

NIH GUIDE

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Vol. 7, No. 12, September 1, 1978

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Letter of intent due no later than October 15, 1978.

NOTE: DUE TO THE FACT THAT THE DISTRIBUTION OF THIS GUIDE IS LATE, ALL APPLICATION RECEIPT DATES MENTIONED IN THIS ISSUE ARE EXTENDED TO NOVEMBER 15, 1978.

CORRECTION

The title page of Vol. 7, No. 11, August 18, 1978, is incorrect in that it lists 3 RFAs as being issued by NINCDS (pages 5, 9, and 15). These 3 RFAs were issued by the National Institute of Allergy and Infectious Diseases (NIAID). We sincerely regret this error.

HAVE YOU MOVED?

If your 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 33B10, Building 31, Bethesda, Maryland 20014, 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.

The 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.

Supplements, printed on yellow paper, are published by the respective awarding units concerning new projects, solicitations of sources, and requests for proposals.

THE CULTURED FIBROBLAST-LIKE CELL:

THE IN VIVO PRECURSOR CELL TYPES

AND THE POST-PROLIFERATIVE

CHARACTERIZATION,

NATIONAL INSTITUTE ON AGING

ANNOUNCEMENT

I. BACKGROUND INFORMATION

The National Institute on Aging (NIA) was established in 1974 to conduct and support biomedical, behavioral, and social research and research training related to the aging processes and the diseases and other special problems and needs of the aged.

Cell culture technologies are extensively used in NIA-supported research to achieve understanding of mechanisms of cellular aging. Most cell lines under investigation are fibroblast-like. The aging research on fibroblast-like cells predominantly addresses loss of proliferative capacity of a cell line after a relatively predictable number of population doublings. Further, there is evidence of an inverse correlation between population doubling capacity of fibroblast-like cells and the age of tissue donors. Similarly, there is an inverse relationship between age of donor organism and the length of latent period of cell growth and migration from explants in primary culture.

Research on cultured fibroblast-like cells is handicapped because of inadequate knowledge of the kinetics of the cells comprising the culture population (e.g. cell lineages), the fate of presumptive post mitotic cells, and the in vivo precursor(s) of the in vitro fibroblast-like cells. The latter two issues are the focus of this announcement; however, knowledge of cell lineages will be critical to some aspects of response to this announcement.

II. GOALS AND SCOPE

Goals of NIA incorporated in this announcement are to understand (1) the basic mechanism(s) of cellular aging, (2) the significance and mechanism(s) for loss of proliferative capacity of normal human fibroblast-like cells in culture, and (3) the understanding of the mechanisms and significance of human skin aging, by individual cell type, and the expression of senescence consequent to the interaction of all components of skin. The achievement of this objective is likely to add significantly to the progress of each of these objectives, and further, contribute to a capacity for greater success in the culture of differentiated cell types of known origin. An understanding of the

basic mechanisms of cellular aging and the mechanisms of skin aging is fundamental to the NIA mission of contributing to the resolution of human age-associated health problems through new knowledge of the biological processes contributing to these problems.

The proposed program emphasizes investigation pertaining to, but not limited to, the following areas of special interest in cultured human skin "fibroblasts":

- A. in vivo precursor cell types of in vitro primary culture and cell lines commonly recognized as composed of fibroblast-like cells;
- B. change in differentiated function and other expressions of phenotypic change due to exposure of cells to the cell culture environment;
- C. the age-related changes in vivo density and distribution of determined or putative precursor cells;
- D. the relationship of such density and distribution to the in vitro age-correlated limit in population doubling capacity of cultured "normal" fibroblast-like cells;
- E. possible in vivo cytopathology and/or age associated changes in morphology of the precursor cells; and
- F. description and characterization of cells which can no longer proliferate, including establishment of possible correlation to these post-proliferative cultured cells to in vivo cell types.

The NIA invites research to acquire knowledge of the sequence of cellular events leading to the establishment of fibroblast-like cell lines from human tissue. The age-related changes in function and distribution of these cells and any transitional changes consequent to the cell culture environment are to be addressed. The use of model systems such as rodents may be necessary to achieve experimental results not appropriate with human subjects.

While the program has considerable breadth of scope, potential applicants should prepare their research proposals in the context of the announced program goals and review criteria to reassure that applications are responsive.

III. MECHANISM OF SUPPORT, FUNDING

The support for this program will be the traditional NIH research project grant. Applicants are expected to plan and execute their own research programs. Support of grants pursuant to this announcement is contingent upon ultimate receipt of appropriated funds for this purpose, but the intent is to budget funds specifically for the program described.

IV. REVIEW PROCEDURES AND CRITERIA

A. Application Review

Upon receipt, all applications will be assigned by the Division of Research Grants according to accepted Referral Guidelines to an Initial Review Group for scientific merit review and to an appropriate Institute or Division for final review by their National Advisory Council/Board.

B. Review Criteria

Applications must be relevant to the goals of this announcement. The factors considered in evaluating applications are:

- scientific merit of the research design, approaches, and methodology;
- adequacy of existing and proposed facilities and resources;
- qualifications and experiences of the principal investigator and proposed staff for the conduct of the proposed investigations;
- reasonableness of the subject and duration in relation to the proposed research.

V. METHOD OF APPLYING

A. Application Procedure

Use the standard research grant application form PHS 398. If the Institution's Business Office or Central Application Control Office does not have this form an individual copy may be requested by writing to the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, or by calling (301) 496-7441.

Type the phrase NIA FIBROBLAST-LIKE CELL PROGRAM on the face page of the application. Enclose a covering letter stating that the application is in response to this announcement. Send the NIA a copy (see below).

Follow the instructions with the application form PHS 398 making sure that items noted in Section IV of this announcement are covered appropriately. Forward to:

Division of Research Grants
Room 240, Westwood Building
5333 Westbard Avenue
National Institutes of Health
Bethesda, Maryland 20014

Receipt dates for research grant applications in response to this announcement are no later than: November 1, March 1, and July 1.

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VI. INQUIRIES AND CORRESPONDENCE

Inquiries and correspondence should be directed to:

Associate Director for Extramural and
Collaborative Research Programs
National Institute on Aging
9000 Rockville Pike
Bethesda, Maryland 20014

ATTENTION: Dr. Nirmal K. Das
Basic Aging Program

Telephone: (301) 496-9350

NUTRITION IN RELATION TO HEALTH
OF THE AGED AND AGING PROCESSES,
NATIONAL INSTITUTE ON AGING

ANNOUNCEMENT

I. BACKGROUND INFORMATION

The National Institute on Aging (NIA) was established in 1974 to conduct and support biomedical, social, and behavioral research and training related to the aging processes and the diseases and other special problems and needs of the aged.

Basic to this responsibility is the development of a research program on nutrition and aging. The overwhelming influence of nutrition and dietary patterns on the health, disease incidence and prevalence, psychological and social integrity of the aged requires that NIA increase its commitment to the development of a research program aimed at establishing the relationships between nutrition and health of the aged adult, as well as aging processes.

II. GOALS AND SCOPE

This announcement from the National Institute on Aging is intended to encourage the increased development of research on clinical and basic nutrition over the full spectrum of interrelationships between nutrition, aging processes, disease prevention, health status, and optimal health maintenance with age. Clearly, nutrition influences all life processes. It is of primary importance in aging research aimed at limiting the major detrimental physical and mental processes that occur with advancing age. A variety of pathophysiologic processes can be linked to excessive or deficient dietary intake of essential nutrients, vitamins, and minerals. These impaired functional processes include a decline in immune function and selected endocrine responses, osteoporosis, hypertension, loss of lean body mass, and decline in mental function and sensory acuity. This is frequently compounded by psychological, social, economic, and environmental factors that undoubtedly contribute significantly to the dietary practice and health of the aged.

In support of the development of a research program on aging, health, and nutrition, the National Institute on Aging has sought the advice and guidance of the scientific community to identify through consultations, conferences, and workshops the important issues and critical research areas that should be encouraged for the development of research on nutrition and aging. The areas selected for emphasis in encouraging research grant applications on nutrition in relation to health of the aged and aging processes are:

- A. Epidemiologic and clinical research on the relationship between aging, nutrition status, dietary intake, and health status of the aged adult. This may include clinical nutrition

research, for example, in general clinical research centers, health survey assessments or reassessment of existing data, i.e., HANES, ongoing longitudinal studies or epidemiologic studies in defined or characterized populations.

- B. Studies on special nutrition-related problems in the aged adult. These studies may include the effects of specific diseases on nutritional status, interactions of nutrients with therapeutic agents, surgical procedures, or preventative regimens.
- C. Investigations on the effects of aging on nutrient utilization, digestion, absorption, and metabolism and their relationship to nutrient requirements.
- D. Basic and clinical nutrition studies of the interrelationships between aging and:
 - 1. factors which may regulate changes that occur in lean body mass, body composition, energy balance and regulation of metabolic processes, and disease susceptibility with increasing age. This includes studies on effects of diet, weight, and physical exercise in modifying immune, endocrine, and metabolic processes with age, as well as the effects of excessive caloric intake and levels of obesity on the health of the aged adult;
 - 2. the effects of nutritional deficiencies of essential nutrients, vitamins, minerals, and trace elements on long-term health and longevity, including the effects of protein and ascorbic acid intake on the absorption and utilization of heavy metals and trace minerals, such as iron and calcium, zinc, and chromium;
 - 3. nutrition and age-related mental deterioration and loss of neural function, particularly senile dementia, including decline in sensory sensations of taste and smell, motor coordination, and cognition.

Although this announcement has selected research areas of nutrition and aging for special emphasis, research grant applications in response to this announcement are not limited to the specific areas addressed above.

III. MECHANISM OF SUPPORT, FUNDING

The support for this program will be via the traditional NIH research project grant. Applicants are expected to plan and execute their own research programs. Support of grants pursuant to this announcement is, of course, contingent upon ultimate receipt by NIA of appropriated funds for this purpose. The intent is to budget funds specifically for this program.

IV. REVIEW PROCEDURES AND CRITERIA

A. Application Review

Upon receipt, all applications will be assigned by the Division of Research Grants according to accepted Referral Guidelines to an Initial Review Group for scientific merit review and to an appropriate Institute or Division for final review by their National Advisory Council/Board.

B. Review Criteria

Applications must be relevant to the goals of this announcement. The factors considered in evaluating applications are:

- scientific merit of the research design, approaches, and methodology;
- adequacy of existing and proposed facilities and resources;
- qualifications and experiences of the principal investigator and proposed staff for the conduct of the proposed investigations;
- reasonableness of the subject and duration in relation to the proposed research;
- adequacy of time to be devoted by proposed project staff.

V. METHOD OF APPLYING

A. Application Procedure

Use the standard research grant application form PHS 398. If the Institution's Business Office or Central Application Control Office does not have this form an individual copy may be requested by writing to the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, or by calling (301) 496-7441.

Type the phrase NIA NUTRITION PROGRAM on the face page of the application. Enclose a covering letter stating that the application is in response to this announcement. Send the NIA a copy (see below).

Follow the instructions with the application form PHS 398 making sure that the items noted in Section IV of this announcement are covered appropriately. Forward to:

Division of Research Grants
Room 240, Westwood Building
5333 Westbard Avenue
National Institutes of Health
Bethesda, Maryland 20014

Receipt dates for research grant applications in response to this announcement are no later than: November 1, March 1, and July 1.

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VI. INQUIRIES AND CORRESPONDENCE

Inquiries and correspondence should be directed to:

Associate Director for Extramural and
Collaborative Research Programs
National Institute on Aging
9000 Rockville Pike
Bethesda, Maryland 20014

ATTENTION: Don C. Gibson, D.V.M., M.P.H.
Chief, Biophysiology and
Pathobiology Aging Program

Telephone: (301) 496-1033

PHARMACOLOGY PROGRAM,
NATIONAL INSTITUTE ON AGING

ANNOUNCEMENT

I. BACKGROUND INFORMATION

The National Institute on Aging (NIA) was established in 1974 to conduct and support biomedical, social, and behavioral research and training related to the aging processes and the diseases and other special problems and needs of the aged. It is obvious that with increasing age there is a greater likeliness of illness and, therefore, a greater need to use therapeutic agents, frequently on a chronic basis. Relatively little is known about changes in drug effects in relation to the age of the individual, yet drugs are administered more extensively to patients as they grow older.

Drugs may behave differently in the aged than in the healthy young individual on whom most information has been acquired. Because of the many physiological and perhaps pathological alterations occurring with age, it is essential that basic and clinical research be undertaken to evaluate the safety and efficacy of drugs being administered to the elderly. The possibility of undesirable pharmaceutical complications such as adverse drug reactions and drug-drug interactions may occur more frequently. Kidney and cardiac function is frequently decreased in the older person, thereby affecting the body's ability to metabolize a drug. Anatomical and physiological changes in the intestinal tract may alter absorptive capacity with increasing age. Decrements in renal function with increasing age results in a less efficient clearance of drugs; therefore, the dosing schedule needs to take into account the fact that the aged individual may not eliminate the drug as rapidly as a younger person.

Research project applications should be directed toward the discovery and elucidation of the influence of physiological and pathological changes during aging, on drug safety, and efficacy.

II. GOALS AND SCOPE

The objective of this program is to develop new knowledge related to basic and clinical expressions of age changes which affect utilization of drugs through: (1) application of recent research accomplishments and (2) new approaches to areas where there are recognized gaps in knowledge.

This is an open competition and the Institute is encouraging new investigators as well as participants in existing grant programs not specifically related to aging who may have new and promising methods or improvements on current approaches to respond to this announcement.

General areas of investigation might include: (1) distribution, metabolism, and pharmacokinetics of the therapeutic drugs in older patients as they may differ from other populations; (2) drug interactions in aged patients receiving multiple drugs; (3) paradoxical reactions to drugs in the elderly; (4) nutritional factors affecting drug efficacy or toxicity in the aged; and (5) new approaches to the study of pharmacologic agents in the elderly. Particular attention is invited to studies of drugs most frequently prescribed in the older age groups.

Animal models should be sought and utilized, insofar as possible, in these research endeavors. The appropriateness of the model must, of course, be considered and discussed in the application.

Since the proposed study is a research and not a service program, funds are not to be used for costs associated with the clinical care and management of patients. Only those patient costs that are clearly for the research aspects of the project will be appropriate for inclusion in the requested budget.

While the program has considerable breadth of scope, potential applicants should prepare their research proposals in the context of the announced program goals and review criteria to reassure themselves that their applications are truly responsive.

III. MECHANISM OF SUPPORT, FUNDING

The support for this program will be the traditional NIH research project grant. Applicants are expected to plan and execute their own research programs. Support of grants pursuant to this announcement is, of course, contingent upon ultimate receipt of appropriated funds for this purpose. The intent is to budget funds specifically for this program.

IV. REVIEW PROCEDURES AND CRITERIA

A. Application Review

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B. Review Criteria

Applications must be relevant to the goals of this announcement. The factors considered in evaluating applications are:

- scientific merit of the research design, approaches, and methodology;
- adequacy of existing and proposed facilities and resources;

- qualifications and experiences of the principal investigator and proposed staff for the conduct of the proposed investigations;
- reasonableness of the subject and duration in relation to the proposed research;
- adequacy of time to be devoted by proposed project staff.

V. METHOD OF APPLYING

A. Application Procedure

Use the standard research grant application form PHS 398. If the institution's Business Office or Central Application Control Office does not have this form a copy can be requested by writing to the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, or by calling (301) 496-7441.

Type the phrase NIA PHARMACOLOGY PROGRAM on the face page of the application. Enclose a covering letter stating that the application is in response to this announcement. Send the NIA a copy (see below).

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VI. INQUIRIES AND CORRESPONDENCE

Inquiries and correspondence should be directed to:

Associate Director for Extramural and
Collaborative Research Programs
National Institute on Aging
9000 Rockville Pike
Bethesda, Maryland 20014

ATTENTION: Lester Smith, Ph.D.
Chief, Molecular and Biochemical
Aging Program

Telephone: (301) 496-9350

AGING AND BEREAVEMENT,

ANNOUNCEMENT

NATIONAL INSTITUTE ON AGING

I. BACKGROUND INFORMATION

The National Institute on Aging (NIA) was established in 1974 to conduct and support biomedical, behavioral, and social research and research training related to the aging processes and the diseases and other special problems and needs of the aged.

An issue of particular interest is how elderly people respond to the bereavement/losses which occur so frequently in the life of the aged. The NIA invites research grant applications which deal with the responses of older people to bereavement, with special interest in response differences associated with gender, age cohort within the elderly population, ethnicity and other cultural factors, such as religious affiliation. A factor of particular interest is the increased risk of morbidity and mortality which appears to be associated with bereavement within the aged population. Bereavement, particularly widowhood, appears to impose stresses often accompanied by increased mortality, especially in the period immediately following bereavement. This reported excess mortality risk of widows is a little understood phenomenon and deserves further investigation. Information is needed on the social and behavioral characteristics that might be related to this increased mortality of widowhood. Information concerning differential styles of coping with loss among the aged population would be especially valuable along with data on the kinds of social and psychological supports of particular value in handling loss.

II. GOALS AND SCOPE

Although bereavement occurs throughout the various age groups in the population, it occurs most often within the elderly population. The impact of bereavement is far-reaching and impinges not only on the older person, but also on those who surround the older person including family members, friends, and social acquaintances. Loss of a loved one is a stressful event and grief is a normal reaction to such loss. However, the intensity, duration, and ramifications of grief are little understood, as are the means of coping with grief. Relatively little information appears to be available on coping styles of older people in response to bereavement. Research in this area seems to be in order as well as on the increased risk factors associated with widowhood.

The NIA seeks an expansion of grant-supported research on a variety of relevant problems. Several research areas are suggested below; however, support is not limited to these areas.

1. The factors which influence morbidity and mortality following bereavement such as kinship, race, sex, preexisting illness in the survivor, the duration of illness of the deceased, etc.
2. The periods of highest risk for the bereaved by sex, race, socio-economic status.
3. Characterization of the role of psychological and social support to the bereaved.

4. Determination of significance of religious belief in coping with bereavement.
5. Role of personality characteristics in response to bereavement.
6. Differential response of age cohorts within the older population to bereavement and variations by sex, ethnicity, and socioeconomic status.

Relevant research on bereavement in addition to the several specific areas specified above is welcomed by the National Institute on Aging.

III. MECHANISM OF SUPPORT

The support for this program will be the traditional research project grant. Applicants are expected to plan and execute their own research programs. Support of grants pursuant to this announcement is, of course, contingent upon ultimate receipt by NIA of appropriated funds for this purpose. The intent is to budget funds specifically for this program.

IV. REVIEW PROCEDURES AND CRITERIA

A. Application Review

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B. Review Criteria

Applications must be relevant to the goals of this announcement.

The factors considered in evaluating applications are:

- scientific merit of the research design, approaches, and methodology;
- adequacy of existing and proposed facilities and resources;
- qualifications and experiences of the principal investigator and proposed staff for the conduct of the proposed investigations;
- reasonableness of the subject and duration in relation to the proposed research;
- adequacy of time to be devoted by proposed project staff.

V. METHOD OF APPLYING

Use the standard research grant application form PHS 398. If the Institution's Business Office or Central Application Control Office does not have this form a copy may be requested by writing to the Office of Grants Inquiries, Division

of Research Grants, National Institutes of Health, or by calling (301) 496-7441.

Type the phrase AGING AND BEREAVEMENT on the face page of the application. Enclose a covering letter stating that the application is in response to this announcement. Send NIA a copy (see below). Follow the instructions with the application form PHS 398, making sure that items noted in Section IV of this announcement are covered appropriately. Forward to:

Division of Research Grants
Room 240, Westwood Building
5333 Westbard Avenue
National Institutes of Health
Bethesda, Maryland 20014

Receipt dates for research grant applications in response to this announcement are no later than: November 1, March 1, and July 1.

VI. INQUIRIES AND CORRESPONDENCE

Inquiries and correspondence should be directed to:

Associate Director for Extramural and
Collaborative Research Programs
National Institute on Aging
9000 Rockville Pike
Bethesda, Maryland 20014

Telephone: (301) 496-5534

RETIREMENT AND AGING,
NATIONAL INSTITUTE ON AGING

ANNOUNCEMENT

I. BACKGROUND INFORMATION

The National Institute on Aging (NIA) is inviting research grant applications to study the complex of factors associated with retirement and aging. Basic to this responsibility is the development of a research program on biomedical, social, and behavioral aspects of retirement and aging. For some time there has been both a public and professional debate about the appropriateness and impact of mandatory retirement. Legislation (Public Law 95-256) ending mandatory retirement in the Federal Government and increasing the retirement age from 65 to 70 years in the private sector (with the exception of tenured professors and highly-pensioned business executives) may potentially have a major impact on society. With the changing age structure of the population and the increasing number of older persons and potential changes in work and retirement patterns, there is a vital need for a body of knowledge regarding the nature and effects of retirement and its impact on both society and the individual older person.

Available studies disagree on the social as well as individual consequences of retirement. The pattern of earlier and earlier retirement has been viewed with alarm because of the economic burden of increasing numbers of the aged population on the working group. Others believe that the present and future productivity can sustain increased numbers of retirees. In sum, occupation, health, income, individual coping capacity, etc., are among the variables that affect adaptation to retirement. Thus, there is a need for a comprehensive body of scientific knowledge related to the medical, psychological, and social impact of retirement on individuals of various populations selected on the basis of socioeconomic status, occupation, gender, race, ethnicity, etc.

II. GOALS AND SCOPE

Research aimed at providing knowledge to minimize any adverse effects of retirement on society and the individual is of major concern to the NIA. The NIA seeks an expansion of grant-supported research on a variety of relevant problems. These include, but are not limited to, the following:

1. Elements in the retirement decision by occupation, race, sex, etc.;
2. The impact of retirement on the individual and his/her health, physical, emotional, and social status, e.g., increase in mortality rates;
3. The study of demographic, social, and economic aspects of work/retirement;
4. Developing functional performance indices of aging by occupation, sex, race, etc., to assist in flexible retirement assessment;
5. The study of factors related to successful and/or unsuccessful adjustment to retirement;

6. The study of new social roles, second careers, etc., in retirement and their role in the promotion and maintenance of health.

Relevant research on retirement and age in addition to the several specific areas specified above is welcomed by the National Institute on Aging.

III. MECHANISM OF SUPPORT

The support for this program will be the traditional research project grant. Applicants are expected to plan and execute their own research programs. Support of grants pursuant to this announcement is, of course, contingent upon ultimate receipt by NIA of appropriated funds for this purpose. The intent is to budget funds specifically for this program.

IV. REVIEW PROCEDURES AND CRITERIA

A. Application and Review

Upon receipt, all applications will be assigned by the Division of Research Grants according to accepted Referral Guidelines to an Initial Review Group for scientific merit review and to an appropriate Institute or Division for final review by their National Advisory Council/Board.

B. Review Criteria

Applications must be relevant to the goals of this announcement.

The factors considered in evaluating applications are:

- scientific merit of the research design, approaches and methodology;
- adequacy of existing and proposed facilities and resources;
- qualifications and experiences of the principal investigator and proposed staff for the conduct of the proposed investigations;
- reasonableness of the subject and duration in relation to the proposed research;
- adequacy of time to be devoted by proposed project staff.

V. METHOD OF APPLYING

Use the standard research grant application form PHS 398. If the Institution's Business Office or Central Application Control Office does not have this form a copy may be requested by writing to the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, or by calling (301) 496-7441.

Type the phrase NIA RETIREMENT AND AGING PROGRAM on the face page of the application. Enclose a covering letter stating that the application is in response to this announcement. Send NIA a copy (see below). Follow the instructions with the application form PHS 398, making sure that items noted in Section IV

of this announcement are covered appropriately. Forward to:

Division of Research Grants
Room 240, Westwood Building
5333 Westbard Avenue
National Institutes of Health
Bethesda, Maryland 20014

Receipt dates for research grant applications in response to this announcement are no later than: November 1, March 1, and July 1.

VI. INQUIRIES AND CORRESPONDENCE

Inquiries and correspondence should be directed to:

Associate Director for Extramural and
Collaborative Research Programs
National Institute on Aging
9000 Rockville Pike
Bethesda, Maryland 20014

Telephone: (301) 496-5534

BASIC AGING PROGRAM,
EXTRAMURAL AND COLLABORATIVE RESEARCH PROGRAM,
NATIONAL INSTITUTE ON AGING

ANNOUNCEMENT

The National Institute on Aging (NIA) was established in 1974 to conduct and support biomedical, social, and behavioral research and research training related to the aging processes and the diseases and other special problems and needs of the aged.

The Basic Aging Program (BAP) is one of the four programs which comprise the Extramural and Collaborative Research Program (ECRP) of the NIA. BAP contains five substantive categories: four of these are research oriented and one is concerned with research resources and services. BAP administers grant-supported research and research training on fundamental molecular and genetic research on the biology and mechanisms of aging (1) at the cellular level, (2) on invertebrate organisms and plants, (3) through theory elaborated by abstract modeling, and (4) on dermatology. In support of these four research areas, BAP supports development of characterized biologic resources, and training and services related to the use of these biologics.

An expansion of grant-supported research is sought in all five areas. The content of these program areas is described below.

Genetics and Cellular Aging

Herein are supported studies on the mechanisms of cellular aging, utilizing the technologies of cell culture, somatic-cell genetics, cell and tissue transplantation, chimeric and genetic-mosaic biology,

Genetics and Comparative Aging

Herein are supported studies on mechanisms of senescence and longevity in laboratory invertebrate animals, plants, and prokaryotes. All applicable research strategies are encouraged; however, genetic approaches are especially emphasized.

Theoretical Gerontology

Herein are supported studies emphasizing computerized and mathematical models of life systems and processes of significance to gerontology, including population genetics.

Dermatology

The conditions often associated with aging skin (dryness, chronic itching, the undesired appearance of "aging") interfere markedly with the quality of life among many mid-life and older persons. Very little is known of

the basic biology of skin aging, much less the underlying mechanisms for its senescence. Research grant applications on these and related phenomena are encouraged.

The study of skin aging is closely related to current research in in vitro cellular senescence. Dermatology, within BAP, provides concerted program administration where substance and technology overlaps extensively with the Genetics and Cellular Aging component of BAP. Studies of human skin, on animal models, and the use of skin-derived cell, tissue, and organ cultures are encouraged.

Genetic and Cellular Resources

Fundamental to gerontology research is the availability of high quality and well-characterized biologics. This component of BAP is responsible for biologics supply, characterization, and related services in the fields of cell culture, invertebrates, plants, and prokaryotes. These services are in support of both ECRP-supported research and research ongoing within the NIA Intramural Research Program. Research currently supported by grants includes research on cell lineage and population characteristics of human diploid cells in culture, the establishment, isolation, and characterization of longevity-mutant nematodes and the training of postdoctoral scientists in the technologies of tissue-specific cell line development. Resources supported by contract are: The NIA Cell Line Repository which supports acquisition, characterization, and distribution of cell lines of special utility to NIA grantees, prospective grantees, and other gerontologists, and the Mycoplasma Contamination Testing Service, contributing to quality control in cell culture laboratories for the same group in investigators.

Support by NIA for research on basic aging includes, but is not limited to, the specific areas designated above. Applications in other basic aging areas found meritorious by NIH's Peer Review groups and the NIA's National Advisory Council on Aging will be considered for support by NIA.

Applicants responding to this announcement should use form PHS 398, the standard application form for research project grants, and follow the procedures described therein. If the Institution's Business Office or Central Application Control Office does not have this form, a copy may be requested by writing to the Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, or by calling (301) 496-7441.

Forward the completed application to:

Division of Research Grants
Room 240, Westwood Building
5333 Westbard Avenue
Bethesda, Maryland 20014

Receipt dates for applications are no later than: November 1, March 1, and July 1.

For further information, direct inquiries to:

Associate Director for Extramural and
Collaborative Research Programs
National Institute on Aging
Room 5C21, Building 31
National Institutes of Health
Bethesda, Maryland 20014

ATTENTION: Donald G. Murphy, Ph.D.
Chief, Basic Aging Program

Telephone: (301) 496-9350

CLINICAL INVESTIGATOR AWARD,
EXTRAMURAL AND COLLABORATIVE RESEARCH PROGRAM,
NATIONAL INSTITUTE ON AGING

ANNOUNCEMENT

The National Institute on Aging (NIA) was established in 1974 to conduct and support biomedical, social, and behavioral research and training related to the aging processes and the diseases and other special problems and needs of the aged.

The National Institute on Aging (NIA) announces the availability of NIA Clinical Investigator Awards in the following selected areas relevant to aging:

Research in Geriatric Medicine
Organic Brain Diseases of Old Age
Clinical Nutrition and Aging
Clinical Immunology and Aging
Clinical Pharmacology and Aging
Endocrinology and Aging
Maturity Onset Diabetes and Aging
Dermatology and Aging
Epidemiology and Aging

These awards provide the opportunity for promising, clinically-trained individuals with demonstrated aptitude in research, for development into independent biomedical investigators in several clinical areas relevant to aging, and to issues in research geriatric medicine.

The award, made to an institution, is designed to foster growth of superior candidates toward independent research. It enables candidates to investigate, for up to three years, a well-defined problem with a sponsor (or sponsors) competent to provide guidance in the chosen problem. It is anticipated that this award provides for transition between fellowship or trainee experience and a career in independent investigation. The Clinical Investigator Award differs from the NIH Research Career Development Award in that it seeks to develop research ability in individuals with clinical background and training rather than to foster the further development of research skills of individuals already having shown significant research achievement.

ELIGIBILITY

Candidates are restricted to those holding health-professional degrees in the clinical sciences (M.D., D.O., D.V.M., or equivalent) with four to seven years of total professional postdoctoral clinical and research experience by the projected start of the award. It is expected that candidates will have a minimum of two years of clinical experience and two years of research. In exceptional circumstances, individuals with less than four, and more than seven years of such experience may apply, but must justify those special circumstances. The award is designed to provide intensive guided research experience for clinicians. Therefore, holders of the Ph.D. or comparable research degrees, either with or without an accompanying health professional degree, are not eligible.

Individuals holding the academic position of associate professor or professor at the time of award are not eligible for the Clinical Investigator Award. Candidates should have broad training, should demonstrate individual competence in clinical activities, and should show research potential in the chosen area of interest. Candidates should provide evidence of a serious intent for an academic career related to that area.

A non-citizen is not eligible to apply unless lawfully admitted to the United States for permanent residence. Determination of the acceptability of applications is made by the National Institutes of Health.

The grantee institution must be a domestic university, medical school, or comparable institution with strong, well-established, research and training programs in the chosen area, adequate numbers of highly-trained faculty in clinical and basic departments relevant to the chosen area, and interest and capability to provide guidance to clinically trained individuals in the development of research independence.

CONDITIONS OF THE AWARD

The Clinical Investigator Award is made on annual basis, with additional years of recommended support, for a total non-renewable and non-transferable period of a maximum of three years. Support is based on a full-time, twelve-month, staff appointment. The awardee will be provided salary support not to exceed \$30,000 annually from NIA funds for the three-year period. The actual salary must be consistent with the established salary structure of the institution for persons of equivalent qualifications, experience, and rank. The institution may supplement the awarded salary consistent with the institution's salary scale. No supplementation may be provided from Federal funds unless explicitly authorized by the program from which such funds are to be derived. In no case may other NIH funds be used as a means of additional salary support. In addition to the base salary, the institution's share of contributions to finance such fringe benefits as are available to all other staff members of comparable rank at the institution, under established and consistently applied institutional policies may be paid from award funds to the extent that they are consistently treated by the institution as direct rather than indirect costs. The applicant is expected to spend a minimum of 75% of time in research.

Up to a total of \$10,000 annually will be provided for supplies, equipment, travel, etc., which are necessary for pursuit of the awardee's research program.

Funds for the reimbursement of indirect costs will be provided at 8% of the total direct award costs, or actual, whichever is less.

REVIEW PROCEDURES AND CRITERIA

Applications for the Clinical Investigator Award receive initial merit review by an NIH peer review panel, and subsequently by the National Advisory Council on Aging. Criteria for review include:

- the applicant's training in research and clinical experience in the specified area of interest
- the applicant's plans for research development
- the applicant's potential for a career in independent research in the area proposed
- the applicant's commitment to a research career in the area of interest
- the applicant institution's commitment to providing the necessary facilities and opportunities necessary to the individual's research development
- the ability and plans of the sponsor (or sponsors) who will provide the applicant with the guidance and experience necessary for career development in clinical investigation
- presence of highly-trained faculty in clinical and basic departments relevant to the area of study
- the applicant institution's research and training program in the area of study

METHOD OF APPLYING

Application Procedure

For the NIA Clinical Investigator Award, use the application form PHS 2557-1 Rev. 8/74. (Note: This is the form also used for the NIH Research Career Development Award and is not the standard research grant application form.) If your institution's business office does not have this form, you can request it by writing to the Office of Grant Inquiries, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014, or by calling (301) 496-7441.

Applications for Clinical Investigator Awards must be received by the National Institutes of Health by November 1, 1978, for review by the National Advisory Council on Aging in May 1979. The requested beginning date for funding should be July 1, 1979. Subsequent receipt dates will be no later than February 1 and June 1.

Type the phrase NIA CLINICAL INVESTIGATOR PROGRAM on the front page of the application.

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Special instructions for preparing applications to the NIA Clinical Investigator Award Program must be obtained from NIA. Address inquiries to:

Betty H. Pickett, Ph.D.
Associate Director, ECRP
National Institute on Aging
9000 Rockville Pike
Bethesda, Maryland 20014
Telephone: (301) 496-5534

GERIATRIC MEDICINE ACADEMIC AWARD,
EXTRAMURAL AND COLLABORATIVE RESEARCH PROGRAM,
NATIONAL INSTITUTE ON AGING

ANNOUNCEMENT

The National Institute on Aging (NIA) announces the availability of NIA Geriatric Medicine Academic Awards which have the dual purpose of improving the quality of curricula in geriatrics and of fostering research and careers in the field of aging. Each school of medicine or osteopathy in the United States or its possessions and territories is eligible for such an award (awards will be limited to one for each eligible school, for a project period up to five years). The number of new awards made each year will depend on the availability of funds.

The Institute has initiated the Geriatric Medicine Academic Award Program to provide a stimulus for development of a curriculum in geriatric medicine in those schools that do not have one and to strengthen and improve the curriculum in those schools that do. Awards provide support to individual faculty members for their educational development, and for implementation of the curriculum in geriatric medicine.

I. OBJECTIVES OF THE AWARD

The Geriatric Medicine Academic Award is made to:

- encourage development of a quality curriculum in geriatrics that will attract outstanding students to aging research and medical practice;
- ensure superior learning opportunities in geriatric medicine;
- develop promising young faculty whose interest and training are in geriatric medicine;
- develop superior faculty who have a major commitment and possess educational skills for teaching geriatric medicine;
- facilitate interchange of educational ideas and methods among awardees and institutions; and
- develop at the grantee institution the ability to strengthen continuously the curriculum in geriatric medicine, with local funds, subsequent to the award.

II. CRITERIA FOR THE AWARD

Competitive review for a Geriatric Medicine Academic Award will include assessment of both the applicant sponsoring institution and the proposed awardee program director. The criteria for an institution to receive a grant are provided below.

The institution must:

- name and sponsor as the program director a candidate with competence in geriatric medicine and a major career interest in improving educational programs;
- identify the educational resources (patients, manpower, materials) necessary to implement the proposed program;
- provide the awardee program director with time to acquire the educational skills necessary for personal development as a teacher, and for the development of the curriculum in geriatric medicine;
- have facilities for rigorous research in the field of aging and quality patient care; and
- state the mechanisms for continued institutional support of the curriculum in geriatric medicine subsequent to the award.

The awardee must:

- have research training or clinical experience in the field of aging;
- present a program for developing or improving the curriculum in geriatric medicine at the grantee institution;
- commit a minimum of 50% of his/her effort to developing or improving the curriculum in geriatric medicine;
- specify a program for enhancing his/her educational skills essential to developing or improving the curriculum in geriatric medicine;
- agree to meet annually with other recipients of Geriatric Medicine Academic Awards to exchange ideas, methods, and program evaluations;
- agree to report annually on the status of the program - since this report will include an evaluation of the program, the proposal must detail a plan for the development of such an annual evaluation;
- hold an academic appointment at a school of medicine or osteopathy in the United States, its territories, or possessions at the time of application; and
- be a citizen or non-citizen national of the United States, or have been lawfully admitted to the United States for permanent residence at the time of application.

III. PROVISIONS OF THE AWARD

Subject to availability of necessary funds, and consonant with the objectives of the Geriatric Medicine Academic Award, the Institute will provide funds annually for a project period up to five years. Awards will be limited to one for each eligible school.

The award may provide funds for:

- support for the awardee, who will give a minimum of 50% of his/her effort to developing and implementing the curriculum in geriatric medicine;
- travel to enable the awardee to develop educational skills and to meet with other awardees to exchange ideas, methods, and program evaluations;
- equipment necessary to develop the curriculum in geriatric medicine;
- supplies necessary to achieve the program's objectives;
- consultant fees for a limited number of experts in the area of geriatrics and in education;
- research allowances, to be determined by NIA, for a limited number of students to augment their learning experiences related to geriatrics; and
- indirect costs, actual up to, but not to exceed, 8% of allowable direct costs.

IV. REVIEW OF APPLICATIONS

Applications for initial Geriatric Medicine Academic Awards will be appraised in terms of criteria outlined for the institution and the awardee in Section II, CRITERIA FOR THE AWARD.

The review will include an initial assessment of the written proposal and may require an interview with the prospective awardee in Bethesda, Maryland (travel expenses for this interview must be paid by the applicant institution). When necessary, a site visit may be made to the institution. The initial review group will recommend applicants for consideration to the National Advisory Council on Aging.

V. WHEN AND HOW TO APPLY

Applicant institutions and the prospective awardee must submit a letter of intent by October 15, 1978. These letters will not be considered commitments, but will be used by the NIA to estimate the number of proposals to be submitted.

Applications for Geriatric Medicine Academic Awards must be received by the National Institutes of Health prior to November 1, 1978, for review by the National Advisory Council on Aging in May 1979. The requested beginning date for funding should be July 1, 1979. Subsequent receipt dates will be no later than March 1 and July 1.

Use application form PHS 398. If the Institution's Business Office or Central Application Control Office does not have this form, a copy may be requested by writing to the Office of Grant Inquiries, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014, or by calling (301) 496-7441.

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Type the phrase NIA GERIATRIC MEDICINE ACADEMIC AWARD as the title for the proposal on the front page of the application.

Use the special Guidelines for preparation of a Geriatric Medicine Academic Award. These may be requested from the NIA (see address below). Staff of NIA is prepared to provide limited consultation in the preparation of applications. Inquiries should be directed to:

Dr. Betty H. Pickett
Associate Director, Extramural and
Collaborative Research Programs
National Institute on Aging
Room 5C21, Building 31
9000 Rockville Pike
Bethesda, Maryland 20014

Telephone: (301) 496-5534