NIH Guide
for Grants and Contracts

U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES

Vol. 14, No. 13, December 6, 1985

IN THIS ISSUE:

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

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

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

NOTICE

Change in Receipt Date - Requests for Applications

NATIONAL CANCER INSTITUTE

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

85-CA-20 - Basic Studies on the Development and Assessment of Retroviral Vaccines

P.T. 34; K.W. 0740075, 10020445, 0710070, 0760080, 0715125, 0755020

85-CA-21 -Studies on Novel Human Exogenous and Endogenous Retroviruses

P.T. 34; K.W. 1002045, 0755035, 0780020, 0755045, 1002008, 0760015, 0760020

As noted in the flyer enclosed with the September 13, 1985 issue, a printing delay resulted in extremely late mailing of the NIH Guide for Grants and Contracts, Vol. 14, No. 10. Because the delay was even greater than originally believed, the National Cancer Institute and the National Institute of Allergy and Infectious Diseases are extending the receipt date for the two RFAs identified above. The new date is January 10, 1986.

NOTICE

NIH/FDA REGIONAL WORKSHOP - PROTECTION OF HUMAN SUBJECTS

P.T. 42; K.W. 0783005

NATIONAL INSTITUTES OF HEALTH

The National Institutes of Health (NIH) and the Food and Drug Administration (FDA) are continuing to sponsor a series of workshops on responsibilities of researchers, Institutional Review Boards (IRBs), and institutional officials for the protection of human subjects in biomedical and behavioral research. This particular workshop will be an intensive one-day workshop on IRB functions and responsibilities. The workshop will focus on selected case studies, illustrating representative problems of interpreting and applying the human subjects regulations. Participants will serve as IRB members in "mock IRB" meetings and compare strategies and solutions to issues raised by the cases. Enrollment will be restricted to 35-40 participants. Written materials will be supplied in advance to participants.

Date	Location	Contact
March 11, 1985	Little Rock, AR	Ms. Kathleen Masterson University of Arkansas Med. Center 4301 W. Markham Mail Slot 636 Little Rock, AR 77205 (501) 661-5502

A final list of dates and locations will be published at a later date. For specific program and registration information, contact:

Roberta H. Garfinkle
Office for Protection from Research Risks
National Institutes of Health
Building 31 - Room 4B09
9000 Rockville Pike
Bethesda, Maryland 20892

NOTICE

NATIONAL INSTITUTES OF HEALTH REGIONAL WORKSHOPS ON THE HUMANE CARE AND USE OF LABORATORY ANIMALS BY AWARDEE INSTITUTIONS

P.T. 42; K.W. 0201011, 1014003

The National Institutes of Health (NIH), Office for Protection from Research Risks (OPRR) is continuing to sponsor a series of workshops on implementing the revised "Public Health Service Policy on the Humane Care and Use of Laboratory Animals by Awardee Institutions" and the NIH Guide for the Care and Use of Laboratory Animals. The workshops are open to institutional administrators, animal care committee members, laboratory animal veterinarians, investigators, and others who share in responsibility for sound management of humane animal research. The current schedule includes:

Date	Location	Contact
March 12, 1986	Little Rock, AR	Ms. Kathleen Masterson Univ. of Arkansas Med. Ctr. 4301 W. Markham Mail Slot 636 Little Rock, AR 77205 (501) 661-5502
April 4, 1986	Boston, MA	Mrs. Virginia B. Werwath Harvard Medical Sch., NERPRC One Pine Hill Drive Southborough, MA 01772 (617) 481-0400 Ext 202

Additional workshops will be announced later. For further information regarding education programs contact:

Roberta H. Garfinkle
Education Program Coordinator
Office for Protection from Research Risks
National Institutes of Health
Building 31 - Room 4B09
9000 Rockville Pike
Bethesda, Maryland 20892

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

FDA-OP-86-1

CLINICAL STUDIES OF SAFETY AND EFFECTIVENESS OF ORPHAN PRODUCTS

P.T. 34; K.W. 0710100, 0755015

FOOD AND DRUG ADMINISTRATION

Application Receipt Date: January 21, 1986
(or 60 days after date of publication in Federal Register,
whichever is later)
(Please contact program office for date)

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of funds for Fiscal Year 1986 for awarding grants to support clinical trials on safety and effectiveness of orphan products. FDA has funds to award approximately 20 to 30 grants ranging from $20,000 to $70,000. The agency will consider grants greater than $70,000 if they extend over a 2- or 3-year period.

I. BACKGROUND

FDA has established an Office for Orphan Products Development to identify and facilitate the availability of orphan products. Orphan products are drugs, biologics, medical devices (including in vitro diagnostics), foods for medical purposes, and veterinary products that may be useful in an uncommon or common disease but lack committed commercial sponsorship because they are not considered commercially attractive for marketing. A subcategory of orphan products are those marketed products for which there is evidence suggesting usefulness in an uncommon, serious disease but which are not labeled for that disease because substantial evidence is lacking. One way to make orphan products more easily available is to support research to determine whether the products are safe and effective. FDA has allocated funds to support such research.

II. RESEARCH GOALS AND OBJECTIVES

A. Clinical Studies: FDA will consider only clinical studies for determining whether the products are safe and effective for premarket approval under the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), including the addition of new uses to marketed drugs. Ordinarily, there should already be available at least some preliminary clinical research suggesting effectiveness and relative safety. FDA will also consider applications where persuasive pharmacologic evidence is available that a product has a reasonable possibility of being effective even though no clinical trials have yet been performed. All studies subject to requirements for clinical investigations under the Federal Food, Drug, and Cosmetic Act are to be conducted in accordance with those requirements in addition to the requirements of the request for application (RFA).

Because funds are relatively limited, FDA cannot consider large research projects involving many subjects (human, or animal in the case of a veterinary drug) and long-term followup. The typical study considered for support may involve up to several dozen subjects, will be well-controlled and directed to providing substantial evidence of the product's safety and effectiveness. Pharmacokinetic studies will also be considered if they are necessary to determine safe and effective doses in subjects with serious organ disease that might affect drug disposition. FDA will consider pharmacokinetic studies, however, only if they are part of studies for determining effectiveness of a drug or are proposed as desirable information to obtain for drugs that already have a significant amount of evidence showing effectiveness. In designing a well-controlled study, the investigator should keep in mind that historical controls or use of the subject as his or her own control is generally less desirable and reliable than active control or, when ethical, placebo controls. In the case of veterinary products, research studies should be directed to the following area only: an orphan drug would be one for the prevention or mitigation of a serious zoonotic disease in humans by its prophylactic or therapeutic use in animals.

Each investigator submitting a grant application for a proposed human or veterinary orphan use in response to this RFA must include a short statement explaining why the proposed product meets the objectives of the orphan products development program as described above. This statement should be in the application under Section 2--"Significance."

B. Statistical Support: Statistical expertise is helpful in the planning, design, execution, and analysis of clinical investigations and clinical pharmacology to ensure the validity of estimates of safety and efficacy obtained from human studies. Applicants will be expected to provide a statistical basis for the number of patients chosen for the trial based upon the proposed outcome measures. Applicants should also document the appropriateness of the statistical procedures to be used in analysis of the results.

C. Journal References: Published reports are necessary and often times critical for the review process and can help to support the investigator's research intent. Applicants will be expected to include copies of reprints of the references necessary and critical for the review.

III. SUBMISSION REQUIREMENTS

(Please submit original set and six copies.)

1. Completed Form PHS 398, "Application for Public Health Service Grant." Please include a brief statement (rationale) of why the proposed product meets the objectives of the orphan products grants program. This statement should be part of "Significance" section of Section 2 - Research Plan.

2. Copies of all reprints critical to the review process should accompany the original and each copy of the grant application.

3. Completed Form HHS 596, "Protection of Human Subjects," Assurance/Certification/Declaration (Part of Form PHS 398).

4. Human Subject Consent Forms and/or Assent Form(s). If a study involves both adults and children, separate consent forms should be provided for the adults and the parents or guardians of the children. See 45 CFR 46.116 or 21 CFR 50.25 for elements of informed consent.

Important Note: Application forms are available from contract and grants business offices at most academic and research institutions. The above requirements are to be mailed to the FDA. Do not use the NIH mailing label at end of application kit.

IV. LETTER OF INTENT

Prospective applicants are requested to submit a brief letter of intent to submit an application which should include a brief synopsis of the research plan. The letter is to be submitted to Benjamin P. Lewis (address below).

V. STAFF CONTACT

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

Kathryn McKnight
State Contracts and Assistance Agreements
Branch (HFA-520)
Food and Drug Administration - Room 15A-17
5600 Fishers Lane
Rockville, Maryland 20857

Telephone: (301) 443-6170

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

Benjamin P. Lewis
Health Scientist Administrator
Office of Orphan Products Development (HF-35)
Food and Drug Administration - Room 12A40
5600 Fishers Lane
Rockville, Maryland 20857

Telephone: (301) 443-4903

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

86-CA-02

CANCER CONTROL SMALL GRANTS RESEARCH PROGRAM

P.T. 34; K.W. 0715035, 0403004, 0745005, 0745020, 0745035, 0745055, 0785055

NATIONAL CANCER INSTITUTE

Application Receipt Date: February 21, 1986

The Division of Cancer Prevention and Control (DCPC) of the National Cancer Institute (NCI) invites Small Grants Research applications from interested investigators who meet the eligibility criteria noted below. This RFA is a modified reissuance of RFA 84-CA-07 and 85-CA-05.

I. RESEARCH GOALS AND SCOPE

A Cancer Control Small Grants Research Award is designed to encourage scientists from a variety of academic disciplines to apply their skills to scientific investigations in the field of human cancer control intervention research.

A. Definition and Phases of Cancer Control

Cancer control is defined as the reduction of cancer incidence, morbidity, and mortality through an orderly sequence from research on interventions and their impact in defined populations to the broad, systematic application of the research results.

Cancer control research studies are classified into one of five phases which represent the orderly progression noted in the above definition: (I) hypothesis development; (II) methods development and testing; (III) controlled intervention trials to establish cause and effect relationships; (IV) research in defined, human populations; and (V) demonstration and implementation studies. The Division is primarily interested in research on cancer control interventions in Phases II through V.

B. Program Areas

Cancer Control Program areas appropriate for research grants include human intervention research in the following areas:

- prevention (chemoprevention, diet and nutrition, occupation and early detection)

- community oncology (improving application of patient management and continuing care research advances in community settings)

- health promotion sciences (modifying personal, social and lifestyle and health care system factors which contribute to cancer prevention and control)

- smoking prevention and cessation

- cancer control operations research and evaluation

- control applications research (adaption of state and local health agency agency data bases for cancer control planning and evaluation; feasibility testing of interventions in community settings)

- applied epidemiology (using epidemiologic methods to determine the association between exposure to an intervention and its impact on disease)

- epidemiologic, planning and survey studies aimed at developing cancer control interventions

C. Exclusions: Animal studies and studies to determine the efficacy of chemotherapy, surgery, radiotherapy, and other primary treatment interventions are not considered cancer control research under this RFA.

II. ELIGIBILITY

Investigators are eligible to apply for a small grant to support research on a cancer control topic if they are interested in conducting exploratory studies in cancer control research. This includes established researchers from other disciplines, new investigators, and investigators currently enrolled in an accredited doctoral degree program. The only exclusions are those individuals who have been a Principal (or Co-Principal) Investigator on an NCI funded cancer control grant or contract, or a paid staff member on an NCI funded cancer control grant or contract for more than two years. Dissertation research proposals are acceptable as specified in the RFA.

III. MECHANISMS OF SUPPORT

Awards will be made as research grants. Total costs (direct plus indirect costs) must not exceed $35,000. The duration of support is one year but may be longer (up to two years) if the funding limits noted above are not exceeded. The direct costs for dissertation research should not exceed $15,000.

IV. INQUIRIES

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

Carlos E. Caban, Ph.D.
Program Director for Cancer Control Research
Cancer Control Science Program
Division of Cancer Prevention and Control
National Cancer Institute
Blair Building - Room 4A01
Bethesda, Maryland 20892-4200
Telephone: (301) 427-8735

David C. Postkanzer, M.D.
Cancer Control Science Program
Division of Cancer Prevention and Control
National Cancer Institute
Blair Building - Room 4A01
Bethesda, Maryland 20892-4200

Telephone: (301) 427-8788

Prospective applicants are strongly encouraged to discuss their ideas with the Program Director to determine whether they fit within the definition and program guidelines of cancer control. APPLICATIONS WHICH, IN THE OPINION OF NCI STAFF, DO NOT FIT WITHIN THE GUIDELINES WILL BE RETURNED WITHOUT REVIEW.

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

86-CA-04

INTERVENTIONS TO IMPROVE THE QUALITY OF SURVIVAL FOR RECOVERED CHILDHOOD CANCER PATIENTS

P.T. 34; K.W. 0415000, 0715035, 0785170, 0414014

NATIONAL CANCER INSTITUTE

Letter of Intent Receipt Date:	January 15, 1986
Application Receipt Date:	March 15, 1986
Start Date:	January 1, 1987

I. BACKGROUND

The Division of Cancer Prevention and Control (DCPC) of the National Cancer Institute (NCI) announces the availability of a Request for Applications for research projects to develop, implement, and evaluate interventions to address long-term morbidity among survivors of pedihood cancers offer encouraging survival statistics, numerous deleterious physical and psychosocial sequelae have been documented. This RFA encourages research that focuses on approaches to preventing, reversing, or remediating negative outcomes in this population.

This RFA announcement is for a single competition with a specified deadline of March 15, 1986 for receipt of applications.

II. MECHANISM OF SUPPORT

Awards are provided to non-profit organizations and institutions, governments, and their agencies, for-profit organizations, and occasionally to individuals when deemed by the PHS to be consistent with legislative intent and program purposes. Given the relatively small numbers of pediatric oncology survivors, multi-institutional ventures involving groups of researchers, e.g., consortia, may be advantageous in many projects.

NCI plans to support up to two awards under this RFA. Up to a five-year period of support is provided for, with costs for both projects totaling up to $400,000 for the first year, dependent upon the availability of funds.

III. STAFF CONTACT

Direct all inquiries and requests for the full text of the RFA to:

Carolyn Cook Gotay, Ph.D.
Community Oncology and Rehabilitation Branch
Division of Cancer Prevention and Control
National Cancer Institute
Blair Building - Room 7A05
Bethesda, Maryland 20892-4200

Telephone: (301) 427-8708

A more detailed RFA is available upon request from the Institute contact. A letter of intent, while not mandatory, is strongly suggested and should be forwarded to the Institute no later than January 15, 1986. A letter of intent is not binding or a necessary requirement for application, and it will not enter into the review of any application subsequently submitted.

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR COOPERATIVE AGREEMENT: RFA

86-CA-05

NATIONAL COOPERATIVE DRUG DISCOVERY GROUPS FOR TREATMENT OF ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

P.T. 34; K.W. 0715120, 0715125, 0415000, 1002045, 1002008, 0710070, 1003002, 0710080, 1003012, 0710100

NATIONAL CANCER INSTITUTE

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

RFA Availability Date	December 6, 1985
Letter of Intent Receipt Date	January 15, 1986
Application Receipt Date	March 10, 1986

The National Cancer Institute (NCI) and the National Institute of Allergy and Infectious Diseases (NIAID) jointly announce availability of an RFA for funding of National Cooperative Drug Discovery Groups for Treatment of Acquired Immune Deficiency Syndrome (NCDDG/AIDS). The RFA (available on request) invites applications aimed at the preclinical discovery of effective and curative treatment of AIDS. Scientific approaches to the discovery of effective anti-AIDS treatment appropriate to the RFA may range from interference with infecting virus replication or function to the maintenance or restoration of immune responses. Applications directed to vaccine development or treatment of AIDS-associated diseases (lymphoma, Kaposi's sarcoma, opportunistic infections, etc.) are not invited. Otherwise, scientific approaches to the discovery of effective treatment appropriate to the RFA are broad and limited only by the creativity and ability of the applying group to exploit leads from basic studies in virology, molecular biology, immunology, biochemistry, medicinal and organic chemistry, and pharmacology.

Each NCDDG/AIDS will be assembled by the Principal Investigator to form a multidisciplinary consortium of the various skills needed to successfully design, synthesize, and evaluate, preclinically, treatment entities and strategies for the treatment and cure of AIDS. Inasmuch as it is unlikely that all of the outstanding talents required to exploit fundamental leads from various scientific disciplines will be found in a single institution, each Group is envisioned as being multi-institutional as well. Thus,

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This program is described in the Catalog of Federal Domestic Assistance No. 13.395, Cancer Treatment Research. Awards will be made under the authority of the Public Health Service Act, Title IV, Part A (Public Law 78-410, as amended, 42 USC 241, and 42 USC 282) and administered under PHS grant policies and Federal Regulation 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.

each NCDDG/AIDS will be assembled by the principal investigator and will consist of a number of Laboratory Programs representing the scientific disciplines required to attain the Group's goal and objectives. The various Laboratory Programs, including that of the principal investigator, may be mobilized from academia, research institutions, or industry. It is expected that the rationale for design of potential treatments, their synthesis, and the preclinical models for their evaluation will originate within the Group and be based on leads from their own and others' fundamental research. Specifically excluded from the Group's activities are activities related to clinical introduction of a new agent; i.e., bulk synthesis and formulation, animal toxicology, and performance of clinical pharmacology and trials.

Awards will be made as Cooperative Agreements. Assistance via Cooperative Agreement differs from the research grant in that the Government component (in this instance, NCI and NIAID) awarding the Cooperative Agreement anticipates substantial involvement during performance. The nature of NCI/NIAID staff participation is described in the RFA. However, the applying Group must define its objectives in accord with its own interests and perceptions of approaches to curative anti-AIDS treatment.

The proposed applicant institution will be responsible for the Group's application. Awards will be made to the Group as a whole and not to individual Laboratory Programs within the Group. The principal investigator's institution will provide a Central Operations Office for the Group. The applicant institution will be responsible for the performance of the entire Group and will be accountable for the funds awarded. The participation of the Government through the NCI/NIAID extramural staff is aimed at facilitating a concerted effort by the Group by making available to the Group biological materials for testing, appropriate existing data bases, and appropriate ancillary testing under existing contracts. The interaction of academic and non-profit research institutions with commercial organizations and Government is expected to favor efficient invention of anti-AIDS treatment and will facilitate their subsequent development to clinical trial.

NCI/NIAID hope to make four to six awards for project periods of five years and have set aside $3,000,000 total costs ($1,500,000 from NCI and $1,500,000 from NIAID) for the initial year's funding.

This RFA is available from:

Dr. John M. Venditti
NCDDG Program Director
Landow Building - Room 5C03
National Cancer Institute
Bethesda, Maryland 20892

Telephone: (301) 496-8752

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

86-HL-11-L

HYPO- AND HYPERBARIC RESEARCH SUPPORT FACILITIES

P.T. 34; K.W. 0705015, 0705065, 0706040

DIVISION OF LUNG DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 1, 1986

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

This program will provide core support for laboratories with existing facilities for hypobaric and hyperbaric research in humans and/or vertebrate animals and an active, peer reviewed research program to expand our knowledge of man's heart, lung or blood function at simulated altitude and/or depth; peer reviewed studies into both hyperbaric and hypobaric aspects of heart, lung, or blood function must be funded at the time of the award.

A letter of intent is requested by February 1, 1986, and the deadline for receipt of applications is April 1, 1986. The earliest award date for successful applications will be in September 1986. Requests for copies of this RFA should be addressed to:

Everett E. Sinnett, Ph.D.
Structure & Function Branch
Division of Lung Diseases, NHLBI
5333 Westbard Avenue - Room 6A07
Bethesda, Maryland 20892

Telephone: (301) 496-7171

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

86-AG-01

MECHANISMS RESPONSIBLE FOR AGE-RELATED INCREASE IN BLOOD PRESSURE

P.T. 34; K.W. 0715115, 0785055, 0710095, 0710100, 1002034, 0785050, 1002019, 0710010, 0755030

NATIONAL INSTITUTE ON AGING

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 16, 1986

The National Institute on Aging (NIA) and the Division of Heart and Vascular Diseases (DHVD), National Heart, Lung, and Blood Institute (NHLBI) announce the availability of a request for applications (RFA) on the above program.

The proposed program "Mechanisms Responsible for Age-Related Increase in Blood Pressure" will provide support for research project grants for a period of up to five years after which it is anticipated that the grantees will continue to compete through regular support mechanisms. The number of grants awarded will vary according to available funds. Each application should focus on investigations seeking to elucidate mechanisms of blood pressure regulation which account for age-related increases in blood pressure associated with industrialized societies. Both human and animal studies are welcome. Among the disciplines and skills appropriate for this research program are those of basic and clinical sciences such as epidemiology, nutrition, biochemistry, pharmacology, physiology, pathology, endocrinology, genetics, gerontology, and behavioral sciences.

Requests for copies of the RFA should be addressed to:

Lot B. Page, M.D.
National Institute on Aging
Building 31 - Room 5C21
9000 Rockville Pike
Bethesda, Maryland 20892

Telephone:
(301) 496-1033

or

John B. Dunbar, Dr. P.H.
Hypertension and Kidney Diseases Branch
National Heart, Lung, & Blood Institute
Federal Building - Room 4C12
Bethesda, Maryland 20892

(301) 496-1857

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

86-HL-15-L

MINORITY SUMMER PROGRAM IN PULMONARY RESEARCH

P.T. 34, FF; K.W. 0715165

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: August 1, 1986

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

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

Requests for copies of the RFA should be addressed to:

Research Training Program
Division of Lung Diseases
National Heart, Lung, and Blood Institute
Westwood Building - Room 640
Bethesda, Maryland 20892

Telephone: (301) 496-7668

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATION: (RFA)

86-HL-07-B

COMPREHENSIVE SICKLE CELL CENTERS

P.T. 04; K.W. 0715040, 0750010, 0745020, 0502017, 0403004, 0710030, 0785035

DIVISION OF BLOOD DISEASES AND RESOURCES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: September 15, 1986

The Sickle Cell Disease Branch, Division of Blood Diseases and Resources, National Heart, Lung, and Blood Institute, (NHLBI) announces its intent to support on a competitive basis ten Comprehensive Sickle Cell Centers, each capable of a wide range of activities encompassing basic and clinical research as well as demonstration activities in education, diagnosis and counseling services to the community. This announcement reaffirms the interest of the NHLBI in continuing to employ the Center program to extend the "state of the art" of sickle cell disease research, education, diagnosis and counseling, and to exploit the synergistic interaction of these efforts. Copies of the RFA, 86-HL-7-B, may be obtained from staff of the NHLBI.

The purpose of Comprehensive Sickle Cell Centers is to focus resources, facilities and manpower in a coordinated effort to solve problems of high priority related to sickle cell disease. In the setting of a Center, it should be possible to coordinate efforts in fundamental and clinical research, clinical applications, education and demonstration programs and to bring the results from each component promptly to bear on the others.

Request for copies of the RFA should be addressed to:

George B. Riley, Ph.D.
Health Scientist Administrator
Division of Blood Diseases and Resources
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 508A
Bethesda, Maryland 20892

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: RFA

86-DE-01

RESEARCH CENTERS IN ORAL BIOLOGY (RCOB)

P.T. 04; K.W. 0745010, 0710070, 1002027, 1002045, 1002019, 1002006, 0710095, 0710085

NATIONAL INSTITUTE OF DENTAL RESEARCH

Application receipt date December 1, 1986

I. BACKROUND INFORMATION

The National Institute of Dental Research (NIDR) announces the availability of a request for applications (RFA) for the above program. These centers will provide support for multidisciplinary research centers that bring together the diverse resources of an institution to investigate important basic science and related applied problems relevant to oral health and disease.

II. RESEARCH GOALS AND SCOPE

The RCOB program's primary goal is to expand the scientific base which underlies the nation's capability to control oral diseases and disorders and to improve oral health. The full range of biomedical research from basic to clinical may be supported under the RCOB mechanism. Support will be provided for collaborative multidisciplinary studies in basic biomedical research areas and selective applied extensions to problems relevant to the mission of the NIDR. Some examples of basic biomedical science reserch areas which are particularly appropriate for study under the RCOB program include: Immunology; Microbiology/Virology; Genetics, Developmental Biology; Tissue Structure and Function; Tissue Repair and Regeneration; Salivary Glands and Secretions; Nutrition; Neurobiology. Support will not be provided for a RCOB that has as a single focus a categorical or thematic area already targeted by NIDR for center support.

III. DUE DATE AND IDENTIFICATION OF CONTACT POINT

The due date for the receipt of applications is December 1, 1986. Requests for copies of the RFA or for additional information should be directed to:

Dr. Aaron Ganz
Special Assistant for Centers
and Special Programs
National Institute of Dental Research
Extramural Programs
Westwood Building - Room 510
5333 Westbard Avenue
Bethesda, Maryland 20892

Telephone: (301) 496-6324

ANNOUNCEMENT

DISEASE MECHANISMS IN IMMUNOLOGIC RENAL DISEASE

P.T. 34; K.W. 0705040, 0710075, 0785095, 0710065, 0710060, 0765035, 1003002, 1002004, 1002008, 1002019, 0785055, 0755020

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

I. PURPOSE

The National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK) invites qualified investigators to submit research grant applications for the support of investigations to examine the role of the immune system in renal injury by expanding interdisciplinary research efforts that will lead to an elucidation of immunopathogenetic mechanisms and define new avenues showing promise for correcting, treating and/or preventing immunologic renal disease. It is hoped that this announcement will stimulate a sustained growth in the number of applications involving immune mechanisms and mediators of inflammation in renal disease submitted to NIH in the future.

II. DISCIPLINE AND EXPERTISE

The interdisciplinary nature of such renal studies will require collaboration among experts in areas such as the major disciplines of immunology, (cellular immunology, immunogenetics, immunochemistry, immunopathology and immunopharmacology), nephrology, renal physiology and pathophysiology, biochemistry, pathology, molecular/cellular biology, genetics and epidemiology.

III. BACKGROUND

Evidence accumulated during the last few decades implicates immunologic factors in a variety of renal diseases, in particular the glomerulonephritides and interstitial nephropathies. The majority of immunologically-medicated glomerular diseases are associated with deposits of immuno-reactants (e.g. immunoglobulin, complement components) in glomeruli in both primary (e.g., membranoproliferative GN) and systemic (e.g., lupus nephritis) diseases. The immunologic mechanisms thus far defined involve deposition of immune complexes from the circulation or their formation in situ by reaction of circulating antibody with native or "planted" glomerular antigens.

This program is described in the Catalog of Federal Domestic Assistance No. 13.849, Kidney, Urologic, and Hematologic Diseases Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal 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.

These mechanisms appear to constitute the primary pathogenetic forms of mechanisms of immune renal injury, but it is clear that additional secondary mechanisms are involved. The role of mediators such as complement, leukocytes, platelets, prostaglandins, lymphokines, coagulation and toxic oxygen metabolites may be important in determining histologic and clinical expression of immune renal diseases. The influence of immune regulation (antigen-specific and anti-idiotypic) requires further evaluation and integration into overall schemes of immunopathogenesis. The role of cellular immunity in glomerular and interstitial diseases requires further definition. Examples are minimal change GN and the nephritis of systemic vasculitis. Lymphoid cell infiltrates in renal interstitial tissue also suggest that direct cell mediated immune injury may be a component of many forms of nephritis, with or without associated antibody deposition. In addition, the fundamental mechanisms of cell mediated immune responses which underlie the humoral antibody and/or immune complex disturbances of the more common nephropathies require further exploration.

IV. OBJECTIVES AND SCOPE

This solicitation is prompted by a recognized need for an expanded research effort to gain greater insight into the immunopathogenetic mechanisms that may cause renal injury and to define mechanisms for arresting, treating and/or preventing immunologic renal disease.

New methodologies and technologies, such as monoclonal antibodies, cell culture and gene cloning are emerging, which should be exploited in the renal field. Making use of these advances should facilitate investigations in the following areas.

- Investigation of host factors (genetic and immunologic) that predispose to the development of immune complex disease glomerulonephritis and other forms of immune-mediated renal injury; in particular, it is now possible to perform studies that may reveal more significant associations between MHC haplotypes (extended haplotypes) or HLA-D gene products (through restriction endonuclease analyses) than was hitherto possible.

- Studies to define the role of cell-mediated injury in the pathogenesis of glomerulonephritis, such as minimal change disease and certain forms of crescentic glomerulonephritis, and various forms of interstitial nephritis.

- Studies of factors favoring the deposition or in situ formation of immune complexes within the glomerulus.

- Studies designed to identify the antigens involved in presumed immune complex glomerulonephritis; in particular, this by immunization of mice with glomeruli from kidneys with immune complex diseases, and by screening of clones for reactivity with particular forms of glomerulonephritis (membranous, proliferative etc.).

- Devlopment of additional animal models in which cell-mediated injury is demonstrable.

- Studies to better define the role of lymphoid cells (i.e., T suppressor and helper cells, cytotoxic T cells, subsets of B cells, natural killer cells, etc.) which by immunoregulatory imbalance may cause disordered humoral immune responses.

- Development of new markers and new ways of assessing functional activity of lymphoid cells within glomerular or tubulo-interstitial inflammatory infiltrates.

- Studies of cellular and soluble mediators which influence the expression of immunologic renal disease.

- Studies of the composition, structure and function of glomerular basement membrane in normals and in subjects with immunologically mediated glomerular disease.

- Studies of the mechanisms of inflammatory damage to the glomerulus in immunologic renal disease (e.g. the role of lysosomal enzymes, eicosanoids and reactive oxygen species).

- Studies of nonimmunologic mechanisms (e.g., alteration of glomerular hemodynamics that may contribute to glomerular disease).

- Studies identifying the role played by the above immunologic and non-immunologic mechanisms of renal damage in human glomerular and tubulo-interstitial disease.

- Other basic laboratory or clinical studies which have relevance to immunologic basis of renal disease.

V. MECHANISM OF SUPPORT

Although this solicitation is included in the NIADDK's funding plan for Fiscal Year 1987, the award of grants in response to the Program Announcement is contingent upon receipt of appropriated funds. The specific number to be funded will depend upon the merit of the applications and funding is expected to begin December 1, 1986.

All PHS and NIH Grant policies governing regular research project grants, including cost sharing, apply to applications received in response to this Program Announcement.

VI. REVIEW PROCEDURES AND CRITERIA

Assignment of Applications

Applications will be received by the National Institutes of Health, Division of Research Grants (DRG), referred to an appropriate Study Section for scientific merit review, and assigned to NIADDK for possible funding, unless programmatic considerations indicate more appropriate assignment to another Institute. These decisions will be governed by normal DRG Referral Guidelines.

Review Procedures

Applications in response to this solicitation will be reviewed on a nationwide basis in competition with other research applications, and in accord with the usual National Institutes of Health peer review procedures. Applications will first be reviewed for scientific and technical merit by a review group composed mostly of non-Federal scientific consultants (Study Section), and then by the National Advisory Council of the NIADDK. The review criteria customarily employed by the National Institutes of Health (NIH) for regular research grant applications will prevail.

VII. METHOD OF APPLYING

Applications should be submitted on form PHS 398, which is available in the business or grants and contracts office at most academic and research institutions. The phrase **"PREPARED IN RESPONSE TO NIADDK KIDNEY PROGRAM ANNOUNCEMENT - DISEASE MECHANISMS IN IMMUNOLOGIC RENAL DISEASE"** should be typed in space #2 on the first page of the application.

VIII. APPLICATION RECEIPT DATES

Applications will be accepted in accordance with the usual NIH receipt dates for new applications. Deadline dates: February 1, June 1, and October 1.

The original and six copies of the application should be sent or delivered to:

Application Receipt
Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
Bethesda, Maryland 20892

For further information, investigators are encouraged to contact the following individual:

M. J. Scherbenske, Ph.D.
Assistant to the Director for Administration
Renal Physiology/Pathophysiology
Program Director
National Institute of Arthritis, Diabetes,
and Digestive and Kidney Diseases
5333 Westbard Avenue
Westwood Building - Room 621
Bethesda, Maryland 20892

Telephone: (301) 496-7458

ANNOUNCEMENT

BLOOD CELL SURFACE ANTIGENS RELATED TO DISEASE

P.T. 34; K.W. 0750010, 0710060, 0790005, 0715015, 1002004

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

The Division of Blood Diseases and Resources (DBDR), National Heart, Lung, and Blood Institute (NHLBI) encourages grant applications on the characterization and biological significance of blood cell surface antigens, particularly as they relate to the structural integrity of the cell, to specific cell functions, and to specific disease processes. Until recently, the major reasons for identifying blood group antigens and antibodies has been their importance in assuring safe and effective blood transfusions. In recent years, however, clinical information regarding the relation of blood cell antibodies and antigens to disease has accumulated, as has knowledge of blood cell membrane structure and function. For instance, red cell antigens can serve as targets for selected autoantibodies in various diseases. It appears that a similar situation exists for platelets and neutrophils--specifically, that tissue-specific antigens can serve as receptors for autoantibodies, which may result in immune destruction of the blood cells, leading to thrombocytopenia or neutropenia. Many red blood cell antigens are associated with diseases as indicated by their loss during the disease process or by an increase in the level of corresponding antibody. In addition, it appears that some red blood cell antibodies recognize antigenic specificities that are also found on microorganisms, suggesting that blood group antigens are structurally similar to surface determinants found elsewhere in nature. Some of the most exciting work relates to the Duffy antigen system. Red blood cells which lack Duffy antigens (Duffy a- b-) are resistant to parasitization by Plasmodium knowlesi and it appears that Duffy determinants are required for parasitic invasion by Plasmodium vivax.

As knowledge of blood cell membrane structure and function has accumulated, so has clinical information regarding blood cell antibodies, antigens, and their relationship to many disease states. It seems quite possible that blood cell antigens play important roles in membrane integrity or cell surface function, or both. The state of knowledge and techniques is such that valuable new information about cellular structure and function would be forthcoming as a result of this solicitation. Thus, the overall goal of this solicitation is to increase our understanding of the nature and function of these cell surface determinants. Studies involving erythrocytes, leukocytes or platelets are encouraged.

This program is described in the Catalog of Federal Domestic Assistance, No. 13.839. 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 CRF Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order '2372, or to Health Systems Agency review.

Applicants should use the regular research grant application (PHS 398). There are three receipt dates each year for new applications: February 1, June 1, and October 1. All applications will be assigned by the Division of Research Grants (DRG) for review according to the NIH process for regular research grant applications. Secondary review will be by the National Heart, Lung, and Blood Advisory Council. Applications recommended for approval will compete for available funds with all other approved applications assigned to the NHLBI. If applications are not available at the institution's business office or central application control office, an individual copy may be requested by writing to DRG, NIH. In order to identify the application as a response to this program announcement, check "yes" on Item 2 of the application face page with the title **"BLOOD CELL SURFACE ANTIGENS RELATED TO DISEASE."** The original and six copies of the application should be mailed to:

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

Requests for additional information or questions regarding this program may be directed to:

Dr. Luiz H. Barbosa
Blood Resources Branch
Division of Blood Diseases and
National Heart, Lung, and Blood Institute
Federal Building - Room 5C10
Bethesda, Maryland 20892

Telephone: (301) 496-1537

ANNOUNCEMENT

CARDIOVASCULAR STUDIES IN PARTICULAR ANIMAL MODELS

P.T. 344; K.W. 0715115, 0715040, 0765020, 0710095, 1002019, 0785170, 0404000, 0735015, 0710100, 0785165, 0785050, 0705055, 0765035

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

The National Heart, Lung, and Blood Institute (NHLBI) announces its intent to award small grants for cardiovascular research studies of a small or pilot nature using the nonhuman primate resource colonies supported by the Division of Heart and Vascular Diseases (DHVD).

The program objectives are:

1) To conduct research on factors involved in the pathogenesis of atherosclerosis or of hypertension in nonhuman primate models that delineate particular aspects of these disorders.

2) To study pediatric and developmental aspects of atherosclerosis or hypertension in such models.

An additional objective of the program is to allow investigators from institutions that have a need but do not have the resources, to conduct cardiovascular studies in the nonhuman primate. This will be accomplished through the use of the resources, facilities, and collaborative opportunities available at the existing DHVD supported colonies.

It is hoped that these small or pilot studies will lead to more clearly defined, efficiently executed regular research grant applications using the nonhuman primate as a model for studies in such areas as metabolism, nutrition, genetics, pediatrics, behavior, instrumentation, pharmacology, pathology, lesion regression, endocrine systems, the central nervous system, electrolyte transport and the microcirculation, as well as other studies related to the pathophysiology of atherosclerosis and hypertension.

The award will provide a maximum of $50,000 (direct costs) over a period not to exceed two years for technical assistance, supplies, small equipment, shipping, subcontract costs (to include fee-for-service costs at the primate facilities) and travel required by the project. (It is anticipated that most of the grants in this program will not require the full two year time frame or the maximum costs.)

This program is described in the Catalog of Federal Domestic Assistance, No. 13.837. Awards will be made under the authority of the Public Health Service Act, Section 301 (42 USC 241) and administered under PHS grant policies and Federal regulations, most specifically 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372, or Health Systems Agency review

Application Submission and Review

Application receipt dates are the regular receipt dates in 1986 of February 1, June 1, and October 1. Applications will be reviewed by Study Section as assigned by the Division of Research Grants. Adherence is required to the Federal Animal Welfare Regulations and to Interagency Research Animal Committee Guidelines for the use of the nonhuman primate.

Inquiries

For inquiries and copies of a more detailed program description and application instructions please contact:

Nanci C. Parsons
Lipid Metabolism-Atherogenesis Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 4A08
Bethesda, Maryland 20892

Telephone: (301) 496-3271

ANNOUNCEMENT

LARGE GRANT SUPPORT PROGRAMS - GENERAL PROGRAM ANNOUNCEMENT

P.T. 04, 34; K.W. 0745010, 0710030, 0785040

NATIONAL INSTITUTE OF DENTAL RESEARCH (NIDR)

I. INTRODUCTION

The National Institute of Dental Research (NIDR) has served as a national resource and focal point for the support of research and research training relevant to oral health and disease since its establishment almost 40 years ago. During those years the NIDR has utilized a variety of research support mechanisms in order to make research and research training opportunities available to the extramural community. The regular research project grant (R01) has been a major mechanism for support of individual projects, while program project grants (P01) and center grants (P50) have been used to support teams of investigators conducting multidisciplinary, closely related projects. The purpose of this announcement is to inform the dental research community about the NIDR's current plans for program projects and center grants. These grants will be used to support the full range of basic, applied, and clinical research through assisting universities and other research institutions to strengthen their multidisciplinary research capabilities.

By informing the dental research community of these plans, the NIDR hopes to both stimulate meritorious research proposals that will advance dental research and provide information that will assist potential applicant institutions in developing their own plans and future application strategies. It must be cautioned, however, that the realization of these plans is dependent upon the availability of necessary authority and resources which are provided on an annual fiscal year basis.

II. LARGE GRANT MECHANISMS TO BE UTILIZED BY THE NIDR

A. Research Program Projects (P01's)

1. Description:

The research program project grant provides support for a group of discrete projects which focus on a single major research area or unifying theme. A program project generally involves the organized efforts of several investigators who are conducting research projects designed to elucidate various aspects or components of this research area or theme. Each research program project is headed by a program director and provides support for the individual projects. It also supports certain common resources, including laboratory and animal facilities, research services, clinical components, and administrative assistance. Funding for support services used jointly is called "core support".

Program project grants are typically investigator-initiated research proposals that can be developed at any time and submitted for the regular grant receipt dates of February 1, June 1, and October 1.

Approved PO1 grants compete directly on the basis of scientific merit with other investigator-initiated applications, most notably the traditional research grants (RO1). Five years of support may be requested and subsequent competing continuation grant applications can be submitted.

2. Current and Planned Use:

Research program project grants have been utilized by the NIDR since 1962. Support has varied from a high of 28 in 1969 to a low of nine in 1978. In FY 1984, the NIDR supported 10 research program project grants. The NIDR anticipates an expansion in its use of this support mechanism and intends to issue shortly a program announcement encouraging submission of additional research program project grant applications.

B. Center Core Grants (P30's)

1. Description:

The center core grant is a mechanism of support intended to enhance and extend the effectiveness of a group of related projects and investigators that are already funded through other mechanisms such as research project grants or research program projects. This mechanism is appropriate for those institutions that already have an established base of dental research excellence. The center core grant provides support for resources and facilities to be shared by the individually-supported project grantees in order to enhance research quality and productivity, promote communication and collaboration, stimulate research ideas, and enhance the cost effectiveness of the research program.

2. Current and Planned Use:

The NIDR has not previously used this support mechanism, but plans to announce the availability of core grants in the near future. This specific program announcement will solicit applications for this award from the dental research community. Specific guidelines with respect to the award itself and the peer review process will appear in the announcement.

C. Research Center Grants (P50's)

1. Description:

The research center grant provides in one award support for both research projects and the core services used by those projects. The full range of research from very basic to clinical may be supported under the research center grant mechanism. It is an institutional award made in the name of a center director. Activities supported under a research center grant should involve multidisciplinary research on a specific disease entity or on one or more basic science areas relevant to the mission of the NIDR. A secondary objective of the research center grant is the creation of a research environment that will attract new

investigators into oral health research and contribute to the development of young investigators. Research center grants are developed in response to a specific announcement of programmatic needs by the NIDR. Applicant institutions must possess scientific personnel and institutional resources capable of providing a strong research base on the field(s) specified. Applications are awarded competitively for a five year grant period.

2. Current and Planned Use:

The NIDR began using the research center grant mechanism in the late 1960's to fund four dental research institutes and centers (DRICs). A fifth DRIC-type center was funded in 1972. All five are still being supported. In addition, by the beginning of FY 1985, the NIDR was supporting six specialized categorical research centers, three periodontal centers and three dental caries centers, utilizing the research center grant mechanism.

The NIDR intends to continue to use the research center grant mechanism to support both noncategorical and categorical/thematic multidisiciplinary research. Emphasis will be on open competition. In order to accomplish that, the NIDR plans to have common grant termination dates for all future research center grants supporting similar areas of research and similarly will bring existing categorical and noncategorical centers into phase. Once this has been accomplished, all center awards will be made for an initial period of five years and the continuation of support beyond the initial project period will be possible only if the NIDR reissues an RFA and the applicant institution is successful in the ensuing open competition.

As a first step toward achieving these goals, the NIDR is issuing a request for application (RFA) for multidisiciplinary research centers with funding to begin in FY 1987. The notice of availability of this RFA appears in the current issue of the NIH Guide. These centers will be entitled Research Centers in Oral Biology (RCOB). A subsequent action will establish common starting and termination dates for the periodontal research centers. (The three dental caries research centers have common termination dates.) The NIDR will continue with its plans for additional categorical/thematic centers and is anticipating funding one or more new centers in FY 1987.

III. GENERAL DISCUSSION

The NIDR has utilized its existing constituted advisory bodies, special ad hoc consultant groups, and has consulted broadly with the dental research community concerning the future use of its large grant program. In announcing its plans to offer a broadened large grant program, the NIDR intends to structure these mechanisms to provide qualified applicants the maximum opportunity to develop creative approaches to dental research problems.

The NIDR is fully commited to ensure that there is full and open competition among all eligible institutions for support under the various large grant programs. The NIDR is also commited to ensure that all large grant applications undergo uniformly rigorous merit review and that projects of only the highest merit are funded.

Interested investigators and institutions are advised to contact the NIDR to discuss their interest in bringing teams of investigators into collaborative relationships and to explore which large grant mechanism or mechanisms might be the most appropriate to meet their objectives.

Initial contact should be made to:

Dr. Aaron Ganz
Special Assistant for Centers
and Special Programs
Extramural Programs
National Institute of Dental Research
Westwood Building - Room 510
Bethesda, Maryland 20892

Telephone: (301) 496-6324 or 7807

ANNOUNCEMENT

NIDR MINORITY RESEARCH SUPPLEMENT PROGRAM

P.T. 344, FF; K.W. 0745010, 0710030

NATIONAL INSTITUTE OF DENTAL RESEARCH

I. DESCRIPTION

The National Institute of Dental Research (NIDR) will provide support for under-represented minority researchers through the Minority Research Supplement Program (MRSP). A minority investigator is defined as a Black, Hispanic, Native American, Asian, or Pacific Islander.

Institutions with NIDR research grants of all types (R01's, P01's, P50's) and interested in including under-represented minority investigators in such research endeavors may submit a supplemental grant application for this purpose. Meritorious applications will be funded as supplements to the existing award.

II. OBJECTIVE

The MRSP will provide supplemental funds to NIDR-supported principal investigators for the purpose of increasing the number of under- represented minorities actively pursuing research objectives relevant to the funded project and to the mission of NIDR.

III. PROJECT EVALUATION AND REVIEW CRITERIA

NIDR staff will evaluate applications requesting supplemental support under this announcement using as criteria the degree to which:

- The research activities proposed under the supplemental request fit within the scientific scope, and the time and resources available for the funded project.
- The research training, experience and potential of the candidate are sufficiently strong to provide assurance that the research objectives proposed will be accomplished.
- The principal investigator and the minority candidate demonstrate a clear understanding of the objectives of the MRSP.

This program is described in the Catalog of Federal Domestic Assistance No. 13.845, Dental Research Institutes. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

The initial review of the administrative and scientific aspects of each proposal will be conducted and managed by the staff of the Extramural Programs, NIDR. Any application requiring additional technical merit review will be deferred for traditional peer review before any further consideration by NIDR. All recommendations will be presented for concurrence to the National Advisory Dental Research Council.

IV. ELIGIBILITY

Any institution with an active NIDR research grant, program project or research center award is eligible to submit a supplemental application on behalf of a principal investigator for the purpose of including under-represented minority researchers in the project.

A. Under-represented Minority Investigator - The minority investigator may be affiliated with the applicant institution or with some other institution. The investigator is expected to provide a complete curriculum vitae which includes a list of research publications and other evidence of meritorious scientific achievments. The program is not intended to pay stipends for student trainees or to support candidates with insufficient research backgrounds. The minority investigator must be willing to devote at least 50% of his/her time to the research project.

B. Research Project - The proposed research project must be closely related to the currently funded research grant. It may represent an increased effort in an already approved objective of the original research project or it may propose a new objective closely related to those already approved. The nature of the proposed research should provide the minority investigator an opportunity to contribute intellectually to the program and to enhance his/her own research skills. The scope of the proposed research project should usually be comprehensive enough to require at least two years for completion and the supplemental application should include such a research plan and projected budget sheets. A one-year application may be acceptable with appropriate justification. No MRSP applications will be accepted in the final year of the current award.

V. FUNDING

Funding will be provided in accordance with the usual NIH policy for supplements. Awards will be issued on an annual basis. Continuing support for the second (or subsequent) year will depend upon approval of a satisfactory annual progress report and a proposed budget from the minority investigator submitted with the principal investigator's non-competing continuation application. Funding for the supplement is always contingent on funding of the parent grant. Each annual supplemental budget shall not exceed $40,000 in direct costs and may not include equipment. Supplemental awards made under this program are for the sole purpose of facilitating participation by minority investigators as described above. Applications should meet one of the following deadlines: November 1, March 1, July 1.

VI. HOW TO APPLY

The principal investigator and the minority investigator should submit a supplemental grant application through the institution on the Standard Form PHS 398, limited to the following: (1) face page, at the top of which the applicant must designate the grant number of the active grant and specifically state "Minority Investigator Supplement"; (2) budget page; (3) a biographical sketch of the minority researcher; (4) an outline of the proposed research project as it relates to the parent grant; and (5) as part of the Significance section, the application should include a statement form the minority investigator outlining his/her reserch objectives and career goals and a statement from the principal investigator describing how this research experience will expand the capabilities and foster the independent career of the minority investigator.

The original and four (4) copies of the application should be sent to:

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

Two copies should be sent under separate cover to:

Dr. Aaron Ganz
Special Assistant for Centers
and Special Programs
Extramural Programs
National Institute of Dental Research
Westwood Building - Room 510
Bethesda, Maryland 20892

Telephone: (301) 496-6324

ERRATUM

ANNOUNCEMENT

THE NCI OUTSTANDING INVESTIGATOR GRANT

P.T. 34; K.W. 0715035, 0710030

NATIONAL CANCER INSTITUTE

In Vol. 14, No. 10, September 13, 1985 issue of the NIH Guide for Grants and Contracts, Page 30, Part V - HOW TO APPLY, the second bullet is incorrect. The correct statement should read as follows:

- "Application for this award should be made on form PHS 398 (Rev. 5/82) in accordance with instructions in this Announcement. These applications are available in the business or contracts offices at most academic or research institutions, or from:

  Division of Research Grants
  National Institutes of Health
  Bethesda, Maryland 20892"

ANNOUNCEMENT

BIOLOGICAL MECHANISMS OF OMEGA-3 FATTY ACIDS IN HEALTH AND DISEASE STATES

P.T. 34; K.W. 0710090, 0715040, 0765025, 0710070, 0790010

NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, AND DIGESTIVE AND KIDNEY DISEASES
NATIONAL INSTITUTE OF NEUROLOGICAL AND COMMUNICATIVE DISORDERS AND STROKE
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT
NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES
NATIONAL EYE INSTITUTE
NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES
NATIONAL INSTITUTE ON AGING
NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM
NATIONAL INSTITUTE OF MENTAL HEALTH

I. BACKGROUND INFORMATION

The National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration invite grant applications for the support of research to elucidate the biological mechanisms by which a seafood diet or the ingestion of fish oils influence health and modulate a number of disease processes. A number of studies have indicated a role for fish or fish oils in prostaglandin metabolism, autoimmune disease, thrombosis and deaths from cardiovascular disease. Most investigators have reached the conclusion that some special food component, probably the omega-3 polyunsaturated fatty acids, which is common to fish, arctic mammals, and cod liver oil must be important.

Data from research on the effects of omega-3 polyunsaturated fatty acids derived from seafoods were reviewed at the Conference on the Health Effects of Polyunsaturated Fatty Acids in Seafoods held June 24-26, 1985, in Washington, D.C. and sponsored by the Nutrition Coordinating Committee of NIH; the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration, Department of Commerce; and the National Fisheries Institute. The conference had two objectives:

(1) To review the research data on: the health effects of polyunsaturated fatty acids in seafoods in terms of the impact of omega-3 fatty acids on eicosanoid formation; thrombosis and atherosclerosis; lipoproteins and atherosclerosis; immunology and inflammation; and the role of docosahexaenoic acid in membrane function and metabolism.

(2) To develop a research agenda to determine the spectrum of the health effects of polyunsaturated fatty acids of seafood origin in the American diet.

Information presented at the conference clearly indicated the important role of omega-3 fatty acids in the modulation of human met abolism and their potential role in the prevention and treatment of a number of diseases of public health

importance, including cardiovascular diseases, cancer, asthma, certain forms of arthritis, inflammatory and autoimmune processes, etc. These areas of research are also of interest to the U..S Malnutrition Panel of the U.S. Japan Cooperative Medical Science Program.

II. RESEARCH OBJECTIVES AND SCOPE

Grant applications are solicited to elucidate the role of seafood and fish oils in health and disease. Special but not exclusive emphasis is placed on clinical research and the application of modern techniques to establish the mechanisms through which these dietary components produce the observed results. Multidisciplinary collaborations are encouraged. Suggested areas of research are presented below, but should not be viewed as constraints. Other research proposals, in areas not mentioned below, that are aimed at establishing a clear understanding of the mechanisms through which omega-3 fatty acids or other components in seafoods influence metabolic processes, and to determine the applicability of this family of compounds or materials to the prevention and treatment of disease are also sought.

A. Eicosanoid Formation and Metabolism

A number of fundamental questions regarding the relation of omega-3 fatty acids to eicosanoid formation remain unanswered. Research is needed on: the mechanism through which these fatty acids modulate eicosanoid synthesis (do they form omega-3 derived eicosanoids or slow the conversion of omega-6 fatty acids to eicosanoids); the benefits and side-effects of specific eicosanoids; the relation of the action of eicosanoid inhibitors, e.g., aspirin, to that of omega-3 fatty acids on eicosanoid formation; the appropriate compositions, forms, and types of test materials; and the appropriate metabolites and analytical procedures to be used for the biochemical monitoring of clinical studies.

B. Thrombosis and Atherosclerosis

The influence of eicosapentaenoic acid (EPA) on prostanoid production and the associated physiological effects, e.g., bleeding parameters, platelet aggregation, and on cardiac function requires elucidation. For example, the discrepancy between the time course of change in fatty acid composition of platelet phospholipids with incorporation of EPA and the time course of changes in bleeding time and platelet function in vitro as well as effects of EPA on the mechanical properties of atheromatous plaques are not understood. The biological effects and effectiveness of PGI3 and TXA3, the effect of omega-3 fatty acids on platelet serotonin production and release, and the establishment of appropriate doses, forms, and purity of omega-3 fatty acids for clinical trials all require further research.

C. Plasma Lipids and Lipoproteins

Omega-3 fatty acids have been shown to effect lipoprotein metabolism in humans, apparently by decreasing production of VLDL rather than through alteration of receptor mediated removal of LDL that results from the incorporation of omega-6 fatty acids in the diet. It has also been reported that fish oils promote the clearance of chylomicrons and VLDL. These effects and the underlying mechanisms require further study, as do the

possible approaches utilizing meals of fatty fish or various forms of purified fish oils and their derivatives for disease prevention and treatment.

D. Immunology and Inflammation

Cellular effects of omega-3 fatty acids need to be determined for as many different cells as possible, especially polymorphonuclear leukocytes of the neutrophil class, monocytes, macrophages (possibly of pulmonary origin), and T and B lymphocytes. These effects need to be assessed by activation of these cells per se, and in response to trans-membrane probes and the calcium ionophore. In addition, it is critical to assess the functional responses of each cell type individually and in combination with lymphocytes, so that there can be some appreciation of the effects of fish-oil enriched fatty acids on immune regulation as well as on specific aspects of the host in flammatory response. Of paramount importance in these regards are detailed biochemical and cell biological studies to define the mechanism of effect of omega-3 fatty acids on specific biochemical and biological responses of immune cells.

E. Cell Membrane Function and Metabolism throughout the Life Cycle

The current state of knowledge regarding specific roles for classes of phospholipids and fatty acids in cell membrane function is limited. Research has demonstrated that photoreceptor cell membranes in the retina contain an unusually high content of polyunsaturated fatty acids. Rats raised from weanling on an essential fatty acid deficient diet exhibit changes in the electroretinogram which appear to be related to depletion of polyunsaturates from the photosensitive retinal membranes. In addition, when rats fed the deficient regimen subsequently had their diet supplemented with linolenic acid (18:3 omega-3) the electrical activity of the photoreceptors increased toward normal values. This suggests that essential fatty acids and their anabolic products may be important in photoreceptor function, but their exact role remains to be elucidated. Moreover, when the polyunsaturated lipids of these specialized biological membranes become altered by oxidation they may become cytotoxic. This change in fatty acid composition may alter the structure and function of retinal photoreceptors and/or the central visual system by affecting membrane fluidity and permeability, by altering the activity of membrane-bound enzymes, or by other mechanisms which are not yet understood. The findings suggest that dietary omega-3 fatty acids are essential for normal prenatal and postnatal development of the brain.

Other issues that require urgent attention include: the origin of tissue 20: and 22:omega-3 fatty acids (are they derived primarily from dietary sources or are they formed in vivo from other fatty acids such as 18:omega-3); are requirements for omega-3 fatty acids different at various stages of the life cycle; the elucidation of the pathways of enzymatic oxidation and hydroxylation of omega-3 fatty acids; the identification of cofactor requirements, if any; and the role of the liver in the metabolism of omega-3 fatty acids. Several pathological conditions have been associated with changes in brain tissue levels of 22:6 omega-3 fatty acid. Improved techniques to follow the relevant metabolic processes in vivo are needed, particularly in regard to the role and function of these lipids in neural tissues during development and throughout the life cycle.

III. MECHANISM OF SUPPORT

The mechanism of support for this program will be the grant-in-aid. The regulations (Code of Federal Regulations, Title 42, Part 52 and Title 45, Part 74) and policies that govern the research grant programs of the Public Health Service will prevail. The award of grants pursuant to this announcement is contingent upon ultimate receipt of appropriated funds for this purpose.

IV. REVIEW PROCEDURES AND CRITERIA

A. Assignment of Applications: Applications will be received by the Division of Research Grants (DRG), NIH, referred to an appropriate study section/review committee for scientific review, and assigned to individual Institutes for possible funding. These decisions will be governed by normal programmatic considerations specified in the DRG Referral Guidelines.

B. Review Procedures: Applications in response to this announcement will be reviewed on an nationwide basis in competition with other applications received in the same review cycle, and in accord with the usual National Institutes of Health/Alcohol, Drug Abuse and Mental Health Administration's peer review procedures. They will first be reviewed for scientific and technical merit by an initial review group composed mostly of non-Federal scientific consultants (study section/review committee). Following study section review, the application will be evaluated by the appropriate Institute Advisory Council or Board with respect to the adequacy of the technical merit review and the program relevance of the research proposed. The review criteria customarily employed by the NIH/ADAMHA for regular research grant applications will prevail.

C. Deadlines: Applications will be accepted in accordance with the usual receipt dates for new applications:

February 1
June 1
October 1

V. METHOD OF APPLYING

Applications should be submitted on form PHS 398 which is available in the business or grants and contracts office at most academic and research institutions, or on form PHS 5161 for state and local governments. The phrase **"PREPARED IN RESPONSE TO NIH/ADAMHA OMEGA-3 FATTY ACID PROGRAM ANNOUNCEMENT"** should be typed into item 2 of the first page of the application.

The original and six copies of the application should be sent or delivered to:

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

Prospective applicants are urged to contact program staff listed below for further information and assistance.

National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases

Van Hubbard, M.D., Ph.D.
Westwood Building - Room 3A18B
NIADDK, NIH
Bethesda, Maryland 20892
(301) 496-7823

National Institute of Neurological and Communicative Disorders and Stroke

Eugene Streicher, Ph.D.
Federal Building - Room 1C04
NINCDS, NIH
Bethesda, Maryland 20892
(301) 496-1447

National Eye Institute

Peter A. Dudley, Ph.D.
Building 31 - Room 6A51
NEI, NIH
Bethesda, Maryland 20892
(301) 496-5983

National Institute of General Medical Sciences

Vivian Dickson
Westwood Building - Room 925
NIGMS, NIH
Bethesda, Maryland 20892
(301) 496-7129

National Institute of Allergy and Infectious Diseases

Dorothy D. Sogn, M.D.
Westwood Building - Room 7A52
NIAID, NIH
Bethesda, Maryland 20892
(301) 496-8973

National Institute on Aging

Evan Hadley, M.D.
Building 31 - Room 5C21
NIA, NIH
Bethesda, Maryland 20892
(301) 496-1033

National Institute of Child Health and Human Development

Gilman D. Grave, M.D.
Landow Building - Room 7C17
NICHD, NIH
Bethesda, Maryland 20892
(301) 496-5575

National Institute of Environmental Health Sciences

Edward Gardner, Ph.D.
P.O. Box 12233
Research Triangle Park
North Carolina 27709
(919) 541-7724

Alcohol, Drug Abuse, and Mental Health Administration

National Institute of Mental Health

Ellen S. Stover, Ph.D.
Parklawn Building - Room 10-104
NIMH, ADAMHA
5600 Fishers Lane
Rockville, Maryland 20892
(301) 443-4337

National Institute on Alcohol Abuse And Alcoholism

Helen Chao, Ph.D.
Parklawn Building - Room 14C17
NIAAA, ADAMHA
5600 Fishers Lane
Rockville, Maryland 20892
(301) 443-4223

ANNOUNCEMENT

BIOMEDICAL RESEARCH FELLOWSHIP OPPORTUNITIES ABROAD

P.T. 22, 48; K.W. 0710030, 0404000

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

The John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC) of the National Institutes of Health announces the availability of postdoctoral fellowships to U.S. health scientists who wish to conduct collaborative research abroad. The purpose of these fellowships is to enhance the exchange of research experience and information in the biomedical, behavioral, and health sciences.

PROGRAMS FOR U.S. SCIENTISTS

SENIOR INTERNATIONAL FELLOWSHIPS. These fellowships offer opportunities to U.S. biomedical, behavioral, or health scientists to conduct research in a foreign institution. The program is for scientists who have established themselves in their chosen career in the United States and whose professional stature is well recognized by their peers and institutional officials.

The purpose of this program is to enhance the exchange of ideas and information about the latest advances in the health sciences, both basic and clinical, and to permit U.S. scientists to participate abroad in ongoing study or research in the health sciences.

Fellowships are awarded for a period of 3 to 12 months and provide stipend, travel, and living allowance.

FOREIGN-SUPPORTED FELLOWSHIPS. These fellowships are supported by specific foreign countries. They provide opportunities for scientists to conduct collaborative research in the country that provides funding.

The purpose of this program is to enhance the exchange of research experience and information in the biomedical, behavioral, and health sciences. The maximum period of support for all programs is 1 year and the minimum period of support varies with each program.

Participating countries are: FINLAND, FRANCE (CNRS AND INSERM), FEDERAL REPUBLIC OF GERMANY, IRELAND, NORWAY, SWEDEN, SWITZERLAND, AND TAIWAN.

PROGRAM FOR FOREIGN SCIENTISTS

INTERNATIONAL RESEARCH FELLOWSHIPS. These fellowships offer opportunities to foreign scientists in the formative stage of their research career to extend their research experience in a U.S. laboratory. Selections are first made by the Nominating Committee in a participating country or region. Over 50 countries or regions in the Americas, Africa, Asia and the Far East, Australia, Europe, and New Zealand participate in the program.

The purpose of this program is to forge relationships between distinguished scientists in the United States and qualified scientists in other countries in order to solve health-related problems of mutual interest.

Fellowships are awarded for a minimum of 12 months and provide stipend, travel, and institutional allowance.

PROGRAM FOR EXCHANGE VISITS

HEALTH SCIENTIST EXCHANGES. This program supports short-term (2-12 weeks) exchange visits between the United States and HUNGARY, POLAND, ROMANIA, YUGOSLAVIA, OR THE SOVIET UNION.

The purpose of this program is to conduct collaborative activities in one of the health sciences or the health-related fields that are of mutual benefit to the United States and the participating country. Priority is given to visits designed to strengthen or expand ongoing collaborative relationships or to explore prospects for long-term cooperation.

The financial provisions include round-trip travel and in-country costs.

APPLICATION PROCEDURES

The eligibility requirements of each program vary and this information is provided in each program's brochure which is available upon request. However, at a minimum, each candidate must have an earned doctoral degree in one of the behavioral, biomedical, or health sciences and some postdoctoral experience. While the maximum period of support for all programs is 1 year, the minimum period of support varies with each program.

Application receipt dates for Senior International Fellowships are January 10, May 10, and September 10. Application kits are available only from the dean or equivalent institutional official. Only these persons can request the application kits from the FIC.

Applications to the Health Scientist Exchange Program, the Alexander von Humboldt Foundation, and the Visiting Scientists Program for the National Science Council, Taiwan, are available and are accepted throughout the year. Applications to all other foreign-supported fellowships must be submitted by May 10, 1986. These application kits are available from the FIC between 1 December and 30 April.

Prospective applicants for the International Research Fellowship Program must contact the Nominating Committee in their respective country for information and application procedure. Application kits are available only through the Nominating Committee. The Nominating Committees submit their applications to the FIC annually by August 1.

The National Institutes of Health is responsible for the scientific review of all applications except those that are submitted to the Alexander von Humboldt Foundation and the National Science Council, Taiwan.

You must send to the Fogarty International Center a self-addressed label if you need additional information. All correspondence should refer clearly to the specific program of interest.

Requests for additional information about the Health Scientist Exchange Programs should be sent to:

International Coordination and Liaison Branch
Fogarty International Center
National Institutes of Health
Bethesda, Maryland 20892

All other requests should be sent to:

International Research and Awards Branch
Fogarty International Center
National Institutes of Health
Bethesda, Maryland 20892

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