NIH GUIDE

For Grants and Contracts

NOTICE OF MAILING CHANGE

☐ Check here if you wish to discontinue receiving this publication

☐ Check here if your address has changed and you wish to continue receiving this publication. Make corrections below and mail this page to:

NIH Guide
Distribution Center
National Institutes of Health
Room B3BE07, Building 31
Bethesda, Maryland 20892

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

OFFICIAL BUSINESS
Penalty for Private Use, $300

Third-Class Mail
Postage & Fees Paid
PHS/NIH/OD
Permit No. G-291

The NIH Guide announces scientific initiatives and provides policy and administrative information to individuals and organizations who need to be kept informed of opportunities, requirements, and changes in extramural programs administered by the National Institutes of Health.

VOL. 15, NO. 16, SEPTEMBER 5, 1986

Vol. 15, No. 16, September 5, 1986

NOTICES

ADVICE TO POTENTIAL RESEARCH CAREER DEVELOPMENT AWARD APPLICANTS.....1
National Institutes of Health
Index: K AWARDS

RESEARCH PROGRAM ANNOUNCEMENT AVAILABLE.....2
National Institute of Mental Health
Index: MENTAL HEALTH

RESOURCES AVAILABLE FOR CONDUCTING RESEARCH ON AGING.....3
NATIONAL INSTITUTE ON AGING
Index: AGING

DATED ANNOUNCEMENTS (RFPs AND RFAs AVAILABLE)

DEVELOPMENT OF METHODS TO DETECT HTLV-III/LAV AND
RELATED RETROVIRUSES IN EXPERIMENTAL SYSTEMS AND
CLINICAL MATERIALS (RFP).....5
National Institute of Allergy and Infectious Diseases
Index: ALLERGY AND INFECTIOUS DISEASES

CORRELATES OR MARKERS OF IMMUNITY IN THE ACQUIRED
IMMUNODEFICIENCY SYNDROME (RFP).....5
National Institute of Allergy and Infectious Diseases
Index: ALLERGY AND INFECTIOUS DISEASES

HEALTH CARE-SEEKING EXPERIENCE AMONG BLACKS
FOR CORONARY HEART DISEASE (RFA).....6
National Heart, Lung, and Blood Institute
Index: HEART, LUNG, AND BLOOD

BIOLOGICAL AND BEHAVIORAL FACTORS IN SMOKING RELAPSE (RFA).....6
National Heart, Lung, and Blood Institute
Index: HEART, LUNG, AND BLOOD

PATHOGENESIS OF AIDS, ASSOCIATED FACTORS (RFA).....7
National Institute of Allergy and Infectious Diseases
Index: ALLERGY AND INFECTIOUS DISEASES

ONGOING PROGRAM ANNOUNCEMENTS

ANIMAL MODELS OF BIOLOGICAL AND BEHAVIORAL FACTORS
IN SMOKING RELAPSE.....7
National Heart, Lung and Blood Institute
Index: HEART, LUNG, AND BLOOD

STUDIES ON NOSOLOGY OF DRUG DEPENDENCE.....9
National Institute on Drug Abuse
Index: DRUG ABUSE

ADVICE TO POTENTIAL RESEARCH CAREER DEVELOPMENT AWARD APPLICANTS

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

National Institutes of Health

The components of the National Institutes of Health (NIH) which make grants and awards have different, and varying, program goals, program initiatives, and resource constraints. These differences frequently result in quite distinct patterns of awards among the Bureaus, Institutes, and Divisions (BIDs). A particularly wide disparity in the abilities of the various BIDs to make Research Career Development Awards ("K04s") has recently been evident. Therefore, all potential applicants for Research Career Development Awards (RCDAs) are strongly urged to contact the appropriate BID staff person, prior to preparing an application, to obtain current information about that BID's situation with regard to RCDAs. Applicants should be aware, however, that the assignment of an application to a particular BID is governed by the NIH referral guidelines.

National Institute of Environmental Health Sciences
Dr. Edward Gardner
Building 3, Room 303B
National Institutions of Health
P.O. Box 12233
Research Triangle Park, North Carolina 27709
Telephone: (919) 541-7724

National Eye Institute
Dr. Israel A. Goldberg
Building 31, Room 6A51
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-5983

National Heart, Lung, and Blood Institute
Dr. Henry G. Roscoe
Westwood Building, Room 7A17A
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-7225

National Institute of General Medical Sciences
Dr. Elke Jordan
Westwood Building, Room 953
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-7061

NIGMS will accept applications for Research Career Development Awards only on behalf of individuals who wish to develop a career directed toward bridging the gap between basic and clinical sciences in one of the following fields: 1) clinical pharmacology 2) trauma and/or burn research, 3) anesthesiology, and 4) biomedical engineering.

National Cancer Institute
Dr. Barney C. Lepovetsky, Chief
Cancer Training Branch
Blair Building, Room 424
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 427-8898

National Library of Medicine
Mr. Peter Clepper, Program Officer
Building 38A, Room 5S-518
National Institutes of Health
Bethesda, Maryland 20894
Telephone: (301) 496-4221

National Institute of Allergy and Infectious Diseases
Dr. William E. Bennett
Westwood Building, Room 7A03
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-5030

Division of Research Resources
Dr. James F. O'Donnell
Building 31, Room 5B03
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-6023

National Institute of Arthritis and Musculoskeletal and Skin Diseases
Dr. Richard Lymn
Westwood Building, Room 403
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-7495

National Institute of Diabetes and Digestive and Kidney Diseases
Dr. Walter Stolz
Westwood Building, Room 657
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-7277

National Institute of Neurological and Communicative Disorders and Stroke
Dr. Donald H. Luecke
Federal Building, Room 1016
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-4188

National Institute on Aging
Dr. Alan F. Pinkerson
Building 31, Room 5C05
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-9322

National Institute on Child Health and Human Development
Ms. Hildegard Topper
Building 31, Room 2A04
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-1848

National Institute of Dental Research
Dr. Thomas Valega
Westwood Building, Room 510
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-6324

RESEARCH PROGRAM ANNOUNCEMENT AVAILABLE

P.T. 34; K.W. 0414000, 0710030, 0404000

National Institute of Mental Health

The National Institute of Mental Health announces the availability of a revised Extramural Research Support Programs announcement, MH-86-18. This announcement reflects changes in programs resulting from the recent reorganization of the Institute. It also contains the new schedule for the review of applications and an updated list of contact persons for the ongoing research programs. Copies of the revised announcement may be requested from:

Ann Cooley
Extramural Policy Branch
Division of Extramural Affairs
Parklawn Building, Room 9-95
5600 Fishers Lane
Rockville, Maryland 20853
Telephone: (301) 443-4673

RESOURCES AVAILABLE FOR CONDUCTING RESEARCH ON AGING

P.T. 34, 36; K.W. 1002002, 0710010, 0780015, 0780020, 1002019

NATIONAL INSTITUTE ON AGING

Early in the 1970s it became obvious to many investigators engaged in research on aging that the availability of appropriate animal models was a major factor for the development of much needed research. In response to this clearly evident need, and in recognition of the fact that many, perhaps most, investigators had neither the facilities nor the fiscal resources needed to develop and maintain colonies of aged animals, the National Institute on Aging (NIA) made provision of resources one of its highest priorities. The availability of high quality material for conducting aging research has continued to be a priority area for NIA, with current resources spanning a broad spectrum, including a cell bank, a nematode bank, rodent colonies, and nonhuman primate colonies.

Specific pathogen-free rodent resources currently available or under development from NIA include four rat and ten mouse genotypes that are raised in barrier facilities and range in age from 3 to 36 months. Mouse genotypes currently available are the inbred strains A/HeNNia, BALB/cNNia, CBA/CaHNNia, C57BL/6NNia and DBA/2NNia; hybrid stocks of B6C3F1Nia(C57BL/6NNia X C3H/NNia), B6D2F1Nia(C57BL/6NNia X DBA/2NNia) and CB6F1Nia(BALB/cNNia X C57BL/6NNia); the congenic strain BALB/cAnNNia-nu(nude); and an outbred stock of Swiss Webster. NIA currently provides one rat genotype, the inbred Fischer 344(F344NNia); however under development is a colony of three additional genotypes; the inbred Brown Norway (BN/BiRijNia), and the reciprocal F1Nia hybrids of the F344 and BN crosses. All rodents are regularly monitored for genetic purity and health status. Animals are housed at contractor facilities behind specific pathogen barriers, maintained at 70 degrees F plus or minus 2 degrees and are fed NIH 31 diet (ad libitum). Cage position on cage racks are routinely rotated to prevent retinal degeneration from fluorescent lighting. Ad libitum access to acidified, chlorinated drinking water is provided. A health monitoring statement for the room in which animals were raised accompanies each shipment of animals. Even though NIA heavily subsidizes this program to make these animals more affordable, the costs are still sizeable. The approximate cost of a 30-month old rat is $106 and a 30-month old mouse is $47, plus shipping cost. These colonies have been developed to facilitate research on aging, therefore, holders of NIA grants always receive first priority in access to animals. For specific information regarding cost and current availability, contact:

Mrs. Jane Soban
Building 31, Room 5C19
National Institute on Aging
Bethesda, Maryland 20892
Telephone: (301) 496-6402

The NIA is currently in the process of developing a colony of rodents specifically for a biomarkers of aging research program being developed at NIA. This colony will include four mouse genotypes (C57BL/6NNia2, DBA/2NNia2, B6D2F1Nia2) and NCTR(C3B6F1) and three rat genotypes (F344Nia, BN/BiRijNia and the F344BNF1 hybrid) which will be maintained similarly to the other colonies, but fed either ad libitum or under conditions of restricted feeding. Research availability to these animals will be limited to investigators selected by NIA (through grant or contract mechanisms) for biomarkers of aging research. Methods for applying for participation in the biomarkers research program will be announced in an RFA in late 1986. For further information about this program contact:

Richard L. Sprott, Ph.D.
Building 31, Room 5C11
National Institute on Aging
Bethesda, Maryland 20892
Telephone: (301) 496-4996

The NIA maintains approximately 300 nonhuman primates (primarily M. mulatta, a few M. nemestrina) at five regional primate centers for conducting research on aging. These animals are in an approximate age range of 18 to 35 years. Approximately two-thirds of these animals are available for noninvasive type research, the remaining one-third being available for invasive research studies. Inquiries regarding the use of these animals should be directed to:

DeWitt G. Hazzard, Ph.D.
Building 31, Room 5C19
National Institute on Aging
Bethesda, Maryland 20892
Telephone: (301) 496-6402

The NIA, under contract, operates the Aging Cell Culture Repository. The purpose of this repository is to acquire, develop and characterize, store, and supply cell cultures for gerontological research. Currently, this repository contains over 600 cell cultures available for research on aging. Included are over 200 skin fibroblast cultures from healthy individuals of various ages who are participating in the Baltimore Longitudinal Study on Aging at the Gerontology Research Center; skin fibroblast cultures from individuals with premature aging syndromes, including Werner, Hutchinson-Guilford (progeria), cultures from clinically documented and at-risk individuals, as well as entire families exhibiting familial Alzheimer disease. Also available are human fibroblast from female (IMR-90) and male (IMR-91 and MRC-5) fetal lung tissues and WI-38 female diploid lung cells available at early, middle, and late population doubling levels. Cultures of animal origin include skin fibroblasts from a variety of species of nonhuman primates; bovine and equine endothelial, smooth muscle and fibroblast cultures and canine and porcine endothelial cell cultures. For additional information about the Repository, including catalog requests, availability and cost of cultures, contact:

Arthur E. Greene, D.Sc.
Coriell Institute for Medical Research
Copewood Street
Camden, New Jersey 08103
Telephone: (609) 966-7377

As a part of an overall NIA strategy to foster quality research through support of quality model resources, the NIA in collaboration with the Division of Research Resources (DRR) and the Institute of General Medical Sciences (GMS), support the Caenorhabditis Genetics Center to acquire, store and distribute genetic stocks of Caenorhabditis elegans (a nematode species) and relevant bibliographic and genetic information. This Center receives nematode strains and mutants, reprints of related publications and data (raw and analyzed) relevant to nematode genetics; stores these materials, verifies genetic status and/or scientific accuracy; distributes mutant strain bibliographic and genetic information to individual scientists, and through publications, to the scientific public at large; and distributes mutant strains to interested scientists. For further information on this resource, contact:

Donald L. Riddle, Ph.D.
Division of Biological Sciences
University of Missouri - Columbia
Columbia, Missouri 65211
Telephone: (314) 882-6363

Except for the Caenorhabditis Genetics Center, which is a multi-Institute supported resource, recipients of NIA grant support receive first priority for use of any of these resources when supplies are limited. When supplies permit, all other resources are made available to other than NIA grantees. To aid graduate students interested in pursuing research on aging, limited numbers of rodents for dissertation research can be obtained free of cost (supply permitting) by application. The application process is relatively simple, requiring 3-4 months for review of proposed studies. To obtain information about this program and/or an application contact Dr. DeWitt G. Hazzard. Any questions you may have regarding any aspect of the NIA resources program should be directed to:

DeWitt G. Hazzard, Ph.D.
Head, Office of Biological Resources
and Resource Development
National Institute on Aging
Building 31, Room 5C19
Bethesda, Maryland 20892
Telephone: (301) 496-6402

DEVELOPMENT OF METHODS TO DETECT HTLV-III/LAV AND RELATED RETROVIRUSES IN EXPERIMENTAL SYSTEMS AND CLINICAL MATERIALS

RFP AVAILABLE: RFP-NIH-NIAID-AIDSP-87-13

P.T. 34; K.W. 0715120, 0760080, 1002045, 0755010, 0780020

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases has a requirement for the development of simpler, faster and quantitative methods for the detection of HTLV-III/LAV and related retroviruses. The end product(s) of this research should permit the ready detection and measurement of HTLV-III/LAV and related retroviruses in clinical, animal and laboratory specimens. Studies proposed may stress innovative approaches to the problem as well as advanced development of currently available methods and techniques. It is anticipated that approaches using recombinant DNA, microscopic, tissue culture, immunodetection and biochemical methods will be proposed but offerors are not constrained to use only these approaches.

It is expected that a cost reimbursement type contract will be awarded and that the project will take approximately three years to complete.

This announcement is a new solicitation. RFP-NIH-NIAID-AIDSP-87-13 is scheduled for issuance on or about September 19, 1986. Proposals will be due no later than December 2, 1986. To receive a copy of the RFP, please supply this office with two self-addressed mailing labels. Telephone inquiries will not be honored and all inquiries must be in writing. All responsible sources may submit a proposal which will be considered by the NIAID.

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

Requests for copies of the RFP should be addressed to:

Ms. Brenda Velez
Westwood Building, Room 707
National Institutes of Health
Bethesda, Maryland 20892

CORRELATES OR MARKERS OF IMMUNITY IN THE ACQUIRED IMMUNODEFICIENCY SYNDROME

RFP AVAILABLE: RFP-NIH-NIAID-AIDSP-87-12

P.T. 34; K.W. 0710070, 1002004, 0715120

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases has a requirement to support research aimed at identifying and characterizing the correlates or markers of the immune status to infection with HTLV and subsequent development of AIDS. Applicants are expected to develop research plans that would explore the relationship of humoral and/or cellular immune mechanisms to an immune state against HTLV-III/LAV. Such plans may incorporate research on human subjects, animal studies and in vitro experiments.

This NIAID sponsored project shall take approximately five years to complete. It is expectecd that a cost reimbursement type contract will be used.

This announcement is a new solicitation. RFP-NIH-NIAID-AIDSP 87-12 is scheduled for issuance on or about September 19, 1986. Proposals will be due no later than December 2, 1986. To receive a copy of the RFP please supply this office with two self-addressed mailing labels. Telephone inquiries will not be honored and all inquiries must be in writing. All responsible sources may submit a proposal which will be considered by the NIAID.

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

Requests for copies of the RFP should be addressed to:

Ms. Mary Anne Glitz
Westwood Building, Room 707
National Institutes of Health
Bethesda, Maryland 20892

HEALTH CARE-SEEKING EXPERIENCE AMONG BLACKS FOR CORONARY HEART DISEASE

RFA AVAILABLE: 86-HL-32-P

P.T. 34, FC; K.W. 0730070, 0715020, 0785025, 0785055, 0785165, 0730050

National Heart, Lung, and Blood Institute

Application Receipt Date: December 8, 1986

The Prevention and Demonstration Research Branch of the Division of Epidemiology and Clinical Applications, 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 available from staff of the NHLBI. Awards will be made to foreign institutions only for research of very unusual merit, need, and promise.

This program will support research on the influence of individual and environmental factors on the care-seeking experience of blacks that relate to patterns of coronary heart disease (CHD) morbidity and mortality. Data on the apparently lower morbidity but higher case fatality for CHD among blacks compared with the majority United States population suggest differences among population groups in factors related to perception of and response to symptoms of CHD. These differences may influence their obtaining appropriate and timely health care prior to a fatal event. The Division of Epidemiology and Clinical Applications therefore invites grant applications for support of research on the influence of factors intervening between earliest perception or recognition of an illness and its CHD outcome or fatality that may differ among population groups.

This solicitation may be of interest to investigators from a broad range of disciplines such as cardiology, pathology, physiology, epidemiology, psychology, sociology, emergency medicine, and public health. Multidisciplinary approaches involving several specialities are appropriate. Applicants must demonstrate access to a black population group and expertise within the proposed team to design and carry out research sensitive to sociocultural elements of a minority population.

Request for copies of the RFA should be addressed to:

Katrina W. Johnson, Ph.D.
PDRB, DECA, NHLBI, NIH
Federal Building, Room 5C10
7550 Wisconsin Avenue
Bethesda, Maryland 20892
Telephone: (301) 496-3503

BIOLOGICAL AND BEHAVIORAL FACTORS IN SMOKING RELAPSE

RFA AVAILABLE: 86-HL-33-P

P.T. 34; K.W. 0404019, 0404000, 0404001

National Heart, Lung, and Blood Institute

Application Receipt Date: December 8, 1986

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

This program will support research on humans on the short-and long-term effects of smoking cessation and relapse. Studies may examine psychological, behavioral, environmental, social, and biological factors. In addition, researchers may consider socioeconomic, gender, and ethnic differences that differentially contribute to relapse. Studies that use multilevel assessment approaches (e.g., behavioral symptoms and taste preference changes, biobehavioral changes and socio-cultural differences) to examine important predictors of smoking relapse may be particularly valuable. It is important that research designs seek to determine the biobehavioral processes through which relapse to tobacco use occurs, rather than merely enumerate population or gender differences.

Requests for copies of this RFA should be addressed to:

Dr. Sally A. Shumaker
Behavioral Medicine Branch
Division of Epidemiology and Clinical Applications
National Institutes of Health
Bethesda, Maryland 20892

PATHOGENESIS OF AIDS, ASSOCIATED FACTORS

RFA AVAILABLE: 86-AI-11

P.T. 34; K.W. 0715120, 0411005, 0765035

National Institute of Allergy and Infectious Diseases

Application receipt date: January 5, 1987

The National Institute of Allergy and Infectious Diseases (NIAID) invites applications for regular research grants to identify factors which affect the outcome of HTLV-III/LAV infection (Human T Cell Lymphotropic Virus Type III/Lymphadenopathy Associated Virus. The name Human Immunodeficiency Virus (HIV) has been proposed for these viruses by the International Committee on the Taxonomy of Viruses).

OBJECTIVES AND SCOPE

The NIAID wishes to encourage ongoing investigations and to stimulate new research to identify other factors besides HTLV-III/LAV which may enhance the severe immunosuppression characteristic of AIDS and/or promote the development of illnesses caused by the opportunistic agents and malignacies that follow HTLV-III/LAV infection. Such research should lead to an improved fundamental understanding of the interactions of HTLV-III/LAV and other contributing factors, such as other viruses, environmental and social or familial factors, in the development of clinical HTLV-III/LAV infection. By identifying associated factors, investigators may be able to define additional opportunities for the prevention of the development of AIDS.

MECHANISM OF SUPPORT

While the NIAID will receive primary assignment on most applications, decisions on awarding unit assignments will follow programmatic guidelines established by NIH. The NIAID has allocated $1.5 million for this program. The number of awards to be made is dependent upon receipt of a sufficient number of applications of high scientific merit and upon the availability of funds. The earliest possible award date is July 1, 1987. This RFA is a one-time invitation.

WHERE COMPLETE RFA MAY BE OBTAINED

A complete RFA entitled "Pathogenesis of AIDS, Associated Factors" may be obtained from:

Harry W. Haverkos, M.D. or
Harold M. Ginzburg, M.D., J.D. M.P.H.
Westwood Building - Room 753
National Institutes of Health
Bethesda, Maryland 20892
Telephone: (301) 496-0545

ONGOING PROGRAM ANNOUNCEMENTS

ANIMAL MODELS OF BIOLOGICAL AND BEHAVIORAL FACTORS IN SMOKING RELAPSE

P.T. 34; K.W. 0404019, 0404000, 0404001, 0755020

National Heart, Lung and Blood Institute

The National Heart, Lung and Blood Institute (NHLBI) of the National Institutes of Health (NIH) supports meritorious research related to smoking cessation and the prevention of smoking relapse. Through this program announcement the Institute wishes to stimulate animal research to investigate the biological and behavioral effects that accompany: (1) tobacco and nicotine cessation and (2) tobacco and nicotine readministration (i.e., relapse) after cessation periods that are varied in duration.

Cigarette smoking is the single most preventable cause of death and illness in the United States, accounting for at least 30 percent of coronary heart disease deaths. Cigarette smoking and tobacco use also contribute substantially to aortic atherosclerosis, atherosclerotic peripheral vascular disease, and sudden cardiac death. In terms of secondary prevention, continued smoking following a myocardial infarction doubles the risk for reinfarction and sudden cardiac death.

The impact of smoking on lung diseases is also devastating. It is estimated that 80 to 90 percent of the 60,000 deaths from chronic bronchitis, emphysema and chronic obstructive pulmonary disease (COPD) are attributable to smoking.

Also, according to the 1982 Surgeon General's Report on Smoking: "Cigarette smoking is the major single cause of cancer mortality in the United States." The contribution of tobacco to all cancer deaths is estimated at 30 percent. "Smoking is a major cause of cancers of the lung, larynx, oral cavity, and esophagus, and a contributory factor for the development of cancers of the bladder, pancreas, and kidney."

Despite extensive empirical data and media attention highlighting the health hazards of tobacco use, 55 million Americans (one third of the adult population) continue to smoke. It is important to recognize, however, that many of these individuals want to and have tried to stop smoking. Unfortunately, there is a great likelihood of relapse after smoking cessation. Most smokers successfully abstain for a short time but 75-80 percent of them relapse within a year.

To date most research has focused on the development and evaluation of smoking cessation programs. Limited attention has been addressed to the biological and behavioral consequences of cessation. Similarly, research on tobacco use, smoking, and nicotine has concentrated on direct effects during the administration of tobacco or nicotine.

Relatively little research has focused on the sequelae of cessation of tobacco or nicotine. Furthermore, the biological and behavioral effects of relapse, following varied periods of cessation, have not been adequately studied. Yet, it is these understudied consequences of cessation and relapse that may contribute to the failure of maintained smoking cessation. Understanding these processes will aid investigators in the design of more effective cessation and relapse prevention programs.

Although animal research in the area of nicotine cessation and readministration is limited, there have been several animal studies that provide promising results in terms of improving our understanding of the effects of nicotine cessation and relapse in humans. For example, research on rats indicates that, following cessation, rats gain weight and prefer sweets. These changes occur in both males and females but are greater in females. Furthermore, male rats are less physically active after nicotine cessation; whereas there are no changes in physical activity in female rats. Additional animal research on these and other effects of cessation may further our understanding of the ways in which weight control and weight gain are related to smoking behavior.

Smokers often report that they relapse because craving for cigarettes becomes unbearable. Smokers who abstain report irritability, anxiety, sleep disturbances, inability to concentrate, and a variety of other complaints that may contribute to relapse. Minimal research attention has addressed the prevalence of these effects, their time course, and the mechanisms by which these factors result in relapse. The immediate positive and negative effects of relapse have also received limited attention in the empirical work in this area. Animal research would allow for controlled exposure to various types of stressors; task performance evaluations prior to initial nicotine administration, during various lengths of cessation, and at various dosages of nicotine readministration; and, assessments of the positive and negative effects of nicotine readministration.

This Program Announcement complements a Request For Applications designed to stimulate research on the biological and behavioral effects of smoking relapse in humans. Thus, proposals responsive to this Announcement should focus on nicotine cessation and readministration questions that cannot be adequately investigated in humans. For example, animal studies would allow careful dose response analyses of components of nicotine and tobacco that may be particularly important in the effects of cessation and relapse, careful examination of daily behavior following cessation and repeated slips and relapses, and examination of both peripheral and central biological changes that may serve as the underlying processes which occur during cessation and relapse and may lead to sustained relapses. Studies that use multilevel assessment approaches to examine important predictors of smoking relapse are of particular value. That is, studies that include both biological and behavioral components are critical to a fuller understanding of the sequelae of cessation.

APPLICATION SUBMISSION AND REVIEW

Application receipt dates for new applications are the regular application receipt dates of February 1, June 1, and October 1. Applications received after any one receipt date are considered and reviewed together with those received by the next receipt date. The earliest possible award date is approximately nine months after

the receipt date. Applicants should use the regular research grant application form PHS-398, which is available at the applicant's institutional application control office or from the Division of Research Grants (DRG) NIH.

In order to identify the response to this announcement check "yes" and put "Animal Models of Biological and Behavioral Factors In Smoking Relapse" under item 2 on page 1 of those grant applications relating to the topics identified herein. The completed application should be mailed to:

Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
5333 Westbard Avenue
Bethesda, Maryland 20892

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

Sally A. Shumaker, Ph.D.
Health Scientist Administrator
Division of Epidemiology and Clinical Applications
National Heart, Lung, and Blood Institute
Federal Building - Room 604
7550 Wisconsin Avenue
Bethesda, Maryland 20892
Telephone: (301) 496-9380

STUDIES ON NOSOLOGY OF DRUG DEPENDENCE

P.T. 34; K.W. 0404001, 0404009, 0745020

National Institute on Drug Abuse

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

The National Institute on Drug Abuse (NIDA) seeks to stimulate research on problems of clinical nosology, particularly the diagnosis and classification of drug use disorders. This basic research is expected to improve our understanding of the essential clinical features of such disorders, which is expected eventually to lead to improvements in knowledge concerning their etiology and treatment. Three major outcomes are expected from the research:

1 measures of the validity of DSM-III-R criteria currently being proposed for the diagnosis of drug use disorders;

2 development of objective criteria for estimating severity of behavioral dependence in such disorders; and

3 development of improved instruments for use in clinical and research diagnosis of the disorders. The findings of the research are also expected to provide an empirical basis for proposed future changes (DSM-IV) in criteria for diagnosis of drug use disorders.

BACKGROUND

In clinical research, diagnostic criteria specify the necessary conditions for a set of signs and symptoms to be labeled as a clinical disorder. Not only do such criteria facilitate communication among investigators, but they permit research findings to be compared across subject groups as well. The validity of diagnostic criteria is of fundamental importance to clinical research. Knowledge about a disorder is largely based on criteria employed in its diagnosis, and improvements in diagnostic criteria may lead to significant advances in understanding the etiology and treatment of the disorder. Clear operational definition of criteria is also of importance to clinical research, as vagueness in diagnostic criteria can produce studies that appear to have contradictory results.

Diagnostic criteria for drug use disorders have changed significantly over the past several decades. These changes have been due primarily to improvements in understanding the essential clinical features of such disorders. At present, DSM-III criteria recognize Substance Abuse and Substance Dependence as two subtypes of substance use disorders (American Psychiatric Association, 1980). For most classes of psychoactive substances; Abuse is defined as a pattern of pathological use resulting in social or occupational impairment; and Dependence is defined as evidence of tolerance or withdrawal symptoms. The criteria lack consistency across psychoactive drug classes, however, and tend to emphasize social consequences and physical indicators of drug use rather than degree of behavioral dependence.

Because of these and other problems, revision of DSM-III criteria for diagnosis of drug use disorders is currently underway. Publication of the revised criteria (DSM-III-R) is expected in the fall of 1986 (American Psychiatric Association, 1985). In DSM-III-R, the criteria for both Abuse and Dependence have been changed. In particular, the criteria for Dependence have been broadened to include behavioral indicators of dependence in addition to tolerance and withdrawal. All of these changes will preface the publication (expected in 1994) of DSM-IV criteria for diagnosis of drug use disorders.

At the present time, research is needed to evaluate the validity, reliability, and clinical utility of the proposed DSM-III-R criteria for drug use disorders. Research is also needed to compare DSM-III-R to DSM-III criteria for diagnosis of drug use disorders, to determine clinical similarities and differences in patients diagnosed by the two sets of criteria. Another priority area involves identification of possible subtypes of DSM-III-R diagnoses of drug dependence (as the subtypes relate to treatment prognosis). Since behavioral dependence, in nature, is not a dichotomous state, objective indicators are needed for determining severity of the disorder. Improved instrumentation is also needed for collecting information that may be employed in the diagnosis of drug use disorders. Such instrumentation may include structural interviews, questionnaires, or laboratory tests.

Whenever possible, this research should involve comparisons across classes of psychoactive substances, although studies involving specific substances are acceptable depending on the intent of the research. In no case, however, should the research be limited to tobacco or alcohol only. The following are representative areas of research interest.

BASIC ISSUES

1 Evaluation of the validity and reliability of DSM-III-R criteria for diagnosis of drug use disorders.

2 Comparisons of clinical characteristics of patients diagnosed by DSM-III-R and DSM-III criteria, as well as by alternative criteria for drug dependence.

3 Development of objective indicators of severity of behavioral dependence in individuals meeting DSM-III-R criteria for drug use disorders.

4 Comparison of DSM-III-R diagnosis of drug use disorders to other conceptualizations of drug dependence.

5 Studies of the validity and clinical utility of instrumentation (structured interviews, questionnaires, laboratory tests) in the diagnosis of drug use disorders.

CLINICAL ISSUES

1 Identification of clinically-valid subtypes of drug use disorders diagnosed by DSM-III-R criteria (based on factors such as age of onset, personal and family history of psychiatric disorders, etc.).

2 Comparisons of clinical and non-clinical populations on DSM-III-R criteria for drug use disorders.

3 Identification of drug abuse symptomatology in individuals who present for treatment but fail to meet DSM-III-R criteria for drug use disorders.

4 Identification of objective indicators of drug problems in individuals meeting DSM-III-R criteria for drug use disorders.

5 Determination of familial patterns that may suggest different modes of inheritance for various subgroups of individuals meeting DSM-III-R criteria for drug use disorders.

RELATED ISSUES

1 Determination of objective indicators of degree of impairment caused by drug use in social and occupational functioning.

2 Determination of the relation of DSM-III-R diagnosis of drug use disorder to other forms of psychopathology.

3 Studies to develop objective criteria for determining remission in individuals meeting DSM-III-R criteria for drug use disorders.

4 Development of objective criteria for determining degree of intoxication and level of physiological dependence in individuals meeting DSM-III-R criteria for drug use disorders.

5 Development of objective criteria for identifying delirium, delusions, residual disorders, amnestic disorders, and dementia that occur in individuals meeting DSM-III-R criteria for drug use disorders.

6 Development of operational criteria for identifying "loss of control," "craving," and "salience of drug use" in individuals meeting DSM-III-R criteria for drug use disorders.

APPLICATION PROCEDURES

State and local government agencies should use forms PHS-5161. All other applicants should use the standard PHS-398 (revised 5/82) research grant application form. "Studies on Nosology of Drug Dependence, DA 86-08" should be typed in Item 2 on the face page of the application.

Application kits containing the necessary forms and instructions may be obtained from business offices or offices of sponsored research at most universities, colleges, medical schools, and other major research facilities. If such a source is not available, the following office may be contacted for the necessary application material:

Grants Management Branch
National Institute on Drug Abuse
5600 Fishers Lane, Room 10-25
Rockville, Maryland 20857
Telephone: (301) 443-6710

The signed original and six (6) permanent legible copies of the complete application should be sent to:

Division of Research Grants
Westwood Building, Room 240
National Institutes oh Health
5333 Westbard Avenue
Bethesda, Maryland 20892

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

Roy W. Pickens, Ph.D.
Director, Division of Clinical Research
National Institute on Drug Abuse
5600 Fishers Lane, Room 10A-38
Rockville, MD 20857
Telephone: (301) 443-6697

REVIEW PROCESS

Applications received under this announcement will be assigned to an initial review group for scientific merit review. Such groups consist primarily of non-Federal experts. Notification of review outcome will be sent to the applicant after the initial review. Only applications recommended for approval by the National Advisory Council will be considered for funding.

Applications will receive a secondary review for policy consideration by the National Advisory Council of the National Institute on Drug Abuse.

APPLICATION RECEIPT AND REVIEW SCHEDULE:

Receipt of Applications	Initial Review	Advisory Council Review	Earliest Award Date
February 1	May - June	Sept - Oct	December 1
June 1	Oct - Nov	Jan - Feb	April 1
October 1	Feb - March	May - June	July 1

REVIEW CRITERIA

Criteria for scientific/technical merit review of applications will include the following:

- the relevance of the proposed research to improving understanding of the clinical nosology of drug use disorders;

- o the significance and originality from a scientific or technical standpoint of the goals of the proposed research;
- o the qualifications and research experience of the principal investigator and other key research personnel;
- o the availability of adequate facilities, other resources, and collaborative arrangements necessary for the research;
- o the appropriateness of budget estimates for the proposed research activities;
- o the adequacy of provisions for the protection of human subjects, if applicable.

AWARD CRITERIA

Applications recommended for approval by the National Advisory Council on Drug Abuse will be considered for funding on the basis of:

- o overall scientific and technical merit of the proposed research as determined by peer review;
- o program balance of NIDA;
- o relevance to national need as reflected by NIDA research priorities;
- o potential contribution to the areas identified in the announcement; and
- o the availability of funds.

TERMS AND CONDITIONS OF SUPPORT

Grant funds may be used for expenses clearly related and necessary to conduct research projects, including both direct costs which can be specifically identified with the project and allowable indirect costs of the Institution. Funds may not be used to establish, add a component to, or operate a treatment, rehabilitation, or prevention intervention service program. Support for research-related treatment, rehabilitation or prevention services and programs may be requested only for costs required by the research. These costs must be justified in terms of research objectives, methods, and designs which promise to yield generalizable knowledge and/or make a significant contribution to theoretical concepts.

Grants must be administered in accordance with the PHS Grants Policy Statement. Title 42 of the Code of Federal Regulations, Part 52, "Grants for Research Projects" is applicable to these awards. While references to other applicable regulations may be found in the aforementioned reference, special attention is called to 42 CFR 2 - Confidentiality of Alcohol and Drug Abuse Patient Records.

AVAILABILITY OF FUNDS

Applications received under this special announcement will be considered for funding on the basis of overall scientific and technical merits of the proposal as determined by peer review. It is estimated that two or three projects will be funded under this announcement. Applications received in response to this announcement will compete for $2.5 million available for new treatment research grants.

PERIOD OF SUPPORT:

Support will be provided for a period of up to five years (renewable for subsequent periods) subject to continued availability of funds and progress achieved.

REFERENCES:

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Washington, D.C.: American Psychiatric Association, 1980.

American Psychiatric Association. DSM-III-R in Development. Washington, D.C.: American Psychiatric Association, 1985.

 *U.S. GOVERNMENT PRINTING OFFICE: 1986-491-284:40010