# NIH GUIDE

## For Grants and Contracts

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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. 20, No. 46
December 13, 1991

## NOTICES



## NOTICES OF AVAILABILITY (RFPs AND RFAs)



## ONGOING PROGRAM ANNOUNCEMENTS

## DISCONTINUATION OF SUPPORT FOR DIAGNOSTIC AND INVESTIGATIVE LABORATORIES

P.T. 34; K.W. 0780000, 1014002

National Center for Research Resources

The National Center for Research Resources announces the discontinuation of its grant program for Diagnostic and Investigative Laboratories, also termed Animal Resource Laboratories. Effective immediately, new and competing continuation applications for this activity will no longer be accepted. However, previously committed non-competing continuation support within approved competitive segments will be provided, in accord with customary award practices, until the completion of the current competitive segment.

The Diagnostic and Investigative Laboratory activity will be superseded by the new Comparative Medicine Research Program Project activity, that is described in a program announcement published in this issue of the NIH Guide for Grants and Contracts.

Questions regarding this notice should be directed to:

Comparative Medicine Program
National Center for Research Resources
Westwood Building, Room 857
5333 Westbard Avenue
Bethesda, MD 20892
Telephone: (301) 496-5175

## NATIONAL INSTITUTES OF HEALTH ACQUIRED IMMUNODEFICIENCY SYNDROME RESEARCH LOAN REPAYMENT PROGRAM

P.T. 23; K.W. 1014002, 0502024

National Institutes of Health

Application Receipt Date: January 21, 1992

This notice is a republication, with minor modifications, of a November 23, 1990 (Vol. 19, No. 42), issuance on this subject. It is being reissued to emphasize its availability.

SUMMARY

Approved by the Office of Management and Budget (OMB) on June 15, 1990, under the requirements of the Paperwork Reduction Act of 1980, the National Institutes of Health (NIH) announces the availability of educational loan repayment under the National Institutes of Health Acquired Immunodeficiency Syndrome (AIDS) Research Loan Repayment Program ["Program"]. The Program, which is authorized by section 487A of the Public Health Service (PHS) Act (42 U.S.C. 288-1), as amended by section 634 of the Health Omnibus Programs Extension of 1988 (Pub. L. 100-607), provides for the repayment of a sizeable portion of the accumulated educational loan debt of health professionals who agree to conduct, as employees of the NIH, research with respect to AIDS. The Program provides for repayment of up to $20,000 of the principal and interest of the educational loans of qualified health professionals for each year of obligated service. The Program is limited to qualified health professionals who have a substantial amount of educational loan debt relative to income, and who were NOT employed by the NIH during the period of November 4, 1987 through November 3, 1988. The purpose of the Program is to increase the number of investigators conducting AIDS research at the NIH. The NIH, through this notice, invites health professionals interested in engaging in AIDS research to apply for participation in the NIH AIDS Research Loan Repayment Program.

SUPPLEMENTARY INFORMATION

On November 4, 1988, the United States Congress enacted Public Law 100-607, the "Health Omnibus Programs Extension of 1988," which directs the NIH to establish a program of educational loan repayment to attract additional investigators into AIDS research. The Program provides for the repayment of a sizeable portion of the accumulated educational loan debt of qualified health professionals who are engaged in AIDS research.

The Office of AIDS Research, NIH, which is responsible for the administration of the Program, will establish periodic deadline dates for the receipt of applications. January 21, 1992 is the next deadline date for the review of ICD-endorsed applications.

The Program pays a maximum of $20,000 a year directly to a participant's lenders for qualifying educational debt during an initial, minimum two-year service period. The actual loan repayment is based, in part, on the availability of funding as well as the proportion of the participant's qualifying debt relative to their NIH basic pay or stipend at the effective date of Program participation. Since such payments to lenders are considered income for the Program participant and increases his/her Federal tax liability, the Program will make payments, equal to 39 percent of the total loan repayments, directly towards the participant's Internal Revenue Service (IRS) account. The Program may make additional tax reimbursements to those participants who show an

increase in State and/or local tax liability. Benefits are in addition to annual basic pay or stipend.

The Program will repay lenders for the principal, interest, and related expenses (such as the required insurance premiums on the unpaid balances of some loans) of qualified Government (Federal, State, and local) and commercial educational loans obtained by participants for the following: (1) undergraduate, graduate, and health professional school tuition expenses; (2) other reasonable educational expenses required by the school(s) attended, including fees, books, supplies, educational equipment and materials, and laboratory expenses; and (3) reasonable living expenses, including the cost of room and board, transportation and commuting costs, and other reasonable living expenses as determined by the Program.

The following loans are NOT repayable under the Program: (1) loans not obtained from a Government entity or commercial lending institution, such as loans from friends and relatives; (2) loans for which contemporaneous documentation is not available; (3) loans or portions of loans obtained for educational or living expenses that exceed the "reasonable" level as determined by the standard school budget for the year in which the loan was made, and are not determined by the Program to be reasonable based on additional documentation provided by the applicant; and (4) loans, financial debts, or service obligations incurred under the Physicians Shortage Area Scholarship Program, National Research Service Award Program, Public Health and National Health Service Corps Scholarship Training Program, National Health Service Corps Scholarship Program, Armed Forces (Army, Navy, or Air Force) Health Professions Scholarship Program, and Indian Health Service Scholarship Program.

Loans in default, or loans not current in payment schedule, will not be considered as qualifying for repayment. Repayments will only be made for loans with current payment status. During lapses in loan repayments, due either to Program administrative complications or a break in service, Program participants are wholly responsible for making payments or any other arrangements that maintain loans in a current payment status. Penalties assessed to participants as a result of Program administrative failures to maintain current payment status may be considered for reimbursement.

Payments will NOT be made under the Program for loans that participants have paid prior to the effective date of Program participation.

In return for the repayment of their educational loans, participants must agree to: (1) be primarily engaged, defined by the AIDS Research Loan Repayment Advisory Committee (LRAC) to be 80 percent of a researcher's time, in AIDS research as employees of the NIH for a minimum period of two years; (2) make payments to lenders on their own behalf for periods of leave without pay; and (3) pay monetary damages as required in cases where the initial contract is breached. Substantial monetary penalties will be imposed for breach of contract. Applicants must submit a signed contract, as part of the application package prepared by the Program, for consideration under the Program.

At the conclusion of the initial contract, participants may reapply and be considered for subsequent, one-year continuation contracts. Continuation contracts are based upon the same review criteria as the initial contract, in addition to a submission that describes AIDS research accomplishments made during the initial contract. These continuation contracts are approved on a year-to-year basis and contingent upon the appropriation and availability of funds.

AIDS research includes studies of the human immunodeficiency virus (HIV), the pathophysiology of HIV infection, the development of models of HIV infection and its sequelae, cofactors predisposing to HIV infection and AIDS or its sequelae, and the development of vaccines and therapeutics. More specifically, the following research activities are included: (1) studies of HIV and related retroviruses; (2) studies of the mechanism(s) by which HIV and related retroviruses establish infection and infect host cells; (3) studies of the mechanism(s) by which HIV and related retroviruses cause disease, including studies of the immune deficiency induced by HIV and related retroviruses; (4) studies of the pathophysiology of host response to HIV infection; (5) studies of in vivo or in vitro models of human HIV infection and its sequelae; (6) epidemiologic studies of HIV and related retrovirus infection; (7) clinical trials involving prophylaxis or therapy for HIV infection or its sequelae; (8) preclinical studies aimed at the development of therapy for or prevention of HIV infection and the immunodeficiency caused by HIV infection and its sequelae; (9) cofactors predisposing to acquiring HIV infection; (10) basic studies and clinical trials involving vaccines, or other immunological or chemotherapeutic interventions for the prevention of HIV infection and its sequelae; and (11) basic studies into the transmission of HIV involving high-risk behaviors and research concerning the interruption of transmission by behavioral change and pharmacologic intervention.

AIDS researchers include scientists who are intellectually engaged in the process of providing scientific direction and guidance in programs of original AIDS research, specifically epidemiologists, statisticians, and others who are involved in the design and conduct of research studies. The duties of such scientists may include the generation and design of studies and the collation and analysis of data; and/or the preparation and publication, as author or co-author, of studies in peer-reviewed journals. AIDS researchers also include physicians who are providing care for HIV-infected individuals who are subjects of HIV-related research.

Because the Program will be most attractive to individuals at the beginning stages of their research careers when they still have substantial educational loan debt, it is anticipated that most participants will be employed as Clinical or Research Associates, Staff or Senior Staff Fellows (including PRAT and Epidemiology), and Visiting Associates. Occasionally, investigators who are more senior may also wish to participate. These individuals may include the following: regular Civil Service employees (either temporary or permanent), NIH Special Experts, Visiting Scientists, and Commissioned Officers in the USPHS Commissioned Corps.

Individuals wishing to apply to the Program must first obtain a firm employment commitment from an Institute, Center, or Division (ICD) Personnel Department. An initiating official, that may be a laboratory or branch chief, must recommend an individual for application to the Program, and the ICD Scientific Program Director and ICD Director must concur. Participation in the Program is contingent, in part, upon employment with the NIH, and candidates may not be recommended for loan repayment by an ICD until a firm employment commitment has been made by the ICD Personnel Department. Thereafter, these applications are reviewed by the LRAC. The LRAC, which is composed of intramural and extramural scientific staff, review, rank, and approve or disapprove applicants. LRAC approval, in part, is based on the appropriateness of the research assignment to AIDS research and the scientific merit of the research. Eligibility for Program participation may be effective retroactive to the Entrance on Duty date when applicants begin their qualified AIDS research assignment prior to LRAC approval. The award of funds is contingent upon the availability of funds appropriated by the Congress of the United States for the NIH.

Under the Program, payments will be made directly to lenders on a quarterly basis at the completion of each quarter of a participant's satisfactory service.

ELIGIBILITY CRITERIA

Specific eligibility criteria with regard to participation in the NIH AIDS Research Loan Repayment Program include the following:

(1) Applicants must be U.S. citizens or permanent residents.

(2) Applicants must have a Ph.D., M.D., D.O., D.D.S., D.M.D., D.V.M., or equivalent degree.

(3) Applicants must have educational debt in excess of 20 percent of their annual basic pay or stipend at entrance on duty, resulting from governmental or commercial loans obtained to support their undergraduate and/or graduate education.

(4) Individuals who are not NIH employees, such as Visiting Fellows, Intramural Research Training Award recipients, National Research Service Award recipients, Guest Researchers or Special Volunteers, NIH National Research Council Biotechnology Research Associates Program participants, and Intergovernmental Personnel Act participants, may NOT participate in the Program.

(5) Individuals employed by the NIH during the period November 4, 1987 through November 3, 1988 are INELIGIBLE.

(6) Applicants may be appointed under a temporary or permanent employment mechanism as long as their employment has the potential to last a minimum of two years.

(7) Individuals with existing service obligations to Federal, State, or other entities will NOT be considered for the Program UNLESS deferrals are granted for the length of their service obligation under the Program.

(8) Applicants will NOT be excluded from consideration under the Program on the basis of race, color, creed, religion, sex, handicap, age, national origin, or political affiliation.

INQUIRIES

Information regarding the Program may be obtained by calling or writing:

Marc S. Horowitz, J.D.
Director, NIH AIDS Research Loan Repayment Program
Office of AIDS Research
Building 31, Room 5C12
Bethesda, MD 20892
Telephone: (301) 402-0192

AUTHORITY AND REGULATIONS

This Program is not subject to the provisions of Executive Order 12372, Intergovernmental Review of Federal Programs. This Program was granted OMB clearance on June 15, 1990, under the requirements of the Paperwork Reduction Act of 1980, and has been designated OMB No. 0925-0361. This Program has been assigned Catalog of Federal Domestic Assistance (CFDA) Number 93.936 - NIH Acquired Immunodeficiency Syndrome Research Loan Repayment Program.

## CONFERENCE: "AGING--THE QUALITY OF LIFE"

P.T. 42; K.W. 0710010, 0745035

National Institutes of Health

The Christopher Columbus Medical Sciences Committee of the National Institutes of Health, in conjunction with several NIH institutes, the Food and Drug Administration, and the Italian National Research Council, has organized a major international conference that will be held at the Omni Shoreham Hotel in Washington, DC,

February 10-12, 1992. The conference is part of the commemoration of the Quincentenary of Christopher Columbus' epic voyage to the Americas.

A banquet will be held in the evening of February 11. Presentation of the prestigious Christopher Columbus Discovery Awards to outstanding scientists in biomedical research will be the highlight of the banquet.

Topics and speakers at the Plenary Session on Monday, February 10, will be:

o Searching for the Fountain of Youth: 500 Years of Research to Understand Aging; Dr. Robert N. Butler, Mt. Sinai Medical Center, New York;

o Age Associated Changes in Cardiovascular Function in Response to Exercise; Dr. Myron Weisfeldt, Columbia University, New York;

o Nutrition, Aging and Disease: The Metabolic Crossroads; Dr. Edwin L. Bierman, University of Washington;

o Drug Metabolism/Pharmacology in the Aging; Dr. Grant R. Wilkenson, Vanderbilt University;

o The Brain: Lighthouse of the Aging Years; Dr. Fred Plum, Cornell Medical Center;

o Osteoporosis, Osteoarthrosis, and Other Musculoskeletal Disorders in the Elderly; Dr. Lawrence E. Shulman, National Institutes of Health;

o The Effect of Chronological Age on Cancer Biology and Therapy; Dr. Emil J. Freireich, M.D. Anderson Hospital;

o Implications of Aging for the Individual and Society; Dr. Robert H. Binstock, Case Western Reserve; and

o Medicare: What is Covered?/What is not Covered?; Dr. Gail Wilensky, Administrator, Health Care Financing Administration.

Concurrent sessions dealing with cardiovascular, brain, cancer, musculoskeletal, healthy aging, nutrition, obesity and urogenital research, featuring outstanding biomedical scientists, will be held on the second and third days. An interdisciplinary poster session will be held on Tuesday, February 11. Summary reports and future challenges will be presented at the final plenary session to close the conference on the third day.

The conference will be of interest to scientists, public health officials, policy makers and analysts, and the general public.

Continuing Medical Education credits for 21.5 hours in Category 1 of the Physician's Recognition Award of the American Medical Association are available.

Registration for the three-day conference is $200 if paid in advance or $250 on site. Early registration of $150 has been extended to December 15, 1991. Those interested in program and registration information should contact:

Aging: Quality of Life Conference
Suzanne Kuntz, Conference Coordinator
655 Fifteenth St., N.W., Suite 300
Washington, DC 20005
Telephone: (202) 639-4524
FAX: (202) 347-6109

**NOTICE OF REGIONAL MEETINGS**

P.T. 42; K.W. 1014006, 1014002

National Institutes of Health

The National Institutes of Health (NIH) has been engaged in a strategic planning process aimed at developing the Agency's first corporate long-range Strategic Plan. The purpose of the NIH Strategic Plan is to: (1) identify areas of research that promise extraordinary dividends for the Nation's future health, (2) nurture the intellectual base of biomedical research and the conditions that lead to breakthroughs on the cutting edge of science, and (3) provide approaches for addressing broad administrative and science policy issues that affect the ability of the NIH to carry out its mandate. The Strategic Plan incorporates the ideas of all the organizational components of the NIH as well as the research components of the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA).

The NIH will convene two regional meetings to provide a forum for the extramural community to comment on the draft Strategic Plan before it is finalized. The first meeting will take place on February 12, 1992, at Occidental College, Los Angeles, California, and will be co-hosted by Occidental College and the Charles R. Drew University of Medicine and Science. The second meeting will be held on February 25, at the University of Connecticut Health Center, Farmington, Connecticut.

Each of the regional meetings will be of one day duration, beginning at 9 a.m. and ending at 3 p.m. The meetings will begin with the NIH Director presenting an overview of the NIH Strategic Plan. Immediately afterwards, representatives of concerned organizations and institutions will be invited to present testimony before a panel of senior NIH officials, to be chaired by the Director, NIH. Due to time constraints, it would be appreciated if only one representative from each organization would present testimony; oral presentations will be limited to five minutes. Written testimony may be any length and should include a brief description of the organization presenting. Testimony will be scheduled based upon when notification of intent to present testimony is received. If the number of organizations that want to present oral testimony exceeds the time available on the agenda, the individual written statements will serve as testimony presented. All testimony, whether oral or written, will form a part of the official record of the NIH Strategic Plan.

If you or others from your organization who plan to attend one of these regional meetings have any special needs that require assistance, please inform the office listed below. If you have questions concerning either of the two regional meetings, please contact Ms. Mary Demory (301) 496-1454.

If you will be attending one of the regional meetings or if your organization would like to testify before the NIH panel, please provide the name, title, institution, telephone number, and mailing address of the individual attending. Indicate which regional meeting and whether or not testimony will be presented. The requested information is to be sent by mail or facsimile no later than December 16, 1991 to:

NIH Strategic Plan Regional Meetings
c/o Dr. Jay Moskowitz
NIH, Building 1, Room 103
9000 Rockville Pike
Bethesda, MD 20892
FAX: (301) 402-1759

A copy of the Draft NIH Strategic Plan and additional information will be sent prior to the regional meetings to participants attending and/or testifying.

## NOTICE OF POLICY CHANGE - FIRST INDEPENDENT RESEARCH SUPPORT AND TRANSITION AWARD

P.T. 34; 1014006

Alcohol, Drug Abuse, and Mental Health Administration

The Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) announces that effective February 1, 1992, applications for the First Independent Research Support and Transition (FIRST) Award must be accompanied by at least three letters of reference. FIRST applicants are to request the letters of reference well in advance of the application submission, advising the referees to return the reference letters to the applicant in sealed envelopes as soon as possible. The sealed envelopes must be attached to the front of the original application. Applications not containing these letters will be returned to the applicant.

Additionally, effective February 1, 1992, applicants for the FIRST award must request five years of support. Applications requesting fewer than five years of research support will be designated as R01s and so reviewed unless the applicant withdraws the application.

## NOTICES OF AVAILABILITY (RFPs AND RFAs)

### SENSORY FEEDBACK SIGNAL DERIVATION FROM AFFERENT NEURONS

RFP AVAILABLE: NIH-NINDS-92-04

P.T. 34; K.W. 0705070, 0710085, 0706010

National Institute of Neurological Disorders and Stroke

The Neural Prosthesis Program of the National Institute of Neurological Disorders and Stroke, National Institutes of Health, is seeking a contract to determine the feasibility of extracting sensory information about fingertip contact and slip from chronic recordings of gross peripheral nerve activity using cuff electrodes. This investigation will include a feasibility study, in animals, of deriving sensory feedback signals from peripheral nerve recordings on a chronic basis. It also will include a study, in human cadaver material, of the most suitable sites for implantation of cuff electrodes for extracting sensory information about the hand. The project will focus on those nerves most likely to provide information about fingertip contact and slip during hand grasp. Personnel with established expertise in sensory physiology and chronic electrical recording in peripheral nerves are required. It is anticipated that one award will be made for a period of three years in July 1992.

This is not a Request for Proposals (RFP). To receive a copy of the RFP, submit a written request to the following address and enclose two self-addressed mailing labels. All responsible sources shall be considered by the agency. The RFP will be issued on or about December 18, 1991, with proposals due on February 17, 1992.

Contracting Officer
Contracts Management Branch, DEA
National Institute of Neurological Disorders and Stroke
Federal Building, Room 901
7550 Wisconsin Avenue
Bethesda, MD 20892
Attention: RFP No. NIH-NINDS-92-04

**PRODUCTION AND CHARACTERIZATION OF MONOCLONAL ANTIBODIES AGAINST H-2 CELL MEMBRANE ANTIGENS**

RFP AVAILABLE: NIH-NIAID-DAIT-92-12

P.T. 34; K.W. 0760045, 0710070, 0715015, 0755020, 0760060

National Institute of Allergy and Infectious Diseases

The National Institute of Health (NIH) has a requirement for the production and characterization of immunogens and monoclonal antibodies against H-2 cell membrane antigens and determination of their effects in experimental models of human autoimmune diseases.

The Clinical Immunology Branch of the Division of Allergy, Immunology and Transplantation, National Institute of Allergy and Infectious Diseases (NIAID), is soliciting contract proposals from organizations having the capabilities and facilities to prepare peptides corresponding to murine Class II MHC antigens using synthetic methods; to prepare monoclonal antibodies against these peptides (immunogens); and to test their effects in the induction, development, or progression of autoimmune disease in experimental animals.

The NIAID-sponsored project shall take approximately five years to complete. This shall be a cost-reimbursement type contract. It is anticipated that two contracts will be awarded. The project will require a high level of expertise in peptide synthesis, monoclonal antibody production, and characterization and availability of animal models of human autoimmune disease.

This is an announcement for an anticipated Request for Proposal (RFP). RFP-NIH-NIAID-DAIT-92-12 shall be issued on or about December 16, 1991, with a closing date tentatively set for January 29, 1992. Requests for the RFP shall be directed in writing to:

Ms. Sylvia Cunningham
Contracting Officer, Contract Management Branch
National Institute of Allergy and Infectious Diseases
The Solar Building/Room 3C07
6003 Executive Boulevard
Bethesda, MD 20892

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

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

**TREATMENT AND REHABILITATION OF ADULT APHASIA**

RFA AVAILABLE: DC-92-03

P.T. 34; K.W. 0715050, 0715055, 0710085, 0404000, 0710030

National Institute on Deafness and Other Communication Disorders

Letter of Intent Receipt Date: February 3, 1992
Application Receipt Date: February 19, 1992

PURPOSE

The National Institute on Deafness and Other Communication Disorders (NIDCD), through the Division of Communication Sciences and Disorders, announces the availability of the Request for Applications (RFA), "Treatment and Rehabilitation of Adult Aphasia."

BACKGROUND

A significant and debilitating effect of stroke is aphasia, a language disorder involving total or partial impairment of the capacity to understand and/or produce spoken language, as well as impairments of the ability to read or write. Most aphasic individuals receive some form of treatment for these language deficits. Previous research has indicated that treatment efforts are effective with some subgroups of aphasia, while other aphasic individuals remain severely impaired despite long-term treatment. Further research is needed into issues associated with treatment of aphasia and the development and refinement of effective treatment protocols.

This RFA encourages applications that propose research addressing treatment issues and rehabilitation of adult aphasia.

ELIGIBILITY

The following organizations are eligible to apply: foreign and domestic, non-profit institutions of higher education, other non-profit and for-profit organizations, State and local governments and their agencies, and authorized Federal agencies.

RESEARCH GOALS AND SCOPE

The understanding of behavioral, linguistic, and neurological correlates of adult aphasia continues to expand. In addition, a number of recent advances have occurred in the treatment of adult aphasia. Research has indicated that some profoundly aphasic patients can learn a computerized technique for exchanging information by manipulating visual symbols. Results of pharmacological treatment have shown promise in the amelioration of selective disorders of aphasia, such as impairments of speech initiation, through the use of the dopamine agonist bromocriptine. Efficacy of specific therapeutic techniques has been demonstrated, among them, the elimination of perseverative intrusions of earlier utterances. Additional intervention strategies currently being tested include treatment protocols targeted directly at theoretically defined language components that are found to be impaired. A limited number of such studies conducted to date have demonstrated measurable improvement among individual aphasic patients many years following onset of their aphasia.

In general, however, research into the development of treatment protocols, and the efficacy of those treatments remains limited. Techniques and commercially available treatment plans have found their way into the clinical arena often with little attention to usefulness with specific subgroups, evidences of efficacy, or attempts to merge theoretical constructs with clinical procedures. It remains unclear why treatment is effective for some but ineffective for other aphasic individuals. Theories of treatment need to be developed in order to place therapeutic efforts on scientific foundations. Efforts must be increased to match patient characteristics to treatment paradigms and ascertain the proper level of description, for only with adequate description of those characteristics can selection and specification of treatment occur. Approaches to the remediation of language disorders require objective and reliable information about the nature and stability of patients' symptoms. Assessment instruments that provide such information are needed in light of new research findings that have clarified symptom and deficit relationships. Existing assessment procedures must be revised and improved in order to bring them into line with current understanding of the relationship of patients' symptoms to underlying language deficits.

Proposed research programs would benefit from a number of interdisciplinary approaches. For example, interdisciplinary models of the treatment process might include speech-language pathology, neuropsychology, pharmacology, and computer sciences. There is a need to coordinate efforts of researchers in all areas of cognitive science and rehabilitation. Cognitive neurolinguistic approaches and theories regarding the neural basis of language should be utilized and pursued. Social science methodologies are needed to examine the psychosocial aspects of aphasia. Documentation of changes and improvements resulting from treatment and not other variables is required from all professionals providing treatment to individuals with adult aphasia.

Applications in response to this RFA may utilize single subject or group designs and address the above issues, the following specific topics, or other related areas:

o Demonstration of the efficacy and efficiency of existing intervention strategies for aphasia treatment.

o Development and validation of novel, innovative, theory-based techniques of treatment.

o Assessment of short- and long-term effects of specific treatments.

o Identifications of aphasia subgroups or subtypes most responsive to specific treatments.

o Characterization of patients with successful responses to treatment.

o Identification of the variables most important in predicting success in treatment, for example, the effects of intensity and duration of treatment on improvement.

o Identification of factors that contribute to or limit generalization (carry-over) of language skills.

o Evaluation of recovery from aphasia, with and without treatment, and processes whereby recovery is maximized.

o Assessment of impact of specific language ability training on other language skills, for example, the effects of language production training on comprehension skills.

o Determination of most effective focus of treatment: deficit vs. strength oriented.

o Exploration of the use of neuroradiographic techniques pre- and post-treatment in documenting brain reorganization.

o Examination of the use of pharmacotherapy in the treatment of aphasia.

o Development and evaluation of alternative and augmentative communication systems for adults with language deficits.

o Investigation of social and psychological factors that have the potential to affect treatment outcome.

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

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

METHOD OF APPLYING

Applicants are requested to submit a letter of intent to Dr. Judith Cooper at the address below on or before February 3, 1992. The letter is to include a descriptive title investigators who may be involved, and any collaborating participants outside the applicant institution. The NIDCD requests such letters only for planning purposes and to provide an indication of the number and scope of applications to be received and, therefore, will not acknowledge their receipt. A letter of intent is not binding, it will not enter into the review of any application subsequently submitted, nor is it a necessary requirement.

Applications must be submitted on form PHS 398 (rev. 10/88) using the instructions included in the application kit. These kits are available from the NIDCD Program Administrator address cited above and from the Division of Research Grants, National Institutes of Health, Westwood Building, Room 449, Bethesda, MD 20892, telephone 301/496-7441.

Receipt date for applications is February 19, 1992. Applications received after February 19, 1992 will be returned to the applicant.

INQUIRIES

Written and telephone inquiries concerning the objectives and scope of the RFA, and inquiries about whether or not specific proposed research would be responsive, are encouraged. The opportunity to clarify any issues or questions from potential applicants is welcomed.

Potential applicants may obtain a copy of the RFA by contacting:

Judith A. Cooper, Ph.D.
Deputy Director, Division of Communication Sciences and Disorders
National Institute on Deafness and Other Communication Disorders
Executive Plaza South, Room 400-B
6120 Executive Boulevard
Rockville, MD 20892
Telephone: (301) 496-5061
FAX: (301) 402-6251

For budgetary and fiscal questions, contact:

Sharon Hunt
Grants Management Officer
NationalInstitute on Deafness and Other Communication disorders
Executive Plaza South, Room 400-B
6120 Executive boulevard
Rockville, MD 20892
Telephone: (301) 496-0909

AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance No. 93.855. 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 grants policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. The program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

**MINORITY YOUTH HEALTH BEHAVIOR RESEARCH: THE DEVELOPMENT AND EVALUATION OF INTERVENTIONS**

RFA AVAILABLE: OD-92-01

P.T. 34, FF; K.W. 0404000, 0715027, 0404023, 0745027

National Institutes of Health

Letter of Intent Receipt Date: February 1, 1992
Application Receipt Date: May 15, 1992

PURPOSE

The National Institutes of Health (NIH) announces the availability of a Request for Applications (RFA) for cooperative agreements to develop, implement, and evaluate a coordinated program of community-based health behavior interventions to lower the unacceptably high rates of morbidity and mortality among minority youth. Applications responsive to this RFA must include, but are not limited to, strategies for decreasing violence-related injuries and deaths, sexually transmitted diseases and unwanted or unintended pregnancies. The NIH also invites applications for a Data Center that will manage data from the research from the other awardees. Although this is an NIH-wide initiative, the National Institute for Child Health and Human Development (NICHD), in close cooperation with the Office of Minority Programs at NIH, will be the lead Institute. One NIH/NICHD staff person will participate as the Project Coordinator and will facilitate grantee access to expertise in other NIH components when appropriate.

HEALTHY PEOPLE 2000

The Public Health Service (PHS) is committed to achieving the health promotion and disease prevention objectives of "Healthy People 2000," a PHS-led national activity for setting priority areas. This RFA, Minority Youth Health Behavior Research: The Development and Evaluation of Interventions, is related to the priority areas of the prevention of violent and abusive behaviors, education and community based programs, family planning and the prevention of HIV infection and sexually transmitted diseases. Potential applicants may obtain a copy of "Healthy People 2000" (Full Report: Stock No. 017-001-00474-0) or "Healthy People 2000" (Summary Report: Stock No. 017-001-00473-1) through the Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325 (telephone 202-783-3238).

ELIGIBILITY REQUIREMENTS

Applications may be submitted by domestic for-profit and non-profit, public and private organizations, such as universities, colleges, hospitals, laboratories, units of State or local governments, and eligible agencies of the Federal Government. Applications from minority individuals and women are encouraged. For-profit organizations must note that no profit or fees may be requested under financial assistance awards.

MECHANISM OF SUPPORT

This RFA will use the National Institutes of Health (NIH) cooperative agreement mechanism (U01). Under its terms, the awardee defines the details of the project within the guidelines of the RFA, retains primary responsibility for implementation, data collection, analysis and interpretation, preparation of publications, and collaboration with other awardees. The awardee also agrees to accept assistance, close coordination and participation of the Sociologist, Demographic and Behavioral Sciences Branch, NICHD (hereafter called the Project Coordinator) working with the project in all aspects of the scientific and technical management.

This RFA is intended as a one-time solicitation. However, if it is determined that there is a sufficient continuing program need, the NIH may reissue this RFA. The total project period for applications submitted in response to the RFA must not exceed five years. The anticipated award date will be November 1, 1992.

FUNDS AVAILABLE

It is anticipated that up to eight awards will be made under this RFA for a total of approximately $5 million (including direct and indirect costs) during the first program year. This level of support is dependent upon the receipt of a sufficient number of applications of high scientific merit. Although this program is provided for in the financial plans of the NIH, the award of grants pursuant to this RFA is also contingent upon the availability of funds for this purpose.

RESEARCH OBJECTIVES

For a detailed outline of the research objectives, applicants are advised to request a copy of the RFA from the Project Coordinator (Staff Contact) listed below.

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

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

REVIEW CONSIDERATIONS

Specific details on review criteria are outlined in the RFA. Applications must be submitted on form PHS 398 (rev. 10/88, reprinted 10/89) that is available in most institutional business offices or from the Division of Research Grants, NIH (301-496-7441). Applications must be received in the Division of Research Grants by May 15, 1992. Late applications will be returned to the applicant.

A special technical assistance workshop will be offered to assist potential applicants who have limited experience with the NIH application process. Representatives from each NIH institute will participate in this workshop to provide potential applicants with information on areas of particular interests. This workshop will

be held in the Washington, DC metropolitan area on February 24, 1992. The NIH cannot support individuals who wish to attend the conference, but the conference will be open to any individual or organization who wishes to attend. An agenda may be obtained by contacting Dr. Bob Eisinger, Office of AIDS Research (telephone 301-496-0357) or Dr. Susan Newcomer (telephone 301/496-1174). For those who are unable to attent the workshop, a summary will be available upon request to Dr. Newcomer.

This technical assistance workshop will also be teleconferenced on the Black College Teleconference Network. Contact Ogden Lacey at telephone (301) 496-1584 for further details on participation in the teleconference.

LETTER OF INTENT

A letter of intent is requested by February 1, 1992, and is to include a descriptive title of the proposed research, the name, address and telephone number of the Principal Investigator, other key personnel, and the number and title of the RFA in response to which the application is submitted. It is to be sent to:

Susan Newcomer, Ph.D.
Office of Minority Programs Project Coordinator
National Institute of Child Health and Human Development
Eexecutive Plaza North, Room 611
Bethesda, MD 20892
Telephone: (301) 496-1174
FAX: (301) 496-0962

INQUIRIES

Written and telephone inquiries concerning this RFA are encouraged. The opportunity to clarify any issues or questions from potential applicants is welcome. Direct inquiries regarding programmatic issues and requests for copies of the RFA to:

Susan Newcomer, Ph.D.
(See above)

Direct inquiries regarding fiscal matters to:

Melinda Nelson
Office of Grants and Contracts
National Institute of Child Health and Human Development
Eexecutive Plaza North, Room 505
Bethesda, MD 20892
Telephone: (301) 496-5481

AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance No. 93.864 (Population Research). Awards are made under authorization of the Public Health Service Act, Title IV, Part A (Public Law 78-410, as amended by Public Law 990158, 42 USC 241 and 285) 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 23472, or to Health Systems Agency review.

## THE BIOLOGY OF KIDNEY DISEASE AND HYPERTENSION IN BLACKS

RFA AVAILABLE: DK-92-11

P.T. 34, FC; K.W. 0715115, 0411005, 0765035, 0710095, 1002019

National Institute of Diabetes and Digestive and Kidney Diseases
National Heart, Lung, and Blood Institute

Letter of Intent Receipt Date: February 13, 1992
Application Receipt Date: March 13, 1992

PURPOSE

The Division of Kidney, Urologic and Hematologic Diseases (DKUHD) of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and the Division of Heart and Vascular Diseases (DHVD) of the National Heart, Lung, and Blood Institute (NHLBI) announce the availability of a Request for Applications (RFA) on the above subject.

End-stage renal disease (ESRD) associated with hypertension is a major health problem among Black Americans. In 1989, the incidence rate of ESRD with a diagnosis of hypertension was nearly six and one-half times greater in Blacks compared to Whites. For Blacks aged 20-44, the rate was greater than 18 times that of whites. A number of factors have been proposed to be responsible for this increased disease burden in Blacks, including greater prevalence of hypertension, more severe and uncontrolled hypertension, lack of easy accessibility to

adequate health care, and greater susceptibility of the kidney to the effects of high blood pressure.

This RFA is targeted toward Blacks, therefore, the study populations must reflect this designation. However, if other social groups are to be used for control purposes, appropriate justification must be included in the study design.

HEALTHY PEOPLE 2000

The Public Health Service (PHS) is committed to achieving the health promotion and disease prevention objectives of "Healthy People 2000," a PHS-led national activity for setting priority areas. This RFA, "The Biology of Kidney Disease and Hypertension in Blacks," is related to the priority areas of heart disease and stroke and diabetes and other chronic disabling conditions. The PHS urges applicants to submit work plans that address specific objectives of "Healthy People 2000." Potential applicants may obtain a copy of "Healthy People 2000" (Full Report: Stock No. 017-001-00474-0) or "Healthy People 2000" (Summary Report: Stock No. 017-001-00473-1) through the Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325 (Telephone 202-783-3238).

RESEARCH OBJECTIVES

This special grant program will support fundamental research on the biology of kidney disease and hypertension in Blacks. To this end, the following are some suggested areas of investigation that would be considered responsive to this solicitation:

o Circulatory and target organ pathophysiology, including the use of polymerase chain reaction and receptor-binding techniques to study specific tissues and relevant receptors in patients with kidney disease and hypertension.

o Known factors and mediators of kidney disease and hypertension utilizing appropriate methodology.

o Dietary mechanisms, including the role of monovalent and divalent cations in the genesis and maintenance of renal dysfunction and hypertension.

o Neural and other humoral factors, including kinins, the renin-angiotensin-aldosterone system, atrial natriuretic peptide, dopamine, and eicosanoids. and their role in renal dysfunction and hypertension.

o The role played by intrinsic morphological and physiological aberrations of the kidney resulting in hypertension.

o Gender-related mechanisms associated with the development of kidney disease and hypertension in Blacks.

o Studies in genetics and immunogenetics, including identification of and studies in, demonstration families and appropriate animal models. This approach would include studies to select and identify Black family configurations; to phenotypically characterize their members; to collect, analyze, immortalize, and store cell lines from these individuals; and to use the DNA to identify markers and genes for kidney disease and hypertension.

o Polycystic kidney disease in Blacks.

MECHANISM OF SUPPORT

Support for this program will be through the traditional research project (R01) grant and will be governed by the current policies of grant programs of the National Institutes of Health. Up to five years of support will be provided (renewable for subsequent periods) subject to the availability of funds and progress achieved.

FUNDS AVAILABLE

For FY 1992, $1.5 million in total costs will be allocated by NIDDK and NHLBI to fund applications submitted in response to this RFA. It is anticipated that six to eight awards will be made. However, this funding level is dependent upon the receipt of a sufficient number of applications of high scientific merit. Although this program is provided for in the financial plans of the NIDDK and the NHLBI, the award of grants pursuant to this RFA is contingent upon appropriated funds for this purpose. Applicants must limit the budget requests to no more than $160,000 in direct costs for the first year. The earliest award date will be September 30, 1992.

SPECIAL INSTRUCTIONS FOR INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH STUDY POPULATIONS

For projects involving clinical research, NIH requires applicants to give special attention to the inclusion of women and minorities in study populations. If women and minorities are not included in the study populations for clinical studies, a specific justification for this exclusion must be provided. Applications without such documentation will not be accepted for review. Data available at present shows that end stage renal disease associated with hypertension occurs in Blacks to a greater extent than any other racial group in the U.S. Therefore, for the purposes of this RFA, minorities are limited to Blacks. If other racial groups are used as controls, it must be justified in the study design.

REVIEW PROCEDURES

Applications will be reviewed by the Division of Research Grants (DRG) for completeness. Incomplete applications will be returned to the applicant without further consideration. Complete applications will then be reviewed for scientific and technical merit by an Initial Review Group that will be convened by the Review Branch, Division of Extramural Activities, NIDDK. Second level review will be carried out by the Advisory Councils of the National Institute of Diabetes and Digestive and Kidney Diseases and the National Heart, Lung, and Blood Institute.

APPLICATION PROCEDURES

LETTER OF INTENT

Prospective applicants are encouraged to submit an optional letter of intent that includes a descriptive title of the grant application, the name of the Principal Investigator, the institutional affiliation of the Principal Investigator, and any other participating institutions. Since such letters are requested only for the purpose of obtaining an indication of the number and scope of applications likely to be received, their receipt will not be acknowledged. A letter of intent is not binding, and will not enter into the review of the application subsequently submitted, nor is it required for application. This letter of intent, is to be received by February 13, 1992, and is to be sent to:

Robert D. Hammond, Ph.D.
Chief, Review Branch, DEA
National Institute of Diabetes and Digestive and Kidney Diseases
Westwood Building, Room 603
Bethesda, MD 20892
FAX: (301) 402-1277

Applications must be submitted using form PHS 398 (rev. 10/88) that is available in the business office or grants office of most academic or research institutions and from the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, 5333 Westbard Avenue, Bethesda, MD 20892, telephone (301) 496-7441. Detailed instructions on application submission are described in the RFA.

INQUIRIES

It is essential that prospective applicants obtain the RFA prior to preparing an application. The RFA can be obtained by contacting:

Lawrence Y. Agodoa, M.D.
Director of Clinical Affairs, DKUHD
National Institute of Diabetes and Digestive and Kidney Diseases
Westwood Building, Room 3A11
Bethesda, MD 20892
Telephone: (301) 496-7572
FAX: (301) 402-0223

or

Paul A. Velletri, Ph.D.
Program Administrator, HKDB/DHVD
National Heart, Lung, and Blood Institute
Federal Building, Rm 4C10
Bethesda, MD 20892
Telephone: (301) 496-1857
FAX: (301) 496-9882

For fiscal and administrative matters, contact:

Mrs. Helen Ling
Grants Management Specialist
National Institute of Diabetes and Digestive and Kidney Diseases
Westwood Building, Room 639
Bethesda, Maryland 20892
Telephone: (301) 496-7467
FAX: (301) 496-9721

or

Ms. Jane R. Davis
Chief, Blood Diseases and Resources Grants Management Section
Grants Operation Branch, DEA
National Heart, Lung, and Blood Institute
Westwood Building, Room 4A15B
Bethesda, Maryland 20892

Telephone: (301) 496-7257
FAX: (301) 402-1200

AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance No. 93.849, (Kidney, Urologic and Hematologic Diseases) and 93.837 (Heart and Vascular Diseases). Grants will be awarded 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 at 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.

## ONGOING PROGRAM ANNOUNCEMENTS

### INDIVIDUAL POSTDOCTORAL AND SENIOR FELLOWSHIPS IN GENOMIC ANALYSIS AND TECHNOLOGY AND THE ETHICAL, LEGAL AND SOCIAL IMPLICATIONS OF HUMAN GENOME RESEARCH

PA: PA-92-21

P.T. 22: K.W. 0720005, 1215018, 1014004

National Center for Human Genome Research

PURPOSE

The mission of the National Center for Human Genome Research (NCHGR) is to characterize the human genome and the genomes of selected model organisms. The research program has the following interrelated goals: the construction of high-resolution genetic linkage maps; the development of a variety of physical maps; the determination of the complete nucleotide sequence of the DNA of human and other selected model organisms; the development of the capability for collecting, storing, distributing, and analyzing the data produced; the development of appropriate new technologies to achieve these goals; and the examination of the ethical, legal, and social implications of the Human Genome Program. These goals are discussed in detail in the document, "Understanding Our Genetic Inheritance - The U.S. Human Genome Project: The First Five Years - FY 1991-1995," available from the Human Genome Management Information Center, Oak Ridge National Laboratory; Oak Ridge, TN 37831-6050, telephone (615) 576-6669.

To accomplish the goals of the NCHGR research program and to use, for further research, the resources that the program will develop, scientists who are well-trained in one or more of a variety of disciplines will be needed. Therefore, the NCHGR is offering both individual postdoctoral fellowships and senior fellowships to highly qualified scientists who are seeking training that will enable them to engage in research relevant to the genome project. The goal of the fellowship program is to train highly skilled scientists who will use their expertise to develop research programs in the mapping and sequencing of the human genome and the genomes of other organisms in the analysis of the resulting data and in the development of biological, medical, or biotechnological applications based on the data. An additional goal is the training of scholars interested in examining the ethical, legal, and social implications of human genome research.

The NCHGR is interested in offering fellowships to:

o molecular biologists and geneticists who wish to receive additional training in genomic analysis or other technical areas relevant to genome research;

o non-biologists, such as those with degrees in the mathematical, physical, chemical, engineering, and/or computer sciences, who wish to obtain training in molecular biology or genetics in order to pursue interdisciplinary approaches to genome studies;

o biologists and other scientists who wish to obtain training that will allow them to address the ethical, legal and social implications (ELSI) of human genome research; and

o scholars trained in the humanities who wish to receive training in genomic research in order to pursue studies in the ELSI area.

ELIGIBILITY

Scientists at all career levels are encouraged to apply for these fellowships. Individuals who have received their doctorate within the last seven years may apply for the traditional postdoctoral fellowship (F32). The F32 mechanism is designed to provide research training to individuals who wish to receive in-depth training in one of the several areas of genomic research. Moreover, an individual who has already completed one postdoctoral fellowship in another scientific discipline may be eligible for a postdoctoral fellowship in genomic research if the additional training can be justified in the context of the individual's future commitment to pursuing a career in genomic research. Experienced investigators or individuals who have had a hiatus in their research career may apply for a one- or two-year Senior Fellowship (F33) to develop skills or to update their knowledge in a particular area of genomic research or analysis. Applications from women and minority scientists are especially encouraged.

MECHANISM OF SUPPORT

Support for fellowships will be provided through the National Research Service Award (NRSA). The stipend levels for the individual postdoctoral fellowships range from $18,600 to $32,300, depending on the number of years of relevant experience subsequent to the award of the doctoral degree. The stipend level for senior fellowships is $32,300 per annum. In addition, the training institution may request an institutional allowance of up to $3,000 per year for supplies, equipment, travel, tuition, fees, insurance, and other training-related expenses. Individual postdoctoral fellowships are made for project periods of up to three years.

Recipients of National Research Service Awards are subject to payback provisions. Details about this requirement and the policies governing this program can be found in the National Research Service Awards Guidelines, that were published in the NIH Guide for Grants and Contracts, Vol. 13, No. 1, January 6, 1984. Single copies are available from the offices listed below.

REVIEW PROCEDURES

Applications for fellowships are reviewed for scientific merit by an initial review group established by the Division of Research Grants, NIH. The following factors are considered in the review of fellowship applications: (1) the candidate's potential for a research career; (2) the scientific merit and training potential of the research proposal; (3) the training environment and resources; and (4) the protections accorded human subjects and vertebrate animals. The second level of review is performed by the appropriate Institute, Center, or Division.

APPLICATIONS PROCEDURES

Application kits, PHS 416-1 (rev. 4/89), are available from the university business office and from the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, Westwood Building, Room 449, Bethesda, MD 20892, telephone: 301/496-7441. All individual fellowship applications are on an expedited review schedule. Receipt dates for applications are January 10, May 10, and September 10 annually. The earliest dates that awards can be made are July, December, and March, respectively. Three letters of reference must accompany the application.

INQUIRIES

For additional information about individual and senior postdoctoral fellowship opportunities available through the NCHGR, contact:

Individual and Senior Fellowships in Genomic Analysis and Technology:

Bettie J. Graham, Ph.D.
Chief, Research Grants Branch
National Center for Human Genome Research
National Institutes of Health
Building 38A, Room 610
Bethesda, MD 20892
Telephone: (301) 496-7531
E-mail: B2G@NIHCU.BITNET; B2G@CU.NIH.GOV

Individual and Senior ELSI Fellowships:

Eric T. Juengst, Ph.D.
Director, Ethical, Legal, and Social Implications Program
National Center for Human Genome Research
National Institutes of Health
Building 38A, Room 617
Bethesda, MD 20892
Telephone: (301) 402-0911
E-mail: EJS@NIHCU.BITNET; EJS@CU.NIH.GOV

For information about PHS Grant Policy, applicants may contact:

Ms. Alice Thomas
Chief, Grants and Contracts Management Branch
National Center for Human Genome Research
National Institutes of Health
Building 38A, Room 613
Bethesda, MD 20892
Telephone: (301) 402-0733
E-mail: AT3@NIHCU.BITNET; AT3@CU.NIH.GOV

The program and grants management officials welcome the opportunity to clarify any issues or questions related to this announcement and encourage written and telephone inquiries.

AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance No. 93.172. Awards will be made under the authority of the Public Health Service Act, Sections 301 (Public Law 78-410, as amended 42 U.S.C. 241) and administered under PHS grants policies. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

## NATIONAL RESEARCH SERVICE AWARDS IN GENOMIC ANALYSIS

PA: PA-92-22

P.T. 22, 44; K.W. 0720005, 1215018, 1002058, 0755045

National Center for Human Genome Research

The National Center for Human Genome Research (NCHGR) announces a broadly based program to train individuals to: (1) develop new technology to expeditiously accomplish the goals of the Human Genome Program, (2) develop research programs in the mapping or determination of the DNA sequence of the human genome and the genomes of other organisms, or (3) analyze and apply the resulting data to solve problems of biological interest. These research training opportunities will be supported through predoctoral institutional training grants (T32s), individual postdoctoral fellowships (F32s), and senior fellowships (F33s).

This is a reissue of a Program Announcement that appeared in the NIH Guide for Grants and Contracts, Vol. 18, No. 25, July 21, 1989.

BACKGROUND

The National Institutes of Health (NIH) is currently engaged, along with several other Federal, private, and international organizations, in a research program designed to characterize the human genome and the genomes of selected model organisms. This endeavor, known as the Human Genome Project, has several interrelated goals: the construction of a high-resolution genetic linkage map of the human; the development of physical maps of the human genome and the genomes of selected model organisms; the determination of the complete nucleotide sequence of human DNA and the DNA of several model organisms; the development of the ability to collect, store, distribute, and analyze the data that accrue from these activities; the development of appropriate new technologies to achieve these goals; and the examination of the ethical, legal, and social implications of the Human Genome Program. These goals are discussed in detail in the document, "Understanding Our Genetic Inheritance-The U.S. Human Genome Project: The First Five Years - FY 1991-1995," available from the Human Genome Management Information Center, Oak Ridge National Laboratory, Oak Ridge, TN 37831-6050, telephone (615) 576-6669.

The aim of the genome program is to produce a set of research resources including methodologies, materials, information and instruments. It is expected that these resources will significantly improve the ability of scientists to study basic biological phenomena, to determine the genetic aspects of human diseases, and to develop methods of diagnosing and treating such diseases.

To achieve the goals of the genome program, there are many biological and technological research problems that need to be solved. Attaining the solutions to these problems will require that the research methods of the biological sciences be augmented and complemented by the approaches and methods of sciences such as physics, mathematics, computer science, chemistry, and engineering. However, it is widely perceived that there is a critical shortage of scientists with the appropriate skills to bring such multidisciplinary approaches to the necessary research. In addition to providing training opportunities for individuals who are capable of developing new technology and tools, there is also a need to provide training opportunities to molecular biologists and geneticists who will take advantage of the resources provided by the Human Genome Program to address important research problems as they relate to disease and development. The intent of the NCHGR research training program in genomic analysis and technology is to develop and support institutional programs and individual fellowships that provide research training that emphasizes the importance of the joint application of one or more of these other sciences with biological approaches in the investigation of those areas of biomedical research relevant to the broad field of genomic analysis. Opportunities are available for predoctoral students and junior and senior scientists with doctoral degrees.

A. INSTITUTIONAL PREDOCTORAL RESEARCH TRAINING PROGRAMS (T32)

The goal of PREDOCTORAL RESEARCH TRAINING in genomic analysis is to provide interdisciplinary training in which students are prepared with a deep understanding of how the methods and principles of one or more non-biological sciences can interact with those of biology to allow investigation of research problems related to genomic analysis. Such programs must be capable of attracting students with different scientific backgrounds and must have sufficient flexibility to provide the appropriate training to individual candidates. For example, for individuals whose undergraduate background was not in the biological sciences, genome-related training should include special course-work to provide a working background in biological sciences prior to beginning laboratory research. Conversely, by including faculty who provide strength in fields such as engineering, mathematics, physics, chemistry, and computer science, individuals who enter with a background in the biological sciences should be provided with opportunities for training in the broader areas that will allow them to become scientists able to address the needs of genome research.

Although the immediate objectives of the genome training program are framed in terms of addressing the goals of the Human Genome Program, such training must also have broader goals. The most successful programs will be those that train skilled scientists able to develop independent research programs that will not only be useful in attaining the goals of the Human Genome Program, but will then be able to utilize the resources developed through that program to address important biological research questions. Thus, it is essential that students who are supported under this program receive thorough training in modern biomedical research. The interdisciplinary training envisioned in the predoctoral component of this initiative must follow fundamentally sound undergraduate preparation in biology, computer science, applied mathematics, chemistry, physics, or engineering. In other words, the training program in genome research is designed to allow trainees access to broad research opportunities across disciplinary and departmental lines, while not sacrificing the standards of depth and creativity characteristic of the best Ph.D. and postdoctoral programs of individual departments. One way to achieve the desired breadth would be cooperative involvement of faculty members from several disciplines and departments as research mentors.

The stipend level for PREDOCTORAL trainees is $8,800 per annum. In addition, the applicant institution may request expenses for tuition and fees and up to $1,500 per year for each predoctoral trainee to defray research supplies, equipment, travel to scientific meetings, medical insurance, and any other training-related expense. Tuition and fees and medical insurance are allowable costs only if required of all persons in a similar training status regardless of the source of support. Indirect costs will be paid at eight percent of total allowable direct costs, or actual costs, whichever is less.

Institutional training grants are made for project periods of up to five years and are renewable. However, no single predoctoral trainee may receive more than five years of aggregate support unless a specific waiver is obtained from the NCHGR.

REVIEW PROCEDURES

Applications will be evaluated for scientific merit by the an appropriate Institute, Center, or Division review committee. The following criteria will be considered: the research and training experience and leadership capabilities of the program director; the qualifications and commitment of the training faculty as measured by research grant support, publication record, and post-training record; the quality of the applicant pool; the number of predoctoral students currently receiving training; the design of the training program including its relevance to the goals of the Human Genome Program; guidance and quality control of the individual trainee's programs; training record of the participating faculty; and adequacy of the resources and environment. Following assessment of the quality of the proposed training and assignment of priority scores indicative of the merit, the initial review group will evaluate each applicant's plans for (1) attracting individuals from underrepresented minority groups and training them for research careers and (2) plans for instructing students in the responsible conduct of research. If an application is deficient in either of these areas, it may not be funded, regardless of scientific merit.

Site visits may, but are not likely to, be conducted as part of the review process. Therefore, applicants must present a complete and well-justified written application and not depend on a site visit to amplify the application.

Subsequent to initial review, applications will be reviewed by an appropriate national advisory council. Among the information the Council will consider is the initial review group's comments on the recruitment of individuals from underrepresented minority groups into the training program.

B. INDIVIDUAL AND SENIOR POSTDOCTORAL FELLOWSHIPS

The NCHGR also supports individual (F32) and senior (F33) postdoctoral fellowships under a separate program announcement. These fellowships are open to molecular biologists; physical, chemical, mathematical, and computer scientists; engineers; and those trained in the humanities who wish to receive training in genomic research or the ethical, legal, and social implications of human genome research. The stipend level for the individual postdoctoral fellowships ranges from $18,600 to $32,300, depending on the number of years of relevant experience subsequent to the award of the doctoral degree. For further information, contact Dr. Graham at the address below.

APPLICATION PROCEDURES

Applications must be submitted using form PHS 398 (rev. 10/88). Receipt dates for the institutional training grant and fellowship applications described in this announcement are January 10, May 10, and September 10, annually.

Application material is available from university business offices and from the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, Westwood Building, Room 449, Bethesda, MD 20892, telephone 301/496-7441.

Recipients of National Research Service Awards are subject to payback provisions. Details about the policies and payback provisions governing the institutional predoctoral training grant, the postdoctoral fellowship, and the senior fellowship can be found in the National Research Service Awards Guidelines, published in the NIH Guide for Grants and Contracts, Vol. 13, No. 1, January 6, 1984, which is available from the office listed below.

INQUIRIES

For additional information about the National Research Service Award institutional training grants (T32s), individual fellowships (F32s, F33s), and to request specific instructions for completing T32 applications, contact the following individuals according to the field of training envisioned:

Genomic Analysis and Technology (T32, F32, F33)

Bettie J. Graham, Ph.D.
National Center for Human Genome Research
Building 38A, Room 610
Bethesda, MD 20892
Telephone: (301) 496-7531
E-mail: B2G@NIHCU.BITNET; B2G@CU.NIH.GOV

Ethical, Legal and Social Implications of Human Genome Research (F32 and F33)

Eric T. Juengst, Ph.D.
National Center for Human Genome Research
Building 38A, Room 617
Bethesda, MD 20892
Telephone: (301) 402-0911
E-mail: EJS@NIHCU.BITNET; EJS@CU.NIH.GOV

For information about PHS Grant Policy, applicants may contact:

Ms. Alice Thomas
Chief, Grants and Contracts Management Branch
National Center for Human Genome Research
Building 38A, Room 613
Bethesda, MD 20892
Telephone: (301) 402-0733
E-mail: AT3@NIHCU.BITNET; AT3@CU.NIH.GOV

The program and grants management officials welcome the opportunity to clarify any issues or questions related to this Program Announcement and encourage written or telephone inquiries.

AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance No. 93.172. Awards will be made under the authority of the Public Health Service Act, Sections 301 (Public Law 78-410, as amended 42 U.S.C. 241) and administered under PHS grants policies. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or to Health Systems Agency review.

## COMPARATIVE MEDICINE RESEARCH PROGRAM PROJECTS

PA: PA-92-23

P.T. 34; K.W. 0765035, 0404000, 0201058, 0720030

National Center for Research Resources

PURPOSE

The Comparative Medicine Program (CMP) of the National Center for Research Resources (NCRR) invites grant applications for the newly created Comparative Medicine Research Program Project (CMRPP) activity. Considering the importance of laboratory animals in biomedical research, a thorough understanding of their biology, pathophysiology, behavior, diseases, and uses is essential for making meaningful extrapolations in studies related to human health and disease. This new activity will establish CMRPPs where such vitally needed laboratory animal studies may be conducted. Funding will be provided to CMRPPs to support a multidisciplinary, multicategorical research program that focuses on biomedical research related to laboratory animal medicine, pathology, and science. Each CMRPP will carry out research on a minimum of three and a maximum of six specific projects. In addition, CMRPPs may have a core support unit to provide administrative services and institutional research-related laboratory animal diagnostic services for its research program. Each CMRPP will be under the leadership of a Principal Investigator (PI) with established scientific and administrative competence. The PI will be responsible for the administrative oversight of CMRPP research projects and for the core support unit.

ELIGIBILITY REQUIREMENTS

Any domestic non-profit or for-profit institution or organization with research resources and facilities for laboratory animals is eligible to apply. The applicant institution must also have substantial and established research programs involving laboratory animals, professional and technical staff to conduct high quality biomedical research, in-house laboratory animal diagnostic capabilities, and excellent institutional research

resources and facilities for laboratory animals. An institution is eligible to have only one CMRPP award. Institutions are not eligible for support if they are currently funded by the CMP under the Animal Resource Laboratories (ARL) or Diagnostic and Investigative Laboratories (DIL) program, which is being discontinued. However, eligibility to apply for CMRPP support can be established if an ARL/DIL award terminates or the grantee institution elects to relinquish the ARL/DIL award. Institutions may not receive support concurrently from both an ARL/DIL and a CMRPP.

MECHANISM AND LEVEL OF SUPPORT

The grant mechanism used for this program will be the research program project grant (P01). The total project period for new and competing continuation (renewal) applications may not exceed five years. A CMRPP will consist of a minimum of three and a maximum of six research projects that are each under the leadership of an experienced investigator. A maximum average of $60,000 (direct costs) may be requested for each research project. The total budget for six (maximum) projects may not exceed $360,000 (direct costs). The CMRPP core unit is expected to support the research projects by providing common laboratory and clinical equipment and administrative services. Up to 20 percent of the combined direct cost budget proposed for the CMRPP research projects may be requested for support of the core unit. The total direct costs requested for CMRPP research projects and the core unit in new and renewal applications may not exceed $432,000 per year, although appropriate escalation will be provided.

RESEARCH OBJECTIVES

The overall objective of a CMRPP is to establish an environment that will enhance scientifically meritorious and productive research, encourage collaboration, and provide a setting conducive to advanced research training. It is not an objective of this program to assist institutions in the development and maintenance of diagnostic laboratories whose purpose is to detect, diagnose, and control diseases in their laboratory animal colonies (the discontinuation of NCRR grant support for diagnostic and investigative laboratories is the subject of a separate NOTICE published in this issue of the NIH Guide for Grants and Contracts). CMRPPs will carry out a multidisciplinary, multicategorical research program that focuses on biomedical research related to laboratory animal medicine, pathology, and science. The following are examples of research that may be performed in CMRPPs:

o Basic studies on the normal and abnormal anatomy, physiology, genetics, and behavior of laboratory animals that are frequently used in biomedical research.

o Studies that will advance the development of new animal models for human or comparative medical studies. Of special interest is the development of innovative techniques to create, produce, maintain, and preserve genetically designed transgenic animals or cells that can be used to study human diseases and develop genetic therapies.

o Investigations to study the etiology, diagnosis, pathogenesis, control, and prevention of laboratory animal diseases that adversely affect biomedical research. Included in such investigations would be the development of better diagnostic techniques and procedures to detect and monitor infections, genetic, and other diseases in laboratory animals.

Applications proposing research that falls exclusively within the categorical interest of a single NIH Institute, Center, or Division are not appropriate for funding in this program.

REVIEW PROCEDURES

Applications will be reviewed for scientific and technical merit by an appropriate review committee managed by the Office of Review, NCRR, in accordance with the usual NIH peer review procedures. Second level review will be provided by the National Advisory Research Resources Council (NARRC). Applications will compete for available funds within the CMP Laboratory Animal Sciences Program. Funding decisions will be based on the quality of the proposed project, the availability of funds, and the achievement of appropriate program balance.

APPLICATION PROCEDURES

Applications must be submitted on grant application form PHS 398 (rev. 10/88) and will be accepted at the standard application deadlines as indicated in the application kit. These forms are available at business and grants and contracts offices at most academic and research institutions. They may also be obtained from the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, Westwood Building, Room 449, Bethesda, MD 20892, telephone (301) 496-7441. The title and number of this announcement must be typed in Section 2 on the face page of the application.

Special instructions outlined in the CMRPP Guidelines also apply to submissions and may be obtained from the Director of the Laboratory Animal Sciences Program at the inquiry address indicated below. Requests for guidelines must include two self-addressed mailing lables.

Applicants are strontly encouraged to contact the program director listed below prior to preparation of an application.

The completed original application (signed original including appendices, if any) and four copies must be sent or delivered to:

Grant Application Receipt Office
Division of Research Grants
National Institutes of Health
Westwood Building, Room 240
Bethesda, MD 20892-4500**

Simultaneously, two additional copies (with appendices, if any) must be sent under separate cover to:

Scientific Review Administrator
Comparative Medicine Review Committee, Office of Review
National Center for Research Resources
Westwood Building, Room 10A16
Bethesda, MD 20892-4500**

INQUIRIES

Requests for further information, general consultation on program requirements, and the Program Announcement with Guidelines, which contains important information for applicants, are encouraged and may be obtained from:

Director, Laboratory Animal Science Program
Comparative Medicine Program
National Center for Research Resources
Westwood Building, Room 857
Bethesda, MD 20892**
Telephone: (301) 496-5175
FAX: (301) 480-0868

Questions regarding fiscal matters may be directed to:

Mr. Paul Karadbil
Grants Management Specialist
Office of Grants and Contracts Management
National Center for Research Resources
Westwood Building, Room 849
5333 Westbard Avenue
Bethesda, MD 20892
Telephone: (301) 496-9840

AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance No. 93.306, Laboratory Animal Sciences and Primate 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.

## SMALL GRANT PROGRAM ANNOUNCEMENT FOR THE NATIONAL INSTITUTE ON DEAFNESS AND OTHER COMMUNICATION DISORDERS

PA: PA-92-24

P.T. 34; K.W. 0715050, 0715055, 0705070, 0410001

National Institute on Deafness and Other Communication Disorders

This announcement supersedes all previously issued announcements for the National Institute on Deafness and Other Communication Disorders (NIDCD) Small Grant Program. The current Small Grant Program provides support for pilot research that is likely to lead to a subsequent Individual Research Project Grant (R01) or a First Independent Research Support and Transition Grant (FIRST (R29)) research project application. The research must be focused on areas within the mission of NIDCD, that is, hearing, balance/vestibular, smell, taste, voice, speech, and language.

ELIGIBILITY

The Small Grant program is designed solely to support basic and clinical scientists with limited research experience who are at the beginning stages of their research careers.

Foreign organizations and institutions are not eligible. Current and previous recipients of NIH research grants such as Small Grant awards, R01 or R29 grants are ineligible for the Small Grant program. Individuals who have received research support from other Federal funding agencies are considered ineligible.

Participation in the program by investigators at minority institutions is encouraged.

Small grant funds may not be used to support thesis or dissertation research.

TERMS AND CONDITIONS OF THE AWARD

Applicants may request up to $25,000 (direct costs) per year. The grant may not exceed two years and is not renewable. Investigators are expected to seek continuing support for research through a research project grant (R01) or First Independent Research Support and Transition (R29).

APPLICATION SUBMISSION AND REVIEW PROCEDURES

Only one Small Grant application may be submitted by an investigative team per receipt date. Applicants may not submit R01 or R29 applications on the same topic concurrently (to be considered at the same Advisory Council) with the submission of a Small Grant application.

The submission, review, and award schedule for the Small Grant Program is:

| Receipt Dates for 1992 | Institute Committee Review | Council Review | Earliest Funding |
|---|---|---|---|
| Jan 7 | Feb-Mar | May | Jul |
| May 6 | Jun | Sep-Oct | Dec |
| Sep 16 | Oct-Nov | Jan-Feb | Apr |

A review committee of the NIDCD will evaluate each Small Grant application in accord with the usual NIH peer review procedures and criteria. Applications will be evaluated with respect to the following criteria:

o significance and scientific merit of the proposed project;

o level of innovation;

o investigator's potential for carrying out the research, as demonstrated by publication record and/or previous research/clinical experience or training relative to the goals and methods of the proposed study;

o adequacy of the investigator's time commitment to the project;

o potential of the proposed studies to lead to more extensive research;

o adequacy of the facilities, supporting personnel, and available equipment for carrying out the proposed studies; and,

o justifications of budget requests.

All applications subsequently will be reviewed by the National Deafness and Other Communication Disorders Advisory Council.

The award of grants is contingent on the (1) receipt of applications of high scientific merit; (2) responsiveness to this announcement, including the eligibility of investigators; (3) relevance to the mission of NIDCD; and (4) the availability of appropriated funds.

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

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

The composition of the proposed study population must be described in terms of gender and racial/ethnic group. In addition, gender and racial/ethnic issues should be addressed in developing a research design and sample size appropriate for the scientific objectives of the study. This information should be included in the form PHS 398 in Section 2, A-D of the Research Plan AND summarized in Section 2, E, Human Subjects.

Applicants are urged to assess carefully the feasibility of including the broadest possible representation of minority groups. However, NIH recognizes that it may not be feasible or appropriate in all research projects to include representation of the full array of United States racial/ethnic minority populations (i.e., Native Americans (including American Indians or Alaskan Natives), Asian/Pacific Islanders, Blacks, Hispanics).

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

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

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

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

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

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

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

METHOD OF APPLYING

The research grant application form PHS 398 (rev 10/88) must be used. Application kits are available from the business offices or the offices of sponsored research of most institutions; from the Division of Research Grants, National Institutes of Health (telephone: 301-496-7441); and from NIDCD Division staff listed below.

On the face page of the application: Item 2. Type "Small Grant Program NIDCD". Check the "YES" box.

Section 2. Do not exceed a total of five pages for the following sections: specific aims, background and significance, progress report/preliminary studies, and experimental design and methods. A half-page introduction is acceptable only for revised applications. Applications that exceed the page limitation or NIH requirements for type size and margins will be returned to the investigator. The five page limitation does not include ancillary subsections of Section 2 (Human Subjects, Consortia).

Section 3. Appendix materials are not allowed.

Use the mailing label in the application kit to mail the original and four copies of the application to the Division of Research Grants. To ensure that the application is received in sufficient time for the review, send one copy of the application to:

Chief, Scientific Review Branch
National Institute on Deafness and Other Communication Disorders
National Institutes of Health
Executive Plaza South, Room 400-B
6120 Executive Plaza Blvd.
Rockvillem MD 20892

For additional information, investigators are encouraged to call (301-496-5061) or write to NIDCD staff responsible for grants in the investigator's particular area of scientific interest:

Dr. Beth Ansell (voice, speech)
Dr. Judith Cooper (language)
Dr. Amy Donahue (hearing)
Dr. Jack Pearl (chemical senses)
Dr. Daniel Sklare (balance/vestibular)

For budgetary and fiscal questions, contact:

Sharon Hunt
Grants Management Officer
National Institute on Deafness and Other Communication Disorders
Executive Plaza South, Room 400-B
6120 Executive Plaza Blvd.
Rockville, MD 20872
Telephone: (301) 402-0909

AUTHORITY AND REGULATIONS

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 45 CFR Part 74. The program is not subject to the intergovernmental review requirements of Executive Order 12372 or to Health Systems Agency review.