BURROUGHS WELLCOME FUND

Diversity in Science

Background

BWF is committed to funding the next generation of scientists and researchers, thus we have an interest in advancing the careers of underrepresented minority postdoctoral fellows. The URM Postdoctoral Enrichment Program award provides a total of $50,000 over three years to support the development of a URM postdoctoral fellow in a degree-granting or research institute in the United States or Canada.

The continuing lag in advancement of URM scientists is a significant problem for the scientific community. Despite several decades of federally supported programs, Americans from these minority populations continue to be underrepresented among Ph.D. recipients and in the S&E workforce. Contrary to popular belief, many well prepared underrepresented minority students—including men and women of Latino, Native-American, Pacific Island, and African-American descent—are interested in pursuing scientific or engineering careers. In 2005, the same percentage (44 percent) of African-American and white college-bound high school students indicated their intent to major in S&E fields.

Many students with strong SAT scores, impressive grades, and success in high school honors math and science courses leave the college science pipeline, but the loss is disproportionately among women and minorities. Thus, factors other than school preparation, science aptitude, and interest must be responsible for the low achievement and low persistence of these subgroups of undergraduate and graduate S&E students. Identifying and mitigating these negative factors, then retaining well-educated students with S&E interests would improve the United States' ability to compete in today's global scientific community. (SCIENCE, 31 March 2006, Preparing Minority Scientists and Engineers, Michael Summers and Freeman Hrabowski).

The primary goal of the proposed URM Postdoctoral Program is to substantially enhance the postdoctoral training and experience of URM junior scientists. Funds will be provided to support the following enrichment activities:

i) Activities for the postdoctoral fellow to enhance research productivity, e.g. workshops/courses, travel, collaborations, training in new techniques

ii) Activities for the postdoctoral mentor to increase the mentoring of URM fellows in university- based programs:

- Career guidance of the URM postdoctoral fellow
- Research guidance that increases the productivity of the URM postdoctoral fellow

iii) Participation in a peer network system of URM postdoctoral scholars

General Information

The URM Postdoctoral Enrichment Program award provides a total of $50,000 over three years as outlined below to support the development of a URM postdoctoral fellow in a degree-granting institution (or its affiliated graduate and medical schools, hospitals and research institutions) in the United States or Canada. Individual URM postdoctoral fellows conducting biomedical or medical research are eligible to apply.

This award cannot be used to provide the postdoctoral fellow's salary or to purchase reagents or equipment commonly found in the mentor's laboratory.

- Year one: $20,000 will be granted to support enrichment activities of the postdoctoral fellow ($10,000 for research supplies or equipment uniquely required to enhance the postdoctoral fellow's research and $10,000 for education and training, including for mentors in the research lab where the postdoctoral fellow is assigned.)
- Year two: $20,000 (same allocation as year one)
- Year three: $10,000 will be granted for enrichment activities for the postdoctoral fellow to advance his/her research.

A qualified mentor is required for the URM Postdoctoral Program. It has been documented that minorities are less likely to enter and remain in science and engineering when they lack mentors and role models. In most science and engineering disciplines, the percentage of URMs among faculty recently hired is not comparable to that of recent minority Ph.Ds. and is far below that of recent bachelor degree recipients. This results in fewer minority faculty to act as role models for minority students. (*A National Analysis of Minorities in Science and Engineering Faculties at Research Universities*, Nelson and Brammer, January 2010). This program is designed to encourage innovative scientists with broad ranging backgrounds in the biomedical and medical sciences and with experiences in working with postdoctoral fellows to consider serving as mentors.

BWF will host workshops and courses to set expectations for mentors and postdoctoral fellows. Discussions will include considerations of the cultural barriers that exist for URM postdoctoral fellows within the scientific community and the value effective mentors can have on career development.

Eligibility

Applicants must have secured a postdoctoral position with funding (including support by the advisor's existing research grants) at a degree-granting, research-intensive institution in the United States or Canada and must begin the postdoctoral position on or by the designated award commencement date. A person with more than 36 months of postdoctoral experience (in a research laboratory) at the time of application or with more than five years from his/her Ph.D. is not eligible for this award.

The program targets postdoctoral fellows with Ph.Ds in the biomedical or medical sciences. Applicants with M.D. degrees who have secured a postdoctoral research appointment beyond clinical fellowship will be considered for this program. Applicants must be underrepresented minorities (i.e. American Indian or Alaska Native, Black or African American, Hispanic, or Native Hawaiian or other Pacific Islander) and must be citizens of the United States or Canada.

Selection Process

Selection of award recipients is made by a scientific advisory committee with final approval by the Burroughs Wellcome Fund Board of Directors. Up to 10 URM Postdoctoral awards will be made annually. The committee will use the following criteria to identify URM postdoctoral fellows who are innovative and committed to research. The award will provide funding to support and advance the URM postdoctoral fellow and support clear articulation of the vision and philosophy of advancing his/her career.

Qualifications of URM Postdoctoral Applicant

- URM postdoctoral fellows with strong Ph.D. achievement actively conducting research in the biomedical and medical areas

Characteristics of Proposed Mentor

- Capacity, track record, and commitment to advancing the careers of young scientists
- Willingness to participate in workshops to understand expectations of the award and a commitment to its goals

- Publications, training, and research background

Characteristics of Proposed Research Laboratory

Appropriateness of facilities including laboratory, classroom, and residential spaces where URM postdoctoral fellow is assigned