnosis Research Program of the Division of Cancer Biology and Diagnosis at the National Cancer Institute (NCI) invites applications for Cooperative Agreements from institutions interested in identifying and evaluating molecular probes to improve the pathologic classification of astrocytomas. Astrocytomas are the most common primary tumors of the central nervous system (CNS), but precise pathologic diagnosis is often difficult, and the current classification scheme does not permit reliable predictions of clinical outcome. Recent advances in the field of molecular biology suggest that opportunities exist to develop a classification scheme using molecular probes. This should lead to a better understanding of the disease and hopefully to improved therapy. This Request for Applications (RFA) is designed to promote collaborations and interactions among researchers from a variety of basic scientific and clinical disciplines (e.g. molecular biology, cell biology, immunology, biochemistry, cytogenetics, neuropathology, clinical medicine) to

facilitate correlation of results using molecular probes with results using standard histopathological analysis and with patient response to specific therapies.

Awards will be made as Cooperative Agreements. These create an assistance relationship in which substantial involvement of NCI staff is anticipated during performance of the project, as outlined in the detailed RFA. This mechanism is used when the NCI wishes to stimulate investigator interest and proposes to advise or assist in planning in an important and opportune area of research. Applicants will be responsible for the planning, direction and execution of the proposed project. It is essential that there be good liaison between basic scientists and clinicians, as the goal of this RFA is to apply the knowledge and techniques of basic science to the clinic in the areas of diagnosis and prognosis. Each group responding to this RFA should describe existing and proposed collaboration/cooperation between basic scientist(s) and clinician(s).

NCI anticipates making 3 to 5 awards for project periods of up to 5 years; total direct costs of \$750,000 have been set aside for the initial year's funding. Although this program is provided for in the financial plans of the NCI, the award of Cooperative Agreements pursuant to this RFA is contingent on the availability of funds appropriated for fiscal year 1989.

This RFA is a one-time solicitation with a specified deadline of January 16, 1989, for receipt of applications.

The RFA label available in the 9/86 revision of Application Form 398 must be affixed to the bottom of the face page. Failure to use this label could result in delayed processing of your application such that it may not reach the review committee in time for review.

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

Doris Balinsky, Ph.D.  
Program Director for Biochemistry and Immunodiagnosis  
Division of Cancer Biology and Diagnosis  
National Cancer Institute  
Room 10A10, Westwood Building  
5333 Westbard Avenue  
Bethesda, Maryland 20892  
Telephone: (301) 496-1591

Inquiries concerning this RFA are encouraged and should be directed to Dr. Balinsky at the above address or telephone number.

This program is described in the catalog of Federal Domestic Assistance no 13.394, Cancer Detection and Diagnosis Research. Awards are under authorization of the Public Health Service Act, Title IV, Part A (Public Law 78-410 as amended: 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

#### SEXUALLY TRANSMITTED DISEASES RESEARCH UNITS

RFA AVAILABLE: 88-AI-14

P.T. 34; K.W. 0715220, 1002027, 0785035, 0785055, 0710030

National Institute of Allergy and Infectious Diseases

Application Receipt Date: November 28, 1988

#### BACKGROUND INFORMATION

The National Institute of Allergy and Infectious Diseases (NIAID) invites applications for program project grants to be initiated during FY 1989 for a continuing program of research on the spectrum of Sexually Transmitted Diseases (STD).

#### RESEARCH GOALS AND SCOPE

The goal of the program is to encourage investigators to undertake research that will provide the clinical, behavioral, epidemiological and microbiological information needed for the eventual control of sexually

transmitted diseases. The NIAID wishes to broaden the scope of its program of research in this area so that the knowledge gained may be applied to improvement in the means of prevention, diagnosis, and therapy of these infections.

As one means of achieving the stated goals, the NIAID proposes to maintain support of a number of STD Research Units. These units are funded as program project grants, function as centers of excellence in STD research and serve as foci for research and training. The research to be considered for emphasis in this program can be on any or on all of the STDs that are currently recognized as significant public health problems with the exception of ectoparasites. A strong clinical component should be a major part of the program project application. Several distinguishing characteristics that must be considered in developing these applications for STD Research Units and the specific areas of research being encouraged are detailed in the full RFA.

Only institutions with demonstrated strong ongoing research programs and resources that can focus on a multidisciplinary and multifaceted team effort to study STD infections in depth will be considered for program project support under the provisions of this program.

#### MECHANISM OF SUPPORT

**Eligibility:** Domestic universities, medical colleges, hospitals, laboratories and other public or private research institutions, including state and local governmental units, are eligible.

**Length of Support:** The project can be supported up to a maximum of five years without additional competition contingent upon availability of funds.

**Expected Number of Awards:** Competition is open for two or three program projects in STD research. Two currently funded STD Research Units may be competing for renewal of their support. Support for each STD Research Unit is estimated at \$450,000 per year, direct costs.

#### APPLICATION PROCEDURES

All applications in response to this RFA must be submitted on Application Form 398 Rev. 9/86. On line 2 of the application form, insert the title of this RFA "Sexually Transmitted Diseases Research Units" and the RFA number 88-AI-14. The RFA label contained in the application kit must be affixed to the bottom of the face page. Failure to use this label could result in delayed processing of your application such that it may not reach the review committee in time for review.

All inquiries and requests for the full text of this RFA should be directed to:

William P. Allen, Ph.D., Chief  
Bacteriology and Virology Branch  
NIAID, NIH, WB-738  
Bethesda, Maryland 20892  
Telephone: (301) 496-7728

Interested investigators are requested to submit a letter of intent or call by September 30, 1988 the Institute contact person. The letter of intent should include a descriptive title, the principal investigators and the individual subprojects under consideration for the program project. The letter of intent is not binding and is not a requirement.

#### BEHAVIORAL RESEARCH ON THE USE OF CONDOMS TO PREVENT AIDS

RFA AVAILABLE: 88-HD-16

P.T. 34; K.W. 0404000, 0715120, 0745055

National Institute of Child Health and Human Development

Application Receipt Date: January 16, 1989

#### BACKGROUND INFORMATION

The Center for Population Research (CPR) of the National Institute of Child Health and Human Development (NICHD) invites scientists to submit grant applications for the support of research on behavioral aspects of condom use. CPR comprises four branches which support research on all aspects of contraception and related behaviors. Applications submitted in response to this announcement will be assigned to the most appropriate branch within the center.



The purpose of this RFA is to solicit research on factors affecting the use of condoms. Findings should be useful in efforts to encourage the use of condoms among groups for whom this method is appropriate and to modify the characteristics of condoms and the ways in which they are made available in order to increase their use among people who should be using them to prevent infection.

#### RESEARCH GOALS AND SCOPE

Proposed research should include one or both of two general approaches: (1) to collect and analyze the experiences and perceptions of men and women who have used condoms and (2) to collect and analyze the attitudes of those who have not used condoms. Both positive and negative features of condoms should be considered. These include awareness of condoms through friends, advertising, or other means; their availability in stores, vending machines or clinics; their cost; any embarrassment during purchase; difficulty in unwrapping them in the situations in which they are used; ease of transport in pocket or purse; ease of application; real or perceived effectiveness in preventing pregnancy and sexually transmitted disease; and enhancement or reduction of pleasure. In addition, research is needed relating to different kinds of condoms: with or without lubricant; whether spermicides are included in the lubricant; whether or not contoured, textured, or colored; whether fitted with reservoir tip; varying degrees of thickness, length, and circumference; whether supplied with applicator; and any other features that the investigators may consider relevant to effective and consistent use.

These experiences and perceptions should be related to the social, economic, psychological, and, where relevant, physiological characteristics of the respondents and their partners. Attention should be given to the experience and perceptions of men and women who have used condoms, but no longer do so, as well as current users. Proposed research should determine whether condoms are used intermittently and the reasons for omitting use. If other methods are used in addition to condoms, research should determine whether they are used in combination with condoms or separately.

Condom use should also be related to the various kinds of sexual activity in which the respondent engages, their duration and frequency, whether they are associated with alcohol or drug use, and to the nature of the relationship with partners. Special attention should be given to the circumstances under which condoms break or leak.

The populations proposed for study should include members of groups for whom condom use is essential for preventing the spread of AIDS and other sexually transmitted diseases. These groups include young sexually active men and women, male homosexuals, prostitutes and their clients, intravenous drug users and their sexual partners, and any other groups identified by the investigator as being at high risk of sexually transmitted diseases. In addition, studies may include men and women in monogamous relationships, whether married or not, if their experience and perceptions are considered to be valuable in identifying factors affecting the use of condoms. It is not necessary for samples to be national in scope, but they should represent carefully defined populations in specific localities so that the findings of research can be considered applicable to one or more high-risk groups.

#### MECHANISM OF SUPPORT

The support mechanism for this program is the individual research project grant. Although this solicitation is included in the plans for Fiscal Year 1989, the support of grants to be awarded as a result of this RFA is contingent upon the receipt of funds for this purpose. It is anticipated that four to six grants will be awarded, depending on the overall merit of the applications and the availability of funds. After projects are underway, meetings will be held to foster the sharing of work in progress. Principal and co-investigators will be encouraged to attend these meetings; funds should be included in the budget for one two-day meeting per year in Bethesda, Maryland to discuss the research with other investigators. The current policies and requirements that govern the research grant programs of NIH will prevail (Code of Federal Regulations, Title 42, Part 52 and Title 45, Part 74).

#### REVIEW PROCEDURES AND CRITERIA

NICHD staff will review applications for responsiveness to the RFA; those judged to be nonresponsive will be returned. The applicant may resubmit the application and have it assigned for review in the same manner as unsolicited grant applications during the next review cycle. An application will be considered nonresponsive to this RFA if it is identical to one already submitted to the NIH for review, unless the previous application is withdrawn.

Responsive applications will be reviewed within six months of receipt. They may be subjected to triage by a peer-review group to determine their scientific merit relative to the other applications received in response to this RFA. NIH will withdraw from competition those applications judged to be noncompetitive and notify the applicant and institutional business official. Those applications judged to be competitive will be further evaluated for scientific merit by a review panel convened solely for this purpose by the Scientific Review Program, NICHD. Criteria for the initial review include the significance and originality of research goals and approaches; the feasibility of research and adequacy of the experimental design; the research experience and competence of the investigator(s) to conduct the proposed work; the adequacy of investigator(s) effort devoted to the project; and the appropriateness of the project duration and cost relative to the work proposed. Following review by the Initial Review Group, applications will be evaluated by the Institute's Advisory Council for program relevance and policy issues before awards are made. After scientific review, NIMH and other Institutes may participate in funding meritorious applications received in response to this RFA. The anticipated award date is July 1, 1989.

#### METHOD OF APPLYING

Applications should be submitted on Form PHS 398 (revised 9/86) which is available in most institutional business offices or from the Division of Research Grants, NIH (301/496-7441). Applications should be identified by checking the "yes" box in Item No. 2 on the face page of the application and by typing in the words, "In Response to RFA 88-HD-16." The RFA label available in Form 398 must be affixed to the bottom of the face page of the original application. The signed original (topmost) and four (4) copies of the application must be received by January 15, 1989. Late applications will not be accepted. Applications should be sent or delivered to:

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

It is extremely important for the timely review of your application that two (2) additional copies be sent under separate cover to:

Laurance S. Johnston, Ph.D.  
Deputy Director, Scientific Review Program  
National Institute of Child Health and Human Development  
Executive Plaza North, Room 520  
6130 Executive Boulevard  
Bethesda, Maryland 20892

Inquiries regarding this announcement may be directed to:

Arthur A. Campbell  
Deputy Director, Center for Population Research  
National Institute of Child Health and Human Development  
Executive Plaza North, Room 604  
6130 Executive Boulevard  
Bethesda, Maryland 20892  
Telephone: (301) 496-1101

This program is described in the Catalog of Federal Domestic Assistance No. 13.864, Population Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS Grant Policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order No. 12372 or to Health Systems Agency review.

#### ONGOING PROGRAM ANNOUNCEMENTS

##### TYPE II OSTEOPOROSIS

P.T. 34; K.W. 0705050, 0715135

National Institute on Aging  
National Institute of Arthritis and Musculoskeletal and Skin Diseases

## BACKGROUND

Osteoporosis and associated fractures constitute a major public health problem affecting more than 20 million Americans. Osteoporosis can be defined as an absolute decrease in the amount of bone, leading to fractures after minimal trauma. While women are disproportionately vulnerable to this debilitating disease, both men and women lose bone mineral with age and are at increasing risk for fracture as they grow older. One third of women over 65 years of age will suffer vertebral fractures. By age ninety, one third of the women and approximately 17 percent of the men will have experienced a hip fracture.

Although the fundamental pathogenesis of osteoporosis remains unclear, clinical evidence suggests that there are two types of the syndrome. Type I, which occurs mainly in women within 15 to 20 years after menopause, is manifested by vertebral crush fracture and Colles' fracture of the distal forearm. Type II osteoporosis occurs in both men and women over the age of 70 and is associated mainly with hip, pelvic, proximal femur, and wedge type vertebral fractures.

Clinically, type I and II are not readily distinguishable and both often occur in the same patient. However, there are a number of characteristics which help to distinguish them. Type I osteoporosis is associated with excessive and disproportionate loss of trabecular bone, but the rate of cortical-bone loss is only slightly above usual age-related rates. It is also closely related to factors associated with menopause, and the most effective method to date of reducing postmenopausal bone loss is estrogen therapy.

In the type II form of osteoporosis, bone loss is proportionate for both cortical and trabecular bone and is only slightly greater for patients with fracture than for the remainder of the aging population. As bone is lost, increasing numbers of older people have bone densities that fall below the fracture threshold. Age-related risk factors include decreased osteoblast function and impaired 1,25(OH)<sub>2</sub>D, leading to decreased calcium absorption and secondary hyperparathyroidism. At present, there is no established universally effective therapy for type II osteoporosis.

## GOALS AND SCOPE

Much recent osteoporosis research has been directed toward the postmenopausal, type I form. Both epidemiologic and clinical findings suggest that type II and type I osteoporosis may be related but they are not identical. The goal of this announcement is to encourage research to determine whether these two syndromes of osteoporosis have different etiologic mechanisms and to develop theories of pathogenesis which can lead to the prediction, prevention, and treatment of type II osteoporosis. This research lends itself to interdisciplinary collaboration in the areas of cell biology, biochemistry, endocrinology, physiology, biophysics, epidemiology, and aging. The NIA/NIAMS encourages collaborative proposals from experimental gerontologists, geriatricians, bone endocrinologists and related biomedical researchers.

The NIH urges applicants for grants to give added attention (where feasible and appropriate) to the inclusion of minority groups and/or women in the study populations for research.

## SPECIFIC OBJECTIVES

The NIA/NIAMS invite grant applications to test hypotheses and elucidate mechanisms including, but not limited to, the following general areas:

Etiologic mechanisms underlying type II osteoporosis in men and women. Suspected factors include parathyroid function, calcium absorption, vitamin D metabolism, bone remodeling, prostaglandin and growth factor activity, and osteoblast function.

The role of age-related changes in bone biochemistry, bone turnover, bone cells, endocrine function, mineral absorption, and other aging changes in contributing to age-related bone loss in men and women.

Improved techniques for measuring bone density and bone strength, and their validation in old and very old persons.

Epidemiologic studies designed to determine risk factors for type II osteoporosis in men and women. Longitudinal studies are particularly encouraged. Incidence and prevalence studies among races and ethnic groups which may offer mechanistic explanations of type II osteoporosis are also encouraged.

Interventions that may prevent or retard age-related osteoporosis in men and women including exercise, diet, drug and/or hormonal therapy as well as other factors that are linked to type II disease.

#### MECHANISMS OF RESEARCH SUPPORT

The primary mechanisms for support of this program are:

Research Project Grant (R01)

FIRST Award (R29)

Career grants, which include:

Special Emphasis Research Career Award (K01) in  
Nutritional and Metabolic Factors in Aging  
Research Career Development Award (K04)  
Clinical Investigator Award (K08)  
Academic Award (K08)

#### REVIEW PROCEDURES

Applications will be evaluated in accordance with the usual NIH peer review procedures, based on scientific merit. Following study section review, the applications will be evaluated by the National Advisory Council on Aging and the National Arthritis and Musculoskeletal and Skin Diseases Advisory Council. Awards will be based on available funds.

#### METHOD OF APPLYING

Applications should be submitted on the PHS 398 (Revised 9/86) application form. Application deadlines are February 1, June 1, or October 1. Under item 2, on the face page of the application, Response To Specific Program Announcement, type NIA/NIAMS, TYPE II (AGE-RELATED) OSTEOPOROSIS. If your institution does not have NIH research grant application kits, copies may be obtained by writing:

Office of Grant Inquiries  
Division of Research Grants  
National Institutes of Health  
Westwood Building, Room 449  
Bethesda, Maryland 20892  
Telephone: (301) 496-7441

Forward the original + 6 copies of the completed application to:

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

#### INQUIRIES AND CORRESPONDENCE

Potential applicants interested in obtaining further information may call:

Ann W. Sorenson, Ph.D.  
Osteoporosis and Rheumatology Program Director  
National Institute on Aging  
Bethesda, Maryland 20892  
Telephone: (301) 496-1033

Stephen L. Gordon, Ph.D.  
Musculoskeletal Diseases Program Director  
National Institute of Arthritis and  
Musculoskeletal and Skin Diseases  
Westwood Building, Room 405  
Bethesda, Maryland 20892  
Telephone: (301) 496-7326

ERRATUM

RESEARCH ON AIDS AND THE AMERICAN TEENAGER

RFA: 88-HD-13

P.T. 34, AA; K.W. 0715120, 0411005, 0750020, 0404000

National Institute of Child Health and Human Development

Correction to RFA-88-HD-13, RESEARCH ON AIDS AND THE AMERICAN TEENAGER, NIH Guide for Grants and Contracts, Vol. 17, No. 26, August 12, 1988. Sentence 1 of Paragraph 1 under IV. REVIEW PROCEDURES AND CRITERIA should read as follows:

Applications submitted in response to this RFA will be reviewed for scientific merit by an initial review group (IRG) which will be convened by the Scientific Review Program of the National Institute of Child Health and Human Development (NICHD) to review only these applications.