For Grants and Contracts

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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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.

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NOTICES

NOTICE OF MEETING - "ETHICAL ISSUES IN ALCOHOL RESEARCH"

P.T. 42; K.W. 0404003, 0783005, 0783010

National Institute of Alcohol Abuse and Alcoholism

The Research Society on Alcoholism (RSA) and Northeastern Ohio Universities College of Medicine (NEOUCOM) are co-sponsoring a Panel Discussion on "Ethical Issues in Alcohol Research" to be held June 2, 1988, as a part of the Research Society on Alcoholism Meeting at Wild Dunes Resort, Charleston, South Carolina, June 1-5, 1988. Topics to be addressed include: alcohol administration to research subjects including alcoholics, adult children of alcoholics, women and children, potential antibody tests for alcohol abuse and other topics.

For further information, please contact:

Edward B. Truitt, Jr., Ph.D.
Conference Chairman
Northeastern Ohio Universities
College of Medicine
4209 State Route 44
Rootstown, Ohio 44272
Telephone: (216) 325-2511, Ext. 1634

CLARIFICATION OF PAGE LIMITATIONS FOR SUBMISSION OF A GRANT APPLICATION TO PHS

P.T. 34; K.W. 1014002

Division of Research Grants

This notice is to clarify certain issues that have arisen with regard to the page limitations in effect in the 9/86 version of the Grant Application Form 398. Project Grant applications submitted to PHS must use the 9/86 version of this form and must adhere to the page limitations discussed therein, or they will be returned to the applicant without review. Furthermore, the type style and type density used in applications must be readily legible, with type not exceeding 15 characters per inch. In the event that the type used varies in the number of characters per inch, (i.e., a different spacing for each letter), the range of characters per inch should not exceed 15. Please note that it is essential that all aspects of the application be readily legible or it will be returned without review.

Please also note that the 20-page limitation for the Research Plan (Sections A-D) applies both to new and competing continuation applications, as well as to all revised applications. Graphs, charts, figures and tables that are essential to the research plan must be included within the 20 pages, although supplemental material can be included in the appendix. However, the appendix should not be used to circumvent the page limitations in the Research Plan. If it is clear that the material included in the appendix is essential to the research plan, and should therefore have been incorporated into the Research Plan, the application will be returned without review for exceeding the page limitation.

DATED ANNOUNCEMENTS (RFPs AND RFAs)

PREPARATION OF HOMOGENEOUS HUMAN PLACENTAL B-GALACTOSIDASE AND HIGH-TITER MONOSPECIFIC POLYCLONAL ANTIBODY TO THIS ENZYME

RFP AVAILABLE: NIH-NINCDS-88-12

P.T. 34; K.W. 0780005, 0710070

National Institute of Neurological and Communicative Disorders and Stroke

The National Institute of Neurological and Communicative Disorders and Stroke has a requirement for the preparation and delivery of purified human placental B-galactosidase and anti-B-galactosidase monospecific polyclonal antibody.

Offeror should have demonstrated ability in purifying hydrolytic enzymes on a large scale and production of high titer monospecific antibodies.

This requirement is totally set aside for small business.

This is an announcement of an anticipated Request for Proposals. RFP-NIH-NINCDS-88-12 will be issued on or about May 31, 1988, with a closing date for receipt of proposals set for July 18, 1988. NINCDS expects to make one award for this requirement.

To receive a copy of the RFP, please supply this office with two self-addressed mailing labels. All responsible sources may submit a proposal which will be considered by the agency. The RFP will be available upon written request to:

Contracting Officer Contracts Management Branch, NINCDS National Institutes of Health Federal Building, Room 901 Bethesda, Maryland 20892

<u>DEVELOPMENT AND EVALUATION OF SAFE METHODS OF INTRACORTICAL AND PERIPHERAL NERVE STIMULATION</u>

RFP AVAILABLE: NIH-NINCDS-88-07

P.T. 34; K.W. 0740050, 0706040

National Institute of Neurological and Communicative Disorders and Stroke

The National Institute of Neurological and Communicative Disorders and Stroke has a requirement to develop neural stimulating electrodes and to evaluate the effects of electrical stimulation on neural and surrounding tissue in non-human animals.

Offeror should have experience in fabrication of electrodes for stimulation of neural tissue and histopathological examination of neural tissue with both light and electron microscopy.

This requirement represents the recompetition of a current contract with Huntington Medical Research Institutes and the incumbent is expected to reapply.

This is an announcement of an anticipated Request for Proposals. RFP-NIH-NINCDS-88-07 will be issued on or about May 13, 1988, with a closing date for receipt of proposals set for July 18, 1988. NINCDS expects to make one award for this requirement.

To receive a copy of the RFP, please supply this office with two self-addressed mailing labels. All responsible sources may submit a proposal which will be considered by the agency. The RFP will be available upon written request to:

Contracting Officer Contracts Management Branch, NINCDS National Institutes of Health Federal Building, Room 901 Bethesda, Maryland 20892

MASTER AGREEMENT FOR CEREBROVASCULAR CLINICAL RESEARCH

MAA/RFP AVAILABLE: NIH-NINCDS-88-13

P.T. 34; K.W. 0715200, 0785035, 0745055

National Institute of Neurological Communicative Disorders and Stroke

The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) is seeking proposals with the intent of awarding Master Agreements (MAs) to sources capable of performing clinical evaluations of new investigational forms of therapies and intervention efforts aimed at preventing and (or) treating cerebrovascular diseases in attempt at reducing disability and optimizing functional recovery. Offerrors may qualify under any number of or all of the 6 project categories listed below. Recipients of MA awards may compete for award under future "quick reaction" MA Order/RFPs for studies in the category(ies) for which they receive a MA award. Current or previous MA holders will be required to compete and requalify to receive an award under this MAA/RFP.

Category I - Clinical Research Studies on Transient Ischemic Attack (TIA)

Category II - Clinical Research Studies of Acute Ischemic Stroke

Category III - Clinical Research Studies of Generalized Cerebral Ischemia

Category IV - Clinical Research Studies on Intracranial Aneurysms and Subarachnoid Hemorrhage

Category V - Clinical Research Studies on Intracerebral Hemorrhage

Category VI - Clinical Research Studies on Dementia Secondary to Cerebrovascular Disease

A MA is an agreement issued to sources which qualify under MAA/RFP solicitations to compete for future tasks issued under the general study areas described in a MA. These agreements contain general terms, conditions, and parameters of performance for the particular study category(ies) that the MA holder is judged capable of having demonstrated that it has the staff expertise, capability, facilities, and access to an adequate study population to compete for future MAO task requirements issued under the Cerebrovascular Clinical Research project. The agreements will not contain specific work tasks nor any funding commitments.

Competition for future MAO tasks will be restricted to qualified MA holders, and successful MA competitors may receive a MAO award. A MAO is a bilateral contract operational addendum to a MA. The MAO outlines the specific performance requirements, including a detailed Statement of Work and Delivery Schedule, and indicates the negotiated funding commitment for the particular study task. During FY 1989, NINCDS expects to award four (4) MAOs for a total cost of approximately \$175,000.

This is an announcement of an anticipated MAA/RFP. MAA/RFP-NIH-NINCDS-88-13 will be issued on or about May 31, 1988, with the closing date for receipt of proposals set for July 18, 1988. All responsible sources may submit a proposal, which will be considered by this Agency. To receive a copy of MAA/RFP, you must supply this office with two self-addressed mailing labels. The MAA/RFP will be available upon written request to:

Contracting Officer
Ref.: MAA/RFP-NIH-NINCDS-88-13
Contracts Management Branch, NINCDS
National Institute of Health
Federal Building Room 901
7550 Wisconsin Avenue
Bethesda, Maryland 20892

PEPTIDE ANTAGONISTS OF LHRH AS GONADOTROPIN INHIBITORS

RFP AVAILABLE: NICHD-CD-88-15

P.T. 34; K.W. 0755025, 0760060, 0760035

National Institute of Child Health and Human Development

The Contraceptive Development Branch of the Center for Population Research, NICHD, is interested in stimulating further investigations into the design, synthesis and testing of peptide antagonists of LHRH as gonadotropin inhibitors. Such investigations will also involve the biological evaluation of the peptides, preferably by the contractor. The Contraceptive Development Branch is prepared, however, to evaluate such peptides if the contractor is unable to do so. The goal is to obtain LHRH antagonists which are more potent than those currently available and are devoid of histamine releasing properties. Proposals to merely collect peptides from various sources and/or only perform biological assays are excluded from consideration at this time.

Organizations must have adequate facilities and capabilities to carry out the proposed peptide program. It is anticipated that two awards will be made under the RFP for a period of two years each.

This is not a request for proposals. RFP-NICHD-CD-88-15 will be issued on or about June 10, 1988. Responses to the RFP will be due approximately 60 days thereafter. Copies of the RFP may be obtained by enclosing a self-addressed label and sending written requests to the following address:

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

INHALATION REPRODUCTIVE TOXICITY TESTING

RFP CANCELLATION: NIH-ES-88-16

P.T. 34; K.W. 1007009, 1007002, 1007003, 0775030

National Institute of Environmental Health Sciences

This project, as announced in the NIH Guide for Grants and Contracts, Vol. 17, No. 17, May 6, is cancelled in its entirety due to budgetary constraints.

Further information concerning the cancellation of this requirement should reference RFP NIH-ES-88-16 and should be forwarded to:

National Institute of Environmental Health Sciences ATTN: Elizabeth B. Ford Contracts Management Office, OAM 79 T.W. Alexander Drive 4401 Research Commons Building P.O. Box 12874 Research Triangle Park, NC 27709 Telephone: (919) 541-7893

<u>DEVELOPMENT OF SEROLOGICAL TESTS FOR INVASIVE UREAPLASMA UREALYTICUM INFECTIONS</u>

RFA AVAILABLE: 88-AI-12

P.T. 34; K.W. 0715125, 0715220, 0755010, 0760045

National Institute of Allergy and Infectious Diseases

Application Receipt Date: July 15, 1988

BACKGROUND INFORMATION

The National Institute of Allergy and Infectious Diseases (NIAID) supports research aimed at decreasing genital infections and sexually transmitted diseases to include adverse outcomes of pregnancy. Toward this end, NIAID desires to expand its support of research on Ureaplasma urealyticum (U.u.) infections.

RESEARCH GOALS AND SCOPE

The NIAID invites application from interested investigators for research which involves the development of monoclonal antibodies and epitope mapping of U.u. to identify serotypes and/or group antigens. The ultimate goal of this solicitation is to better characterize U.u. antigenically, and on this basis to develop specific serological tests to determine the association of U.u. with disease, particularly acute disease of the upper female genital tract linked to prematurity and low birth weight.

MECHANISM OF SUPPORT

An award will be made as a traditional research project grant (R01). Universities, medical colleges, hospitals and laboratories or other public, private, or for profit institutions are eligible. NIAID anticipates making one or two awards for a project period of up to five years as a result of this request.

The initial review for scientific and technical merit will be made by a review group to be convened by the Program and Project Review Branch, NIAID; secondary review will be by the National Advisory Allergy and Infectious Disease Council. Funding decisions will be based upon relative scientific merit, program relevance, and the availability of appropriated funds.

STAFF CONTACT

A more detailed RFA may be obtained from:

Robert Edelman, M.D.
Chief, Clinical and Epidemiological
Studies Branch
Deputy Director, Microbiology and
Infectious Diseases Program
National Institute of Allergy
and Infectious Diseases
Building 31, Room 7A52
Bethesda, Maryland 20892
Telephone: (301) 496-5893

PROGRAM PROJECTS ON IMMUNOPATHOGENETIC ASPECTS OF HOST DEFENSE AND INFLAMMATION WITH SPECIAL EMPHASIS ON NEUTROPHIL BIOLOGY AND NEUTROPHIL (LEUKOCYTE) DISORDERS

RFA AVAILABLE: 88-AI-05

P.T. 34; K.W. 0710065, 0710075, 0710030, 0785035

National Institute of Allergy and Infectious Diseases

Application Receipt Date: October 14, 1988

BACKGROUND INFORMATION

The Clinical Immunology and Immunopathology Branch of the Immunology, Allergic and Immunologic Diseases Program (IAIDP) of the National Institute of Allergy and Infectious Diseases (NIAID) supports research on humoral, cellular and molecular mechanisms of immune system functions in health and disease and the application of this basic biomedical knowledge to clinically relevant problems. This RFA is intended to encourage and invite the development of program project applications from collaborating basic science research and clinical investigative groups concerned with integrated studies on immunopathogenetic aspects and consequences of host defense especially concerned with leukocyte biology and disorders of neutrophilic granular leukocyte disorders.

RESEARCH GOALS AND SCOPE

Immune system and related inflammatory disorders constitute major areas of endeavor under the purview of the NIAID CIIP Branch. Within this specific research area goals of the program projects are aimed at: 1) advancing the understanding of causes and pathogenetic mechanisms of immune dysfunctions, and 2) the generation of an expanded knowledge base that can be applied to the development of improved methods of diagnosis, treatment and prevention of relevant disorders.

The design of these program projects should include studies of certain aspects of cellular immune responses responsible for or associated with disorders in which a role for elements or functions of the immune system can be identified. Broad approaches to research on immune mechanisms in disease may include studies concerned with relevant areas of genetics, cellular and molecular biology, biochemistry, physiology, microbiology and pharmacology. Within this purview is NIAID's programmatic special interest in mechanisms and disorders of host defense and their inflammatory consequences. To achieve this goal it is the intention of NIAID to support multidisciplinary and interdisciplinary program projects designed to pursue pertinent areas of investigation. Subject areas may range in emphasis from focus upon the elucidation of basic aspects of neutrophil biology and pathophysiology to studies aimed at clinical problems of granular leukocyte related disorders and the development of improved methods for their diagnosis, treatment and prevention.

MECHANISM OF SUPPORT

Program Project grants are awarded to an institution on behalf of a program director for the support of a broadly based, multidisciplinary or interdisciplinary, 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 in which staff members conduct research projects related to the overall program objective. The grant can provide support for the projects and for certain core resources shared by individuals in the program where sharing facilitates the total research effort. Each component project supported under the program project grant is expected to contribute and be directly related to the common theme of the program; they should demonstrate an essential element of unity and interdependence. At least two awards are planned for FY 1989.

ELIGIBILITY

ONLY DOMESTIC INSTITUTIONS ARE ELIGIBLE TO APPLY.

METHOD OF APPLYING

Applications may be submitted by any domestic public or private nonprofit or profit-making organizations. 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 20892
Telephone: (301) 496-7966

STAFF CONTACT

A more detailed RFA may be obtained from:

Robert A. Goldstein, M.D., Ph.D.
Chief, Clinical Immunology and
Immunopathology Branch,
Immunology, Allergic and Immunologic
Diseases Program
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Westwood Building, Room 757
Bethesda, Maryland 20892
Telephone: (301) 496-7104

THE RFA LABEL AVAILABLE IN THE 9/86 REVISION OF APPLICATION FORM 398 MUST BE AFFIXED TO THE BOTTOM OF THE FACE PAGE. FAILURE TO USE THIS LABEL COULD RESULT IN DELAYED PROCESSING OF YOUR APPLICATION SUCH THAT IT MAY NOT REACH THE REVIEW COMMITTEE IN TIME FOR REVIEW.

ANIMAL MODELS FOR HUMAN PAPILLOMAVIRUS-ASSOCIATED NEOPLASTIC DISEASES

RFA AVAILABLE: 88-CA-13

P.T. 34; K.W. 0755020, 1002045, 0715035

National Cancer Institute

Application Receipt Date: September 15, 1988

Letter of Intent Receipt Date: August 15, 1988

I. INTRODUCTION

The Biological Carcinogenesis Branch, Division of Cancer Etiology, National Cancer Institute invites grant applications from interested investigators to study the host response mechanisms that mediate the regression of human papillomavirus (HPV) associated neoplastic lesions using either established animal models or new animal models of HPV associated diseases. HPVs are strongly associated with a variety of human anogenital neoplasms, e.g., cervical dysplasias and carcinomas, and are a probable etiological factor in their development. Studies in animal models leading to the development of prototype vaccines to prevent initial HPV infections or to induce the regression of established HPV lesions are encouraged. Basic studies on the mechanism of progression of genital warts and other initially benign papillomavirus lesions to dysplasia and possible carcinoma using animal models are also welcome. The present RFA announcement is for a single competition with a due date of September 15, 1988, for the receipt of applications and August 15, 1988, for the receipt of letters of intent. Applications should be prepared and submitted in accordance with the aims and requirements described in the full RFA document which may be obtained from the program director in section IV below.

II. RESEARCH GOALS AND SCOPE

The major emphasis of the research to be funded under this RFA is the promotion of basic studies on the host response mechanisms that mediate the regression of HPV associated neoplastic lesions using either appropriate known animal models or new animal models. Studies on the mechanism of progression of the initial HPV infection to dysplasia and carcinoma using animal models are also encouraged. The scope of this RFA includes both animal papillomaviruses and human papillomaviruses infections in animals. Collaborative projects which include molecular, cellular, immunological and pathological aspects are strongly encouraged. Examples of pertinent studies (which are not all inclusive) are: 1) identification and characterization of experimentally useful animal papillomavirus-host systems whose disease pattern is similar to the progression/regression profile seen in neoplastic human disease; 2) identification and characterization of animal models that can be infected with human papillomaviruses; 3) characterization of the mechanisms of progression/regression of HPV lesions to dysplasia and carcinoma with particular emphasis on molecular processes and the participation of the humoral and cellular immune responses; 4) identification of specific viral or cellular antigens (epitopes) which mediate the host immune response; 5) development of specific antibodies or the establishment of cytotoxic T-lymphocyte (CTL) lines specific for HPV associated dysplastic or carcinomatous cells; 6) development of prototype animal/human vaccines which can protect animal models from viral challenge or can induce the regression of established lesions in these models; 7) development of procedures to facilitate the regression of dysplastic or malignant lesions via immunotherapeutic or chemotherapeutic approaches.

III. MECHANISM OF SUPPORT

This RFA will use the National Institutes of Health (NIH) grant-in-aid. Responsibility for the planning, direction, and execution of the proposed project will be solely that of the applicant. Except as otherwise stated in this RFA, awards will be administered under PHS grants policy as stated in the Public Health Service Grants Policy Statement, DHHS Publication No. (OASH) 82-50,000, revised January 1, 1987. Approximately \$1,000,000 in total costs per year for five (5) years will be committed to specifically fund applications which are submitted in response to this RFA. It is anticipated that five to six awards will be made. This funding level is dependent on the receipt of a sufficient number of applications of high scientific merit. The total project period for applications submitted in response to the present RFA should not exceed five (5) years. The earliest feasible start date for the initial awards will be April 1, 1989. Although this program is provided for in the financial plans of the National Cancer Institute (NCI), the award of grants pursuant to this RFA is also contingent upon the availability of funds for this purpose. Non-profit and for-profit institutions are eligible to apply. Foreign as well as domestic institutions are eligible. This RFA is a one-time solicitation. Generally, future unsolicited competing renewal applications will compete with all investigator-initiated applications and will be reviewed by a standing DRG study section. However, should the NCI determine that there is a sufficient continuing program need, NCI may announce a request for renewal applications. Only recipients of awards under this RFA will be eligible to apply.

IV. INQUIRIES

A copy of the complete RFA document describing the research goals and scope, the review criteria, and the method of applying can be obtained by contacting:

Dr. Alan A. Schreier
Program Director, DNA Virus Studies II
Biological Carcinogenesis Branch
Division of Cancer Etiology
National Cancer Institute
Executive Plaza North - Room 540
Bethesda, Maryland 20892
Telephone: (301) 496-1953

Written or telephone inquiries concerning this announcement are encouraged and should be directed to Dr. Schreier at the above address and phone number. The program director welcomes the opportunity to clarify any issues or questions from potential applicants.

ONGOING PROGRAM ANNOUNCEMENTS

GENDER AND AGING: RELATION TO HEALTH AND LONGEVITY

P.T. 34, CC, II; 0710010, 0404000, 0413001, 1010013, 0705040, 1002019

National Institute on Aging

INTRODUCTION

The National Institute on Aging (NIA) invites qualified researchers to submit applications for research and research training on social, behavioral, and biological antecedents and consequences of the differences in life expectancy, health, functioning, and well-being of men and women as they grow old. Studies are sought which, unlike the common focus on either men or women exclusively, extend scientific understanding of similarities and differences between the sexes.

This announcement of NIA's special initiative on GENDER AND AGING supplements, but does not replace, NIA's broad announcement on HEALTH AND EFFECTIVE FUNCTIONING IN THE MIDDLE AND LATER YEARS. See NIH Guide to Grants and Contracts, Vol.12, No.6, June 17, 1983, pp. 10-15. This initiative, sponsored by the NIA Behavioral and Social Research Program, is coordinated with related emphasis in NIA's program in Biomedical Research and Clinical Medicine, and in particular with the NIA/NICHD Program Announcement on MOLECULAR GENETICS OF THE MAMMALIAN SEX CHROMOSOMES AND AGING which focuses on the genes on the X and Y chromosomes of mammals and their potential relationship to the biology of aging and the gender gap in mortality (See NIH Guide to Grants and Contracts, Vol. 17, No. 12, April 1, 1988). The initiative on GENDER AND AGING is also coordinated with related programs in the National Institute of Child Health and Human Development (NICHD) and in the National Institute of Mental Health (NIMH).

BACKGROUND

Many studies document, but few attempt to explain, the paradox that today in the United States, on the average, at every age women report more illness and health care utilization than men, yet life expectancy is consistently higher for women than for men. The current gender gap in life expectancy at birth is about 7 years; even at age 65, females can expect to live on the average 4 years longer than men. As a consequence, elderly women now outnumber elderly men by three to two; and, at the oldest ages (85 and older), there are only 40 men for every 100 women.

Numerous established facts and less well established hypotheses have been adduced to account for these gender differences. Genetic and inherent biological factors are clearly important. Females outlive males in many mammalian animal species. In humans there is greater fetal wastage in males; the sexes differ in immune response, neuroendocrine regulation, sex hormone influence on brain differentiation, and stress as an effector of mortality. In addition, the expression of genetic and biological dispositions is markedly affected by sociocultural factors; e.g., the gender gap in longevity, which scarcely existed in Colonial America, has increased correlatively with such century-long trends as industrialization, reductions in fertility and a shift from acute to chronic diseases. Given contemporary lifestyles and environmental conditions, men suffer more than women from lethal diseases, women more from disabling chronic ailments. While only a minority of older people are functionally disabled, among men and women with similar disabilities, it is the women who survive longer. Older men and women differ also in behaviors and attitudes affecting health. They have differing roles and lifestyles that involve smoking, exercise, diet, and other risk factors. Thus, because 20 years ago the incoming cohorts of women first showed increases in smoking followed by reductions in smoking in subsequent cohorts of both women and men, the gender gap in death rates from cancer has temporarily decreased. Moreover, women are more likely than men to perceive and act upon symptoms of illness when they occur.

However, such scattered findings leave a host of important questions unanswered. Little research has provided direct comparisons between males and females; or examined the sex-related interplay among biological, social, and behavioral processes; or specified the mechanisms connecting these processes. NIA's goal in issuing this program announcement is to encourage basic research on: (1) Factors producing the gender differences in longevity and health; (2) Implications of these differences for the effective functioning and well-being of older men vs. older women and for the burden on the health care system; and (3) Consequences of increases in longevity for age-specific changes in health of older men vs. older women.

SPECIFIC OBJECTIVES

The NIA seeks grant applications for the study of specific mechanisms and conditions affecting gender differences and similarities in selected aspects of health and longevity in the middle and later years.

Such applications will often require adaptation to gender comparisons of four general principles guiding NIA research: (1) the continuing interplay between psychosocial and biomedical aging processes; (2) the interrelatedness of old age with genetic predispositions and accumulated early-life experience (sometimes involving cohort comparisons of life-course patterns); (3) the social, cultural, and individual variability of aging; and (4) the potential for deliberate intervention to optimize health and well-being of older people of both sexes. Particular emphasis is placed on studies in such special populations as the oldest old, racial and ethnic minorities, those with low income or little education, and those living in rural areas. (It is now NIH policy that, if women or minorities are not included in a given study, a clear rationale for this exclusion must be provided.)

The following topics are illustrative of appropriate research areas and questions. However, applications need not be limited to these issues. Proposals to study either humans or animals are welcome. Accepted referral guidelines will be followed in assigning particular applications to NIA or to other Institutes.

DEMOGRAPHIC AND EPIDEMIOLOGICAL ASPECTS

- o What are the age-related population patterns of gender differences in mortality, morbidity, co-morbidity and functioning? How do these gender patterns relate to racial, ethnic, socioeconomic, and other population patterns?
- o What historical changes have occurred in these gender patterns? How do gender patterns vary cross-nationally and cross-culturally?
- o What major social, economic, and cultural trends are associated with changes and variations in gender patterns? e.g., what are the implications of the dramatic rise in longevity of black females, so that sex, rather than race, is now the more important factor in survival?
- What models are most effective in forecasting future trends in gender-differentiated life expectancy as well as active and disabled life expectancies?
- o Is there any evidence of a differential compression or expansion of morbidity for men vs. women?

GENETIC AND PHYSIOLOGICAL ASPECTS

- o To what extent do gender-specific genetic predispositions or hormonal mechanisms create an innate female advantage or male disadvanatage in survivorship and protection against particular degenerative diseases?
- o How do differences between the sexes in immune response, neuroendocrine regulation, sex hormone influence on brain differentiation, and stress response produce gender differentials in health and longevity?
- o How are gender differences in morbidity and mortality related to physiological vulnerabilities to environmental hazards (e.g., cigarette smoke, occupational carcinogens, dangers from design of housing or transportation systems)?

PYSCHOLOGICAL CHARACTERISTICS

- o Do older men and women differ in memory, learning, or other aspects of cognitive functioning? In sensory-motor performance? In the fit between person and environment?
- o Are spatial abilities and skills comparatively well maintained by older men, while verbal abilities and skill are comparatively well maintained by older women?
- Do older men and women differ in sense of self-efficacy, self-esteem, or optimism? Do they differ in psychological

- responses to chronic or persistently stressful situations? In ability to adapt to bereavement or retirement?
- o Are there social-emotional differences between older women and men--differences in expression of affect, ease of interpersonal communication, or tendency to form intimate relationships?

ILLNESS BEHAVIORS AND ATTITUDES

- o How do women and men differ in symptom recognition, assessment of symptom severity, readiness to take curative or preventive health actions, and tendency to report symptoms that actually exist?
- o As primary care givers in family health matters, are women more knowledgeable about appropriate forms and sources of care?
- o What gender differences exist in relationships between older people and their physicians or other care-givers?
- o Are there systematic differences between older men and women in risk-taking behavior? In susceptibility to accidental injuries (such as falls or automobile accidents)?
- o What accounts for the higher rates of suicide among men than women at the oldest ages in the United States?

SOCIAL ROLES

- o How do the expectations and behaviors associated with gender roles affect health maintenance or result in differential exposure to health risks throughout the life course?
- o What can be learned from analysis of large data sets about the divergent labor force participation of older men and women? About how women's health, in comparison with men's, responds to the dual role demands of homemaking and labor force participation? To the added role of caretaker frequently experienced in many multi-generation families? To living entirely alone?
- o Are there evidences of increasing role similarity between the sexes with advancing age? Of increasing androgyny (i.e., of older individuals combining both male and female characteristics)?
- o What are the consequences for older men and women of the gender differences in health and longevity with respect to: family relationships, living arrangements, and social networks? Occupational openings for older workers? Health care and health care systems?
- o How do impoverishment and other economic factors affect the health and health care of women vs. men in old age?

INTERACTION OF BIOLOGICAL, BEHAVIORAL AND SOCIAL FACTORS

- o Are there gender differences in the impact of psychosocial factors (e.g. social supports and stress) on immune functioning and health outcomes?
- o How do older men and women differ in obesity and body composition, eating behaviors, or the salience of body-image as a factor in nutrition? How do race and ethnicity affect these differences?
- o How does gender affect the linkages among risk-taking behaviors, specific diseases, and functional outcomes?

APPLICATION AND REVIEW PROCEDURES

Research project grant (R01) applications, fellowships (F32, F33), and research career development awards (K04) will be reviewed for scientific and technical merit by an appropriate study section in the Division of Research Grants. All other applications will be reviewed by an appropriate review group in NIA. Secondary review will be by the National Advisory Council on Aging.

Applications compete on the basis of scientific merit with all other applications before the NIA. The review criteria are the traditional considerations underlying scientific merit.

Researchers considering an application in response to this announcement are strongly encouraged to discuss their project, and the range of grant mechanisms available, with NIA staff in advance of formal submission. This can be done either through a telephone conversation or through a brief letter of intent giving the descriptive title of the proposed project and identifying the principal investigator and, when known, other key participants.

Applicants should use the regular research project and program project grant application form (PHS 398 Rev. 9/86), available at the applicant's institutional Application Control Office or from the Office of Grants Inquiries, Division of Research Grants, NIH (see address below). In order to expedite the application form's routing within NIH, please (1) check the box on the face sheet of the application indicating that your proposal is in response to this announcement and print (next to the checked box) NIA: GENDER AND AGING. In assigning applications to NIA or other Institutes, accepted referral guidelines will be followed.

Mail, the cover letter and the completed application (with 6 copies) to:

Division of Research Grants National Institutes of Health Westwood Building, Room 240 Bethesda, Maryland 20892** Telephone: (301) 496-7441

Receipt dates for the Research Project Grant, the Research Program Project Grant and the First Independent Research Support and Transition Award applications are February 1, June 1, and October 1; those for the National Research Service Awards applications are January 10, May 10, and September 10.

Correspondence and inquiries should be directed to:

Gender and Aging Behavioral and Social Research Building 31C, Room 5C32 National Institute on Aging Bethesda, Maryland 20892 Telephone: (301) 496-3136

or

Gender and Aging Biomedical Research and Clinical Medicine Building 31C, Room 5C21 National Institute on Aging Bethesda, Maryland 20892 Telephone: (301) 496-6402

This program is described in the Catalog of Federal Domestic Assistance No. 13.866, Aging Research. Awards will be made under the authority of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to Health Systems Agency review.