

NIH GUIDE

for GRANTS and CONTRACTS

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

INSTITUTIONAL GRANTS FOR
NATIONAL RESEARCH SERVICE AWARDS
FOR PREDOCTORAL AND POSTDOCTORAL
RESEARCH TRAINING

Vol. 3, No. 22, December 27, 1974

ANNOUNCEMENT

SPONSORED BY THE NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

The National Institute of General Medical Sciences is currently accepting applications from eligible institutions to provide selected predoctoral and postdoctoral individuals with biomedical research training in the areas specified below. All programs should provide multidisciplinary training with extensive involvement of two or more disciplines/departments. Postdoctoral programs should have a scientific/disease orientation and a dominant scientific theme. Predoctoral programs will be limited in number of stipends and amounts awarded, based in part on the number of participating degree programs or departments. All predoctoral trainees will be candidates in appropriately related Ph.D. degree programs offered by the applicant institution. Both awards will be highly competitive and limited in number. In general, institutions will be limited to one each institutional pre- or postdoctoral award per program area.

Further information regarding dates of application and notification, tenure, stipends, trainee eligibility and required payback provisions may be found in *NIH GUIDE FOR GRANTS AND CONTRACTS*, Vol. 3, No. 20, December 13, 1974.

AREAS OF SUPPORT

Predocctoral Institutional National Research Service Awards

1. Cellular and Molecular Biology

Programs should be of a cross-discipline nature in cellular and molecular sciences, involving cooperation between two or more Ph.D. degree programs or departments (such as anatomical sciences, biochemistry, biophysics, genetics, microbiology, and pathology), with representative faculty members capable of providing integrated training and offering thesis research opportunities at the cellular and molecular level.

The GUIDE is published at irregular intervals to provide policy, program, 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.

2. Genetic Mechanisms and Regulation
Training should focus on the principles and mechanisms of genetics, drawing upon a number of disciplines and research areas such as chemistry, biochemistry, cell regulatory processes, and developmental biology. The goal of the program is further understanding of molecular and physiological mechanisms as well as population and behavioral aspects of heredity and of genetic disease.
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 opportunities also included in such areas as biochemistry, physiology, medicinal chemistry, pharmacogenetics and behavioral pharmacology and other cognate fields, via collaborating departments.
4. Systems and Integrative Biology
Research training should center around cross-field graduate programs involving such disciplines and departments as physiology, bioengineering and biomathematics; or physiology, nutrition and behavioral science; or other combinations of disciplines for building research competence, usually toward investigating organ systems and/or integrative functions of animals and man.
5. Medical Scientist
Special programs of integrated medical and graduate research training required to investigate problems of diseases in man. These interdisciplinary programs assure the highly selected trainees access to the full range of pertinent biological, chemical, physical and social sciences as well as medicine. Graduates may be expected to enter medical school faculties in either basic science or clinical departments to conduct research and to translate new knowledge directly to clinical teaching, practice, and other aspects of health care.

Postdoctoral Institutional National Research Service Awards

1. Basic Pathobiology
Advanced training in a research environment affording interdisciplinary opportunities for post-Ph.D.'s from basic biological sciences and biophysical-biochemical fields to participate in fundamental biomedical research problems including research on, or applicable to an understanding of, pathologic and disease systems; and to provide post-M.D.'s with an in-depth working knowledge of the principles and tools of basic science for research at the cellular and molecular levels in both normal and diseased states.
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 the understanding of human genetic disease. Postdoctoral trainees to be drawn from diverse basic biological and medical backgrounds for research study with faculty representing various approaches to genetic research - ranging from biochemical genetics to human population genetics. Preference will be given to applications presenting training opportunities in medical genetics.
3. Clinical Pharmacology
Advanced research training in basic and clinical pharmacology and planned studies to acquire fundamental scientific knowledge and research techniques in areas such as chemistry, biochemistry, physiology, genetics, certain behavioral science subdisciplines and clinical research specialities, to make individuals holding the M.D. or Ph.D. degree competent to investigate, in depth, the effects and the mechanisms of drug actions in humans.

4. Trauma and Burn Research

Special multidisciplinary, research-based program to train postdoctoral scientists to become capable of advancing our knowledge of the body's complex reaction to trauma and burn injuries. The supervisory staff should include trauma surgeons and/or burn specialists as well as basic scientists, and the program director is expected to emphasize research training in related fields such as physiology, biochemistry, and microbiology.

Individual National Research Service Awards

Individual Research Service Awards (individual postdoctoral fellowships) may also be applied for in any of the above listed fields. Additionally, these individual awards may be applied for in the following program areas as announced in the *NIH GUIDE FOR GRANTS AND CONTRACTS*, Vol. 3, No. 15, October 15, 1974.

Cellular and Molecular Biology
Genetics
Pharmacological Sciences
Systems and Integrative Biology
(Physiology and Bioengineering)
Behavioral Sciences Related to Medicine
Clinical Laboratory Sciences
Epidemiology
Anesthesiology

Appropriate program staff of the Institute may be contacted for additional information concerning specified areas by directing written or telephone (301 496-7585) inquiries to Dr. Margaret J. Carlson, Training Officer, National Institute of General Medical Sciences, Bethesda, Maryland 20014.

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