Attachment 2: Background and Rationale of the Short Course Program

The National Human Genome Research Institute (NHGRI), part of the National Institutes of Health (NIH), supports the development of resources and technology that will accelerate genome research and its application to human health. The NHGRI Education and Community Involvement Branch (ECIB) has been administering the NHGRI Summer Workshop in Genomics (aka, the *Short Course*) since 2003, as a way to accelerate the dissemination of genetic and genomic information to science faculty, especially those at minority serving institutions.

The Short Course is an intensive multi-day educational workshop designed to update biology instructors, as well as other instructors and researchers in related disciplines, on genomic science. The course focuses on the continuing effort to find the genetic basis of various diseases and disorders, and current topics on the ethical, legal and social implications of genomics. The course targets college and university faculty seeking to update their curriculum or develop new courses related to genetics and genomics. Preference is given to applicants from racial and ethnic groups underrepresented in health related sciences; institutions that predominantly train students with disabilities; or disadvantaged backgrounds including certain rural and inner-city environments. Students from those same circumstances have been included in the program since 2004, but student selection has evolved. Initially, faculty attendees selected students for attendance, and then in 2012, NHGRI began actively recruiting, screening and accepting graduate students independent of faculty attendees, as a way of preparing and attracting future scientists and health care professionals to a genomics workforce.

NHGRI has assessed the course each year by gathering feedback from participants immediately upon course completion, and using that data to inform the next year, but a full-scale and long-term outcome evaluation has never been conducted. There is an absence of information about if, and how the new knowledge and skills gained by participants has been disseminated over the years, and whether or not the course is meeting program goals. NHGRI completed a feasibility study in 2013, which has provided the framework for this survey.

NHGRI will electronically survey all past program participants (~330) to assess the methods and degree to which faculty participants updated their curriculum, to identify resources and barriers associated with curriculum integration, and to explore the program influence on student participant's career paths. This evaluation will provide important evidence to inform NHGRI about the extent to which the Short Course is meeting the following program goals:

1. Prepare the next generation of genomics professionals for an era of genomic medicine
2. Train and diversify the pipeline of genome professionals in alignment with the NIH and US Department of Health and Human Services diversity and inclusion efforts
3. Expand NIH and NHGRI's professional network to reach out to diverse communities, and to create new partnership opportunities.

NIH and NHGRI leadership will use the evaluation results to inform program design but most importantly, extramural budget allocations, which includes determining the scope of the Short Course at NIHGRI and the potential for expanding the program to other NIH Institutes and Centers. If effective, the Short Course may stand as a model program for other ICs to follow as an effective

means for disseminating cutting-edge information and for increasing diversity in the scientific workforce.