NATIONAL RESEARCH SERVICE AWARDS

FOR

INSTITUTIONAL GRANTS



Beginning with the February 1, 1978 receipt date NIH will accept institutional applications for National Research Service Awards on the same schedule as individual applications. Institutional applications for awards to begin July 1, 1979 should be received by June 1, 1978. Applications must be identified as responding to one or more of the areas listed in this Announcement.

Awards are subject to legislative authority and availability of funds.

Under authority of Section 472 of the Public Health Service Act as amended (42 USC 2891-1), the National Institutes of Health (NIH) awards grants to eligible institutions to develop or enhance research training opportunities for individuals selected by them who are interested in careers in specified areas of biomedical and behavioral research. Title 42 of the Code of Federal Regulations, Part 66, is applicable to these awards.

Domestic nonprofit private or non-Federal public institutions may apply for grants to support training programs in specified areas of research. Predoctoral and postdoctoral trainees may be supported if either or both level(s) of training are justified in the application and approved. The applicant institution must have, or be able to develop, the staff and facilities required for the proposed programs. The training program director at the institution will be responsible for the selection and appointment of trainees to receive National Research Service Awards and for the overall direction of the program.

The proposed program must encompass supervised biomedical research in one or more of the specified areas, and offer opportunity for research training leading to the research degree, or, for those who have already attained the research degree, opportunity to broaden their scientific background; for those who have attained the health professional degree the supervised research should be accompanied by training in scientific methodology. National Research Service Awards (NRSA) will not support study leading to the M.D., D.O., D.D.S., or other similar professional degrees, nor will they support non-research clinical training.

Application material. Application material may be obtained from the Grants Inquiries Office, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014. A self-addressed gummed mailing label enclosed in the request for kits will expedite handling.

Applicants are advised to contact the person designated in the area listing to discuss any questions, and especially if

- an application including predoctoral training is planned, or
- (2) compatibility between institutional and agency training aims is in doubt, or
- (3) questions arise as to waiver provision for the three-year limit on NRSA support. (Note that the aim of obtaining postdoctoral training after NRSA-supported predoctoral training is cited in the regulations as "good cause" for granting a waiver to the three-year limit (§66.106(d)).)

Review and selection. NRSA grant applications will be evaluated by initial review groups at the NIH; they are also subject to review and approval by the appropriate advisory council of the NIH. The application will be evaluated on the basis of records and qualifications of participating faculty, the proposed research training objectives and program design, previous training record of the program and its ability to attract high caliber students, institutional commitment, facilities and environment, and relationship of the proposed program goals to need for research personnel.

GENERAL PROVISIONS

Eligibility requirements. Individuals appointed as trainees on the grant must be citizens or non-citizen nationals of the United States, or must have been lawfully admitted to the United States for permanent residence and have in their possession an Alien Registration Receipt Card (I-151) at time of appointment. A non-citizen national is a person who, although not a citizen of the United States, owes permanent allegiance to the United States. They are generally persons born in lands which are not States, but which are under United States sovereignty, jurisdiction, or administration (e.g. American Samoa). Individuals on temporary or student visas are not eligible.

Predoctoral trainees must have received an appropriate baccalaureate degree as of the date of appointment to the approved training program. An individual at the postdoctoral level must have received as of the date of appointment to the approved training program, a Ph.D., M.D., D.D.S., D.O., D.V.M., O.D., Sc.D., D.Eng., D.N.S., or equivalent domestic or foreign degree.

Stipends and other training costs. Stipends and allowances requested will be as follows: At the predoctoral, level the annual stipend is \$3,900.

For postdoctorals, the stipend for the first year of support is determined by the number of years of prior relevant postdoctoral experience at time of appointment in accordance with the accompanying table. Relevant experience may include research experience (including industrial), teaching, internship, residency, or other time spent in full-time pursuit of additional degrees or full-time studies in a health-related field at a level beyond that of the qualifying doctoral degree. The stipend for each additional year of support is based on the level of the first year plus \$400 for each additional year under the National Research Service Award. There is no allowance for dependents.

Postdoctoral Stipends

Years of Relevant			
Experience at Time	Year of Award		
of Initial Appointment	lst Year	2nd Year	3rd Year
0	\$10,000	\$10,400	\$10,800
1	10,800	11,200	11,600
2	11,500	11,900	12,300
3	12,200	12,600	13,000
4	12,800	13,200	13,600
5 or more	13,200	13,600	14,000

Tuition and travel may be requested. Tuition at the postdoctoral level is limited to that required for specified courses. The institution may request tuition and fees (including appropriate medical insurance) only to the extent that the same resident or nonresident tuition and fees are charged to regular non-federally supported students; the institution may request actual indirect costs or 8% of allowable direct costs (whichever is less) and up to 25% of the total award for costs deemed essential to carry out the NRSA training program such as salaries, equipment, research supplies, staff travel, etc.

Period of support. Awards for institutional grants may be made for project periods of up to 5 years. However, no individual may receive more than three years of support in the aggregate from a National Research Service Award. Any exception to this requires a waiver from the Agency head based on review of justification from the trainee and the grantee institution.

Conditions of award. No trainee may be supported unless a Statement of Appointment form and a signed Payback Agreement indicating his or her intent to meet the service or payback provisions required under the law

have been submitted to NIH. Trainee appointments are made for full-time research training and research. Trainees may utilize some of their time in academic studies and clinical duties if such work is closely related to their research training experience.

A NRSA award may not be held concurrently with another Federally sponsored fellowship or similar Federal award which provides a stipend or otherwise duplicates provisions of the NRS award. NRSA recipients may, however, accept concurrent educational remuneration from the Veterans Administration (e.g. G.I. Bill) and loans from Federal funds.

Supplementation of the NRSA stipend from non-Federal funds is permitted. Other Federal funds may be used for supplementation only if explicitly authorized by the program from which such funds are derived. No NIH, ADAMHA, or DN grant funds may be used for supplementation. This is not intended to discourage in any way the use of Federal loan funds. This additional support may be provided without obligation by the trainee or may be conditioned on his or her performance of certain services such as teaching or serving as a laboratory assistant. Under no circumstances, however, should the service requirements detract from or prolong the training.

Within two years after completion of NRSA support, recipients of NRSA Awards are to engage in continuous health-related biomedical or behavioral research or teaching or any combination thereof which is in accordance with usual patterns of academic employment for a period equal to the period of support. Alternatively, if the Secretary, DHEW, determines there are no suitable health research or teaching positions available to the individual, the following may be authorized: (1) If the individual is a physician, dentist, nurse, or other individual trained to provide health care directly to patients, the Secretary may authorize (a) service in the National Health Service Corps, (b) service in his or her specialty in a geographic area designated by the Secretary, or (c) service in his or her specialty in a health maintenance organization serving a medically underserved population; (2) If the individual who received the NRS Award is not trained to provide health care to patients, the Secretary may authorize the individual to engage in some other health-related activity. For each year for which an individual receives a NRS Award he or she shall (a) engage in twelve months of health research or teaching, (b) serve 12 months as a member of the National Health Service Corps, or (c) if authorized by the Secretary for one of the other alternatives, shall serve twenty months for each year of award.

For individuals who fail to fulfill their obligation through service, the United States is entitled to recover an amount equal to the total stipend received plus interest. The amount is computed in accordance with a formula which gives only one-half credit for each month of service when the total payback obligation is not completely fulfilled through

service. Interest on the amount begins on the date the United States becomes entitled to such amount; it is computed at a rate fixed by the Secretary of the Treasury considering private consumer rates prevailing on that date. Payment must be completed within three years.

By Federal Regulation, there are certain conditions under which the Secretary, HEW, may extend the period for undertaking service or for repayment, permit breaks in service, or otherwise waive or suspend the payback obligation of an individual where enforcement of the obligation would involve extreme hardship or be against equity and good conscience.

Trainees are not entitled to vacations, as such, although those at academic institutions may take the holidays at Christmas, in the Spring, etc., and the short period between semesters or quarters. The time between a summer session and a fall semester is considered an active part of the training period. Those at non-academic institutions are entitled to the normal holiday and vacation periods of the institution.

Taxability of stipends. The Internal Revenue Service has ruled that the NRSA awards are made primarily for the benefit of the grantor and are accordingly not excludable from gross income as fellowships. (IRS Bulletin No. 1977-36, dated September 6, 1977.)

Notification of final action. The applicant will be notified by the awarding unit of the final action on the application by either an award notice or by a letter.

For additional information on the above program write: Office of Research Manpower, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

The Alcohol, Drug Abuse, and Mental Health Administration and the Division of Nursing, Health Resources Administration, also provide support through National Research Service Awards. For information and application forms, contact the appropriate agency.

National Institutes of Health Research Area List for both Institutional and Individual National Research Service Awards

For purposes of assignment to the appropriate Institute and initial review group, an application must be identified as responding to one or more of the research areas listed below.

This list incorporates changes over the one published in the NIH Guide of January 12, 1977. Some of these are specific, originating with change in priorities of the individual institutes; others are generic, prompted by questions raised in the 1976 Report of the National Academy of Sciences about differences in announcement areas for individual and institutional awards. In response to those questions most Institutes have adopted a list applicable to both individual and institutional awards. The differences that are retained consist of a limited number of research areas in which training opportunities under NRSA are limited to the individual fellowship. In this Announcement the research areas eligible for training support through institutional awards are listed first, with any additional areas supported by individual postdoctoral awards only supplied as an addendum. Note that the National Institutes of Health does not provide individual fellowship awards at the predoctoral level.

NATIONAL INSTITUTE ON AGING

Awards may be for predoctoral and postdoctoral trainees or a combination of the two. Training may be for laboratory, clinical, or field research, and may be multidisciplinary. It may relate to:

- The biology of aging, e.g. biophysical, biochemical, cellular, organ or organismic aging, the pathologic changes in aging experimental animals.
- 2. The special medical problems of aging and the aged, e.g. preventive medicine and aging, the aging nervous system, senile dementia, aging of the endocrine system, aging of connective tissue structures, pharmokinetics and pharmodynamics in the aged.

NIA (Continued)

- 3. Psychological aspects of aging and the aged, e.g. cognitive, personality, and attitudinal changes with age.
- 4. Societal aspects of aging, e.g. population age-structure and its impact on economic, societal, and individual function, retirement, social aspects of aging in different cultures.

Dr. Walter Spieth (301) 496-1033

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contact is the same as for Institutional Awards.

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Allergic and Immunologic Diseases and Basic Immune Mechanisms

Allergy
Immunochemistry
Immunology
Immunopathology
Immunogenetics
Clinical Immunology
Autoimmunity
Transplantation Biology

2. Infectious Diseases and Basic Microbiological Mechanisms

Bacteriology Virology Parasitology Mycology Pathogenesis of Infectious Diseases

3. Epidemiology of Allergic,
Immunologic, and Infectious
Diseases

Proposed institutional training programs may be multidisciplinary.

Dr. Louis D. Bourgeois (301) 496-7465

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contact is the same as for Institutional Awards.

NATIONAL INSTITUTE OF ARTHRITIS, METABOLISM, AND DIGESTIVE DISEASES

Proposals should demonstrate capability to provide opportunity for (1) the clinically-trained to acquire expertise in scientific research (e.g. biochemistry, biophysics, cell biology, epidemiology, genetics, physiology, or psychology), and (2) the scientifically-trained to obtain further training in biomedical research or clinical investigation relating to:

NIAMDD (Continued)

Arthritis, Bone, or Skin Diseases Diabetes, Endocrine, or Metabolic Diseases Digestive Diseases, Liver Diseases, or Nutrition Kidney, Urologic, or Blood

Office of Associate Director (301) 496-7277

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contact is the same as for Institutional Awards.

NATIONAL CANCER INSTITUTE

The goal of the Cancer Research Manpower Development Program is to insure that an adequate number of highly competent basic and clinical cancer research specialists will be trained to meet needs in the following areas of research:

Cancer Etiology and Prevention Cancer Detection and Diagnosis Cancer Treatment and Restorative Care

Proposed institutional training programs may be multidisciplinary.

Dr. Barney Lepovetsky (301) 496-7803

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contact is Mrs. Helen W. Denson (301) 496-7895.

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NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

Awards provide opportunities for research training in the biological and/or behavioral science aspects of the areas listed below. Primary concern in awarding institutional awards will be given to multidisciplinary or interdisciplinary programs which cannot be provided through individual fellowships. Although major concern is for post-doctoral training, predoctoral training will be considered where a special case for support can be justified.

Center for Research for Mothers and Children:

- Problems of pregnancy, embryonic and fetal growth, labor, and neonatal adaptation
- 2. Sudden infant death syndrome
- Problems of cellular, tissue, and organ development, including developmental changes in immune response mechanisms
- Congenital anomalies; structural, metabolic, and behavioral
- Learning disorders, including dyslexia
- Nutritional role of minor and trace elements in growth and development
- 7. Developmental impairments associated with aberrant absorption, transport, and metabolism of nutrients
- 8. Socioenvironmental influences on impact of poor nutritional status
- Problems associated with changes in metabolism during development, including drug metabolism
- 10. Mental retardation
- 11. Adolescence, puberty, and problems of physical and behavioral development

NICHD (Continued)

Center for Population Research:

- 1. Fertility Infertility
- 2. Fertility Regulation
- 3. Nutrition and Reproduction
- 4. Social and Behavioral Aspects of Reproduction
- 5. Population Change
- Dr. Gilbert L. Woodside (301) 496-1848

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contact is the same as for Institutional Awards.

NATIONAL INSTITUTE OF DENTAL RESEARCH

- *1. Behavioral Studies
- 2. Craniofacial Anomalies
- 3. Nutrition
- 4. Pain Control
- 5. Periodontal Diseases
- 6. Restorative Materials .
- 7. Salivary Secretions
- 8. Soft Tissue Diseases

*Additional information sharply defining the type of training needed in this area is available on request. Potential applicants are urged to obtain information from the NIDR before submitting proposals.

Dr. Robert J. Schuellein (301) 496-7748

For Individual Postdoctoral Fellowships in addition to the areas listed above:

- 1. Cariology
- 2. Mineralization

The Institute Contact is the same as for Institutional Awards.

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

- Environmental Toxicology (including behavioral toxicology)
- Environmental Mutagenesis, Teratogenesis and Carcinogenesis
- Environmental Pathology -Pathophysiology
- 4. Environmental Epidemiology and Biostatistics
- Dr. Christopher Schonwalder (919) 775-4022

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contact is the same as for Institutional Awards.

NATIONAL EYE INSTITUTE

Laboratory and clinical research training related to vision and disorders of the visual system:

- Retinal and Choroidal Diseases
- 2. Corneal Diseases
- 3. Cataract
- 4. Glaucoma
- 5. Sensory and Motor Disorders and Rehabilitation

Preference will be given to two-year research training programs in the following areas as they relate to the above:

- 1. Immunology
- 2. Genetics
- 3. Pharmacology
- 4. Epidemiology
- 5. Physiology
- 6. Biochemistry
- 7. Developmental Biology
- 8. Psychophysics and Physiological Optics

NEI (Continued)

9. Pathology

Chief, Scientific Programs Branch (301) 496-5303

Individual Postdoctoral Fellowships are supported in the five areas noted above. The Institute Contact is the same as for Institutional Awards.

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Awards will be made to applicants presenting the most meritorious, broadly-based programs in the following areas, which match the NIGMS research programs:

For Predoctoral Training Grants:

- 1. Cellular and Molecular Biology
- 2. Genetics
- 3. Pharmacological Sciences
- 4. Systems and Integrative Biology
- 5. Medical Scientist Program

For Postdoctoral Training Grants:

- 1. Basic Pathobiology
- 2. Clinical Pharmacology
- Genetics (with emphasis on Medical Genetics)
- 4. Trauma and Burn Research
- 5. Anesthesiology
- Dr. Charles A. Miller (301) 496-7464 or 496-7022

For Individual Postdoctoral Fellowships:

- -areas 1 through 4 in the predoctoral
 group;
- -areas 1 through 5 in the postdoctoral group:
- -the following additional areas:
- 1. Behavioral Sciences Related to Medicine
- 2. Clinical Laboratory Sciences
- 3. Epidemiology

The Institute Contact is

Dr. Roger Fuson (301) 496-7368

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NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Division of Heart and Vascular Diseases

The research training may be in fundamental studies of basic processes and functions, behavioral studies, or clinical investigations directed toward long-term involvement in research toward increasing our knowledge and understanding in cardiovascular areas related to our programs in:

Hypertension
Arteriosclerosis
Cardiovascular Aspects of Diabetes
Arrhythmias
Heart Failure and Shock
Cerebrovascular Disease
Peripheral Vascular Disease
Congenital and Rheumatic Heart
Diseases
Cardiomyopathies and
Infections of the Heart
Circulatory Assistance
Cardiovascular Devices and
Technology

Dr. D. M. MacCanon (301) 496-1724

2. Division of Lung Diseases

The Division supports multidisciplinary research training in fundamental and clinical disciplines.

Training programs should be addressed to one or more of the following categories:

Structure and Function of
the Lung
Pediatric Pulmonary Diseases
Emphysema and Chronic Bronchitis
Fibrotic and Immunologic
Lung Diseases
Respiratory Failure
Pulmonary Vascular Diseases
Epidemiology of Respiratory
Diseases

Ms. Barbara Marzett? (301) 496-7668

NHLBI (Continued)

3. Division of Blood Diseases and Resources

The Division seeks to support research training awards in the areas of:

Thrombosis
Hemostasis
Red Blood Cell Diseases
Sickle Cell Disease
Blood Resources
Blood Banking Sciences

Dr. Fann Harding (301) 496-1817

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contacts are the same as for Institutional Awards.

NATIONAL INSTITUTE OF NEUROLOGICAL AND COMMUNICATIVE DISORDERS AND STROKE

Applications are accepted in the following four areas. Listed are examples of training disciplines in which applications would be appropriate.

Basic Neurosciences

Developmental Neurology
Neuroanatomy
Neurobiology
Nuerochemistry
Neuroimmunology
Neuropharmacology
Neurophysiology
Neuroradiobiology
Neurovirology
Sensory Physiology and Biophysics

2. Clinical Neurosciences

Clinical Investigation Neuroepidemiology Neuropathology

NINCDS (Continued)

3. Basic Communicative Sciences

Audiology Sensory Physiology and Biophysics Speech Pathology

4. Clinical Communicative Sciences

Audiology Clinical Investigation Otopathology Speech Pathology

Dr. Raymond Summers (301) 496-9236

Individual Postdoctoral Fellowships are supported in the above areas. The Institute Contact is the same as for Institutional Awards.

DIVISION OF RESEARCH RESOURCES

Laboratory Animal Science and Medicine Dr. John Holman (301) 496-5175

Individual Postdoctoral Fellowships are supported in the above area. The Institute Contact is the same as for Institutional Awards.

Special Programs for Minority Institutions: In addition to the programs described above, NIH offers institutions with predominantly minority enrollments programs with eligibility requirements and terms of support that differ from those described here. Inquiries may be addressed to the Institute contacts listed, or to

Dr. Ciriaco Gonzales, Director Minority Biomedical Support Program (MBS) (301) 496-6743 Mr. Elward Bynum, Director Minority Access to Research Careers (MARC) (301) 496-7357