

# NIH GUIDE

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## For Grants and Contracts

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NOTICE

PHS GRANT APPLICATION FORM 398--REMINDERS

P.T. 34; K.W. 0710030, 1014002

National Institutes of Health

The newly revised form PHS 398 (dated 9/86) must be used by all NRSA Institutional Training Grant applicants starting with the January 10, 1988 receipt date, and by all research grant applicants starting with the February 1, 1988 receipt date. The page limitations indicated in the instructions for the 9/86 revision must be observed. PLEASE NOTE THAT ANY APPLICATION SUBMITTED ON ANY VERSION OF THE PHS 398 OTHER THAN THE 9/86 REVISION WILL BE RETURNED WITHOUT REVIEW, AS WILL APPLICATIONS THAT EXCEED THE PAGE LIMITS SPECIFIED IN THE PHS 398 INSTRUCTIONS OR SUPPLEMENTAL INSTRUCTIONS PERTAINING TO A PARTICULAR PROGRAM.

It is important to submit legible copies of the application. The original pages of the PHS 398 form, printed in orange ink, should be used. However, if these pages are not reproducible by any copying machine available to your institution, you may substitute the draft pages of the form (which are in black ink) after deleting the words "Remove and Use for Draft Copy" in the margin. DO NOT SUBSTITUTE THE 5/82 VERSION OF THE PHS 398. An application will be considered incomplete and returned if the original and all copies are not legible.

DATED ANNOUNCEMENTS (RFPs AND RFAs AVAILABLE)

ADHESION STUDIES OF POLYMER INSULATING COATINGS

RFP AVAILABLE: RFP-NIH-NINCDS-88-01

P.T. 34; K.W. 1009013, 0750005

National Institute of Neurological and Communicative Disorders and Stroke

The National Institute of Neurological and Communicative Disorders and Stroke has a requirement to develop methods for enhancing the adhesive forces and decreasing the disruptive forces that are active at the interface between a thin film polymer coating and a crystalline or metallic substrate in a saline environment.

Offerors should have experience in the chemistry and physics of polymer adhesion, the surface analysis of polymer-substrate adhesion and the thin-film coating of electronic devices.

This requirement represents the recompetition of a current contract with Hughes Aircraft Company and the incumbent is expected to reapply. RFP NIH-NINCDS-88-01 now available. Proposals will be due on January 6, 1988.

To receive a copy of the RFP, please supply this office with two self-addressed mailing labels. All responsible sources may submit a proposal which will be considered by the agency. Requests for copies of the RFP will be filled on a first-come, first-served basis until the supply is exhausted. The RFP package will be available upon written request to:

Contracting Officer  
Contracts Management Branch  
National Institute of Neurological and  
Communicative Disorders and Stroke, NIH  
Federal Building, Room 901  
7550 Wisconsin Avenue  
Bethesda, Maryland 20892

RESEARCH CENTERS FOR AIDS DEMENTIA AND OTHER  
RETROVIRUS-ASSOCIATED NEUROLOGICAL DISORDERS

RFA AVAILABLE: 88-NS-07

P.T. 04; K.W. 0715120, 0710085, 1003002, 0785110, 0414000

National Institute of Neurological and Communicative Disorders and Stroke

Application Receipt Date: February 12, 1988

The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) announces the availability of an RFA for the establishment of research centers for the investigation and elucidation of the etiology and pathogenesis, natural history, epidemiology, pathology, definition of the diagnostic criteria, and prevention and therapy of AIDS dementia and other retrovirus-associated neurological syndromes. Proposals focusing on AIDS dementia and encephalomyelopathy in children and infants are particularly encouraged.

While the principal stimulus for establishment of these centers is concern for the involvement of the central nervous system in AIDS, appropriate studies in relevant fundamental neurobiological areas will be acceptable within the center's mission, e.g., basis for the predilection of some retroviruses for the nervous system, as well as studies of retrovirus-associated neurological diseases, other than AIDS, such as tropical spastic paraparesis in humans and visna in animals.

The number of people, including children and infants, affected by the AIDS retrovirus, HIV, is growing, and the associated neurological syndromes are recognized with increasing frequency. Neurological involvement may be apparent before severe immunodeficiency is recognized. The neurological disorders associated with AIDS are of particular concern to the NINCDS.

Dementia is one of the more common and devastating neurological complications of AIDS. As many as 60 percent of patients with AIDS may develop dementia that cannot be attributed to opportunistic infections. The dementia may occur at any stage; it is often manifested very early in the clinical course of the illness.

Other neurological manifestations associated with HIV infection are spastic paraplegia and ataxia, sensory and motor neuropathies, multiple mononeuropathies, developmental abnormalities in children with loss of cognitive ability and progressive long-tract signs, and a dysmorphic syndrome due to intrauterine infection with the HIV.

The clinical features, course, and pathology of these conditions require elucidation and clarification. An understanding of the etiologies and pathogeneses may provide a rational basis for the development and evaluation of prophylactic and therapeutic strategies.

Multidisciplinary approaches are encouraged. Investigations appropriate to the RFA are broad and limited only by the creativity and ability of the applicants to exploit leads from basic studies in virology, molecular neurobiology, immunology, biochemistry, neuropathology, and clinical neurology. Fundamental scientific approaches consonant with the RFA may range from investigations of the peculiarities that predispose to persistent retrovirus infection in the central nervous system to the effects of the dysimmune state on the developing and mature nervous system. Studies leading to the identification and development of animal models of retrovirus infection with predilection for the mature and immature central and peripheral nervous systems are particularly solicited.

The NINCDS anticipates establishing up to four research centers, each for five years. Awards for these centers will depend upon availability of funds. We anticipate supporting centers with major thrust on the neurological aspects of AIDS in children, and in adults, as well as on the clinical neuroscience of other retroviral diseases in man and in animal models.

To qualify for consideration, an appropriate population of clinically well-defined patients with AIDS and ARC sufficient in number to meet the objectives of the research plan is essential. A well-established neuropathological research program and a broad, fundamental neuroscience capability are prerequisites for successful applications.

Any United States academic medical center, school of public health, research institution, profit-making organization, or consortium of cooperating

institutions may submit a proposal. Applicants must demonstrate the ability to marshal the requisite expertise needed for all functions of the research plan, including neurological, neuropsychological, and behavioral assessment of AIDS patients; neuropathological confirmation of diagnosis; biometry, epidemiology, and clinical data management; and fundamental neurovirological and immunological research. Prospective applicants are encouraged to consult with the staff of the Division of Demyelinating, Atrophic, and Dementing Disorders early in the planning stage.

A copy of the complete RFA, which provides background information, research goals and scope, terms and conditions, review procedures and criteria, and the NINCDS guidelines for preparation and submission of clinical research center proposals may be obtained by contacting the program administrator:

Dr. A.P. Kerza-Kwiatecki  
Program Administrator  
Division of Demyelinating, Atrophic, and Dementing Disorders  
Federal Building, Room 702  
National Institute of Neurological and Communicative Disorders and Stroke  
Bethesda, Maryland 20892

The National Institute of Mental Health also supports research centers on the assessment of the central nervous system effects of the AIDS virus, such as dementia, cognitive impairment, and neuropsychiatric disorders. A more detailed announcement of NIMH interests will be published in the near future. Potential applicants should contact:

Dr. Ellen Simon Stover  
Deputy Director, Division of Basic Sciences  
National Institute of Mental Health  
Room 11-103, Parklawn Building  
5600 Fishers Lane  
Rockville, Maryland 20857  
Telephone: (301) 443-3563

GENITOURINARY TRACT MANIFESTATIONS OF THE HUMAN IMMUNODEFICIENCY VIRUS (HIV)

RFA AVAILABLE: 88-DK-02

P.T. 34; K.W. 0715120, 0715125, 0705075, 1002045

National Institute of Diabetes and Digestive and Kidney Diseases

Application receipt date: February 10, 1988

The Division of Kidney, Urologic and Hematologic Diseases (DKUHD) of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) invites grant applications for support of research on the effects of infections with the Human Immunodeficiency Viruses (HIV) on the genitourinary (GU) tract.

Significant progress has been made in understanding the molecular biology and the clinical presentations of HIV infections. It has also been established that the genitourinary tract plays a major role in the transmission of the virus. Further work is needed to better understand the behavior of the virus in the GU tract, the site(s) of virus replication, and factors influencing transmission of the virus from an individual to another.

BACKGROUND

Since first diagnosed in 1978, the incidence of AIDS has increased substantially in the United States, and many other parts of the world. The causative agent, the human immunodeficiency virus (HIV), has been shown to have a high predilection for the T lymphocyte. In addition to blood, semen of infected individuals has been demonstrated as a very effective vehicle for transmission. The T lymphocyte has been proposed as the agent responsible for transporting the virus throughout the body, and probably from host to host. Although the T lymphocyte in the semen may be an effective means of transmission of the virus, other mechanisms are possible.

The purpose of this initiative is to seek proposals which deal with the HIV infections in the GU tract, the specific organs and cells in which the virus resides and/or replicates, and the mechanisms of transmission from host to host. Particular encouragement is offered to investigators well-trained in pertinent technologies who currently may be pursuing other research interest.

## RESEARCH OBJECTIVES

The GU tract is a focal point in the transmission of the HIV from host to host. Although the mode of transmission from the male is proposed to be via the semen, the mechanism from female to male is not well-understood. It is also unclear whether the virus in the GU tract resides and replicates in cells other than the T lymphocytes. Nor has there been a clear definition of the specific organs in the GU tract where the virus resides and/or replicates. Conditions in the GU tract that promote or hinder transmission of the virus need to be explored. Finally, very little is known of the effect of specific therapy, directed against the virus, such as AZT, on the structure and functions of organs and cells of the GU tract. A major objective of this initiative is to encourage collaboration between individuals in the basic and applied fields of medicine to study the needed mechanisms of viral replication and transmission through the GU tract.

## APPLICATION AND REVIEW PROCEDURES

Applications in response to this RFA will be reviewed for scientific and technical merit by an initial review group which will be convened by the Division of Extramural Activities, NIDDK, solely to review these applications. Upon receipt, applications will be evaluated for their responsiveness to the objectives of the RFA. If an application is judged unresponsive at this stage, the applicant will be contacted and given the opportunity to withdraw the application or have it considered for the regular research grant program of the NIH. Should the proposal submitted in response to the RFA be substantially similar to a research grant application already under consideration by the NIH, the applicant will be asked to withdraw either application. Simultaneous submission of identical applications will not be allowed.

Funding decisions will be based on recommendations by the Initial Review Group and by the National Diabetes and Digestive and Kidney Diseases Advisory Council, and relevance to the Objectives and Scope of the RFA. Applicants should request a start date of September 30, 1988.

The support mechanism for this program will be the traditional, individual, research-project grants (RO1s) only. Current plans for Fiscal Year 1988 include \$3.0 million for the total (direct and indirect) costs of this program. However, the funding of applications submitted in response to this RFA is contingent on the actual availability of funds and receipt of applications deemed worthy of support by the accepted NIH peer review procedure. It is anticipated that 15 - 20 grants will be awarded, for up to 5 years, under this program. The specific amount to be funded will depend on the merit and scope of the applications received.

Copies of the complete RFA may be obtained from :

Lawrence Agodoa, M.D.  
Director, Clinical Studies  
DKUHD, NIDDK  
National Institutes of Health  
Westwood Building, Room 625  
Bethesda, Maryland 20892  
Telephone (301) 496 7571

Prospective applicants are asked to submit a letter of intent no later than January 15, 1988. The Institute requests such letters for the purpose of ascertaining the number and types of applications to be reviewed. Such letters are not required, are not binding, and do not enter into the review of the application.

Applications should be submitted on PHS Form 398 (revised Sept. 1986). The RFA label available in the 9/86 Revision of Application of 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.

EFFECTS OF HUMAN IMMUNODEFICIENCY VIRUS (HIV) INFECTIONS ON  
THE KIDNEY, AND IN DIALYSIS AND RENAL TRANSPLANT PATIENTS

RFA AVAILABLE: 88-DK-03

P.T. 34; K.W. 0715120, 0715125, 0785095, 0765035, 0745065

National Institute of Diabetes and Digestive and Kidney Diseases

Application receipt date: February 17, 1988

The Division of Kidney, Urologic and Hematologic Diseases (DKUHD) of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) invites grant applications for support in research areas dealing with the effects of infections with the Human Immunodeficiency Viruses (HIV) on the kidney; and the implications of such infections in patients on dialysis and/or with renal allografts.

The major goal of this program is to encourage investigators with diverse interests and expertise to work together to improve our understanding of the pathophysiologic mechanisms involved in HIV infections and kidney disease, and the effect on dialysis and renal transplant patients, and management of these patients.

#### BACKGROUND

The Human Immunodeficiency Virus (HIV) type 1 infection is a leading cause of renal failure in the United States. The clinical course of the renal syndrome is that of a fulminant progression to end stage renal disease in a relatively short period of time, with a probable specific histologic appearance of the kidneys. It also has been shown that renal manifestations in individuals with antibodies to HIV may precede any other clinical manifestations of the syndrome.

Patients with ESRD on dialysis are relatively immunosuppressed, therefore, progression from onset of infection to the development of ARC or AIDS may be sufficiently altered, compared to the non-renal disease individual. However, it has been observed that dialysis patients who develop AIDS follow a more rapidly fatal course with generalized wasting. There also are suggestions that other relatively routine procedures related to dialysis, such as blood transfusions, vaccinations and immunizations adversely affect the clinical course of dialysis patients with AIDS.

Patients with renal allografts may acquire HIV infection by additional risk factors, such as infected graft, or through blood transfusions. Because of their unique status, such renal allograft patients may follow a modified clinical course. Presently, a controversy exists as to whether the immunosuppression status of the transplanted patient aggravates or favorably modifies the clinical course in HIV infection. Insufficient data are available to determine whether introduction of the renal allograft and the attendant immunosuppression accelerates or retards the development of ARC and/or AIDS in the asymptomatic individual with antibodies to HIV only.

Finally, the effect of the treatment of HIV infection, such as with AZT, on the clinical course of patients with renal disease, on dialysis, and/or with renal allograft needs to be investigated.

#### OBJECTIVES AND SCOPE

This program is intended to explore the effect of HIV infection on the kidney, and on the clinical course of dialysis and renal allograft patients. Collaboration between basic and applied science is encouraged to investigate the following areas:

- o The effect of HIV infection on renal structure and function at the organ, cellular and molecular level; and the pathogenesis of the nephropathy associated with HIV infection, using state-of-the-art technology to investigate the presence (or absence) of the virus in the renal tissue.
- o The clinical course of HIV infection in the dialysis patient with specific reference to factors that modulate progression from initial infection and anti-HIV antibody positivity to the development of ARC and/or AIDS; the effect of blood transfusions, immunization and vaccination, coinfection with the hepatitis virus, and treatment of anemia with recombinant human erythropoietin.

- o The clinical course of the renal transplant recipient, focussing on specific issues relevant to graft and patient survival in the presence of HIV; and on factors such as immunosuppression, histocompatibility, pretransplant blood transfusion regimen, and concurrent infections.
- o The effect of treatment of HIV infection, such as with AZT, on the course of renal disease, on morbidity and mortality in the dialysis patient, and on graft and patient survival as well as on immunosuppression regimen in the renal allograft patient.

#### APPLICATION AND REVIEW PROCEDURES

Applications in response to this program will be reviewed for scientific and technical merit by an initial review group which will be convened by the Division of Extramural Activities, NIDDK, solely to review these applications. Upon receipt, applications will be evaluated for their responsiveness to the objectives of the RFA. If an application is judged unresponsive at this stage, the applicant will be contacted and given the opportunity to withdraw the application or have it considered for the regular research grant program of the NIH. Should the proposal submitted in response to the RFA be substantially similar to a research grant application already under consideration by the NIH, the applicant will be asked to withdraw either application. Simultaneous submission of identical applications will not be allowed.

Funding decisions will be based on recommendations by the initial review group and by the National Diabetes and Digestive and Kidney Diseases Advisory Council, and relevance to the objectives and scope of the RFA. Applicants should request a start date of September 30, 1988.

The support mechanism for this program will be the traditional, individual, research-project grant (R01) only. Current plans for Fiscal Year 1988 include \$4.5 million for the total (direct and indirect) costs of this program. However, the funding of applications submitted in response to this RFA is contingent on the actual availability of funds and receipt of applications deemed worthy of support by the accepted NIH peer review procedure. It is anticipated that 20 - 25 grants will be awarded, for up to 5 years, under this program. The specific amount to be funded will depend on the merit and scope of the applications received.

Copies of the complete RFA may be obtained from :

Lawrence Agodoa, M.D.  
 Director, Clinical Studies  
 DKUHD, NIDDK  
 National Institutes of Health  
 Westwood Building, Room 625  
 Bethesda, Maryland 20892  
 Telephone: (301) 496-7571

Prospective applicants are asked to submit a letter of intent no later than January 15, 1988. The Institute requests such letters for the purpose of ascertaining the number and types of applications to be reviewed. Such letters are not required, are not binding, and do not enter into the review of the application.

Applications should be submitted on PHS Form 398 (revised Sept. 1986). 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.

#### BIOMEDICAL RESEARCH SUPPORT SHARED INSTRUMENTATION GRANTS

P.T. 34; K.W. 1014001, 0780005

Division of Research Resources

Application Receipt Date: February 23, 1988

#### BACKGROUND

The Division of Research Resources (DRR) is continuing its competitive Biomedical Research Support (BRS) Shared Instrumentation Grant (SIG) Program initiated in Fiscal Year 1982. The program was established in recognition of



the long-standing need in the biomedical research community to technological advances in instrumentation and the rapid cope with rapid rate of obsolescence of existing equipment. The objective of the program is to make available, to institutions with a high concentration of PHS-supported biomedical investigators, research instruments which can only be justified on a shared-use basis and for which meritorious research projects are described.

An eligible institution may submit more than one application for different instrumentation for the February 23, 1988 deadline. However, if multiple applications are submitted for similar instrumentation from one or more eligible components of an institution, then documentation from a high administrative official must be provided, stating that the multiple applications are a coordinated institutional resource plan, not an unintended duplication.

#### RESEARCH GOALS AND SCOPE

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

#### ELIGIBILITY

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

#### MECHANISM OF SUPPORT

BRS Shared Instrumentation Grants provide support for expensive state-of-the-art instruments utilized in both basic and clinical research. Applications are limited to instruments that cost at least \$100,000 per instrument or system. The maximum award is \$400,000. Types of instrumentation supported include, but are not limited to, nuclear magnetic resonance systems, electron microscopes, mass spectrometers, protein sequencer/amino acid analyzers and cell sorters. Support will not be provided for general purpose equipment or purely instructional equipment. Proposals for "stand alone" computer systems will only be considered if the instrument is solely dedicated to the research needs of a broad community of PHS-supported investigators.

Awards will be made for the direct costs of the acquisition of new, or the updating of existing, research instruments. The institution must meet those costs (not covered in the normal purchase price) required to place the instrumentation in operational order as well as the maintenance, support personnel and service costs associated with maximum utilization of the instrument. There is no upper limit on the cost of the instrument, but the maximum award is \$400,000. Grants will be awarded for a period of one year and are not renewable. Supplemental applications will not be accepted. The program does not provide indirect costs or support for construction or alterations and renovations. Cost sharing is not required. If the amount of funds requested does not cover the total cost of the instrument, the application should describe the proposed source(s) of funding for the balance of the cost of the instrument. Documentation of the availability of the remainder of the funding, signed by an appropriate institutional official, must be presented to DRR prior to the issuance of an award.

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

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

## ADMINISTRATIVE ARRANGEMENTS

Each applicant institution must propose a Principal Investigator who can assume administrative/scientific oversight responsibility for the instrumentation requested. An internal advisory committee to assist in this responsibility should also be utilized. The Principal Investigator and the advisory group are responsible for the development of guidelines for shared use of the instrument, for preparation of all reports required by the NIH, for relocation of the instrument within the grantee institution if the major user group is significantly altered and for continued support for the maximum utilization and maintenance of the instrument in the post-award period.

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

If a grant award is made, a final progress report will be required which describes the use of the instrument, listing all users, and indicating the value of the instrumentation to the research of the major users and to the institution as a whole. This report is due within 90 days following the end of the project period.

## REVIEW PROCEDURES AND CRITERIA

Applications are reviewed by specially convened initial review groups of the Division of Research Grants (DRG) for scientific and technical merit and for program considerations by the National Advisory Research Resources Council of the DRR. Funding decisions are the responsibility of the DRR and will not be made prior to November 15, 1988.

Criteria for review of applications include the following:

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

## METHOD OF APPLYING

Copies of a more detailed announcement are being mailed to Program Directors of BRS grants and to sponsored program offices at all institutions currently receiving BRS grants. Interested investigators should obtain the complete announcement prior to preparing an application.

Applications must be received by February 23, 1988. Applications received after this date will not be accepted for review in this competition. The original and four copies should be sent to:

Application Receipt Office  
Division of Research Grants  
National Institutes of Health  
Westwood Building - Room 240  
5333 Westbard Avenue  
Bethesda, Maryland 20892\*\*

Two copies of the application and one copy of any appendix material should be addressed to:

Biomedical Research Support Program  
Division of Research Resources  
National Institutes of Health  
Building 31 - Room 5B23  
9000 Rockville Pike  
Bethesda, Maryland 20892

If appendix material is submitted, four collated sets must be included with the application package to the Division of Research Grants.

Inquiries should be directed to the Biomedical Research Support Program Office at (301) 496-6743.

This program is described in the Catalog of Federal Domestic Assistance number 13.337, Biomedical Research Support. Awards will be made under the authority of the Public Health Service Act, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 42 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency Review.

#### BEHAVIORAL MECHANISMS AND CAUSES OF CHILDHOOD INJURY

RFA AVAILABLE: 88-HD-03

P.T. 34; K.W. 0404000, 0715005, 0715175

National Institute of Child Health and Human Development

Application Receipt Date: May 16, 1988

#### BACKGROUND INFORMATION

The Human Learning and Behavior Branch (HLB) of the Center for Research for Mothers and Children (CRMC), National Institute of Child Health and Human Development (NICHD) invites research grant applications investigating the role of behavior at various levels in the etiology of childhood injuries and their prevention. Research on this topic is needed to elucidate how behavioral factors cause or are related to specific types of injuries. This approach will develop the knowledge base to establish effective prevention programs that can be used by pediatricians and public health officials.

Injuries account for about half of all deaths in children under 15 years of age. In children as, in adults, motor vehicle crashes are the leading cause of injury-related deaths followed by injuries in the home environment. Although environmental changes which eliminate risk are generally most effective to control injuries, for many hazards the means do not exist to change the environment; and approaches using principles based upon other aspects of human behavior are needed to reduce contact with hazards. Consequently, improved understanding of the behavioral etiologies and mechanisms of injuries and safety is needed in order to formulate new intervention approaches.

Applications are encouraged to clarify the major behavioral variables responsible for specific kinds of childhood injuries and the mechanisms of how such variables cause or relate to childhood injuries. Of particular interest are studies that identify and measure observable behaviors of parents and children that are precursors of injury occurrence or injury avoidance (safety); that is, behaviors closely linked to injury morbidity and mortality. Why are some populations at risk and how might they be protected? What are the chains of events which result in injury producing events? How do family stress and other psychosocial factors affect childhood injury? Research needs include the development of experimental models that explain the origins and continuation of both risk-taking and injury avoidance (safety) behaviors.

Of particular interest are studies that clarify how development of the child and the interaction of the environment in relation to this development contribute to child safety and/or injury. How do children learn behaviors that alter the rate and severity of childhood injuries? What are the skills which must be taught to effect reduction in injuries?

Also of interest are the behaviors of communities or organizations collectively with regard to child injuries and hazards. Such studies could address the factors and approaches which influence parents, communities, or relevant organization to produce safe products and environments for children.

This RFA is intended to be one component of a program of childhood injury research within NICHD and other Public Health Service agencies. The focus of this announcement is to develop the theory and understanding of how behavioral factors are related to childhood injury. Based upon understanding gained from this and other research, interventions can be developed and evaluated as part of future planned funding initiatives.

Applications should be submitted on PHS Form 398 (revised Sept. 1986). The RFA label available in the 9/86 Revision of Application of 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.

It is anticipated that up to five (5) awards will be made as a result of this announcement through the grant-in-aid (R01) mechanism used by the NICHD. For a copy of the detailed RFA fully describing the specific areas of research sought, contact the following:

Peter C. Scheidt, M.D.  
Human Learning and Behavior Branch  
National Institute of Child Health and Human Development  
Room 7C18, Landow Building  
7910 Woodmont Avenue  
Bethesda, Maryland 20892  
Telephone: (301) 496-6591

#### SPECIALIZED CARIES RESEARCH CENTERS

RFA AVAILABLE: 88-DE-02

P.T. 04; K.W. 0785040, 0715125, 0710070, 1002019, 0404000, 0760080

National Institute of Dental Research

Application Receipt Date: September 1, 1988

The National Institute of Dental Research (NIDR) invites applications for the support of Specialized Caries Research Centers to conduct multidisciplinary, fundamental and clinical research on the epidemiology, etiology, pathogenesis, prevention and treatment of dental caries.

#### BACKGROUND INFORMATION

The National Institute of Dental Research currently supports three Specialized Caries Research Centers whose approved funding periods will end in the summer of 1989. The present announcement establishes a new round of competition for a five-year period of funding beginning 1989.

#### RESEARCH GOALS AND SCOPE

One of the goals of the NIDR is to accelerate and expand the development of new information which may lead to the eradication of dental caries as a major health problem. To achieve this goal it is essential that the NIDR maintain a program of multidisciplinary centers capable of pursuing promising leads in an integrated fashion, using modern molecular biology and other new technologies, as well as more traditional approaches. To provide adequate attention to all research areas believed to have significant potential, the NIDR seeks to develop a balanced overall program in which the protocols of the different centers are complementary rather than duplicative. Collaborative arrangements between centers will be encouraged. Even though centers are expected to have a strong clinical orientation, it is recognized that considerable emphasis on laboratory and animal studies are warranted.

Subject areas which may be pursued include the following which are presented in random order with no priorities implied. Center protocols may include one or more of the areas listed or to others considered equal in importance.

- o Develop methods to identify individuals or populations at high risk to caries.
- o Develop prevention methods applicable to high risk populations.
- o Use recombinant DNA techniques to study oral bacteria and their products which may be involved in induction of specific caries immunity.
- o Characterize salivary molecules involved in tooth pellicle formation, and colonization by oral bacteria leading to caries susceptibility.
- o Study ecologic relationships among microorganisms in dental plaque leading to caries development.
- o Improve the delivery and effectiveness of anti-plaque/anti-microbial agents in caries prevention.
- o Determine the genetic factors related to caries susceptibility or resistance.
- o Determine the behavioral factors related to caries susceptibility or resistance.

- o Determine the dietary and nutritional factors related to caries susceptibility or resistance.
- o Study specific and non-specific immune mechanisms in the oral cavity.
- o Explore mechanisms of action of fluoride in preventing caries.
- o Determine the causes of the recently reported declines in caries prevalence.

#### ELIGIBILITY

This competition is open to all domestic institutions, including those proposing new caries research centers, as well as those with existing centers. The applicant institution, however, must have an adequate base of ongoing caries research encompassing basic and/or clinical studies and must propose new and/or continuing research that falls within the intent of the RFA.

#### FUNDING MECHANISM

The administrative and funding mechanism will be the research center grant (P50). Each center program is expected to include several related, but multidisciplinary projects. First year budget will be limited to \$500,000 in direct costs. NIDR anticipates making a minimum of three awards.

#### STAFF CONTACT

Requests for copies of the full RFA should be addressed to:

Dr. Marie U. Nylén  
 Director, Extramural Program  
 National Institute of Dental Research  
 Westwood Building, Room 503  
 Bethesda, MD 20892-4500  
 Telephone: (301) 496-7723

#### ONGOING PROGRAM ANNOUNCEMENTS

##### HEALTH PROMOTION RESEARCH UNDERLYING NURSING PRACTICE

P.T. 34; K.W. 0745035, 0785130, 0411005

National Center for Nursing Research

Application Receipt Dates: February 1, June 1, October 1

The Health Promotion and Disease Prevention Branch, National Center for Nursing Research (NCNR), has, as one of its interests, the support of research which is designed to decrease the vulnerability of individuals and families to illness and disability. This interest extends across the life span. Specifically, nursing research on health promotion addresses the general health and health care of the population, stressing the positive aspects of well-being, not merely the absence of illness and disability.

Of specific interest to NCNR are studies which (a) identify risk factors which constitute a threat to the health status and the quality of life of study populations; (b) design and implement intervention strategies which reduce risk factors and increase an individual's capability for both improving and maintaining health as well as treating illness and injury; and (c) investigate the cost effectiveness of health promotion programs. Because health promotion has been identified as a middle class phenomenon, NCNR is particularly interested in supporting research which reflects the characteristics, needs, and preferences of populations at greater risk to illness and disability, such as certain ethnic minorities, the elderly, youth, women, and the disabled.

As part of its mission to promote the health of the American people, the NCNR invites qualified researchers to submit research and research training applications which focus on the enhancement of personal and community health through individual as well as environmental change. Applicants are encouraged to design studies which examine and use scientific principles which underlie nursing practice.

Applicants from institutions with a General Clinical Research Center (GCRC) funded by the NIH Division of Research Resources may wish to identify the Center as a resource for conducting the proposed research. In such a case, a letter of agreement from the GCRC Director should be included in the application material.

For additional information contact:

Dr. Deidre M. Blank  
Chief, Health Promotion and Disease Prevention Branch  
National Institutes of Health  
National Center for Nursing Research  
Building 38A, Room B2E17  
Bethesda, Maryland 20894

This program is described in the Catalog of Federal Domestic Assistance No. 13.361, Nursing Research. Awards are made under the authority of the PHS Act, Sections 301, 483, 484, and 487 as amended by Public Law 99-158 and 97-219. Awards are 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 to review by a Health Systems Agency.

#### BIOLOGICAL DETERMINANTS OF ALCOHOL CONSUMPTION

P.T. 34; K.W. 0404003, 0414012, 1002019

National Institute on Alcohol Abuse and Alcoholism  
Alcohol, Drug Abuse, and Mental Health Administration

Application Receipt Dates: February 1, June 1, October 1

#### BACKGROUND

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) invites grants applications for the support of research addressing problems related to the identification of biological determinants of alcohol consumption. Significant progress has been made in recent years in our understanding of the biological mechanisms of alcohol actions, the genetic factors influencing these actions, and the factors affecting the development of tolerance and dependence. Little is known, however, about the biological determinants of alcohol consumption. Recent studies suggest that a complex interaction of neurobiologic and systemic factors regulates alcohol intake. Circumstantial evidence has linked ethanol preference to the brain reward system either directly or indirectly, through its anxiolytic actions. There are also reports suggesting that alcohol consumption is regulated by one or several factors such as absorption rate, circadian rhythm, endocrine response, and dietary factors. Studies on biological determinants of ethanol intake have been preliminary so far. There is a great need for further exploration of this important problem.

The purpose of this announcement is to encourage research proposals on the biological determinants of alcohol consumption. Knowledge of the biological factors underlying alcohol consumption will form the basis for intervention and treatment of alcoholism. Studies can be conducted on humans or experimental animals. Where appropriate, the use of animals genetically bred for difference in alcohol consumption is encouraged. Examples of potential research under this announcement include but are not limited to the following:

- o Role of neuramines, neuropeptides, or opioids in mediating the intake, maintenance and cessation of alcohol drinking.
- o Role of physiological systemic factors outside the CNS in modulating alcohol intake.
- o Role of organ damage in mediating alcohol intake.
- o Correlation between endocrine system modifications and alcohol intake.
- o Influence of nutritional factors on alcohol intake patterns.
- o Normal mechanisms of hunger and thirst and their interaction with the CNS systems controlling alcohol consumption.
- o Interaction of excessive appetite for alcohol with the etiology of eating disorders.
- o Regulation of alcohol consumption by circadian rhythm.

#### APPLICATION AND REVIEW PROCEDURES

Applications may be submitted by any public or private nonprofit or profit-making organizations and by eligible agencies of the Federal

government. Women and minority investigators are encouraged to apply. Support may be requested for a period of up to 5 years; annual awards will be made subject to continued availability of funds and progress achieved. Grant funds may be used for expenses clearly related and necessary to carry out research projects. Research grant support is not provided to establish, add a component to, or operate a prevention, intervention or treatment program. Grants must be administered in accordance with the PHS Grants Policy statement (Rev. January 1, 1987).

Application forms may be obtained from your institutional business office or from:

National Clearinghouse for Alcohol and Drug Information  
Reference Department  
P.O. Box 2345  
Rockville, Maryland 20852

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

Receipt Dates	Initial Review	Adv. Council Rev.	Start Date
Feb. 1	May/June	Sept./Oct.	Dec. 1
June 1	Oct./Nov.	Jan./Feb.	April 1
Oct. 1	Feb./Mar.	May/June	July 1

Applications should be sent to:

Grant Application Receipt Office  
Division of Research Grants  
National Institutes of Health  
Westwood Building - Room 240  
5333 Westbard Avenue  
Bethesda, Maryland 20892\*\*

Applications recommended for approval by the National Advisory Council on Alcohol Abuse and Alcoholism will be considered for funding on the basis of overall scientific and technical merits as determined by peer review, NIAAA programs needs and balance, and the availability of funds. In FY 1988 approximately \$500,000 will be available to support approximately 4 grants under this announcement. Application of high scientific merit which cannot be funded under this announcement could be considered for funding under the Institute's regular research grant programs.

Further information and consultation on program requirements can be obtained from:

Helen M. Chao, Ph.D.  
Chief, Biomedical Research Branch  
Parklawn Building, Room 14-C-20  
NIAAA, Division of Basic Research  
5600 Fishers Lane, Room 14-C-20  
Rockville, Maryland 20857  
Telephone: (301) 443-4223

This program is described in the Catalog of Federal Domestic Assistance No. 113.273. Grant awards are made under the authority of Sections 301 and 510 of the Public Health Service Act (42 USC 241, 290bb). Applications submitted in response to this announcement are not subject to the intergovernmental review requirements of Executive Order 12372, as implemented through Department of Health and Human Service regulations at 45 CFR Part 100.

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

5333 Westbard Avenue  
Bethesda, Maryland 20816