



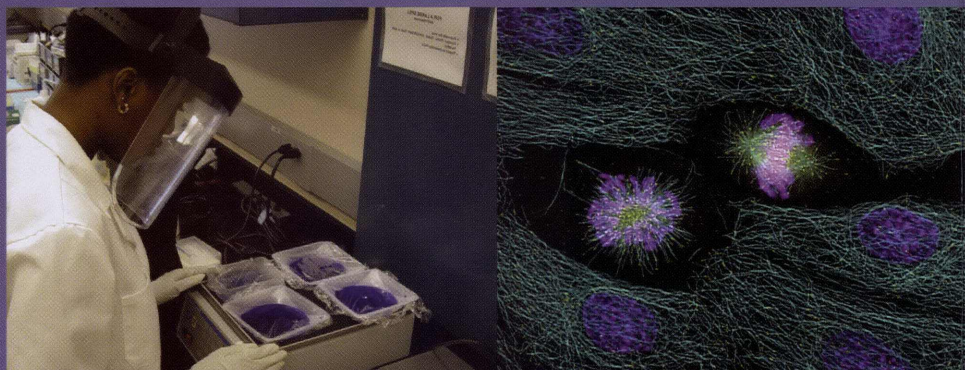
# *Scientists for the 21st Century*

## *Preparing a Diverse Research Workforce*



U.S. DEPARTMENT OF  
HEALTH AND HUMAN SERVICES  
National Institutes of Health  
National Institute of General Medical Sciences





**T**his is a time of rapid progress and tremendous opportunity in biomedical and behavioral science. Future discoveries will require highly trained scientists from a wide range of backgrounds and disciplines.

To help meet this need, the National Institutes of Health (NIH) has a variety of activities to enhance the diversity of the biomedical and behavioral research workforce. This brochure describes programs of NIH's National Institute of General Medical Sciences (NIGMS), which has a long-standing commitment to preparing a workforce that reflects the diversity and talent of the U.S. population. One way the Institute pursues this goal is through efforts to increase the number of scientists who are members of groups that have historically been underrepresented in research careers. These programs offer support at the high school, undergraduate, graduate, postdoctoral and faculty levels.



**We can help you experience the excitement of science.**

**Read on to find out how, then go online or contact us to learn more.**

For additional information, see <http://www.nigms.nih.gov/minority>.





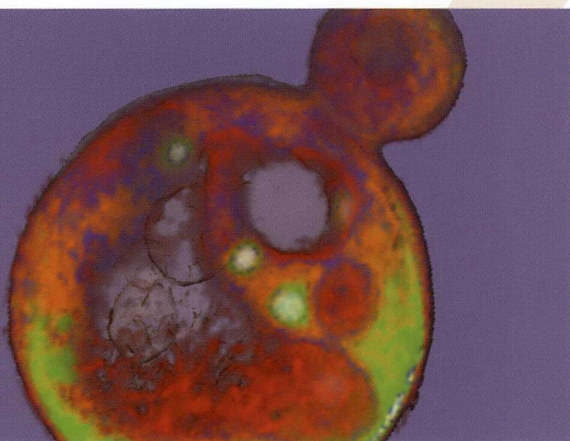


## MORE INFORMATION

NIGMS diversity programs are open to all individuals whose participation contributes to creating a biomedical and behavioral workforce that is representative of the U.S. population. While institutions that receive grants determine underrepresentation in their settings, groups that have historically been underrepresented in the biomedical and behavioral sciences include, but are not limited to, African Americans, Hispanic Americans, Native Americans (including Alaska Natives), natives of the U.S. Pacific Islands, individuals with disabilities and individuals from socially, culturally, economically or educationally disadvantaged backgrounds that have inhibited their ability to pursue research careers.

For detailed information on the programs described in this brochure, see <http://www.nigms.nih.gov/minority> or contact:

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CAROLYN LARABELL

## OTHER SUPPORT

NIGMS supports and organizes scientific meetings and other activities that promote diverse participation in biomedical and behavioral research. The Institute also collaborates with the Indian Health Service on a special program that links the Native American community with organizations that conduct health research. This program encourages research on diseases relevant to American Indians and Alaska Natives, and it prepares Native American scientists and health professionals to compete for NIH funding.

To attract and encourage individuals from underrepresented groups to pursue biomedical and behavioral research careers, NIH provides supplements to existing research grants, enabling people at the high school through faculty levels to work in the labs of scientists holding the grants. Another NIH-wide program makes grants to institutions for predoctoral and postdoctoral training programs; the institutions select the students to be supported with these funds.



## UNDERGRADUATE OPPORTUNITIES

Undergraduate programs often provide students with their first experience performing “hands-on” science in a research lab. These grants, made to minority-serving institutions that then select the students to be supported, may also offer workshops, special classes and opportunities to attend scientific meetings. Students may receive stipends, tuition and fee allowances or salaries for doing research.

## POST-BACHELOR'S APPRENTICESHIPS

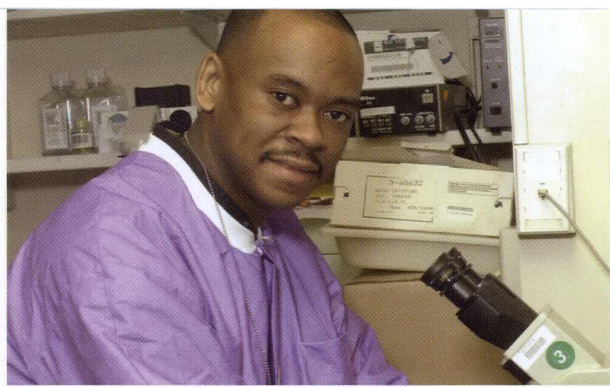
Recent college graduates from underrepresented groups can strengthen their research skills through one-year apprenticeships that enable them to work side-by-side with a faculty mentor and participate in student development and education activities. The goal is to prepare participants for entry into competitive Ph.D. programs at research-intensive institutions.

## PREDOCTORAL SUPPORT

At the graduate level, programs assist students who are pursuing a Ph.D., M.D.-Ph.D. or another combined professional degree-Ph.D. in the biomedical or behavioral sciences. These grants provide a stipend and fee allowance or a salary and fringe benefits, as well as funds for tuition, supplies, equipment and travel. NIGMS also assists those making the transition from master's degree to Ph.D. programs.

## POSTDOCTORAL FUNDING

After completing the Ph.D. or another advanced degree, individuals can receive additional support from NIGMS. For example, one program combines a traditional postdoctoral research experience at a research-intensive institution with the opportunity to develop teaching skills through mentored assignments at a minority-serving institution. This facilitates the progress of postdoctoral scientists toward research and teaching careers in academia, provides a resource to motivate the next generation of scientists and promotes connections between minority-serving and research-intensive institutions.



## FACULTY DEVELOPMENT

To assist faculty members at minority-serving institutions in developing their research skills, NIGMS offers senior fellowships that provide a year of laboratory experience at a research-intensive institution. Ideally, these awards lead to long-term collaborations between the grantees and the faculty at the research-intensive institutions.

## RESEARCH FUNDING

NIGMS helps faculty members at minority-serving institutions develop competitive research programs by funding research projects (including pilot projects) in all areas of biomedical and behavioral science. The Institute also supports a program that tests interventions to promote interest, motivation and preparedness for careers in biomedical and behavioral research, particularly activities designed to increase the diversity of the research workforce.

## INSTITUTIONAL DEVELOPMENT

Developmental activities to enhance the research environment at minority-serving institutions include innovative courses that increase the interest, skills and competitiveness of students and science faculty in pursuit of biomedical and behavioral research careers. In addition, limited funds may be available to purchase equipment and to renovate or remodel existing facilities to provide the space needed to implement the developmental activities.



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**ACCESSIBILITY:** This publication can be made available in formats that are more accessible to people with disabilities. To request this material in a different format, contact the NIGMS Office of Communications and Public Liaison at 301-496-7301; send e-mail to [info@nigms.nih.gov](mailto:info@nigms.nih.gov); or write to the office at the following address: 45 Center Drive MSC 6200, Bethesda, MD 20892-6200. If you have questions about this publication, you can use the same contact information to reach the writer, Susan Athey.

To learn more about the basic research and training that NIGMS supports and funding opportunities it offers, go to <http://www.nigms.nih.gov>.

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