

NIH Guide for Grants and Contracts

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AND HUMAN SERVICES

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

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

Have You Moved?

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

NOTICE

NIH PEER REVIEW APPEALS SYSTEM

P.T. 34; K.W. 1014002

NATIONAL INSTITUTES OF HEALTH

The National Institutes of Health (NIH) has initiated an appeals process whereby applicants may request an examination of their concerns about the referral and peer review of their applications for grants and cooperative agreements (assistance awards).

This process is intended to resolve those concerns which arise from perceived shortcomings or errors in the substance or procedure of peer review--i.e., from receipt and assignment of an application through its review by the National Advisory Council or Board (subsequently abbreviated to "advisory council"). Such concerns may involve NIH's refusal to accept an application; a disputed assignment of the application to an initial review group or to an NIH Bureau, Institute, or Division (subsequently abbreviated to "Institute"); perceived insufficient expertise on the initial review group or site visit team or conflict of interest on the part of one or more of its members; apparent factual or scientific errors, oversights, or bias associated with the review of an application at the initial or advisory council review; and possibly inappropriate handling of the review or of the application.

On the other hand, the appeals process is not intended to resolve purely scientific disputes between peer reviewers and the investigator; to provide a mechanism for allowing investigators to submit information that should have been presented in the original proposal; or to provide a forum for disputing priority score determinations in the absence of specific and substantive evidence pointing to a flawed review.

The appeals process will not supersede or bypass the peer review process, but if serious shortcomings are found to have occurred in the review of an application, they will be rectified by one of the following actions: rereview by the same or another initial review group; special consideration by the advisory council; or administrative action authorized by the Institute Director or staff.

NIH encourages investigators to discuss their concerns with the appropriate NIH staff before requesting an examination of these concerns under the appeals process. When requesting such an examination, principal investigators should clearly describe their concerns and support their position by pertinent facts and reasons.

Under the appeals process, all concerns must first be directed to the NIH component which at the time is responsible for the application.^{1/} Appropriate officials will

^{1/} The Division of Research Grants (DRG) is responsible for all matters relating to the assignment and initial review of applications by DRG study sections until the review has been completed. The awarding Institute is responsible for all matters relating to the review of applications by initial review committees in the Institute and for all matters after the initial review has been completed.

thoroughly examine the investigator's concerns, frequently with the help of the initial reviewers or other experts, and, if shortcomings are found to have occurred, every effort will be made to rectify them in a timely manner.

If the principal investigator seriously disagrees with the resolution of his/her concerns by the responsible NIH component, the investigator and applicant organization may jointly appeal to the Office of Extramural Research and Training, which is a component of the Office of the Director, NIH. The appeal must clearly set forth the original dispute and the reasons for disagreeing with the resulting decision. To allow for a complete and independent examination of the appeal--which will frequently entail consultation with scientific or other experts--the application will be withdrawn from the regular review process until the appeal is resolved. An amended application submitted during consideration of the appeal will inactivate the original application and the accompanying appeal. The NIH Deputy Director for Extramural Research and Training and the Institute Director in charge of the application will render the final NIH decision on the appeal and communicate it to the applicant.

How to Use the Appeals System:

Communications before the Initial Review

After being notified about the assignment of an application to the initial review group and the awarding Bureau, Institute, or Division, the principal investigator may direct his/her serious concerns about the assignment of the application to the Deputy Chief for Referral, Referral and Review Branch, DRG, Westwood Building, Room 248, National Institutes of Health, Bethesda, Maryland 20205, and about the pending review of the application to the executive secretary of the initial review group.

Communications after the Initial Review

After having received the summary statement, the principal investigator may direct his/her serious concerns about the review, including advisory council review, to the responsible institute staff. For competing applications, this is usually the program official listed on the Notice of Grant Award. If this person is unknown, investigators should write their concerns directly to the Office of the Associate Director for Extramural Programs in the awarding organization,^{2/} NIH, Bethesda, Maryland 20205.

All Appeals

After having received the definitive response from the responsible NIH awarding organization--and the principal investigator seriously disagrees with the decision--he/she and the applicant organization may appeal to the Appeals Officer, James A. Shannon Building, Room 213, NIH, Bethesda, Maryland 20205, (301) 496-5358.

^{2/} The name of the awarding organization may be determined from the grant identification number; i.e., AG-National Institute on Aging, AI-National Institute of Allergy and Infectious Diseases, AM-National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, CA-National Cancer Institute, DE-National Institute of Dental Research, ES-National Institute of Environmental Health Sciences, EY-National Eye Institute, GM-National Institute of General Medical Sciences, HD-National Institute of Child Health and Human Development, HL-National Heart, Lung, and Blood Institute, LM-National Library of Medicine, NS-National Institute of Neurological and Communicative Disorders, RR-Division of Research Resources.

NOTICE

AVAILABILITY OF FROZEN SERUM PANELS

P.T. 36,34; K.W. 0755010, 0780005, 0750010, 0760025, 0760060, 0760070

NATIONAL CANCER INSTITUTE

The National Cancer Institute (NCI) is interested in evaluating serum assays that are potentially useful in the diagnosis of cancer. A variety of serum components (e.g., peptide hormones, viral antigens, isoenzymes, glycoproteins, antibodies, immune complexes, tumor-associated antigens, carbohydrates, phospholipids, nucleosides, etc.) have been reported to be useful in cancer diagnosis and/or in monitoring cancer treatment or recurrence. Coded panels composed of 1 ml aliquots of pretreatment frozen sera from patients with various neoplasms, from benign disease patients, and from healthy controls are available to investigators to evaluate assays in which preliminary results indicate the ability to discriminate between cancer patients and controls. Promising results may form the basis for a subsequent grant application. Preliminary data documenting a useful test must be submitted and should include: a brief description of the assay, results in patients with cancer, results in patients with non-malignant disease, results in healthy control subjects and reprints of published work, if available. Request for a coded serum panel should be sent to:

Diagnosis Serum Panels
Project Officer NCI-Serum Bank
Diagnosis Branch
National Cancer Institute
National Institutes of Health
Westwood Building - Room 10A10
5333 Westbard Avenue
Bethesda, Maryland 20205

ANNOUNCEMENT

ADDITIONAL INFORMATION REGARDING RFA 85-DE-01 - (OROFACIAL PAIN RESEARCH CENTERS)*

P.T. 04; K.W. 0715150, 0785040, 0710100, 0785035, 0785055, 0705055, 0755030, 0414011

NATIONAL INSTITUTE OF DENTAL RESEARCH

The National Institute of Dental Research (NIDR) wishes to inform potential applicants for this Center program that funding for meritorious applications responsive to this RFA may not occur until FY 87.

Nevertheless, the NIDR recognizes the urgency of stimulating research in this scientific area, and thus is retaining a receipt date of June 15, 1985, with review to follow on a schedule to be announced to applicants.

Applicants with further questions should contact:

Patricia S. Bryant, Ph.D.
Health Scientist Administrator
Craniofacial Anomalies, Pain Control
and Behavioral Research Branch
National Institute of Dental Research
Westwood Building - Room 506
5333 Westbard Avenue
Bethesda, Maryland 20205

Telephone: 301 - 496-7807

* Originally announced in the January 4, 1985, NIH Guide for Grants and Contracts.

ANNOUNCEMENT

MOLECULAR BIOLOGICAL AND GENETIC BASIS OF AGING

P.T. 22, 34, 44; K.W. 0710010, 1002004, 1002008, 1002019, 0765015, 0790010, 0760015, 0765020, 0760070

NATIONAL INSTITUTE ON AGING

I. INTRODUCTION

The National Institute on Aging (NIA) was established in 1974, to conduct and support biomedical, behavioral, and social research and training related to the aging process and the diseases and other special problems and needs of the aged. Consistent with this mandate, Molecular Biology and Genetics, subprograms of the Molecular and Cellular Biology Program, support research on the molecular and genetic mechanisms of aging. The purpose of this announcement is to encourage further research and training activities using modern tools of molecular biology and genetics to elucidate the molecular bases of aging processes.

II. BACKGROUND

Recent advances in the ability to isolate and amplify specific pieces of DNA, to alter DNA at specific sites, and to move DNA sequences to new locations in the genome, are providing insights into the structure of genes and the regulation of their expression. The broad outlines of genetic organization are now becoming clear, and the ability to alter these sequences and relate structure to function in both a gene and its gene product can lead to an understanding of how genes function. Although several genetic diseases have been identified (e.g. Werner's Syndrome, Down's Syndrome, Huntington's Disease) that appear to accelerate certain features of aging, the genetic basis of aging is poorly understood. The recent identification of a DNA fragment carrying the gene for Huntington's Disease suggests that fragments carrying this gene or other genes related to aging processes can be isolated and extensively characterized.

Gene expression can be altered not only by random or specific mutation of control sequences, but also by insertion of transposable elements into the genome in the vicinity of a gene, and by chromosomal rearrangements. Extrachromosomal DNA

This program is described in the Catalog of Federal Domestic Assistance No. 13.866, Aging 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. Awards will also be made under the authority of the Public Health Service Act, Section 472, 42 USC 2891-1, and administered under PHS grants policy and Federal Regulations 42 CFR Part 66. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

has now been demonstrated in a variety of eukaryotic organisms, and there is evidence that at least some of the DNA has the properties of transposable elements. Thus it is possible that transposable elements could play a role in the aging process by altering patterns of gene expression.

Considerable evidence has been accumulating to indicate that proteins in old organisms may differ from proteins in young organisms. These differences could arise in a number of ways, including lowered fidelity of transcription or translation, post-translational modification, racemization of amino acids already incorporated into proteins, and expression of genes for isozymes. Although it is probable that one or more of these processes contributes to the heterogeneity of proteins in aging cells, it is not clear whether any of these events is a primary cause of cellular aging.

III. GOALS AND SCOPE

The goal of this announcement is to encourage research on the mechanisms of cellular aging using modern genetic and molecular biological approaches. The new techniques available for the study of gene structure and expression provide an opportunity to elucidate the molecular details of events and gene products involved in aging processes. Such studies could lead to an understanding of mechanisms of age-related diseases and functional decline in various organisms.

IV. SPECIFIC OBJECTIVES

The NIA seeks research and training grant applications to test hypotheses and elucidate mechanisms of aging using genetic and molecular biological approaches in various biological systems. Research is encouraged in, but not limited to, the following areas:

- A. Identify and discern the nature of genes involved in aging processes in a variety of biological systems, and characterize the regulation of expression of these genes and interactions between the products of these genes.
- B. Identify and characterize normal human genes and their products, and the molecular alterations of these genes, which may underlie diseases that appear to accelerate certain features of aging, e.g. Alzheimer's Disease and progeroid syndromes.
- C. Characterize the effect of aging on the molecular mechanisms of replication, repair, transcription, RNA processing, translation, post-translational processing, transport of proteins, and turnover of proteins and messenger RNA. These experiments should focus on important age-related changes in relevant biological systems.
- D. Characterize modifications of the structure and functions of nuclear components which accompany aging.
- E. Characterize modifications of the structure and functions of components of cellular organelles which accompany aging.
- F. Determine the possible roles of extrachromosomal DNA and transposable elements in aging processes.

- G. Characterize factors and processes which regulate DNA replication and cell proliferation, and are altered during aging.
- H. Employ a dynamic systems analysis approach to discover those biochemical events (e.g. gene expression, metabolism, organelle function) which are rate-limiting to, or controlling, a specific clearly-defined aging process.
- I. Develop new model systems amenable to molecular and genetic analysis of aging organisms, using particularly organisms with a short life span.

Although studies with human cells and tissues are preferred, use of invertebrates and other vertebrates may be desirable where shorter lifespans and better genetic systems are an advantage. Therefore, the NIA supports several colonies of animals for use in aging research. Applicants interested in using these animals should contact the following persons:

Animal:	Rats and Mice	Caenorhabditis elegans
Contact person:	Jane Soban	Dr. Donald Riddle, Director
	Molecular and Cellular Biology Branch Building 31 - Rm. 5C19 National Institute on Aging, NIH Bethesda, MD 20205	Caenorhabditis Genetics Center Division of Biological Sciences University of Missouri Columbia, MO 65211
Telephone:	301/496-6402	314 - 462-6363

To support research on cellular aging, the NIA has also established, under contracts, an Aging Cell Repository. Additional information on the Aging Cell Repository may be obtained from the publication by N.K. Das and D.G. Murphy, in Exp. Aging Res. 4:321-331 (1978) available upon request from the Molecular and Cellular Biology Branch, or by calling:

Dr. DeWitt Hazzard
Program Administrator for Cell Biology
Building 31 - Room 5C19
National Institute on Aging
National Institutes of Health
Bethesda, Maryland 20205

Telephone: 301 - 496-6402

V. MECHANISMS OF RESEARCH AND RESEARCH TRAINING SUPPORT

The primary mechanisms for support of this program are:

1. Research grant
2. Program project grant, involving several projects with a common focus.
3. Postdoctoral fellowship.

Additional mechanisms for support are:

1. New investigator research award for applicants who have not previously been supported as principal investigators by a U.S. Public Health Service research grant; ceiling \$37,500 per year for three years, including salary support up to \$25,000 per year.
2. Physician scientist award for clinically trained investigator; ceiling \$40,000 per year for salary and up to \$20,000 per year for supplies for five years
3. Research career development award; awarded for 5 years with up to \$40,000 per year for salary.
4. Institutional training grant.

Potential applicants should contact NIA staff for information and advice.

VI. REVIEW PROCEDURES AND FUNDING POLICY

According to standard referral guidelines, the NIH Division of Research Grants will assign all applications to appropriate NIH study sections for initial scientific review, and to the appropriate Institute or Division for final review by its National Advisory Council or Board. Applications submitted in response to this program announcement will compete with all NIA grant applications for funding consideration. No set aside money is available for these applications.

VII. METHOD OF APPLYING

Use the appropriate NIH research or research training grant application kits. If your institution does not have them, copies may be obtained by writing:

Office of Grant Inquiries
Division of Research Grants
National Institute of Health
Bethesda, Maryland 20205

Telephone: (301) 496-7441

Please type the phrase NIA Molecular Biology Program on the face page of the application and enclose a cover letter indicating that the application is in response to this program announcement. Forward the application to:

Division of Research Grants
National Institutes of Health
Westwood Building - Room 449
5333 Westbard Avenue
Bethesda, Maryland 20205

Application deadlines are March 1, July 1, and November 1 for research grant applications, and February 1, June 1, and October 1 for individual or institutional National Research Service Awards, program project grants, physician scientist awards, and research career development awards.

Applicants are strongly encouraged send a letter of intent to the Molecular Biology Program at the following address. Please include the name of the principal investigator, address, title of application, and abstract of the proposed research. A letter of intent is not binding, is not a requirement for consideration, and does not enter into the review of a subsequent application. Letters are requested in order to provide NIH staff with an indication of the number and scope of applications for purposes of planning the review.

Dr. Huber R. Warner, Acting Chief
Molecular and Cellular Biology Branch
Building 31 - Room 5C19
National Institute on Aging
National Institutes of Health
Bethesda, Maryland 20205

Telephone: (301) 496-6402

ANNOUNCEMENT**DOMINANTLY INHERITED POLYCYSTIC KIDNEY DISEASE - MULTIDISCIPLINARY APPROACH**

P.T. 34; K.W. 0785095, 07100220, 1002004, 1002008, 1002019, 1003002, 0785055, 0785165

NATIONAL INSTITUTE OF ARTHRITIS, DIABETES AND DIGESTIVE AND KIDNEY DISEASES

The Division of Kidney, Urologic and Hematologic Diseases (DKUHD), of the National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases (NIADDK), encourages investigator initiated grant applications to study the pathogenesis of Dominantly Inherited Polycystic Kidney Disease (DIPKD). Little is known of the natural history or pathogenesis of DIPKD other than it leads to progressive renal failure. Anatomically DIPKD is a slowly evolving disorder, characterized by a focal, progressive increase in the diameter of some renal tubules which compress the otherwise normal adjacent renal tissue. The two current theories of cyst development in DIPKD are: (a) a primary defect in tubular basement membrane which favors cyst formation and (b) cyst formation due to the obstruction of urine flow caused by the proliferation of epithelial cells leading to partial obstruction of the tubular lumen.

A significant disease process, DIPKD affects 200-400 thousand Americans and invariably leads to progressive renal failure in 9-11% of patients in the End Stage Renal Disease (ESRD) program. It is estimated that the ESRD program, supported by Medicare, approaches \$2.0 billion in annual expenditures; of these costs, approximately \$180-\$200 million goes toward the care of patients with DIPKD. Time lost from work and time contributed by family members escalate the figure higher. DIPKD does not become clinically apparent until the 3rd-5th decade of life, a time after which the opportunity for genetic transmission has occurred.

Because of the lack of autosomal dominant animal models of polycystic kidney disease, drug-induced models have frequently been used. A polycystic lesion has been induced in rats and mice using diphenylamine, 2-amino-4, 5-diphenylthiazide, nordihydroguariaretic acid and cis-diamine dichloroplatinum. The renal diseases induced by each of these have been well characterized with respect to evolution of renal failure and morphological changes. Spontaneous forms of polycystic kidney disease has been detected in two mouse strains and recently an antelope population was identified in Florida that has spontaneous polycystic kidney disease.

This program is described in the Catalog of Federal Domestic Assistance No. 13.849, Kidney, Urologic, and Hematologic Diseases Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

Specific objectives of this solicitation are to: (1) encourage increased research activity in the DIPKD area; (2) develop both Data and Cell Banks of the largest known polycystic disease families that will be available to the research community, and (3) encourage the submission of research grant applications that will carry out studies aimed at discovering the primary defect through molecular analysis or at finding the affected locus or loci through linkage analysis in large families.

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

Since the bulk of the data relating to the pathogenesis of DIPKD has been obtained in experimental models, its relevance to human disease cannot be assessed without similar data from human subjects. In terms of potential for carrying out human studies, two to three centers in the United States and another in Denmark are known to have identified large DIPKD patient populations, which provide unique resources for studies that should advance our understanding of the pathogenesis of the disease. Furthermore, based on the success in recent years of developing genetic markers for other heritable diseases, such as Huntington's Disease, linkage studies in these families could lead to the identification of the chromosome which carries the gene responsible for the disorder. Once identified and cloned, the gene product could prove useful in the early detection of gene carriers.

The award of grants pursuant to this program announcement is contingent upon receipt of appropriated funds for this purpose. Although this solicitation is included in the NIADDK funding plan for Fiscal Year 1986, support is contingent upon receipt of funds for this purpose. The specific amount to be funded will depend upon the merit of the applications and funding is expected to begin April 1986.

All PHS and NIH grant policies governing regular research project grants, including cost sharing, apply to applications received in response to this program announcement.

I. REVIEW PROCEDURES AND CRITERIA

A. Assignment of Application

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

B. Review Procedures

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

II. METHOD OF APPLYING

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

III. APPLICATION RECEIPT DATES

Applications will be accepted in accordance with the usual NIH receipt dates for new applications. Deadline dates are: July 1, November 1, March 1.

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

Application Receipt
Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
Bethesda, Maryland 20205

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

M.J. Scherbenske, Ph.D.
Renal Physiology/Pathophysiology
Program Director
National Institute of Arthritis, Diabetes,
and Digestive and Kidney Diseases
Westwood Building - Room 621
5333 Westbard Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-7458

ANNOUNCEMENT

TRANSFUSION MEDICINE ACADEMIC AWARD

P.T. 34; K.W. 0750010, 0785035, 0502000, 0720005

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: October 15, 1985

The Transfusion Medicine Academic Award (TMAA) was initiated in January 1983, to (1) encourage the development of curricula in transfusion medicine, and (2) allow the awardee to broaden his or her expertise in transfusion medicine so as to contribute more effectively to the teaching, research, and clinical needs of this discipline. The term "transfusion medicine" is used to define a multidisciplinary area concerned with the proper use or removal of blood and its components in the treatment or prevention of disease states (other than in renal hemodialysis). Schools of medicine, osteopathy, or veterinary medicine (United States or its possessions and territories) singly or in concert one with another, are eligible to apply for one 5-year TMAA (nonrenewable), providing they possess the requisite blood bank, patient care, and research facilities required for such an activity. The TMAA may provide salary, fringe benefits, supporting costs, and indirect costs to well-trained investigator-faculty members who are skilled organizers and negotiators. The number of awards made each year will depend on the availability of funds.

The Division initiated the TMAA program to encourage the development of teaching programs in transfusion medicine. At present, teaching, research, and clinical responsibilities in transfusion medicine are rarely coordinated into a definable program but are dispersed among basic and clinical science disciplines and among activities of the local transfusion services or blood center facility. It is important to note that establishing a transfusion medicine curriculum may not require additional curriculum; existing teaching materials (components of other disciplines) may be coordinated into an overall program and organized to focus on emerging and important areas of transfusion medicine. Some schools may find it desirable to assemble the appropriate components into a specific unit. Others may wish to retain the transfusion medicine disciplines as part of another major department.

This award is also intended to:

- o Attract to the field of transfusion medicine outstanding students and promising young clinicians and scientists who can serve the teaching, research, and clinical aspects of transfusion medicine.

This program is described in the Catalog of Federal Domestic Assistance, No. 13.839, Blood Diseases and Resources. Awards will be made under the authority of the Public Health Service Act, Section 301 (42 USC 241) and administered under PHS grant policies and Federal Regulations, most specifically 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

- o Encourage the development of faculty capable of providing appropriate instruction in the field of transfusion medicine.
- o Facilitate interchange of information, and evaluation and educational techniques among research, medical, and blood service communities.
- o Enable the grantee institution to develop a continuing transfusion medicine program, using local support when this award terminates.

Requests for the TMAA program guidelines should be directed to:

Fann Harding, Ph.D.
National Heart, Lung, and Blood Institute
Federal Building, Room 5A08
Bethesda, Maryland 20205

Telephone: (301) 496-1817