

Title of proposed program: Careers in the Biomedical Workforce

Submitting Source: NIH

What is the major obstacle/challenge/opportunity that the Common Fund should address?

The National Institutes of Health has a vested interest in achieving a sustainable, diverse, and productive U.S. biomedical research workforce. The characteristics of biomedical research training are inextricably linked with the effectiveness of the biomedical research enterprise. The number of biomedical PhDs awarded in the US has increased in the past years, while the number of tenure-track positions in academic research has decreased. This has consequences for the career paths taken by biomedical scientists, as well as the age at which they become independent. For example, in academia, the age at which scientists establish independent research careers has remained stable for many years, at around 42 years for PhDs (and higher for physician scientists), reflecting the length of the combined graduate and postdoctoral training period. It is important to provide graduate students and postdoctoral researchers with resources and information to enable them to make well informed decisions about the various career options, and the training and skills needed to pursue these options. This Common Fund program will test these concepts by developing an integrated set of initiatives to develop methods to enhance the training experience for biomedical researchers, providing them with the skills needed in today's economy, thereby enriching the caliber of the scientists who do go into NIH-funded research. These initiatives will be guided by recommendations to be provided by the Advisory Council to the Director (ACD) in June, 2012.

What would the goals of the program be?

The overall goal of this program would be to pilot new mechanisms to enhance the training and career development of biomedical graduate students and postdoctoral researchers to better align with current and future career options. This overarching goal will be broken into concrete objectives as further strategic planning is conducted following receipt of advice on this topic from the ACD.

Why is a trans-NIH strategy needed to achieve these goals?

A diverse and sustainable biomedical and behavioral research workforce is crucial for NIH to fulfill its mission and this transcends IC boundaries. It is relevant to the NIH as a whole, and will benefit the next generation of biomedical scientists. Moreover, this program will require central NIH coordination with academia, industry, etc to ensure that the program benefits a wide spectrum of the biomedical workforce.

What initiatives might form the strategic plan for this topic?

Specific initiatives will be designed following receipt of the ACD recommendations. This is a complex topic which has been the subject of a special ACD task force over the past year.

If a Common Fund program on this topic achieved its objectives, what would be the impact?

If the Common Fund goal of piloting new training mechanisms is successful, these mechanisms will be available to the ICs to use to help build and sustain the workforce that the nation needs for improving health and global competitiveness. Recruitment and retention of the "best and the brightest" will be enhanced as students have a better understanding of their career options. This will improve the quality of the workforce in all sectors.