

INFRASTRUCTURE

and Crosscutting Issues

Current Activities

Clinical Research Training in Minority-Serving Institutions

Background

As part of the effort of the U.S. Department of Health and Human Services to eliminate racial and ethnic disparities in health, a need has been identified to expand the training of clinical research at minority-serving institutions (MSIs) as one approach to fostering careers in clinical research addressing health disparities. MSIs conduct high-quality programs for educating ethnic minorities, and they represent a rich resource of talent with the appropriate cultural sensitivity and perspectives needed in clinical research. However, MSIs have had difficulties developing and sustaining independent clinical research programs, and there is a paucity of ethnic minority clinical researchers pursuing successful clinical research careers. The NIDDK Office of Minority Health Research Coordination and the National Institute of Arthritis and Musculoskeletal and Skin Diseases have teamed to promote the first step in fostering the development of curricula in clinical research, leading to a master's degree in clinical research at MSIs, through a 1-year planning grant. This planning grant is seen as the first phase; the second phase, announced through a Request for Applications in Fiscal Year (FY) 2001, will provide support to assist with the development of the clinical research curriculum. The awards are planned for FY 2002.

Research Goals and Scope

The planning grant provided funds to enable MSIs to assess the resources, both at the home institution and at potential affiliate institutions, to develop a master's degree curriculum in clinical research. The curriculum will focus on clinical—patient- or population-based—research. For the purpose of this award, clinical research includes patient-oriented research, epidemiological and behavioral studies, and outcomes or health services research. Patient-oriented research is defined as research conducted with human subjects (or on material of human origin, such as tissues and specimens) as well as research on cognitive phenomena that requires direct interaction with human subjects. Patient-oriented research also includes the development of new technologies, an understanding of the mechanisms of human disease, therapeutic interventions, and clinical trials.

The core curriculum will include an array of clinical research-related topics of general interest, such as biostatistics, bioethics, clinical trials design, and observational study design. Other topics may include human genetics, pharmacology, patenting and material-transfer agreements, and legal and social issues. The scope of the core curriculum can be flexible to meet the perceived needs of the institution.

Performance Measures

The performance measures will include the development of effective curricula in each of the participating MSIs and the number of trainees enrolled in the programs.

Outcome Measure

The outcome measure will be an increase in the number of racial and ethnic minorities pursuing careers in clinical research.

NIDDK Small Grants for Underrepresented Investigators

Background

The NIDDK recognizes the need to increase the racial/ethnic diversity of the pool of scientists in research areas important to the NIDDK. This program is aimed primarily at recently trained M.D. and/or Ph.D. investigators. The program will enable the applicant to accept a tenure-earning position, gain additional research experience while transitioning to independence, and obtain preliminary data on which to base a subsequent research grant application in an area of diabetes, endocrinology, metabolism, digestive diseases, obesity, nutrition, kidney, urology, or hematology research.

Research Goals and Scope

The primary purpose of this Program Announcement is to foster the research careers of underrepresented minority investigators conducting research in areas of interest to the NIDDK. Individuals who have received training through individual postdoctoral fellowships or institutional training grants still require a transition period to demonstrate independence and to generate the preliminary data necessary for obtaining independent funding. This small grant program is meant to provide this transitional support and to encourage minority investigators to pursue research careers and to become independent scientists.

Performance Measure

The performance measure will be the number of underrepresented investigators funded.

Outcome Measure

The outcome measure will be an increase in the number of underrepresented investigators funded.

Medical Student Research Scholars Program

Background

Available data indicate a serious shortage of racial/ethnic minority physicians. There is an even greater shortage of health researchers from these groups. These physicians from racial/ethnic minority communities provide an invaluable service to patients who are minorities, are poor, and receive support from Medicaid. It is essential that there be adequate numbers of physician researchers trained to focus on problems related to health disparities and to bring incisive research to these areas.

This program is designed to attract students in the early stages of their medical careers, provide research training and mentoring with outstanding investigators actively engaged in biomedical research, and encourage the students to continue on a research career path once their medical school and clinical training has been completed. It is critical for the success of this program that the members of the training faculty, the administration of the medical school, and the training program director work together to identify, recruit, and encourage those minority medical students demonstrating an interest in a research career to participate in the program. This will include outreach efforts, with assistance from NIDDK Office of Minority Health Research Coordination staff members, to interested students at MSIs, where currently there are no NIDDK-supported centers.

Research Goals and Scope

This announcement invites applications for a National Research Service Award Program developed to address the shortage of minority investigators trained in biomedical research. This program provides the opportunity for members of underrepresented minority groups, who have completed at least 2 years of medical school and are currently enrolled, to gain research experience by contributing to or completing a research project in conjunction with one of the NIDDK-supported research centers.

The NIDDK supports P30, P50, and P60 centers at 28 locations. To ensure that the medical students supported by the Medical Student Research Scholars Program are exposed to the highest quality research using the most up-to-date equipment and cutting-edge technologies, the NIDDK encourages the use of already-funded, ongoing core facilities at the applicant's institution. The training faculty recruited for the program should have access to these core facilities and most often will be members of one or more NIDDK-supported centers. In addition, the trainees should be exposed to all the enrichment activities organized and funded by the centers.

Performance Measure

The performance measure will be the number of racial/ethnic minority medical students recruited and funded at NIDDK-supported centers.

Outcome Measure

The outcome measure will be an increase in the number of minority medical students trained at the centers and subsequently embarking on careers in biomedical research.

National High School Student Summer Research Program**Background**

There is a need for programs designed to increase the number of minority students “in the pipeline” specializing in biomedical research. The scientific community is interested in attracting qualified minority students into research careers, but few of them opt for science degrees and research careers, and fewer minority graduates of health professional schools pursue research careers. Many analysts have said that opportunities are lacking for many of these bright young people to gain the critical skills and experience necessary to enter biomedical research and the health sciences. Realizing that the excitement of discovery through research can awaken an interest among students who might not otherwise choose to pursue scientific studies, it is important to nurture the natural inclinations among promising youth to pursue the field of study that most interests them. The shortage of qualified minority investigators in academic research positions exacerbates the situation, because there are few visible role models for students. One way to address this problem is to expose minority students to research opportunities early in their education and to provide them with research training opportunities to develop both their research capabilities and their interest in pursuing a career in research.

Research Goals and Scope

Consistent with the mission of the National Institutes of Health, the overall goal of this program is to strengthen the Nation's research portfolio through providing educational experiences that encourage, develop, and enhance the capacity of promising disadvantaged students interested in biomedical, behavioral, or clinical research careers. To foster student

development, this program is aimed at preparing high school students for an academic college experience in the biomedical sciences. The National High School Student Summer Research Program is designed to engage and mentor high school students in research conducted by NIH-funded investigators.

Performance Measure

The performance measure will include the number of underrepresented students recruited and funded at NIDDK-supported centers.

Outcome Measure

The outcome measure will be an increase in the number of minority students pursuing careers in biomedical research.

NIDDK Short-Term Education Program for Minority Students

Background

The scientific community is interested in attracting qualified minority students into research careers, but few of them opt for science degrees and research careers, and fewer minority graduates of health professional schools pursue research careers. Many analysts have said that opportunities are lacking for many of these bright young people to gain the critical skills and experience necessary to enter

biomedical research and the health sciences. The shortage of qualified minority investigators in academic research positions exacerbates the situation, because there are few visible role models for students. One way to address this problem is to expose minority students to research opportunities early in their education and to provide them with research training opportunities to develop both their research capabilities and their interest in pursuing a career in research.

Research Goals and Scope

This program is designed to provide short-term research education for underrepresented minority high school and/or undergraduate students to expose them to research in the areas of diabetes; endocrinology; metabolism; nutrition; obesity; and digestive, liver, urologic, kidney, and hematologic diseases. By providing an early research experience, NIDDK hopes that many of these students will pursue a career in biomedical research.

Performance Measure

The performance measure will include the number of underrepresented students recruited and funded at NIDDK-supported institutions.

Outcome Measure

The outcome measure will be an increase in the number of minority students pursuing careers in biomedical research.