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For Grants and Contracts

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

Vol. 19, No. 29
August 10, 1990

NOTICES

NOTICES OF AVAILABILITY (RFPs AND RFAs)

ONGOING PROGRAM ANNOUNCEMENTS

ERRATA

NATIONAL INSTITUTES OF HEALTH REGIONAL WORKSHOPS ON IMPLEMENTATION OF THE PUBLIC HEALTH SERVICE POLICY ON HUMANE CARE AND USE FOR LABORATORY ANIMALS

P.T. 42; K.W. 0201011, 1014003

National Institutes of Health

The National Institutes of Health (NIH), Office for Protection from Research Risks (OPRR), will sponsor four workshops on implementing the Public Health Service Policy on Humane Care and Use of Laboratory Animals. Each of the four workshops scheduled for FY 1991 will focus on a specific topic.

The workshops are open to institutional administrators, members of Institutional Animal Care and Use Committees, laboratory animal veterinarians, investigators, and other institutional staff who have responsibility for high-quality management of sound institutional animal care and use programs.

SPONSOR: UNIVERSITY OF RHODE ISLAND
36 Upper College Road
University of Rhode Island
Kingston, RI 02881

DATE: DECEMBER 3-4, 1990

CONTACT: URI Conference Center - (401) 792-2170
Mr. Kevin McAndrews - (401) 792-2833

TOPIC: PROBLEMS OF SMALL VS. LARGE INSTITUTIONS

SPONSOR: THE MEDICAL UNIVERSITY OF SOUTH CAROLINA
Attn: Carol Reed, Registration Coordinator
Department of Comparative Medicine, 704 BSB
Charleston, SC 29425-2216

DATE: APRIL 4-5, 1991

CONTACT: Dr. M. Michael Swindle - (803) 792-3625

TOPIC: SURGERY AND POST-SURGICAL CARE

SPONSOR: WASHINGTON UNIVERSITY SCHOOL OF MEDICINE
Continuing Medical Education
Box 8063
660 South Euclid
St. Louis, MO 63110

DATE: MAY 2-3, 1991

CONTACT: Ms. Loretta Giacoletto - (314) 362-6891 or
1-800-325-9862

TOPIC: RECURRENT CONTROVERSIES IN PROTOCOL REVIEW

SPONSOR: UNIVERSITY OF WASHINGTON
Department of Comparative Medicine
Box SB-42
University of Washington
Seattle, WA 98195

DATE: SEPTEMBER 12-13, 1991

CONTACT: Ms. Gail Wolz - (206) 543-9678

TOPIC: RESOLVING THE ETHICAL DILEMMAS IN ANIMAL PROTOCOL REVIEW

Reproposal of Part 3, Subparts A and D of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) Animal Welfare Regulations is scheduled for release in August of 1990. Subpart A (dogs and cats) includes standards for the exercise of dogs and Subpart D (primates) includes standards for a "physical environment adequate to promote the psychological well-being of nonhuman primates." The Public Health Service (PHS) Policy requires compliance with the APHIS regulations.

The National Institutes of Health, Office for Protection from Research Risks, is cosponsoring with the University of California, Los Angeles, on September

9 - 11, at the Lake Arrowhead Conference Center, an animal welfare education program which will focus on institutional programs and procedures to meet the reproposed APHIS requirements for dogs, cats, and nonhuman primates.

For further information contact:

Ms. Gitta Walton
Director, Human Subjects and Animal Research Policy
6-956 Factor Building
UCLA
Los Angeles, CA 90024-1694
Telephone: (213) 825-8714

For information concerning future workshops, contact:

Mrs. Roberta Sonneborn
Executive Assistant for Animal Welfare Education
Office for Protection from Research Risks
Building 31, Room 5B59
National Institutes of Health
Bethesda, MD 20892
Telephone: (301) 496-7163

ACADEMIC AWARDS: GERIATRIC MENTAL HEALTH ACADEMIC AWARD, CHILD AND ADOLESCENT MENTAL HEALTH ACADEMIC AWARD, AND THE SCHIZOPHRENIA ACADEMIC AWARD

P.T. 34; K.W. 0710010, 0715095, 0715177, 0785185

National Institute of Mental Health

The National Institute of Mental Health announces a change in the duration of support for the Mental Health Academic Awards. The three awards included are the Child and Adolescent Mental Health Academic Award, the Geriatric Mental Health Academic Award, and the Schizophrenia Academic Award.

The Academic Award is designed to provide support to acquire the skills to assume leadership in teaching and to be a research resource, as well as a researcher, in the mental health areas of geriatric disorders, child and adolescent disorders, or schizophrenia. The awards are limited to psychiatrists and psychiatric nurses with master's degrees.

Beginning with the October 1, 1990, grant receipt date, all new and revised applications for these awards should be for 5 years; requests for less than 5 years will not be accepted. Any approved, but not yet funded applications for 3 years of support may be withdrawn and resubmitted for 5 years.

Any current holder of a 3-year award may, prior to termination of that award, apply for an additional 2 years of support. Any previous academic awardee who received 3 years of support, but whose project period is terminated may not apply for an additional 2 years.

A revised Announcement for Academic Awards will be issued in 1991.

Inquiries: Potential applicants may seek information and consultation from the staff of the Division of Clinical Research, NIMH at 5600 Parklawn Dr., Rockville, MD 20857.

Leonard Lash, Ph.D
Associate Director for Research Training
Room 10-99
Telephone: (301) 443-3264

Eleanor Dibble, D.S.W.
Child and Adolescent Disorders Research Branch
Room 10-104
Telephone: (301) 443-5944

David Shore, M.D.
Schizophrenia Research Branch
Room 10C-06
Telephone: (301) 443-4707

Enid Light, Ph.D.
Mental Disorders of the Aging Research Branch
Room 11C-03
Telephone: (301) 443-1185

CLINICAL STUDIES OF THERAPIES FOR SEVERE HERPESVIRUS INFECTIONS

RFP AVAILABLE: RFP-NIH-NIAID-DMID-91-21

P.T. 34; K.W. 0755015, 0715125, 1002045, 0745070

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases (NIAID) has a requirement for the conduct of Clinical Studies of Therapies for Severe Herpesvirus Infections.

The Antiviral Research Branch, Division of Microbiology and Infectious Diseases Program, NIAID, is seeking a multicenter collaborative groups to continue ongoing clinical trials and conduct new trials to evaluate new therapies for severe herpesvirus infections (including herpes encephalitis, neonatal herpes, varicella zoster virus, and cytomegalovirus infections). The NIAID solicits proposals from medical institutions qualified to serve as the sole Contracting Unit or as the Central Unit of a collaborative trial. The Contractor must have demonstrated experience in the clinical evaluation of antivirals and the demonstrated capacity to organize and administer a collaborative clinical study. This announcement is for the recompetition of Contract No. N01-AI-62554 currently held by the University of Alabama. The Request for Proposals (RFP) was issued on July 19, 1990, and proposals are due by close of business on September 14, 1990. One (1) award is anticipated, and it is expected that a completion contract will be funded over a period of five years. Any responsible offeror may submit a proposal which will be considered by the Government.

To receive a copy of RFP-NIH-NIAID-DMID-91-21, please supply this office with a written request, citing the RFP number together with two self-addressed mailing labels addressed to:

Mr. Thomas C. Porter
Contracting Officer
Contract Management Branch, NIAID
National Institutes of Health
Westwood Building, Room 707
5333 Westbard Avenue
Bethesda, MD 20892

This advertisement does not commit the Government to make an award.

MAINTENANCE OF INTERNATIONAL BONE MARROW TRANSPLANT REGISTRY

RFP AVAILABLE: RFP-NIH-NIAID-DAIT-91-23

P.T. 34; K.W. 0705005, 0745065, 0780030

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases (NIAID) has a requirement for the Maintenance of International Bone Marrow Transplant Registry.

The Genetics and Transplantation Branch of the Allergy Immunology and Transplantation Division, NIAID, has a requirement for the maintenance of a statistical center for the collection, organization, and analysis of clinical data provided by bone marrow transplant teams throughout the world. Offerors should have demonstrated expertise in statistical analysis and in large-scale data management utilizing computer technology. This NIAID-sponsored project shall take approximately five years to complete. This shall be a cost reimbursement type contract. The work will require a knowledge of immunogenetics, bone marrow transplantation, immunodeficiences, collaboration with bone marrow transplant centers, and analysis of data from clincical studies. It is anticipated that only one award will be awarded by the Government. Any responsible offeror may submit a proposal which will be considered by the government.

RFP-NIH-NIAID-DAIT-91-23 was issued on July 20, 1990. This announcement has appeared in the Commerce Business Daily and is republished here for information only. Proposals will be due by close of business September 4, 1990. To receive a copy of this RFP, please supply this office with a request

in writing and two self-addressed mailing labels addressed to the office below:

Ms. Merilee Rahe-Stoline
Contract Specialist
Contract Management Branch
National Institute of Allergy and Infectious Diseases
Westwood Building, Room 707
5333 Westbard Avenue
Bethesda, MD 20892

This advertisement does not commit the Government to make an award.

MASTER AGREEMENT FOR MECHANISM OF ACTION AND BIOCHEMICAL PHARMACOLOGY STUDIES OF ANTITUMOR AGENTS

RFP AVAILABLE: NCI-CM-17504-74

P.T. 34; K.W. 0710100, 1003002, 0740020

National Cancer Institute

RFP NO. NCI-CM-17504-74 will be issued upon request to Odessa S. Henderson, Contract Specialist, on or about August 6, 1990 and proposals will be due approximately September 28, 1990.

The Developmental Therapeutics Program (DTP), Division of Cancer Treatment, National Cancer Institute (NCI), is interested in receiving proposals from, and establishing a Master Agreement with, offerors who have the capability to evaluate the biological mechanisms of action of newly identified, potential antitumor agents. The majority of the compounds to be studied will have been identified by the DTP in vitro screen utilizing a diverse panel of human tumor cell lines arrayed in disease-specific subpanels. Those compounds demonstrating specific differential cytotoxic and/or growth inhibitory effects will be considered for further evaluation. DTP seeks to evaluate the biochemical mechanism of action of such agents to help determine reasons for their specificity, and to help set priorities for development. New agents selected on the basis of unique patterns of sensitivity may well exert their biological effects through mechanisms different from those demonstrated for current standard anticancer drugs. Also, some compounds may be selected for evaluation for other than reasons of differential specificity in the in vitro cell line screen, e.g., antimetastatic, photosensitizing, or radiosensitizing activities. Thus, Master Agreement Holders should include a pool of investigators with varying areas of expertise. Compounds to be studied will be selected and assigned by the Government. Since compounds of a commercially confidential nature (discreet) may be evaluated, pharmaceutical and chemical firms will be excluded from the competition. Also, since structural formulae of discreet materials will be provided by the Government, the organization must be willing to sign a confidentiality of information statement. A Master Agreement (MA) is the instrument issued to sources who respond to a Master Agreement Announcement, and who are judged to be qualified to compete for future orders issued under the general project area or areas described in the MA. MAs are competitively negotiated and awarded to more than one organization. This type of agreement is designed to accomplish highly circumscribed pieces of work as promptly as possible. The MAs which will be awarded under this RFP will not be funded per se. After award, MA Holders will be invited to propose on MA Orders (MAO) as they are issued. An MAO is a bilateral award document issued to an MA Holder who successfully competed for requirements described in a MAO RFP. Individual MAOs will be issued on either a completion or a term (level of effort) basis, whichever is deemed appropriate by the Contracting Officer.

Copies of the RFP may be obtained by sending a written request to:

Ms. Odessa S. Henderson, Contract Specialist
National Institutes of Health
National Cancer Institute
Research Contracts Branch, TCS
Executive Plaza South, Room 603
Bethesda, MD 20892

BIOLOGICAL TESTING FACILITY

RFP AVAILABLE: NICHD-CD-90-23

P.T. 34; K.W. 0755010, 0780000

National Institute of Child Health and Human Development

The Contraceptive Development Branch of the Center for Population Research, National Institutes of Child Health and Human Development, is seeking an organization to operate and maintain a biological testing facility. The program is designed to permit the rapid evaluation of new compositions of matter, drug formulations, delivery systems and devices. Such evaluation requires the availability of a broad spectrum of biological tests, assays and analytical procedures. These include antifertility tests in male and female animals, bioassays, mechanism of action studies, and radioimmunoassays of natural and synthetic hormones. As a minimum, the offeror must have in-house capabilities and technical staff to undertake the broad spectrum of antifertility tests, biological assays, radioimmunoassays and radioreceptorassays, and safety studies outlined in the statement of work; have adequate facilities for housing rats, rabbits, and rhesus monkeys in individual cages; have and maintain AAALAC accreditation or self-accreditation which must be approved by the Office for Protection from Research Risks (OPRR), NIH, for the contract period; have individuals who can be assigned to the contract fulltime (100 percent effort); and have experience in conducting studies under Good Laboratory Practices guidelines and be ready to perform such studies under the contract. All responsible sources may submit an offer which shall be considered by the agency. It is anticipated that one cost-reimbursement, incrementally funded type contract will be awarded under the RFP for a period of five years, beginning April 1, 1991. The RFP represents a recompetition of the project "Operation and Maintenance of a Biological Testing Facility" being performed by EG&G Mason Research Institute, Worcester, Massachusetts.

This is not a Request for Proposals. RFP-NICHD-CD-90-23 will be issued on or about August 13, 1990. Proposals will be due approximately 60 days thereafter. Copies of the RFP may be obtained by sending written requests to Mr. Paul J. Duska at the address listed below. Please enclose a self-addressed label. Requests may also be made by FAX Telephone (301) 496-0962.

Paul J. Duska, Contracting Officer
Contracts Management Section, OGC
National Institute of Child Health and Human Development
Executive Plaza North, Room 610
9000 Rockville Pike
Bethesda, MD 20892

CULTIVATION OF CYANOBACTERIA (BLUE-GREEN ALGAE)

RFP AVAILABLE: NCI-CM-17514-29

P.T. 34; K.W. 1002027, 0780005

National Cancer Institute

The Natural Products Branch (NPB), Developmental Therapeutics Program (DTP) Division of Cancer Treatment (DCT), National Cancer Institute (NCI), has a requirement to isolate and grow various species of cyanobacteria to provide NCI with a repository of cell extracts for use in new screens for antitumor/anti-AIDS activities. It is anticipated that one cost-reimbursement type contract will be awarded for a five-year, incrementally funded period of performance. A completion form of contract is planned.

To be considered for such a contract, offerors must show evidence of capability to isolate and cultivate cyanobacteria as well as possess the expertise to accomplish: maintenance and preservation of cultures, optimization and scale-up of production, extraction of cells, and concentration of extracts. The project will require that approximately 300 axenic cultures and 700 culture equivalents be grown to obtain 1.5 to 5g cyanobacterial cell extracts. The contractor may be required by NCI to scale-up cultivation of certain cultures to produce 20g to 40g of cell extract. This may be subcontracted.

The Principal Investigator (P.I.) should be trained in microbiology or phycology, preferably at the Ph.D. level or equivalent from an accredited school, and have at least three to five years of experience in the proposed

area. The P.I. should have a broad knowledge of culture cultivation in particular in those areas related to growing cyanobacteria, cyanobacterial taxonomy, sample preparations, or related fields. The P.I. should be assigned to the project a minimum of 50 percent of the time, be responsible for the overall implementation of the contract, and be the NCI's key contact for the technical aspects of the program. The level of training of the team members should reflect their assigned duties. They should have experience in taxonomy, culture isolation and preservation, culturing of cyanobacteria, and chemical extraction.

RFP NO. NCI-CM-17514-29 will be issued upon request to Clyde Williams, Contracting Officer, on or about August 13, 1990, and proposals will be due September 28, 1990.

All responsible sources may submit a proposal which shall be considered by the NCI. The proposed contract project represents a recompetition of contract number N01-CM-67745 currently held by the University of Hawaii at Manoa. This announcement is not a request for proposal (RFP).

A copy of the RFP may be obtained by sending a written request to:

Clyde Williams
Contracting Officer
National Institutes of Health
National Cancer Institute
Research Contracts Branch
Treatment Contracts Section
Executive Plaza South, Room 603
9000 Rockville Pike
Bethesda, MD 20892

MECHANISMS OF DAMAGE CAUSED BY CARDIOPULMONARY BYPASS

RFA AVAILABLE: HL-90-12-H

P.T. 34; K.W. 0715040, 1002004, 0765035

National Heart, Lung, and Blood Institute

Application Receipt Date: December 3, 1990

The Devices and Technology Branch of the Division of Heart and Vascular Diseases and the Blood Diseases Branch of the Division of Blood Diseases and Resources announce the availability of a Request for Applications (RFA) on the above subject. Applications are invited for support of basic research, studies with animal models, and clinical investigation targeted toward: 1) obtaining a better understanding of the mechanisms of multisystem damage seen with cardiopulmonary bypass and by the often associated technique of profoundly hypothermic total circulatory arrest, and into the particular susceptibility to this damage of the very young and the elderly; and 2) developing methods of preventing or attenuating this damage.

Applicants are encouraged to develop their own approaches within their areas of expertise to investigating fundamental mechanisms of the complex humoral, cellular, and other responses to cardiopulmonary bypass; to developing reversible methods of preventing or minimizing these responses; or to exploring and testing in vivo newly developed methods of management.

In any studies involving human subjects, women and minority individuals should be included in the study population; otherwise a clear rationale for their exclusion must be provided in the application. Minority institutions are encouraged to apply, and other institutions are encouraged to established collaborative arrangements with minority institutions.

The support mechanism for this program will be the traditional, individual research grant. Although approximately $1.2 million for this program is included in the financial plans for fiscal year 1991, award of grants pursuant to this RFA is contingent upon receipt of funds for this purpose. It is anticipated that four to six grants will be awarded under this program. The specific amount to be funded, however, will depend on the merit and scope of the applications received and the availability of funds.

Copies of the RFA may be obtained from:

Paul Didisheim, MD
Devices and Technology Branch
Division of Heart and Vascular Diseases, NHLBI
Federal Building, Room 312
NIH, Bethesda, MD 20892
Telephone: (301) 496-1586
Fax: (301) 480-6282

Diane Lucas, PhD
Blood Diseases Branch
Division of Blood Diseases and Resources, NHLBI
Federal Building, Room 5A12
NIH, Bethesda, MD 20892
Telephone: (301) 496-5911
Fax: (301) 496-9940

NATIONAL COOPERATIVE PROGRAM ON CULTURE CONDITIONS FOR NON-HUMAN IN VITRO FERTILIZATION AND PREIMPLANTATION DEVELOPMENT

RFA AVAILABLE: HD-90-12

P.T. 34; K.W. 0413002, 1002017, 0780000

National Institute of Child Health and Human Development

Application Receipt Date: November 20, 1990

OVERVIEW

The National Institute of Child Health and Human Development (NICHD) invites applications from investigators willing to participate, with the assistance of the NICHD under cooperative agreements, in an ongoing multisite Cooperative Program designed to improve the culture conditions that will promote more efficient non-human in vitro fertilization and normal oocyte and preimplantation development in vitro for several species. The Research Coordinator from the Institute staff will collaborate with the principal investigators in planning, evaluation, and publication of the research and serve as coordinator, facilitator, and partner in the research. It is anticipated that there will be substantial evolution of the program as new findings are obtained and shared. New principles obtained from research on one species could be rapidly tested in other species. It is expected that up to seven (7) awards will be made with an award period of five (5) years. Applications received after the receipt date will not be considered. Only institutions in the United States will be eligible for participation.

MECHANISM OF SUPPORT

The funding mechanism for assistance in this high priority area of research is a cooperative agreement between each participating site and NICHD. The major difference between a cooperative agreement and a research grant is that there will be substantial programmatic involvement of the Research Coordinator from the NICHD staff above and beyond conventional program and grants management procedures.

It is anticipated that up to seven awards will be made with an award period of five years.

REVIEW PROCEDURES

Applications will receive a preliminary review for minimal requirements by NICHD staff and may receive a triage review for relative scientific merit by a peer review group. Scientific and technical merit will be evaluated by a special review committee convened specifically for this purpose by the Scientific Review Program, NICHD. A second-level review will be done by the National Advisory Child Health and Human Development Council.

APPLICATION PROCEDURE AND INQUIRIES

Potential applicants can request further information and copies of the full Request for Applications, which outlines the requirements for participation in this program, from:

Richard J. Tasca, Ph.D.
Reproductive Sciences Branch
Center for Population Research
National Institute of Child Health and Human Development
National Institutes of Health
Executive Plaza North, Room 603
Bethesda, MD 20892
Telephone: (301) 496-6515

This program is described in the Catalog of Federal Domestic Assistance No. 13.864, Population Research. Awards will be made under the authority of the Public Health Service Act 301 (42 USC 241) and 441 (USC 289d) and administered under PHS Grant Policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to A-95 or Health Systems Agency review.

INDEX MARKERS FOR A FRAMEWORK LINKAGE MAP OF THE HUMAN GENOME

RFA AVAILABLE: HG-90-02

P.T. 34; K.W. 1215018, 0760002, 1002058

National Center For Human Genome Research

Letter of Intent Receipt Date: September 10, 1990
Application Receipt Date: October 16, 1990

The National Center for Human Genome Research (NCHGR) invites applications for assistance awards for the isolation of highly polymorphic genetic linkage markers and the development of a framework linkage map of the human genome.

This program is described in the Catalog of Federal Domestic Assistance No. 13.172. Awards will be made under the authority of the Public Health Service Act, Sections 301 (Public Law 78-410, as amended 42 U.S.C. 241) and administered under PHS grants policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirement of Executive Order 12373 or to Health System Agency review.

BACKGROUND

Currently, the five-year goal for the genetic linkage mapping component of the Human Genome Program is the development of a two to five centimorgan (cM) linkage map of the human genome (i.e., a map in which DNA markers are spaced, on average, two cM apart and with no gaps greater than five cM between adjacent markers). The NIH has previously solicited applications for research projects to develop such a high-resolution linkage map under a series of program announcements. The NCHGR will continue to accept applications for such projects in response to the most recent program announcement, "Mapping, DNA Sequencing, and Technology Development in Support of the Human Genome Program" (NIH Guide for Grants and Contracts, Vol. 19, No. 28, July 27, 1990).

The development of the high-resolution human linkage map would be greatly abetted by the construction of a "framework map" consisting of a set of "index" markers, which would each be much more informative than typical DNA markers. A framework map consisting of an ordered set of highly informative markers could be used to rapidly localize any new gene or marker to a particular interval; efforts to map the marker to a finer resolution could then be restricted to that interval. Because of its usefulness in rapidly localizing new markers to a small chromosomal region, a framework map of highly informative markers would be useful both to scientists involved in the localization and identification of specific genes, such as those associated with particular diseases or syndromes, and those engaged in the construction of high-resolution linkage maps.

Of the 2,000 or so polymorphic human markers that have been isolated to date, only 10 percent or fewer are informative enough to be useful as index markers on a framework map. This number is not adequate to develop a maximally useful framework map. Furthermore, the distribution of the known highly polymorphic markers is sufficiently non-random so that any map based on them would not be readily usable for rapid gene localization. A reasonable estimate is that a useful framework map would consist of markers whose heterozygosity is 70 percent or better, with an average spacing of ten to fifteen cM between markers. The utility of the framework map will be further enhanced if each marker is identified by a "sequence-tagged site", (Olson et al. [1989] Science, Vol. 245, p. 1434).

Given the usefulness that a framework linkage map of the human genome would have for laying the foundation for building a high-resolution map and for mapping and isolating functional genes, the NCHGR is interested in supporting research projects designed to isolate new highly polymorphic markers and assemble them into a framework map for each human chromosome.

RESEARCH GOALS

This Request for Applications (RFA) is intended to solicit applications for research projects designed to develop a framework linkage map of one or more human chromosomes as described in the "Background" section. Issues that are

appropriately addressed in applications responding to this RFA include identification and collection of existing markers, isolation of new index markers, mapping of index markers, the relationship between the degree of polymorphism and spacing of index markers on the framework map, criteria to be used for determining when the framework map is complete, and error analysis and quality control issues associated with mapping.

Each applicant responding to this solicitation should identify one or more human chromosomes for which a framework map will be developed and indicate the anticipated time needed to complete it. It is not necessary that all of the index markers be isolated or mapped in the applicant's own laboratory; collaboration with other laboratories for the collection and mapping of index markers is encouraged.

MATERIALS AND DATA RELEASE

It would be of most benefit to the entire scientific community for the framework maps, the markers comprising them, and the data supporting the localization of the markers to become available as rapidly as possible. Thus, the NCHGR is interested in the applicant's discussion of the issues involved in making index markers and supporting data available and in plans for doing so.

In developing such plans, applicants should be aware that, in order to assist investigators in distributing markers and mapping data, the NCHGR will identify and support an appropriate repository and/or database that is qualified and suitable for collecting and distributing the index markers and supporting mapping data. The NCHGR will also support any additional costs required by investigators for deposition of markers and data in this repository/database.

MECHANISM OF SUPPORT

Support for this program will be through research project grants (R01). Support for grants under this RFA is contingent upon the appropriation of funds for this purpose. It is anticipated that three million dollars will be awarded during fiscal year 1991, although the number of awards is contingent upon the quality and scope of the applications received. Between awards made under this RFA and grants already funded by the NCHGR, it is anticipated that sufficient resources will be provided to develop a framework map of each human chromosome. To assist communication among investigators developing framework maps of individual chromosomes, semi-annual meetings of all grantees receiving funds under this RFA are planned.

LETTER OF INTENT

Prospective applicants are asked to submit a letter of intent by September 10, 1990. This letter should include a brief descriptive title, the names of key investigators, and the names and addresses of any other participating institutions. The letter of intent is requested in order to provide an indication of the number and scope of applications to be reviewed. The letter of intent does not commit the sender to submit an application, nor is it a requirement for submission of an application. Please send letters of intent and requests for the full RFA or additional information to:

Mark S. Guyer, Ph.D.
Assistant Director for Program Coordination
National Center for Human Genome Research
Room 605, Building 38A
National Institutes of Health
Bethesda, MD 20892
E-mail: gy4@nihcu.bitnet
gy4@cu.nih.gov

RESEARCH ON FIBER TOXICOLOGY

PA: PA-90-23

P.T. 34; K.W. 1007009, 0785055, 0750000, 0715165

National Institute of Environmental Health Sciences

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

I. BACKGROUND

The National Institute of Environmental Health Sciences (NIEHS) is the principal Federal funding agency for support of basic research on environmental factors that contribute to human health problems and disease. Major emphasis by NIEHS is placed upon research examining those physical and chemical substances to which humans are exposed as a result of industrial and commercial use of synthetic chemicals. However, there are also many natural environmental substances which have been found to have deleterious effects on human health and also are within the purview of the NIEHS mission. One of these substances, asbestos, has been shown to have a strong association with asbestosis, bronchial carcinoma and mesothelioma in humans who have worked with or been exposed to this material when used for a variety of commercial purposes.

Asbestos is a collective name given to minerals that occur naturally as fiber bundles and possess unusually high tensile strength, flexibility and physical and chemical durability. Once liberated into the environment, asbestos persists for an unknown length of time. The principal varieties of asbestos used in commerce are chrysotile, a serpentine mineral, and crocidolite and amosite, both of which are amphiboles. Chyrsotile accounts for more than 95 percent of the world asbestos trade and occurs in virtually all serpentine rocks.

In many animal species, fibrosis, bronchial carcinomas, and pleural mesotheliomas (in the rat), have been observed following inhalation of both chrysotile and amphibole asbestos. The length, diameter, and chemical composition of these fibers have been shown to be important determinants in their deposition, clearance, and translocation within the body.

Epidemiological studies, mainly on occupational groups, have established that all types of asbestos fibers are associated with diffuse pulmonary fibrosis (asbestosis), bronchial carcinoma, and primary malignant tumors of the pleura and peritoneum (mesothelioma). Cigarette smoking has been shown to increase asbestosis mortality and the risk of lung cancer in persons exposed to asbestos but not the risk of mesothelioma.

In summary, a large body of toxicological and epidemiological information is available for asbestos and a wide variety of other mineral and man-made fibers. Experimental animal data suggest that certain fiber characteristics are responsible for the observed biological effects such as lung disease in asbestos workers. The most important of these appears to be fiber size (length, diameter, aspect ratio). However, other characteristics, such as in vivo persistence and durability, chemical composition, and surface chemistry (surface charge, etc.) may also be important, although less well-studied.

In order to assist in the definition of areas requiring further research in fiber toxicology, a workshop sponsored by NIEHS entitled, "Fiber Toxicology Research Needs," was held in the Research Triangle Park, North Carolina, during July 10-12, 1989. The workshop papers and a summary of research needs are to be published in Volume 88 (July 1990) of Environmental Health Perspectives. The workshop brought together international experts in environmental science, industrial hygiene, epidemiology, toxicology, and molecular biology. The objectives of this workshop were to: (a) review critically human and animal experimental data concerning fiber toxicology with an emphasis on biological mechanisms, (b) identify gaps in fiber toxicology knowledge and appropriate research needs, and (c) suggest future research efforts. Accordingly, the following gaps in knowledge and research needs have been identified as being appropriate for and necessary to our more complete understanding of the mechanisms by which mineral and man-made fibers produce and exert their adverse biological effects.

II. RESEARCH GOALS AND SCOPE

This announcement is issued to encourage investigator-initiated research toward and to foster research activity in fiber toxicology, particularly asbestos and man-made mineral fibers. Collaborative research efforts among toxicologists, physical-chemical scientists, and scientists in closely related disciplines are especially encouraged.

Research interests include, but are not limited to studies designed to:

A. Determine the mechanisms of action by which fibers interact with target cells and produce cell injury.

B. Better understand the kinetics of fiber uptake by individual target cells of disease in terms of (in vitro) biological responses and in vivo pathogenicity.

C. Establish a well-defined (in vitro) lung cell system with which to model the mechanisms of persistence and durability of asbestos and man-made mineral fibers in vivo.

D. Model and study the molecular and cellular mechanisms involved in fiber carcinogenesis and fibrogenesis.

Additional animal studies are encouraged to understand the basic mechanisms for the relationship between pulmonary fibrosis and pulmonary tumors, as well as pleural fibrosis and mesothelioma, in terms of the carcinogenic and fibrogenic potency of fiber dimensions, the use of fiber number rather than fiber mass as a main dose parameter, and the relationship between the fiber dose inhaled, and the dose received and retained by the lung parenchyma.

Epidemiological studies on populations exposed to small diameter glass fibers, ceramic fibers, and carbon/graphite fibers are also encouraged. The lack of adequate exposure assessment has hindered the interpretation of epidemiological studies of asbestos exposed populations. Exposure assessments should seek to characterize fiber type, exposure level, and airborne fiber dimensions. In addition, exposure and health effects of non-asbestiform silicates, such as wollastonite and attapulgite, are encouraged.

III. MECHANISM OF SUPPORT

The mechanism of support for this activity will be the individual research grant - Research Project Grant and FIRST Award as applicable.

IV. APPLICATION AND REVIEW PROCEDURES

A. Deadline

Applications will be accepted in accordance with the usual receipt dates for new research grant applications; i.e., February 1, June 1, and October 1. The earliest possible award dates will be approximately nine months after the respective receipt dates. Applications received too late for one cycle of review will be held until the next receipt date.

B. Method of Applying

Applications will be received by the NIH's Division of Research Grants (DRG) and referred to an appropriate study section for scientific and technical merit review. Institute assignment decisions will be governed by normal programmatic considerations as specified in the NIH Referral Guidelines. The review criteria customarily employed by the NIH for regular research grant applications will prevail. Following the initial scientific review, the applications will be evaluated by the National Advisory Environmental Health Sciences Council or another appropriate Institute council. It should be noted that the National Heart, Lung, and Blood Institute has an extensive basic research program on asbestosis and pulmonary fibrosis for which grants submitted to this program announcement may be appropriate.

Applications should be submitted on form PHS-398 (revised 10/88) which is available in the business or grants and contracts offices at most academic and research institutions or from the DRG. To identify the application as a response to this announcement, check "yes" in Item 2 on the face page of the application and enter the title "Research on Fiber Toxicology, PA-90-23."

The original and six (6) copies of the application should be directed to:

Applications Receipt Office
Division of Research Grants
National Institutes of Health
Westwood Building, Room 240
Bethesda, MD 20892**

Inquiries related to this Program Announcement should be directed to:

Dr. George S. Malindzak
Program Administrator
Scientific Programs Branch
Division of Extramural Research and Training
National Institute of Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, NC 27709
Telephone: (919) 541-3289

ERRATA

SEXUALLY TRANSMITTED DISEASES COOPERATIVE RESEARCH CENTERS

RFA: AI-90-03

P.T. 34; K.W. 0715182, 0715125, 0710030

National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases (NIAID) has received several questions focusing on some of the research areas outlined in the subject Request for Applications (RFA), published in the NIH Guide for Grants and Contracts, Vol. 19, No. 14, April 6, 1990. The following provides clarification of those areas.

Applicants are reminded that, as indicated in the RFA, they are strongly encouraged to focus on pathogens for which sexual transmission is the principal mode (eg: C. trachomatis, N. gonorrhoeae, T. pallidum, H. ducreyi, T vaginalis, human papilloma virus, herpes simplex virus). Because of the compelling need for additional research on these STD pathogens, it is urged that Hepatitis B virus and Group B Streptococci not be included as one of the minimum of three pathogens or syndromes addressed in STD CRC proposals.

Research on human immunodeficiency virus (HIV) infection as it affects or is affected by STDs may be included in applications. Projects which focus on HIV alone are, however, not appropriate for this RFA. HIV should not be considered one of the three pathogens which is requested by the RFA.

Finally, the inter-disciplinary emphasis of the STD CRC RFA should not obscure the central importance of basic biomedical research. Responses to the RFA must include strong projects which utilize molecular biological, microbiological, immunological, and other laboratory-based approaches to examine questions. The STD CRC framework should link complementary basic science approaches with clinical, epidemiological, and behavioral approaches.

The receipt date for applications remains unchanged: October 10, 1990.

For questions please contact:

Dr. Judith N. Wasserheit
Chief, Sexually Transmitted Diseases Branch
Westwood Building, Room 749
Division of Microbiology and Infectious Diseases
National Institute of Allergy and Infectious Diseases
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892
Telephone: (301) 402-0443

**THE MAILING ADDRESS GIVEN FOR SENDING APPLICATIONS TO THE DIVISION OF RESEARCH GRANTS OR CONTACTING PROGRAM STAFF IN THE WESTWOOD BUILDING IS THE CENTRAL MAILING ADDRESS FOR THE NATIONAL INSTITUTES OF HEALTH. APPLICANTS WHO USE EXPRESS MAIL OR A COURIER SERVICE ARE ADVISED TO FOLLOW THE CARRIER'S REQUIREMENTS FOR SHOWING A STREET ADDRESS. THE ADDRESS FOR THE WESTWOOD BUILDING IS: 5333 Westbard Avenue
Bethesda, Maryland 20816

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