NIH GUIDE FEB 17 ETT and CONTRACTS US DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Vol. 6, No. 3, February 4, 1977

IN THIS ISSUE:

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES INSTITUTIONAL NATIONAL RESEARCH SERVICE AWARDS

NIGMS is currently accepting applications from eligible institutions for support of individuals who seek biomedical research training.

Page 1

Page 6

TWO CORRECTIONS TO VOL. 6, NO. 2, JANUARY 12, 1977

- Research areas listed for the National Institute of Neurological and Communicative Disorders and Stroke were incorrect in the January 12 issue.
- 2. Inadvertently page 2 was not included; it is attached to this Guide.

HAVE YOU MOVED?

If your present address differs from that shown on the address label, please send your new address to: Room 2A14, 5333 Westbard Avenue, National Institutes of Health, Bethesda, Maryland 20014, and attach your address label to your letter. Prompt notice of your change of address will prevent your name being removed from our mailing list.

The GUIDE is published at irregular intervals to provide policy and administrative information to individuals and organizations who need to be kept informed of 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. NIH Guide for Grants and Contracts Vol. 6, No. 2, January 12, 1977

<u>Review and selection</u> NRS grant applications will be evaluated by initial peer review groups at the NIH and are also subject to review and approval of the appropriate advisory council of the NIH whose activities relate to the research training proposed. 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 training in NIH program areas.

GENERAL PROVISIONS

<u>Eligibility requirements</u> Individuals appointed as trainees on the grant must be citizens or non-citizen nationals of the United States, or have been lawfully admitted to the United States for permanent residence and have in their possession a permanent visa 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 in accordance with the following: For predoctoral, an annual stipend of \$3,900 for individuals at all levels.

For postdoctorals, the stipend for the first year is determined by the number of years of prior relevant postdoctoral experience at time of appointment. 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 for the first year plus \$400 for each additional year under the National Research Service Award.

Tuition and travel may be requested. There is no allowance for dependents.

Years of Relevant	
Experience at Time	Year of Award
of Initial Award	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

Postdoctoral Stipends

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

ANNOUNCEMENT

INSTITUTIONAL NATIONAL RESEARCH SERVICE AWARDS

The National Institute of General Medical Sciences is currently accepting applications from eligible institutions for support of highly selected, promising individuals who seek biomedical research training in the areas specified below.

It is the Institute's goal in the <u>predoctoral</u> programs to provide trainees broader access to thesis research opportunities across discipline and department lines while not sacrificing the standards of depth and creativity characteristic of the best Ph.D. programs. Cooperative involvement of faculty members from several departments as thesis research mentors is considered evidence for such breadth.

Programs for <u>postdoctoral</u> trainees should offer a wide range of research training opportunities. For individuals holding the Ph.D. degree, training should focus on advanced and specialized areas of research and offer appropriate opportunities to study clinical problems. For trainees holding a professional degree, at least two years of rigorous research training should be provided which is usually best accomplished in basic science departments.

The applicant is expected to present a detailed plan for the proposed training as well as criteria for trainee selection and mechanisms for quality control. The application should also give information on the qualifications of the proposed faculty participants, including their experience as trainors and their current research programs and support.

Separate applications for support of predoctoral and postdoctoral research training are required. In general, only one award in each of the ten areas listed below will be made to an institution. Further information regarding dates of application and notification, tenure, stipends, trainee eligibility, and required payback provisions may be found in the <u>NIH Guide for Grants and</u> Contracts, Vol. 6, No. 2, January 12, 1977.

For general information about these institutional NRS Award Programs, contact Dr. Margaret Carlson, Training Officer, National Institute of General Medical Sciences, Bethesda, Maryland 20014, telephone (301) 496-7585. Before preparing an application, applicants are strongly urged to contact the indicated staff member for the specific area.

NIGMS AREAS OF SUPPORT

Predoctoral Institutional National Research Service Awards

1. Cellular and Molecular Biology

Programs should be of a cross-disciplinary nature and involve in-depth study of biological problems at the level of the cellular and molecular sciences. The research training offered should bring together components of at least two departments or Ph.D.-degree programs (such as anatomical sciences, biochemistry, biophysics, chemistry, developmental biology, genetics, immunology, microbiology, neurobiology, and pathology). Dr. Charles A. Miller - (301) 496-7021

2. Genetics

Programs should emphasize the principles and mechanisms of genetics, with collaboration of faculty members representing a number of disciplines and research areas which may include chemistry, biochemistry, cell regulatory processes, population and behavioral aspects of heredity, and developmental biology. Dr. Dorothea S. Miller - (301) 496-7137

3. Pharmacological Sciences

Training should emphasize the acquisition of competence in the broad fields of pharmacology and toxicology to conduct research on drug actions and effects in living cells, in animals, and in man--ranging from the chemical to the clinical level, with thesis research opportunities in such disciplines/departments as biochemistry, chemistry, genetics, medicinal chemistry, physiology, and the neuro- and behavioral sciences as well as in pharmacology. Dr. Sara A. Gardner -(301) 496-7181

4. Systems and Integrative Biology

Research training should bring together components of varied resources and approaches of such disciplines/departments as physiology, bioengineering, biomathematics, nutrition, anatomical sciences, and the neuro- and behavioral sciences into combinations that will build the broad research competence required to investigate integrative and developmental functions of higher organisms and their organ systems. Dr. R. Burns Ross - (301) 496-7518

5. Medical Scientist Program

Interdisciplinary programs of integrated medical and graduate research training required for investigation of diseases in man. These programs assure highly selected trainees a choice of a wide range of pertinent graduate programs in the biological, chemical, physical, and social sciences combined with training in medicine leading to the combined NIH Guide for Grants and Contracts Vol. 6, No. 3, February 4, 1977

M.D.-Ph.D. degree. The proposed program should be flexible and adaptable in providing each trainee with the appropriate background in the sciences relevant to medicine and be rigorous enough to enable the individual to function independently in both basic research and clinical investigations. Dr. Vincent Price - (301) 496-7563

Postdoctoral Institutional National Research Service Awards

1. Basic Pathobiology

Advanced interdisciplinary training for post-Ph.D.'s from basic biological, biochemical, and biophysical sciences for research on fundamental problems of human disease; and training, for individuals holding a professional degree, that provides an in-depth knowledge of the principles and methods required for research at the cellular and molecular level in normal and diseased states. Dr. Edward Hampp -(301) 496-7563

2. Genetics (with emphasis on Medical Genetics)

Advanced and special research training in genetics, utilizing and applying the principles and fundamental mechanisms of genetics toward an understanding of human genetic disease. Trainees may be drawn from diverse biological and medical backgrounds for research with faculty representing various approaches to genetic research--ranging from biochemical genetics to human population genetics. Opportunities for training in medical genetics are considered desirable. Dr. Dorothea S. Miller - (301) 496-7137

3. Clinical Pharmacology

Advanced research training in clinical pharmacology. Individuals should receive experience in the methodology and conduct of clinical research to qualify them to investigate, in depth, the effects and the mechanisms of drug actions in humans. Trainees, who would usually have the M.D. degree, should have the opportunity to acquire fundamental scientific knowledge and research techniques in areas such as basic pharmacology, biochemistry, physiology, analytical methodology, and other biomedical subdisciplines. Dr. Sara Gardner - (301) 496-7181

4. Trauma and Burn Research

Multidisciplinary research training for postdoctoral scientists to enhance their capability of advancing our knowledge of the body's complex reactions to trauma and burn injuries. The supervisory staff should include trauma surgeons and/or burn specialists as well as basic scientists. Emphasis will be placed on basic training for at least two years within such departments as physiology, biochemistry, immunology, and microbiology. Dr. Emilie Black - (301) 496-7373

5. Anesthesiology

Research training support is offered to individuals with the M.D. degree who seek a better understanding of the fundamental mechanisms of anesthesia and pain and their effects on the body at the level of the organ systems as well as at the cellular and molecular levels. In order to achieve these goals, it is expected that trainees will spend at least two years in such basic science departments as physiology, pharmacology or biochemistry. Dr. Emilie A. Black - (301) 496-7373

INDIVIDUAL POSTDOCTORAL NATIONAL RESEARCH SERVICE AWARDS

The National Institute of General Medical Sciences is currently accepting applications from eligible individuals who seek biomedical research training in the areas specified below.

Information regarding dates of application and notification, tenure, stipends, eligibility, and payback requirements may be found in the <u>NIH Guide for Grants</u> and Contracts, Vol. 6, No. 2, January 12, 1977.

For additional general information about the individual National Research Service Awards, contact Dr. Roger Fuson, Fellowships Officer, National Institute of General Medical Sciences, Bethesda, Maryland 20014, telephone (301) 496-7368. For information specific to the listed program areas, call the indicated staff member.

Postdoctoral individual National Research Service Awards may be applied for in the following areas:

1. Cellular and Molecular Biology

Awards are provided to enable individuals holding the Ph.D. degree in the biological or physical sciences to acquire special advanced research training toward developing necessary cross-field knowledge for a research career in cell sciences—in areas such as membrane structure and function, cell motility, differentiation, enzyme catalysis and regulation, and proteins and other macromolecules, which are essential for an understanding of living systems at the cellular-molecular level. The fellowships enable individuals holding the M.D. degree to obtain the requisite background and skills in basic research to bring new knowledge at the subcellular and molecular level into medicine. Dr. Charles A. Miller - (301) 496-7021

2. Genetics (including Medical Genetics)

Awards are made for research training focusing on the principles and mechanisms of genetics. The aim is the further understanding of genetic processes in general and of human genetic disease. Applicants may propose research and study with investigators representing various approaches to genetics including biochemical, developmental, regulatory, population and clinical aspects of heredity. Dr. George W. Woolley -(301) 496-7137 NIH Guide for Grants and Contracts Vol. 6, No. 3, February 4, 1977

3. Pharmacological Sciences (including Clinical Pharmacology)

Training should emphasize the acquisition of competence in the broad research on drug action and effects on cells, animals, and man. Proposals from individuals with either a Ph.D. or a professional degree may range from the chemical to the clinical level of study and include training opportunities in such areas as biochemistry, physiology, medicinal chemistry, genetics, and other cognate fields. Dr. Raymond Bahor - (301) 496-7707

4. Systems and Integrative Biology (Physiology and Bioengineering)

Support for research training is offered to individuals holding a Ph.D. or professional degree who seek to apply engineering, physical and/or mathematical principles to biological and medical problems. Support is also available to individuals seeking competence in the quantitative study of organ systems and integrated physiological functions of animals and man. Dr. R. Burns Ross - (301) 496-7518

5. Clinically Oriented Areas

Research training support is offered (1) to individuals with the M.D. degree who are preparing for careers in clinical research; emphasis will be placed on proposals incorporating at least two years of training within such basic science departments as biochemistry, genetics, microbiology, immunology, physiology, pharmacology, psychology, or biostatistics; (2) to individuals with the Ph.D. degree who seek competence to apply the knowledge and methods of basic biomedical disciplines to medical problems, usually in close collaboration with clinical scientists. The following areas are represented:

Pathobiology - Dr. Edward Hampp (301) 496-7563 Anesthesiology - Dr. Emilie Black (301) 496-7373 Trauma and Burn Research - Dr. Emilie Black (301) 496-7373 Clinical Laboratory Sciences - Dr. Robert Melville (301) 496-7081 Behavioral Sciences Related to Medicine - Dr. William Taylor (301) 496-7048 Epidemiology - Dr. Margaret Carlson (301) 496-7585

In addition, the National Institute of General Medical Sciences offers individual National Research Service Awards under its <u>Minority Access to</u> <u>Research Careers (MARC) Program</u>. For information, contact Mr. Elward Bynum, Director, MARC Program, National Institute of General Medical Sciences, Bethesda, Maryland 20014 (301) 496-7357.

NATIONAL RESEARCH SERVICE AWARDS

FOR

INSTITUTIONAL GRANTS

NIH GUIDE FOR GRANTS AND CONTRACTS (January 12, 1977)

The research areas in which applications will be accepted for institutional National Research Service Awards was incorrectly listed for the National Institute of Neurological and Communicative Disorders and Stroke in Vol. 6, No. 2, page 8, January 12, 1977. Please substitute the research areas listed below.

- 1. Developmental Neurology
- 2. Neurobiology
- 3. Neuroimmunology
- 4. Neuropathology and/or Otopathology
- 5. Neurovirology
- 6. Sensory Physiology and Biophysics
- 7. Minority Programs in Neurosciences
- Dr. Raymond Summers (301) 496-9236