NIH Guide
for Grants and Contracts

U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES

Vol. 12, No. 10, October 14, 1983

IN THIS ISSUE:

(Continued)

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.

ERRATUM

REQUEST FOR GRANT APPLICATIONS: RFA

RFA-NIH-NICHD-CPR-DBSB-83-3

CONSEQUENCES OF PREGNANCY LOSSES FOR ADOLESCENTS

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

An Announcement in the **September 23, 1983,** NIH Guide for Grants and Contracts **(Vol. 12, No. 9),** showed an incorrect application receipt date on pages 26 and 29. The correct application receipt date is be December 5, 1983.

ERRATUM

REQUEST FOR RESEARCH GRANT APPLICATIONS RFA

NIH-NCI-DCBD-DB-83-15

APPLICATION OF RECOMBINANT DNA TECHNOLOGY TO DIAGNOSIS OF CANCER

NATIONAL CANCER INSTITUTE

An Announcement in the **September 23, 1983,** NIH Guide for Grants and Contracts **(Vol. 12, No. 9),** showed an incorrect application receipt date on page 17, paragraph 3. The correct application receipt date is February 15, 1983.

NOTICE

STATEMENT ENCOURAGING RESEARCH ON FUNDAMENTAL PROBLEMS EQUALLY GERMANE TO HEART, LUNG, AND BLOOD DISEASES

NATIONAL HEART, LUNG,AND BLOOD INSTITUTE

Since its establishment thirty-five years ago, the National Heart, Lung, and Blood Institute (NHLBI) has supported a broad array of fundamental and clinical research through a variety of research support mechanisms. Within the Institute, a number of specific research programs have been developed dealing with particular heart, lung, and blood diseases.

The Institute is cognizant of the rapid progress and sophistication that has been achieved in fundamental sciences. These advances provide new opportunities and they have served to blur categorical distinctions between areas of research. This has been particularly true at the cellular and molecular levels where research interests not only converge but virtually overlap and often fuse.

The Institute wishes to state and emphasize explicitly its interest in supporting fundamental research relevant to its mission that transcends the specific goals and interests of its various subdivisions. Investigators are encouraged, therefore, to organize their research endeavors to provide fundamental answers to broad problems germane to heart, lung, and blood diseases. Investigators should not feel constrained to structure their research according to the Institute's organizational units.

The Institute announces its interest in receiving grant applications requesting research support on topics that are of broad interest to its several program divisions. An example of such a topic is the endothelium. This tissue is of interest to each of the Institute's three program divisions--heart, lung, and blood. This interest extends from the level of basic biological mechanisms and an understanding of underlying cellular dysfunctions to the prevention, diagnosis, and treatment of disease. Thus, on the one hand, endothelium is being investigated from the perspective of cell biology, biochemistry, physiology, pharmacology, developmental biology, and molecular biology; on the other, its implications are being explored with respect to clotting, the pathogenesis of atherosclerosis, the development of collateral circulation, blood pressure regulation, nonrespiratory functions of the lung, handling of salt and water by the body, and the development of artificial organs and prostheses.

Applications for support of research on any such topics are encouraged, using any of the mechanisms currently available at the NHLBI. Among these are individual research grants, program project grants, and support of individuals either as young investigators or awardees of research development grants.

Further information about this statement of interest and the support mechanisms available may be obtained from the Office of the Director, Division of Extramural Affairs, National Heart, Lung, and Blood Institute.

NOTICE

NIH WILL TERMINATE ERYTHROPOIETIN DISTRIBUTION PROGRAM

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

The National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) has for many years been providing medium purity human urinary erythropoietin (Epo) free of charge to qualified investigators in order to encourage research in erythropoiesis. However, commercial sources of medium purity human Epo are now available and the NHLBI has determined (1,2) that acceptable substitutes for NIH Epo can now be obtained. As a result, the NHLBI will terminate the Erythropoietin Distribution Program on January 31, 1984. For additional information, please contact:

Dr. Alan S. Levine
Red Blood Cell Program Administrator
Blood Diseases Branch
Division of Blood Diseases and Resources
National Heart, Lung, and Blood Institute
Federal Building - Room 5A12
Bethesda, Maryland 20205.

1. Levine AS, Alter BP, Clemons G, Fried W, Weinberg R, Zanjani ED, Zuckerman KS: Human erythropoietin: Comparative in vivo and in vitro dose response of commercial products. Blood 62:no. 5, Supplement 1, 1983 (abstract submitted)
2. A final report will be available at a later date.

NOTICE

PERCENTILE RANKING OF RESEARCH GRANT APPLICATIONS AS THE BASIS FOR FUNDING DECISIONS

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

The National Institute of Child Health and Human Development (NICHD), and its National Advisory Council, view the investigator-initiated grant program as the foundation of extramural research support activities. It continues to have the highest priority in the allocation of appropriated funds.

In making funding decisions on research grant applications, the single most important factor is the evaluation and assessment of scientific and technical merit performed by peer review groups. Most of these initial review groups are located in the National Institutes of Health (NIH), Division of Research Grants (DRG), and are referred to as Study Sections. The Study Sections serve all of the Institutes.

If the Initial Review Group (IRG) recommends a proposal favorably, each member votes a priority score. The scores for each favorably recommended application are then averaged. The best possible score is 100; the poorest possible score is 500. IRGs are advised to use the full range of scores and that a rating of 250 represents the proposal of "average" scientific and technical merit. These priority scores have been the primary basis for determining the order for awarding available funds for research support. For several years a statistically transformed ("normalized") score was used in an effort to minimize the effects of different scoring behaviors among the various initial review groups. In 1980, the Director, NIH, determined that the normalization process was not achieving its objectives and that the NIH would return to displaying the untransformed ("raw") priority scores. The Director, however, encouraged the NIH Bureaus, Institutes, and Divisions (BIDs) to explore statistically sound approaches to accounting for differences in Study Section behavior.

In an attempt to achieve improved program balance and equalize the likelihood of funding of high quality research across all Study Sections, the National Heart, Lung, and Blood Institute (NHLBI) three years ago initiated a modified system of determining rank order for awarding research grants. Using the priority scores of the current and the two preceding meetings of each Study Section, a percentile distribution of priority scores is generated, and each grant application is assigned a percentile rank corresponding to its score. This process is repeated individually for each Study Section. Grants are then awarded in priority order based on their percentile ranks in Study Section (rather than on their untransformed priority scores), taking into account program relevance, until all available funds are utilized.

The NICHD Advisory Council recommended in September 1982 that this Institute also move to a system of payment of research grants based on their percentile rank rather than their priority score. The Institute is implementing this recommendation for a two-year trial period. Thus, notice is hereby given that beginning October 1, 1983, NICHD will award grants in order of their percentile rank.

ANNOUNCEMENT

AVAILABLILITY OF REQUEST FOR APPLICATIONS (RFA)

NIH-RFA-NHLBI-DBDR-84-G-A

HEMORRHEOLOGIC CONTRIBUTIONS TO THROMBOSIS

DIVISION OF BLOOD DISEASES AND RESOURCES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1984

The Blood Diseases Branch (BDB), Division of Blood Diseases and Resources (DBDR) of the National Heart, Lung, and Blood Institute (NHLBI),announces the availability of a Request for Applications (RFA) on the above subject. This program will support research directed toward understanding the effects of blood flow both on hemostatic reactions involving soluble plasma proteins and cell surfaces and receptors, including polymerization reactions, and on the development and dissolution of arterial and venous thrombi. Research addressing questions related to implantation of artificial devices, extracorporeal circuits, thrombogenicity of synthetic biomaterials and general red cell behavior would not be relevant. This announcement may be of particular interest to investigators with expertise in biochemistry, biophysics, physiology, bioengineering, and clinical expertise in thrombosis, hematology or cardiovascular medicine.

A letter of intent is requested by January 15, 1984. The due date for applications will be February 15, 1984. Request for copies of the RFA should be addressed to:

Dr. Anne P. Ball
National Heart, Lung, and Blood Institute
Federal Building - Room 5A12
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-5911

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS - (RFA)

NIH-RFA-NHLBI-DBDR-84-G-B

DEVELOPMENT OF THERAPEUTIC AGENTS FOR SICKLE CELL DISEASE

DIVISION OF BLOOD DISEASES AND RESOURCES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1984

The Sickle Cell Disease Branch, Division of Blood Diseases and Resources, (DBDR) National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. This program will support basic and applied research in the design and development of drugs for the treatment of sickle cell disease. Investigations of agents must go beyond demonstration of antisickling effects in vitro and should include evaluating effects on red cell survival, potential effects on extra-erythrocytic tissue, and feasibility of systemic administration. It is hoped that this announcement will be of particular interest to investigators with expertise in synthetic, organic and pharmaceutical chemistry, hemoglobin chemistry, molecular and cell biology, membrane biochemistry, pharmacology, toxicology, and clinical hematology.

The due date for the applications will be February 15, 1984. Request for copies of the RFA should be addressed to:

John I. Hercules, Ph.D.
National Institutes of Health
Federal Building - Room 508A
Bethesda, Maryland 20205

Telephone: (301) 496-6931

ANOUNCEMENT

AVAILABILITY OF REQUESTS FOR APPLICATIONS (RFA)

NIH-RFA-NHLBI-DHVD-84-G-C

SODIUM SENSITIVITY AND BLOOD PRESSURE RESPONSE

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1984

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

This program will support research to identify the mechanisms and characteristics that determine sodium sensitivity resulting in blood pressure change in normotensives and in persons with essential hypertension. This announcement may be of particular interest to investigators with expertise in hypertension, cardiology, biochemistry, neurology, nutrition, physiology, epidemiology, and genetics.

Requests for copies of the RFA should be addressed to:

Ms. Marilyn Farrand, R.D.
Nutritionist
Preventive Cardiology Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building - Room 6A08
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-3503

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: (RFA)

NIH-RFA-NHLBI-DHVD-84-G-D

ADULT MAMMALIAN CARDIAC MYOCYTES

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 16, 1984

The Cardiac Diseases Branch, Division of Heart and Vascular Diseases (DHVD), National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the above subject. The purpose of this special grant program is to: (1) encourage investigators to develop improved methods for obtaining homogeneous preparations of viable cardiac myocytes in high yield; (2) provide a comprehensive description of the physiological, structural, and biochemical properties of isolated, healthy myocytes to serve as a reference for studies of cells obtained from diseased hearts; and (3) encourage the study of specific abnormalities associated with myocytes isolated from diseased hearts.

This announcement may be of particular interest to investigators in disciplines which include tissue culture, cellular physiology, electrophysiology, electron microscopy, morphology and biophysics, within departments of cardiology, biochemistry, anatomy, pathology, and physiology.

The due date for the receipt of applications will be April 16, 1984. Requests for copies of the RFA should be addressed to:

Constance Weinstein, Ph.D.
Deputy Chief, Cardiac Diseases Branch
National Heart, Lung, and Blood Institute
Federal Building - Room 3C06
7550 Wisconsin Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-1081

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS (RFA)

NIH-RFA-NHLBI-84-G-E

DEMONSTRATION AND EDUCATION RESEARCH IN HEART, BLOOD VESSEL, LUNG, AND BLOOD DISEASES AND RESOURCES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1984

The National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) announces the availability of a Request for Applications (RFA) for demonstration and education research in heart, blood vessel, lung, and blood diseases and resources. The population in which the research would be conducted should be well defined and may include health care professionals and defined groups within a community or the general population. Staffing for the research should include relevant professional expertise in disciplines as needed, including medical disciplines, health education, epidemiology, biostatistics, and behavioral and social sciences. To be responsive to this announcement, the applicant institution must have biomedical research activities related to the general areas of the proposed demonstration and education research.

The due date for applications is February 15, 1984. Requests for copies of the RFA should be addressed to:

HEART AND BLOOD VESSEL DISEASES
Limited to Research on
"Cardiovascular Disease Prevention in the Workplace"

Dr. Gerald Payne
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 6A14
Bethesda, Maryland 20205

Telephone: (301) 496-2465

LUNG DISEASES

Dr. Sydney Parker
Division of Lung Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Westwood Building - Room 6A12
Bethesda, Maryland 20205

Telephone: (301) 496-7668

BLOOD DISEASES AND RESOURCES

Mr. Allan Czarra
Division of Blood Diseases and Resources
National Heart, Lung, and Blood Institute
National Institutes of Health
Federal Building - Room 518
Bethesda, Maryland 20205

Telephone: (301) 496-4186

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: (RFA)

NIH-RFA-NHLBI-DLD-84-G-F

PRODUCTION OF TOXIC OXYGEN SPECIES IN ACUTE LUNG INJURY

DIVISION OF LUNG DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: April 2, 1984

The Division of Lung Diseases (DLD), National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) announces the availability of a Request for Applications (RFA) on the production of activated oxygen species in the lung. The main objective of this special grant program is to improve our understanding of the biochemical reactions and cellular interactions that give rise to toxic oxygen species during exposure to hyperoxia or other inciting agents which can lead to acute lung injury.

Projects should address the intracellular reactions in the lung which generate active oxygen species from molecular oxygen, and the fundamental biochemistry of reactions that quench partially reduced oxygen species. Also of interest are cellular interactions in the lung that influence the generation of toxic oxygen species. This announcement may be of particular interest to investigators with expertise in biochemistry, biophysics, pharmacology, chemistry, cellular physiology and toxicology.

A letter of intent is requested by December 15, 1983, and the deadline for receipt of applications is April 2, 1984. The earliest award date for successful applicants will be in September 1984.

Requests for copies of this RFA should be addressed to:

Alfred Small, Ph.D.
Interstitial Lung Diseases Branch
Division of Lung Diseases
National Heart, Lung, and Blood Institute
National Institutes of Health
Westwood Building - Room 6A05
Bethesda, Maryland 20205

Telephone: (301) 496-7034

ANNOUNCEMENT

AVAILABILITY OF REQUEST FOR APPLICATIONS: (RFA)

RFA-NIH-NHLBI-DLD-84-G-G

ISOLATION AND CHARACTERIZATION OF HUMAN LUNG CELLS

DIVISION OF LUNG DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: February 15, 1984

The Structure and Function Branch, Division of Lung Diseases, National Heart, Lung, and Blood Institute (NHLBI) announces the availability of a Request for Applications (RFA) on the isolation and characterization of cells from human lung. The main objective of this special grant program is to stimulate development of methods to isolate from human adult lung specific cell types that are of potential clinical importance, i.e., alveolar type I and type II cells, airway epithelial cells, (mucous, serous, Clara, and ciliated cells) and endothelial cells (large vessel and capillary). Characterization of metabolic, physiologic, and ultrastructural properties of the human lung cells is also a major objective of this program.

The development of methods to successfully isolate certain lung cell types (e.g., airway epithelial cells, capillary endothelial cells, and type I alveolar epithelial cells) may require further work in animals before studies on human tissue are attempted. Applications for development or refinement of methods to isolate these cells from animal lungs will be accepted if the studies are clearly aimed towards applying the methods to obtaining cells from human lung. In addition, cells chosen for study must be of potential relevance to human lung disease. This announcement may be of particular interest to investigators with expertise in cell biology, biochemistry, cell physiology, and lung pathology.

A letter of intent is requested by December 15, 1983, and the deadline for receipt of applications is February 15, 1984. The earliest award date for successful applicants will be in September 1984.

Requests for copies of this RFA should be addressed to:

Dorothy Berlin Gail, Ph.D.
Structure and Function Branch
Division of Lung Diseases
National Institutes of Health
5333 Westbard Avenue - Room 6A03
Bethesda, Maryland 20205

Telephone: 301 - 496-7171

ANNOUNCEMENT

AVAILABILITY OF REQUESTS FOR APPLICATIONS (RFA)

NIH-NHLBI-DHVD 84-G-H

SPECIALIZED CENTERS OF RESEARCH IN HYPERTENSION,

NATIONAL RESEARCH AND DEMONSTRATION CENTERS IN HYPERTENSION

DIVISION OF HEART AND VASCULAR DISEASES

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Application Receipt Date: May 1, 1984

The Division of Heart and Vascular Diseases of The National Heart, Lung, and Blood Institute (NHLBI), Nation Institutes of Health (NIH) supports a comprehensive research program in the pathogenesis, diagnosis, treatment and prevention of Hypertension. This comprehensive research program is intended to be a multidisciplinary approach directed at the reduction of death and disability due to hypertension and ultimately to its prevention. As part of this comprehensive program, the NHLBI announces a recompetition for Hypertension Specialized Centers of Research (SCOR) and a competition for National Research and Demonstration Centers (NRDC) in Hypertension. Applications received in response to this request will participate in a single competition.

An NRDC in Hypertension is an enhancement of the SCOR program. It must include basic and clinical research (the traditional SCOR components) along with demonstration and education research and an essential coordinating and integrating effort. APPLICANTS MAY APPLY FOR EITHER A NATIONAL RESEARCH AND DEMONSTRATION CENTER OR A SCOR. The submission of a National Research and Demonstration Center application may, in some instances, result in the award of a SCOR grant. In other words, the applicant institution may apply for support as a NRDC but after appropriate peer review may be approved as a SCOR only if its basic and clinical research components are judged to be meritorious, but its demonstration and education components are not so judged.

Eventually, a network of NRDC will be established in other program areas which will further the Institute's mission in the prevention of cardiovascular, pulmonary, and blood diseases.

The requirements and formats for applications submitted in response to this announcement and additional information regarding the characteristics of these mechanisms of support can be obtained from:

Michael J. Horan, M.D., Sc.M.
Chief, Hypertension and Kidney Diseases Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute
Federal Building - Room 4C04
Bethesda, Maryland 20205

Telephone: 301/496-1857

ANNOUNCEMENT

NATIONAL RESEARCH SERVICE AWARDS FOR SHORT-TERM TRAINING: STUDENTS IN HEALTH PROFESSIONAL SCHOOLS

Application Receipt Date: February 1, 1984

There has been continuing evidence of a disturbing decline in the number of students in health professional schools who are interested in research careers. To help arrest or reverse this trend, the National Institutes of Health will continue to support short-term research training experiences for students in health professional schools under the National Research Service Award (NRSA) Act of 1974 as amended. Title 42 of the Code of Federal Regulations, Part 66, is applicable to these awards.

I. PURPOSE

The National Institutes of Health (NIH) supports a short-term research training program to expose talented students in health professional schools to the opportunities inherent in a research career. The program is designed to help ameliorate or avoid a future shortage of clinician investigators by attracting highly qualified professional students into biomedical and behavioral research careers.

II. ELIGIBILITY REQUIREMENTS

A. Applicant Institutions

Domestic nonprofit private or public schools of medicine, optometry, osteopathy, dentistry, veterinary medicine, pharmacy and public health with strong research programs may apply for grants to support short-term research training for students in health professional schools for periods of two-three months. The applicant institution must have the staff and facilities required for the proposed program. Only one application per health professional school may be submitted for a given receipt date. A health professional school may have only one active award at any time.

B. Trainees

The training institution will be responsible for the selection and appointment of trainees. Trainees should have successfully completed at least one semester at an accredited school of medicine, optometry osteopathy, dentistry, veterinary medicine, pharmacy or public health prior to participating in the program. NRSA awards cannot be used to support courses which are required for the M.D., D.O., D.D.S., D.V.M. or other similar professional degrees. Students in a combined MD/PhD program are not eligible for support. In Schools of Pharmacy only students who are candidates for the Pharm. D. are eligible. These awards are intended to introduce students to research that would not otherwise be available through their regular course of studies. Therefore, individuals holding MS or PhD degrees in the health sciences, or those already matriculated in formal programs leading to the MS or PhD degree, are not eligible.

Individuals appointed as trainees on the grant must be citizens or noncitizen nationals of the United States, or must have been lawfully admitted for permanent residency at the time of appointment. Noncitizen nationals are individuals who, although not citizens of the United States, owe permanent allegiance to the United States. They are generally persons born in lands which are not states but which are under United States sovereignty, jurisdiction, or administration (e.g., American Samoa). Individuals on temporary or student visas are not eligible.

III. PROGRAM ELEMENTS

Each institution is invited to develop an application in response to this announcement that is best suited to its own strengths and characteristics. The goal is to identify a cadre of exceptional students with the potential to pursue careers in biomedical and behavioral research.

The training program director should have a demonstrated record of success in conducting research and in working with research trainees. Each application should describe a plan for widely advertising the program throughout the school to insure active competition for appointment. Special attention should be given to appointments of minority students and women.

The overall training is not necessarily restricted to activities in a single discipline or department. The choice of participating training sites and mentors should be carefully described to show that the institution's best environments and role models have been selected. It is expected that students will be assigned to the institution's strongest research and research training programs which may involve basic or clinical research or a combination of both.

Each institution will be expected to encourage among the trainees a sense of belonging to a community of scientists. Among the methods that may be used is providing a special seminar series addressing such topics as research methodology, instrumentation, experimental design, etc. A plan for assessing the impact of the program on both the institution and the trainee is highly desirable.

No grants will be made to support fewer than four trainees, nor more than thirty-two appointment actions per budget period based on a full-time three month appointment. Adjustments in numbers of trainees may be made for different periods of appointment within the acceptable range of two to three months. All training must be full-time during the specific training sequence.

IV. APPLICATION PROCESS

A. Application Form

The application form for Institutional Training Grants (PHS 6025) is used supplemented by instructions specific to this program.

B. Period of Support

Institutions applying for new or renewal short-term training institutional grants should request five years of support.

C. Training Related Expenses

Training related expenses will be based on a monthly proration of the level in effect for predoctoral NRSA institutional trainees, currently $125 per month for each participating student. This amount is subject to revision depending upon the availability of funds.

D. Trainee Expenses

The stipend support for trainees will be based on a monthly proration of that in effect for predoctoral NRSA trainees, currently (as of October 1, 1983) $441 per month. Stipends may be supplemented in keeping with NRSA guidelines, and further may be used in conjunction with the Department of Education Work-Study Program. Trainee tuition and fees and trainee travel, where necessary to the research training, must be covered by the funds provided for training related expenses.

E. Indirect Costs

Indirect costs will be awarded based on a current indirect cost rate, or 8 percent of total allowable direct costs, whichever is less.

F. Trainee Reporting Requirements

Individuals under this program are not required to sign an NRSA payback agreement. A Statement of Appointment of Trainee form (PHS 2271) must be submitted at the start of each trainee appointment and reappointment. A Termination Notice form (PHS 416-7) is not required.

G. Other Terms and Conditions

Except as modified by this announcement, the terms and conditions in the NRSA Guidelines for Individual Awards and Institutional Grants brochure are applicable to grants made under this announcement.

IV. REVIEW CRITERIA

All applications will be subject to the NIH peer review procedures. Particular attention will be paid to:

- The proposed training program and the qualifications of the program director and participating mentors.
- The training environment.
- The institution's commitment to the training of investigators in basic and clinical research.
- The proposed method of selection and assignment of students.
- For renewal application, program accomplishments to date.
- The institution's plan for measuring the effectiveness of the program.

V. APPLICATION DATES AND NOTIFICATION OF AWARDS

February 1, 1984, is the only receipt date for applications to be funded in fiscal year 1985. The applications will be considered by the September-October 1984 National Advisory Councils and awards will be made for possible starting dates in the spring of 1985. February 1 will continue as the one annual receipt date for awards to be made in subsequent years.

Questions relating to eligibility and requests for applications and detailed instructions specific to this program should be addressed to:

National Institutes of Health
Office of Grants Inquiries
Division of Research Grants
Westwood Building - Room 449
Bethesda, Maryland 20205

Telephone: (301) 496-7441

ANNOUNCEMENT

REQUEST FOR APPLICATIONS: (RFA)

84-DE-01

SPECIALIZED CARIES RESEARCH CENTERS

NATIONAL INSTITUTE OF DENTAL RESEARCH

Application Receipt Date: December 30, 1983

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

I. BACKGROUND

Dental caries affects the majority of people and it is the leading cause of tooth loss in children and young adults. It has been estimated that repair of all carious lesions in the U.S. population would cost more than $10 billion annually. In practice, only a fraction of these treatment needs are met and the personal and social toll is high. There are regional differences in the prevalence of caries and certain sectors of the population appear to be at unusually high risk. Recent surveys indicate that the prevalence of coronal caries among children has decreased during the last decade, probably because of the widespread application of fluorides. However, two-thirds of the nation's school children suffer from the disease. Very little is known about secondary caries and root caries, which affects adults and may be increasing in prevalence. Additional research is needed if the disease is to be eliminated as a public health problem.

The disease is characterized by localized, progressive destruction of the tooth. It results from demineralization of susceptible tooth surfaces by acid produced by oral microorganisms from dietary carbohydrates. Research has focused on four strategy areas:

I. Combating the responsible microbiological agents
II. Increasing the resistance of the tooth and the host
III. Decreasing the caries conducive properties of the diet
IV. Improving the delivery and acceptance of caries preventive methods

Traditionally, the NIDR has relied upon the efforts of individual investigators supported by research project grants or contracts to perform most caries research. These have included chemists, microbiologists, immunologists,

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This program is described in the Catalog of Federal Domestic Assistance No. 13.840, Caries 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 Health Systems Agency review.

nutritionists, behavioral scientists, epidemiologists, and dentists experienced in conducting clinical trials. In order to stimulate caries research and facilitate development of preventive methods the NIDR proposes to support specialized centers, where multidisciplinary caries research requiring collaboration between investigators trained in different disciplines would be possible. Center grant applications are invited from qualified institutions for a single competition, with a receipt date of December 30, 1983. This RFA may be re-issued at a later date.

II. CENTER CHARACTERISTICS

Each Specialized Caries Research Center will be an identifiable unit within a larger institution, already committed to some aspects of caries research. The center will consist of a cluster of related research projects, some of which will be fundamental and others will involve clinical studies. These may include phase 1 and phase 2 clinical trials and small epidemiological surveys. However, large scale clinical trials or epidemological surveys and research on restoration of frank caries lesions will not be supported through the center. A broad range of research topics is not a prerequisite but each center will include research projects related to two or more of the strategy areas mentioned above. Core resources, such as animal facilities, computer services and equipment to be shared by investigators, will be provided although budgetary constraints preclude expenditures for very expensive items of equipment. A director with responsibility for scientific and administrative leadership will be supported. A committee consisting of staff members and other expert consultants, who are not members of the center staff, will advise the director on the merits of new projects and the progress of existing investigations.

It is anticipated that the centers will encourage collaboration with researchers from non-dental departments and will provide a training environment for young investigators. Some funds may be used to support pilot projects. Each participating scientist will be expected to obtain independent research support from sources other than the center grant during the award period. Center grant funds should not be used to provide 100 percent of the salary support for investigators, for prolonged periods. In these ways funds will be released to attract other scientists to the center or permit new projects to be supported. Funding for five-year project periods, with a possibility of renewal, should provide a more stable environment than is usually encountered when investigators are supported entirely by individual research project grants.

Site visits to review the performance of the centers and provide guidance to the director will be conducted periodically by NIDR staff and non-government expert consultants.

III. MECHANISM OF SUPPORT

The centers will be supported by specialized center research grants for a period of five years, commencing on September 1, 1984. Subsequent support will be contingent upon program needs and the center's performance, as determined by peer review, when compared with other applications. Applicants may request up to $300,000 in direct costs, for the first year. Modest increases may be requested for subsequent years to strengthen existing areas of research and broaden the range of activities. It is anticipated that two awards will be made, if a sufficient number of high quality applications are received. Although funds have been allocated for this purpose in the NIDR financial plans for fiscal years 1984 through 1989, awards

resulting from this RFA are contingent upon receipt of appropriated funds. All policies and requirements which govern the research grant programs of the PHS, including cost sharing, will apply to grants made as a result of responses to this invitation.

IV. REVIEW PROCEDURES AND CRITERIA

Initially, applications will be evaluated by the NIDR Special Grants Review Committee. This review may involve a site visit. Secondary review will be by the National Advisory Dental Research Council at a special meeting in August 1984.

Major factors to be considered in the evaluation of applications will include:

1. The extent to which the center will promote advances leading to the prevention of dental caries, which could not be achieved or, which would be achieved more slowly, if the component projects were funded separately.

2. The scientific merit of each project including its originality and feasibility, the soundness of the methodology proposed, and the compentence of the investigators.

3. The technical merit and justification for core resources requested.

4. The adequacy of laboratory and clinical facilities and the availability of appropriate patient populations.

5. The scientific and administrative qualifications and experience of the director and his/her availability to provide effective leadership.

6. The plans for establishing and developing the center, for monitoring research and for reviewing changes in research directions.

7. The institutional environment, its commitment to caries research and its resources to foster a multidisciplinary center of this type.

8. The appropriateness of the budget.

V. METHOD OF APPLICATION

It is suggested that prospective applicants submit a letter of intent (limited to two pages) as soon as possible to Dr. John D. Townsley giving the center's objectives, a list of the proposed component research projects and a summary of ongoing caries research. Dr. Townsley, whose address and telephone number are given below, should be contacted for additional information. This may assist respondents in ensuring that applications are responsive and help NIDR staff in planning for timely review of applications. The letter of intent is not binding nor is it a prerequisite for acceptance of applications. Applications which are judged nonresponsive to this RFA will be returned to the applicant, as will applications received after December 30, 1983.

Applications should be prepared on form PHS 398 (Rev. 5/82), Application for PHS Grant, which can be obtained from the Division of Research Grants (DRG), NIH, or from the institution's application control office. To identify the application as a response to this RFA, check "yes" on item 2 of page 1 of the application and enter the title **"SPECIALIZED CARIES RESEARCH CENTERS"** and the number 84-DE-01.

The instructions accompanying form 398 should be followed as far as possible but some modifications will be necessary. For example, a new Table of Contents should be prepared giving page numbers for all items in the application. Each component project should be identified by number and investigator. Separate detailed budgets for the first 12 month period for the entire center, core resources and component projects should be prepared. Consolidated budgets for all years of support should be included. Funds may be requested for professional, technical, and administrative personnel, core resources, equipment, supplies, minor renovations, consultant services, travel, publication costs, and patient costs directly related to the research. Detailed justification of the budget requests will be required. Under Section 2, Research Plans, describe the goals of the center and explain how the core resources and each component project will contribute to achieving those goals. Describe the administrative structure and define the responsibilities of the director, advisory groups, and individual investigators. Describe the relationship of all existing institutional caries research projects to the center. Describe the core unit and explain how it will relate to the projects that will utilize its resources. Each component project should be presented as if it was a research project grant application, that is, the instruction pages 15-18 of form 398 should be followed. A page 2 (Abstract) form 398 should be completed for the core resources, each component project and for the entire application.

The receipt date for an original and five copies of the complete application is on or before December 30, 1983. Applications should be sent to:

Division of Research Grants
National Institutesof Health
Westwood Building - Room 240
5333 Westbard Avenue
Bethesda, Maryland 20205

In addition, one informational copy should be sent under separate cover to:

John D. Townsley, Ph.D.
Chief, Caries Research Grants
and Contracts Branch
National Institute of Dental Research
Westwood Building - Room 522
5333 Westbard Avenue
Bethesda, Maryland 20205

Telephone: (301) 496-7884

REQUEST FOR RESEARCH GRANT APPLICATIONS: RFA

84-AI-01

TROPICAL DISEASE RESEARCH UNITS

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Application receipt date: February 15, 1984

I. BACKGROUND INFORMATION

The National Institute of Allergy and Infectious Diseases (NIAID) invites applications for a program project grant to be initiated in FY 1985 for participation in a Tropical Disease Research Unit (TDRU). The Institute plans to solicit applications for TDRUs only periodically and at designated times.

The Tropical Disease Research Unit is intended to bring together relevant biomedical knowledge and technology in a multidiscipli disciplinary attack on the world's tropical and parasitic diseasess. The TDRU is expected to develop programs of basic and applied research in one or more disease areas related to the basic biology and immunology of host-parasite relations, pathogenesis, improved diagnostic procedures, immunotherapy and immuno- prophylaxis, chemotherapy and chemoprophylaxis, vector biology and control, and other approaches to treatment and prevention.

Since enhancement of tropical disease research capabilities in the United States is one of the objectives of the TDRU program, this invitation for applications is being extended only to domestic institutions.

II. SCIENTIFIC PROGRAM REQUIREMENTS

The complexity of the major tropical diseases is such that a multidisciplinary approach is desirable. The primary goal of TDRUs is to apply recently developed innovative biomedical technologies to the problems of one or more of the following parasitic diseases of interest to NIAID: malaria, schistosomiasis, filariasis, trypanosomiasis, and leishmaniasis. The TDRU will represent a multidisciplinary and cooperative among scientists in basic and applied fields for the study of one or more of these major diseases. Such disciplines as biochemistry, cell biology, entomology, pharmacology, immunology, and genetics should join those of parasitology in seeking new approaches to complex and refractory tropical infections.

A program project grant is a mechanism for the support of a broadly based multidisciplinary research program that has a well-defined central research focus or objective. This contrasts with the usually narrower thrust of the traditional individual research project. The responsibility for leadership of the program resides with the program director who must possess demonstrated scientific and

administrative competence. The program project grant consists of a number of interrelated projects that contribute to the program objective. Each of these scientifically meritorious projects usually is under the leadership of an established investigator who would be the principal investigator (P.I.) for the specific project. The grant also can provide support for certain common resources (cores). Such resources (e.g., laboratory or clinical facilities) should be utilized by two or more projects within the program when such sharing facilitates the total research effort. In addition, a program project consists of scientifically meritorious projects whose interrelationships will result in a greater contribution to its program goals than if each project were pursued individually.

DISTINGUISHING FEATURES OF A PROGRAM PROJECT GRANT

1. There must be a unifying well-defined goal or problem area of research to which each project relates and contributes thereby producing a research environment that allows each research effort to share the creative strengths of the others.

2. The Program Director (P.D.) must possess recognized scientific and administrative competence. The P.D. must show a substantial commitment of time and effort to the program and exercise leadership in the maintenance of its quality control.

3. Each research project included in the program project application must, as assessed by peer review, stand on its own independent scientific merit, as well as complement other projects whenever feasible.

4. These multiple projects require the participation of investigators in several disciplines or such persons with special expertise in several areas of one discipline. All investigators must contribute to, and share in, the responsibilities of fulfilling the program objective.

5. Only institutions with strong ongoing research programs and resources that can focus on a multidisciplinary approach on tropical diseases will be considered for program project support under the provisions of this program.

III. METHOD OF APPLYING

A. Letter of Intent

Prospective applicants are encouraged to submit to the Parasitology Program Officer, NIAID, a one-page letter of intent that includes a brief synopsis of the proposed research and indentification of any other participating institutions. The institute requests such letters for the purpose of providing an indication of the number and scope of applications to be received. A letter of intent is not binding, will not enter into the review of any application subsequently submitted, and is not a necessary requirement for application.

Inquiries should be directed to:

Dr. Harley G. Sheffield
Parasitology Program Officer
Molecular Microbiology and Parasitology Branch
Microbiology and Infectious Diseases Program
National Institute of Allergy
and Infectious Diseases
Westwood Building - Room 737
National Institutes of Health
Bethesda, Maryland 20205

Telephone: (301) 496-7115

B. Application Procedures

Before preparing an application, the prospective applicant should request a copy of the NIAID Information Brochure on Program Projects, which contains details on the requirements for multidisciplinary grant applications, from:

Dr. Susan B. Spring
Executive Secretary
Microbiology and Infectious Diseases
Research Committee
National Institute of Allergy and Infectious Diseases
National Institutes of Health
Westwood Building - Room 706
Bethesda, Maryland 20205

Telephone: (301) 496-7465

The Information Brochure contains special instructions for preparing program project grant applications, review procedures and criteria, and other important information.

Application kits may be obtained from the institution's application control office. If not available there, they may be obtained from:

Office of Grants Inquiries
Division of Research Grants
National Institutes of Health
Westwood Building - Room 448
Bethesda, Maryland 20205

Use the standard research grant application form PHS 398 (Rev. 5/82). For purposes of identification and processing, the words **PROGRAM PROJECT: TROPICAL DISEASE RESEARCH UNIT** and the RFA number 84-AI-01 should be typed in item 2 on the face page of the application.

The submission date for receipt of applications has been set for February 15, 1984. Therefore, letters of intent and receipt of applications will be due as stated below:

Letter of Intent	Applications
December 1, 1983	February 15, 1984

The original and six (6) copies of the application should be sent or delivered to:

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

Please forward a copy (not the original) of the cover letter and the application face page to Dr. Harley G. Sheffield at the address shown above in order to alert NIAID to the submission of the application.The cover letter and fact page should also be sent to:

Chief, Program and Project Review Branch, National Institute of Allergy and
Infectious Diseases
Westwood Building - Room 703
National Institutes of Health,
Bethesda, Maryland 20205.

Applications that are not responsive to the RFA or are not received by February 15, 1984, will not be accepted for review and will be returned to the applicant.

IV. REVIEW PROCEDURES AND CRITERIA

Applications in response to this RFA will be reviewed on a nationwide basis in competition with each other, and in accord with the usual National Institutes of Health peer review procedures. They will first be reviewed for scientific and technical merit by an initial review group composed mostly of non-Federal scientific consultants in June 1984, and then by the National Advisory Allergy and Infectious Diseases Council at its October 1984 meeting.

The program project grant application should include a justification for the appropriateness of that granting mechanism. Review criteria include evaluation of the following, not necessarily in order of importance:

- The scientific merit of the program as a whole, as well as that of each individual project. Each project should be supportable on its own merit.
- The significance of the overall program goals and the development of a well-defined central research focus.

- The cohesiveness and multidisciplinary or multifaceted scope of the program and the coordination and interrelationships among the individual projects and core(s). The relationship of each core(s) to the central focus of the overall program.

- The qualifications, experience, and commitment of the investigators responsible for the individual research projects or core(s) and their contribution to the program, including their ability to devote adequate time and effort to the program.

- Accomplishments of the program to date (for renewal applications).

- The academic and physical environment in which the research will be conducted, including the availability of space, equipment, patients, and the potential for interaction with active scientists from other departments and/or institutions.

- A sound administrative and organizational structure that facilitates attainment of the objective(s) of the program.

- Arrangements for internal quality control of ongoing research, allocation of funds, day-to-day management, internal communications and cooperation among the investigators involved in the program, contractual agreements, and replacement of the Program Director, if required, on an interim or permanent basis.

The applications received in response to this solicitation will compete for fiscal year 1985 funds. At the present time, two TDRUs are being supported and will terminate early in 1985. Because there is considerable uncertainty as to the level of funds that will be available then, it is probable that only two awards will be made. The earliest possible award date will be February 1, 1985.

REQUEST FOR RESEARCH GRANT APPLICATIONS: (RFA)

84-AI-02

ASTHMA AND ALLERGIC DISEASE CENTERS AND

ASTHMA AND ALLERGIC DISEASE CENTERS FOR IMMUNODERMATOLOGIC STUDIES

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Application Receipt Date: October 15, 1984

I. BACKGROUND INFORMATION

The National Institute of Allergy and Infectious Diseases (NIAID) invites applications for grants to be initiated during FY 1985 for participation in the ongoing Asthma and Allergic Disease Centers (AADC) program.

The Allergy and Clinical Immunology Branch (ACIB) of the Immunology, Allergic, and Immunologic Diseases Program of NIAID sponsors fundamental and clinical research grants and contracts and the procurement and application of research resource and reference reagents concerned with asthma, allergic and immunologic diseases and with relevant mechanisms of hypersensitivity and inflammation. This request for applications is intended to encourage the development of applications from clinical investigative groups meeting the criteria and requirements for an AADC and to coordinate the submission of new and renewal applications providing equitable opportunity for both to compete for funds currently available for this programmatic activity.

Since its inception in 1971, the AADC program has progressively expanded with the gradual addition of new Centers on an open application basis. In accordance with established policy announced in the **NIH Guide for Grants and Contracts**, Vol. 7, No. 8, p. 1, June 9, 1978, proposals for AADCs are received only periodically and at designated times. Applications for bothrenewal of existing AADCs and creation of new Center programs will be expected to compete for available funds in accordance with periodic announcements.

This program is described in the Catalog of Federal Domestic Assistance No. 13.855, Immunology, Allergic and Immunologic 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 Regulation 42 CFR Part 74. This program is not subject to Health Systems Agency Review.

The AADC program currently consists of 16 centers. Included are two Immunodermatology Centers awarded in 1980 which are now part of the overall program and are subject to competitive renewal. During FY 1985, two Centers are scheduled to terminate and may compete for renewal.

The fundamental objective of the NIAID AADC program is to foster acceleration of the application of knowledge on the immune system emerging from relevant biomedical sciences to clinical investigations concerned with asthma, allergic diseases, and hypersensitivity disorders. Especially sought as the requisite factors within a participating institution are quality research in (a) basic science(s), (b) clinical investigation supported by adequate clinical facilities, staff expertise in diagnosis and management of asthmatic and allergic patients, and (c) access to (an) appropriate patient population(s) within a suitable academic/investigative setting designed to favor multidisciplinary interaction.

II. RESEARCH GOALS AND SCOPE

A. There should be indication by the sponsoring university or medical institution of willingness and preparedness to commit resources to ensure development, operation, support, and function of the proposed Center in devoting its efforts to an identified study on asthma and/or allergic disease as a fundamental prerequisite.

B. The applicant's achievements in basic science research should have reached that stage of development where experimental leads are sufficiently encouraging to warrant transition from promising laboratory findings to corresponding investigations at the clinical level with the ultimate goal of developing new and improved methods for diagnosis, prevention, and treatment of asthma and/or the other allergic diseases.

C. A prospective Center should be in a position to present evidence of experience, orientation, laboratory and clinical facilities, scientific and professional staff, support personnel and the expertise to design proposals, execute protocols representing a multifaceted long-term approach, and bring diverse institutional strengths to bear upon the study of major problems in asthma, other allergic diseases and/or pathophysiologic mechanisms underlying these disorders.

D. Suitable subjects for study within the provision of this program may include those relevant to:

1. asthma and its multifactoral aspects;

2. atopic diseases (e.g., allergic rhinitis, urticaria, atopic dermatitis);

3. identification, isolation, and characterization of etiologic agents of allergy (e.g., drugs, chemicals, foods, airborne allergens);

4. pathologic expressions, pathophysiologic mechanisms, and genetic factors of allergic disease and allergic inflammatory reactions;

5. immune mechanisms and agents of immediate hypersensitivity and of related hypersensitivity manifestations of antigen-antibody reactions or cell mediated immunity (e.g., hypersensitivity pneumonitis, allergic

dermatitis, vasculitis, allergic gastroenteritis, drug reactions) and the development of corresponding improved diagnostic materials and methods;

6. immunopharmacology, immunotherapy, and the development of specific pharmacologic agents designed for prevention and treatment of asthma and the other allergic diseases.

7. immunodermatologic studies; the role of hypersensitivity and immune-related inflammatory mechanisms has become increasingly evident in disorders of the skin. The recognition of the socio-economic impact of allergic skin disorders has provided another stimulus to further major efforts in this field. Clinical immunologists are in a position to take advantage of the ready access of the skin for in vivo studies of immune mechanisms operative in both local lesions and systemic immunopathologic diseases with manifestations at cutaneous sites. NIAID views with favor the entrance of researchers from immunobiology, immunochemistry, and immunogenetics into clinically relevant studies leading to advances in the diagnosis, prevention, and treatment of allergic and immunologic diseases. These studies in skin diseases may be conducted as an AADC with special emphasis on immunodermatology.

E. Study of animal models will be considered acceptable as a partial segment or adjunct to a Center's program only if this line of research is applicable to the character of the primary investigation of asthma or the human allergic disease central to the proposal.

F. Designation of a Center Director should be based upon accomplishment and experience as a senior scientist and ability to assume both leadership of the investigative group and responsibility for scientific, professional, and administrative functions.

G. More than one delineated avenue of research may be pursued within a Center with provision for unified operation and coordination of component projects and collaborative investigators.

H. A Center should not rely upon its ability to conduct research activity solely within the confines of a single discipline, but rather should have established the associations to involve participation by workers in the pertinent biomedical fields and medical specialties allied to asthma, allergy, and clinical immunology (e.g. immunobiology, biochemistry, microbiology, biostatistics, bioinstrumentation and computer science, and the clinical subspecialities, e.g. dermatology, rheumatology, infectious diseases, pulmonary medicine, hematology, otorhinolaryngology, when a high degree of relevance to immunology exists).

I. The Center Director will be expected to communicate freely with the NIAID and other designated Centers for effective exchange of new information, to interact with scientists working in other Centers on related investigative problems, and to present progress reports and share experimental data with other Centers through exchanges and attendance at NIAID sponsored meetings of study groups and AADC workshops.

Community Activities and Educational Projects

In addition to supporting traditional research endeavors, NIAID encourages the development of Center activities dedicated to educational, outreach and community programs. Investigative groups having the appropriate staff, facilities and interest are invited to include relevant subproject proposals within the overall application submitted for peer review. Within the Center's proposed research framework the applicant institution may include projects related to the following type of activities:

1. development of demonstration programs designed to yield new information on the feasibility of diagnostic methods and treatment;

2. assessment of the regional socioeconomic impact of immunologic and allergic diseases through interaction with practicing physicians and epidemiologists in the area,

3. involvement in the continuing medical education of practicing physicians, and in lay community outreach in the region served.

III. MECHANISM OF SUPPORT

In fiscal year 1985, the NIAID plans to fund at least two new or competing renewal Asthma and Allergic Disease Center applications. Each grant may have a competing project segment of not more than five years. Funding beyond the first year of the grant will be contingent upon satisfactory progress during the preceeding year and availability of funds. It is recommended that budgetary requests be limited to an approximate total direct cost of $250,000 to $300,000 per annum.

The receipt date for applications will be October 15, 1984. They will undergo initial review in February-March 1985, and subsequent review by the National Advisory Allergy and Infectious Diseases Council in May 1985. July 1, 1985 will be the earliest starting date for successful applicants.

Grant funds may be utilized to support the research activities of scientific and professional personnel, consultation services, equipment, supplies, travel, and publication costs. Support for research-related costs of patient involvement and medical care may be authorized. Since the program cannot provide funds for new construction, adequate physical facilities must be available for the primary needs of the Center. However, moderate alterations or renovations to enhance clinical facilities may be allowed if they are necessary to meet objectives of the Center program.

Only those institutions that can demonstrate expertise in both basic and clinical areas and can direct their resources toward a multifaceted attack on asthma or the other allergic diseases can be supported under the provisions of the AADC program.

IV. LETTER OF INTENT

Prospective applicants are encouraged to submit to the Chief, Allergy and Clinical Immunology Branch, NIAID a brief letter of intent that includes a synopsis of the proposed research and identification of any other participating institutions. The Institute requests such letters for the purpose of providing an indication of the

number and scope of applications to be received. A letter of intent is not binding; it will not enter into the review of any applicationsubsequently submitted, and is not a necessary requirement for application. If submitted, the letter of intent should be received no later than July 15, 1984.

Inquiries and letters should be directed and addressed to:

Dr. Robert A. Goldstein
Chief, Allergy and Clinical Immunology Branch
Immunology, Allergic and Immunologic
Diseases Program
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Westwood Building - Room 755
Bethesda, Maryland 20205

Telephone: (301) 496-7104

V. REVIEW PROCEDURES AND CRITERIA

These are outlined in the NIAID Information Brochure on Program Projects (see "METHOD OF APPLYING" below).

VI. CONSEQUENCES OF LACK OF RESPONSIVENESS TO THE RFA OR LATE SUBMISSION

Based upon the letter of intent, potential applicants will be promptly advised whether or not their proposal is found to be within the research goals and scope of the program as defined in this RFA. Applicants will then have an opportunity to correct deficiencies or weaknesses and to restructure their submissions accordingly. Formal applications that are not responsive to the RFA or are not received by October 15, 1984, will not be accepted for review and will be returned to the applicant.

VII. METHOD OF APPLYING

Before preparing an application, the prospective applicant should request a copy of the NIAID Information Brochure on Program Projects from:

Dr. Nirmal Das
Executive Secretary
Allergy, Immunology and Transplantation
Research Committee
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Westwood Building - Room 706
Bethesda, Maryland 20205

Telephone: (301) 496-7966

The Information Brochure contains special instructions for preparing program project grant applications, review procedures and criteria, and other important information.

Use the standard research grant application form PHS 398 (Rev. 5/82). In addition to following accompanying format instructions for the development of a Center application, include expanded material listed above under the eight points for the "letter of intent". For purposes of identification and processing, the words **"ASTHMA AND ALLERGIC DISEASE CENTER"**, and the RFA number 84-AI-02 should be typed in item 2 on the face page of the application.

Application kits may be obtained from the institution's research and application control office. If not available there, they may be obtained from:

Office of Grants Inquiries
Division of Research Grants
National Institutes of Health
Westwood Building - Room 448
Bethesda, Maryland 20205

Forward the complete application to:

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

Please forward a copy (not the original) of the application face page to:

Dr. Robert A. Goldstein
Allergy, Immunology and Transplantation
Research Committee
National Institute of Allergy and
Research Committee
National Institutes of Health
Westwood Building - Room 706
Bethesda, Maryland 20205

in order to alert NIAID to the submission of the proposal, and to:

Chief, Program and Project Review Branch
National Institute of Allergy and
Infectious Diseases
Westwood Building - Room 703
National Institutes of Health
Bethesda, Maryland 20205.

REQUEST FOR RESEARCH GRANT APPLICATIONS: RFA

84-AI-03

PROGRAM PROJECTS ON MECHANISMS OF IMMUNOLOGIC DISEASES

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Application receipt date: June 15, 1984

I. BACKGROUND INFORMATION

The Allergy and Clinical Immunology Branch of the Immunology, Allergic and Immunologic Diseases Program (IAIDP) of the National Institute of Allergy and Infectious Diseases (NIAID) is concerned with asthma, allergic, and immunologic diseases and with relevant mechanisms of hypersensitivity and inflammation. This request for applications (RFA) is intended to encourage the development of applications from collaborative basic science and clinical investigative groups, and to coordinate the submission of new and renewal program project applications providing equitable opportunity for both to compete for funds currently available for existing programmatic activities concerned with the study of mechanisms of immunologic diseases. As such, this program is intended to complement the NIAID Asthma and Allergic Disease Center program as well as the Centers for Interdisciplinary Research in Immunologic Diseases program.

Immunologic diseases together with asthma, allergic diseases, and hypersensitivity and inflammatory disorders constitute major areas of endeavor of the Allergy and Clinical Immunology Branch. The programmatic activity on immunologic diseases is designed to further investigate underlying mechanisms of disease and to enhance basic knowledge relevant to the etiology, prevention, and management of immunologic disorders. Studies are effected from either one of two disciplinary approaches: clinical immunology or immunopathology. Clinical immunology studies are directed toward acquired and inherited diseases associated with

This program is described in the Catalog of Federal Domestic Assistance No. 13.855, Immunology, Allergic and Immunologic 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 Regulation 42 CFR Part 74. This program is not subject to Health Systems Agency Review.

dysfunctions of the immune system. Immunopathology studies include specific areas of genetics, cytology, biochemistry, physiology, and pharmacology of the immune system and its disorders.

The research to be supported by this announcement is concerned with and seeks to define the etiologic factors, pathogenic mechanisms, development of critical diagnostic measures and approaches to effective prevention, control, and treatment of immunologic abnormalities.

II. RESEARCH GOALS AND SCOPE

A. Program project grants are awarded to an institution on behalf of a program director for the support of a broadly based, multidisciplinary, long-term research program which has a specific major objective or basic theme. A program project generally involves the organized efforts of groups of investigators, members of which conduct research projects related to the overall program objective. The grant can provide support for the projects and for certain basic resources shared by individuals in a program where the sharing facilitates the total research effort. Each project supported under a program project grant is expected to contribute to and be directly related to the common theme of the program; the projects under the direction of a principal investigator should demonstrate an essential element of unity and interdependence.

B. It is planned that awards will be made during fiscal year 1985 to support at least one program project grant depending on the availability of funds. It is anticipated that projects will be initiated April 1, 1985.

C. Proposals should emphasize new ideas and new initiatives and should be concerned with the clinical relevance of new knowledge to the immune system and its disorders deriving from studies in related disciplines.

D. Protocols focused on the study of immune mechanisms in disease should be designed to favor integration and coordination of intra-institutional research projects concerned with immunologic disorders and those in basic biomedical sciences. Programs should include clinical investigative components drawing upon immunologically relevant endeavors in medicine, pediatrics, surgery, pathology, and their subspecialties.

E. While proposals should be based on clinical investigation as the major requirement, the value and place of experimental studies relevant to human immunologic disease are recognized. Inclusion of basic research components utilizing samples of human source materials in in vitro procedures and those involving laboratory animals serving as feasible models for required in-depth studies are acceptable. Such work, however, should clearly demonstrate relevance to human diseases.

F. Patient oriented studies and those involving in vitro laboratory procedures and the use of experimental animal models should have an immunologic base or draw upon immunologically relevant areas in the disciplines of biochemistry, pharmacology, microbiology, virology, genetics, or pathology.

G. The proposals should consist of a number of demonstrably integrated projects utilizing multifaceted experimental approaches and investigative probes bearing upon either a well defined immunologic disease or upon immune mechanisms common to multiple human disorders.

H. The proposal should clearly explain how the projected multidisciplinary integrated program can be expected to accomplish the stated goal more efficiently and effectively than a series of independent individual grant supported studies.

I. Designation of a program director should be based upon accomplishment, experience as a senior scientist, and ability to assume both leadership of the investigative group and responsibility for scientific, professional, and administrative functions, and commitment devoting a significant amount of his/her time to the project. Each project or subproject in the program should have a designated principal investigator also with a demonstrable record of accomplishment in clinical immunology, immunopathology, or one of the basic science disciplines or clinical specialties relevant to the particular subject of investigation.

J. Thematic approaches involving combined clinical and basic immunologic approaches to the study of autoimmune disorders, congenital and acquired immunodeficiency disorders of children, Acquired Immunodeficiency Disease Syndrome (AIDS), and other related areas are encouraged.

Community Activities and Educational Project

In addition to supporting traditional research endeavors, NIAID encourages the development of Program Project activities dedicated to educational, outreach and community programs. Investigative groups having the appropriate staff, facilities and interest are invited to include relevant subproject proposals within the overall application submitted for peer review. Within the Program Project's proposed research framework the applicant institution may include projects related to the following type of activities:

1. Development of demonstration programs designed to yield new information on the feasibility of diagnostic methods and treatment.

2. Assessment of the regional socioeconomic impact of immunologic and allergic diseases through interaction with practicing physicians and epidemiologists in the area.

3. Involvement in the continuing medical education of practicing physicians, and in lay community outreach in the region served.

III. MECHANISM OF SUPPORT

Support for this competing project period segment of a program project in Mechanisms of Immunologic Diseases will be limited to a maximum of five years. If a competing renewal application is planned, it should be submitted only in response to an RFA. Funding beyond the first and subsequent years of the grant will be contingent upon satisfactory progress during the preceeding years, and availability of funds. It is recommended that budgetary requests be limited to an approximate total direct cost of $250,000 to $300,000 per annum.

The receipt date for applications will be June 15, 1984. They will undergo initial review in October by the Allergy and Immunology Research Committee and subsequent review by the National Advisory Allergy and Infectious Disease Council in January, 1985. April 1, 1985 will be the earliest starting date for successful applicants.

Grant funds may be utilized to support the research activities of scientific and professional personnel, administration, consultation services, central support services, equipment, supplies, travel, and publication costs. Support for research-related costs of patient involvement and medical care may be authorized. Since the program cannot provide funds for new construction, adequate physical facilities must be available for the primary needs of the project. However, moderate alterations or renovations to enhance clinical or laboratory facilaties may be allowed if they are necessary to meet objectives of the proposed program.

IV. LETTER OF INTENT

Prospective applicants are encouraged to submit to the Chief, Allergy and Clinical Immunology Branch, NIAID a one-page letter of intent that includes a brief synopsis of the proposed research and identification of any other participating institutions. The Institute requests such letters for the purpose of providing an indication of the number and scope of applications to be received. A letter of intent is not binding, it will not enter into the review of any application subsequently submitted, and is not a necessary requirement for application. If submitted, the letter of intent should be received no later than March 15, 1984.

Inquiries should be directed to:

Robert A. Goldstein, M.D., Ph.D.
Chief, Allergy and Clinical Immunology Branch,
Immunology, Allergic and Immunologic
Diseases Program
National Institute of Allergy and
Infectious Diseases
Westwood Building - Room 755
National Institutes of Health
Bethesda, Maryland 20205

Telephone: (301) 496-7104

V. REVIEW PROCEDURES AND CRITERIA

These are outlined in the NIAID Information Brochure on Program Projects (see METHOD OF APPLYING below).

VI. CONSEQUENCES OF LACK OF RESPONSIVENESS TO THE RFA OR OF LATE SUBMISSION

If a letter of intent is submitted, potential applicants will be promptly advised whether or not their proposal is found to be within the research goals and scope of the program as defined in this RFA. Applicants will then have an opportunity to correct deficiencies or weaknesses and to restructure their submissions accordingly. Formal applications that are not responsive to the RFA or are not

received by June 15, 1984, will not be accepted for review and will be returned to the applicant.

VII. METHOD OF APPLYING

Before preparing an application, the prospective applicant should request a copy of the NIAID Information Brochure on Program Projects which contains details on the requirements for multidisciplinary grant applications, from:

Dr. Nirmal Das
Executive Secretary
Allergy, Immunology and Transplantation
Research Committee
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Westwood Building - Room 706
Bethesda, Maryland 20205

Telephone: (301) 496-7966

The Information Brochure contains special instructions for preparing program project grant appalications, review procedures and criteria, and other important information.

Use the standard research grant application form PHS 398 (Rev. 5/82). For purposes of identification and processing, the words **"PROGRAM PROJECT ON MECHANISMS OF IMMUNOLOGIC DISEASES"** and the RFA number 84-AI-03 should be typed in item 2 on the face page of the application.
In addition to following the accompanying format instructions for the development of the application, include the material listed below:

1. A brief description of the intended project;

2. A description of available laboratory facilities;

3. Ongoing basic and clinical research relating to immunologic diseases, indentifying existing projects and sources of support;

4. Past research by members of the proposed investigative group in basic and clinical immunology;

5. A description of all clinic facilities available for use by the proposed project;

6. Specific information on the institution's present patient load and projections for patient involvement in clinical investigations;

7. The academic positions and major research interests of the program director and his professional staff who will be involved in the work of the program projects;

8. Collaborative possibilities with other area laboratories and investigators and delineation of the roles and manner of anticipated participation and interaction of the principal investigators, consultants, and collaborators.

Application kits may be obtained from the institution's application control office. If not available there, they may be obtained from:

Office of Grants Inquiries
Division of Research Grants
National Institutes of Health
Westwood Building - Room 448
Bethesda, Maryland 20205

Forward the complete application to:

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

Please forward a copy (not the original) of the application face page to:

Dr. Robert A. Goldstein
Allergy, Immunology and Transplantation
Research Committee
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Westwood Building - Room 706
Bethesda, Maryland 20205

in order to alert NIAID to the submission of the proposal, and to:

Chief, Program and Project Review Branch
National Institute of Allergy and
Infectious Diseases
Westwood Building - Room 703
National Institutes of Health
Bethesda, Maryland 20205.

ANNOUNCEMENT

NMR RESOURCES, BIOTECHNOLOGY RESOURCES PROGRAM

DIVISION OF RESEARCH RESOURCES

I. BACKGROUND INFORMATION

The Biotechnology Resources Program (BRP) of the Division of Research Resources (DRR) invites grant applications from interested institutions for support of resources for nuclear magnetic resonance (NMR) emphasizing in vivo spectroscopy and new NMR imaging methodologies to be used in metabolic studies and analysis of cells, organs or tissues and studies of molecular pharmacology.

The purpose of the BRP is to make advanced technology including instruments available to the biomedical research community on a regional or national shared basis. The program also emphasizes development of technology, instruments, and methodology to broaden the range of application in biomedical or clinical research. A complete resource encompasses five essential component activities: core research and development, collaborative research, service, training and dissemination.

II. AREAS OF RESEARCH INTEREST

A number of new and increasingly sophisticated techniques for investigation of biologically important molecules have been developed during the past two decades. One of these, NMR spectroscopy, is now at a stage of development in which it can be applied to chemical reactions occurring in vivo. The goal of this announcement is to encourage the development of regionally shared resources which are on the leading edge of this exciting area of research. The focus should be on the applications involving nuclei such as carbon, fluorine, sodium or phosphorus to study in vivo vivo biochemical processes.

This program is described in the Catalog of Federal Domestic Assistance No. 13.371, Biotechnology 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 Public Health Service grant policies and Federal Regulation 42 CFR Part 74. This program is not subject to Health Systems Agency review.

One component in the definition of a resource is core research. Examples of appropriate core projects include coil and field design improvements to optimize localization of volumes of interest (e.g. hippocampus vs. cortex) and sensitivity or other aspects of instrument operation. In addition, development of methods to increase the applicability of the technique such as labeling the specimen studied with appropriate probe molecules are of interest as are new NMR imaging techniques using nuclei other than hydrogen. A research dedicated wide bore instrument (20cm or greater bore size) would be the basis for the resource in most cases, although other instrumental configurations could be considered.

Collaborative research and service applications from basic and clinical scientists in the geographical region served should be described in the application. These could include studies of molecular pharmacology involving drug-tissue interactions, drug distribution and storage, and studies of drug metabolism. Studies of in vivo biochemistry of normal organs and tissues and changes occurring in them during onset of disease and as a consequence of therapy would be of potential interest. These examples are not intended to be exhaustive and other innovative proposals for user research projects will be considered.

III. MECHANISM OF SUPPORT

The program provides partial or full support for equipment, personnel, supplies and other allowable costs necessary for the establishment and operation of a resource. In addition to equipment funds and core research costs, salaries and other support needed to make the technology available to collaborative and service users are provided. Because of the benefits to be gained by the host institution, it is common for the institution to participate in the funding of a new resource.

IV. APPLICATION PROCEDURES

Applications should be submitted on form PHS 398, applicaton for research grant. Application kits should be available from institutional business offices or from the Division of Research Grants (DRG), NIH. Application deadlines are February 1, June 1, and October 1. The completed original application and six (6) copies should be sent to:

Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
5335 Westbard Avenue
Bethesda, Maryland 20205

V. PROGRAM GUIDELINES AND INQUIRIES

Detailed guidelines and special application instructions are available from the BRP. It is strongly recommended that prospective applicants discuss the proposed resource with BRP staff prior to submitting an application. Inquiries and requests for BRP guidelines should be addressed to:

Biotechnology Resources Program
Division of Research Resources
National Institutes of Health
Building 31 - Room 5B 41
Bethesda, Maryland 20205

Telephone: (301) 496-5411

ANNOUNCEMENT

NEW INVESTIGATOR RESEARCH AWARD PROGRAM

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

I. BACKGROUND

The National Institute of Environmental Health Sciences (NIEHS) is the principal Federal Agency for biomedical research on the effects of chemical, physical and biological environmental agents on man's health and well-being. The Institute, through its Extramural Program, supports basic and applied research on the consequences of the exposure of man and other biological systems to potentially toxic or harmful agents in the environment including the development, testing and validation of biological test systems which can be used to measure and predict human toxicity from exposure to environmental factors.

The NIEHS recognized the need to encourage research investigators to become interested in the broad area of environmental health sciences and instituted the Young Environmental Scientist Health Research Grant Program in 1977. Since this program paralleled similar support mechanisms in other National Institutes of Health (NIH) institutes, the NIH standardized the programs under the rubric New Investigator Research Award Program (NIRA). The NIRA is a three-year award with a limit of $107,500 total direct costs. Since 1978, approximately 60 awards have been made by the NIEHS under this program.

II. RESEARCH GOALS

The specific goal of this announcement is to continue to encourage new investigators interested in the broad area of environmental health sciences to submit grant applications in research areas compatible with the mission of the NIEHS. Listed below are general subject areas representative of the interests of the Institute. The list provides example only, and investigators with other interests and expertise should not hesitate to contact the Institute representative to discuss the applicability of their programs to those of the NIEHS.

This program is described in the Catalog of Federal Domestic Assistance No. 13.112, Characterization of Environmental Health Hazards; 13.113, Biological Response to Environmental Health Hazards; 13.114, Applied Toxicological Research and Testing; and 13.115, Biometry and Risk Estimation. 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 Health Systems Agency review.

A. Epidemiological and laboratory investigations which assist in establishing causal associations between human disease and hazardous chemical, physical and biological factors in man's environment.

B. Definition and quantification of the health effects of chemical, biological, and physical factors in man's environment.

C. Elucidation of the process by which environmental agents affect biological systems in human diseases and disorders.

D. Development of the understanding of pharmacological principles that govern the site and severity of damage by environmental agents.

E. Elucidation of the details and time sequence of molecular, structural and functional changes resulting from exposure to environmental agents.

F. Studies of chemicals which are capable of altering the genetic makeup of man, reducing reproductive capacity, or damaging the embryo or fetus at any state of differentiation and development.

G. Development of reliable test systems for determining which agents are mutagens, teratogens, carcinogens or otherwise toxic.

H. Elucidation of the molecular and cellular mechanism of mutagenesis, teratogenesis and organ toxicity.

I. Use of aquatic forms as models for environmental health studies as described above.

In addition to the above general research areas of interest to the Institute, the NIEHS has issued several RFAs and Program Announcements during the past several years citing specific research needs, the subjects of which are still considered timely. These announcements appeared in the NIH Guide for Grants and Contracts and are summarized as follows:

ALTERNATIVE DESIGNS OF STANDARD CANCER BIOASSAY

The objective is to stimulate interest in the development of alternative designs of the standard cancer bioassay in order to make the end results more amenable to low-dose extrapolation and risk estimation. Alternative designs should maintain the cancer screening potential of the current bioassay.

IMMUNOTOXICOLOGY OF ENVIRONMENTAL AGENTS

The objective is to stimulate high quality research in areas of immunotoxicology including applications of immune function tests, changes in immune response following exposure to environmental chemicals, development of immunologic models to study hypersensitization and allergy, and the effects of inhalation exposure on immune elements in the lung.

BIOLOGICAL EFFECTS OF CHEMICAL INTERACTIONS

The objective is to study all facets of biological effects of interactions of chemicals of environmental concerns. Of particular interest are projects aimed at developing new methods for study of interactions.

ENVIRONMENTAL MEDICINE

The objective is to generate interest in the use of laboratory or clinical tests that aid in the detection and measurement of toxicity demand from chemical exposure at levels which do not produce acute symptoms but which may produce detectable damage years later. Of particular interest are the effects of exposure that may occur in occupational settings, therapeutic levels of unexpected episodes of chemical exposure such as might occur with populations exposed to hazardous chemical wastes.

III. REVIEW PROCEDURES AND CRITERIA

A. Review Procedures

Applications received in response to this announcement will be considered along with other non-solicited applications and will be assigned in accordance with the NIH Referral Guidelines. The initial review will be for scientific merit and will be carried out by an appropriate peer review group. The secondary review for relevance and responsiveness to the announcement will be made by the appropriate National Advisory Council.

B. Review Criteria

The factors considered to be important for review include a demonstrated knowledge of the applicable science, adequacy of facilities and commitment, availability of subject population when applicable and in-depth knowledge of the state-of-the-art to which the announcement is directed. The application will be judged upon the overall scientific merit, adequacy of methodology, facilities and resources, commitment of time and cost effectiveness of the proposal. The sponsoring institution should indicate a commitment of facilities and resources to the program.

IV. METHOD OF APPLYING

Applications should be submitted on form PHS 398, the application for the traditional research grant. Application kits containing this form and the necessary instructions are available in most institutional business offices or from the Division of Research Grants (DRG), NIH. Applications must be sent to the following:

Division of Research Grants
National Institutes of Health
Westwood Building - Room 240
5333 Westbard Avenue
Bethesda, Maryland 20205

Additional information regarding the program and interests of the NIEHS can be obtained by contacting:

Dr. Edward Gardner, Jr.
Program Director
Regular Research Programs Section
Scientific Programs Branch
Extramural Program
P.O. Box 12233
Research Triangle Park, North Carolina 27709

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