The overall goal of the Parent Grant is to understand in detail the processes and criteria by which young scientists decide among various career options, and to better understand why so little progress has been made toward ethnic and racial diversity in the ranks of biomedical faculty. A key objective is to determine the degree to which their career paths are affected by real or perceived barriers to preferred careers vs. career and life-style choices they are making. The study uses sequential semi-structured interviews with ~275 students over 3-4 years (the current period of support) spanning the end of college and the early years of PhD training. The study is designed to achieve special insights into the career decision-making of students from underrepresented ethnic and racial groups. The initial plan was to interpret interview data using Social Cognitive Career Theory (SCCT) as the primary interpretative framework. However, early results have revealed that this interpretive framework will be too narrow to reveal the processes and influences of career decisions. Therefore, the aim of the research proposed in this Supplement is to create an expanded interpretive framework consisting of multiple lenses. To expand the framework, we need to find, interpret and synthesize the interrelationships of previous work in: 1) the component variables of SCCT, 2) other career development theories, and 3) research about students from specific populations, including underrepresented minorities, women and STEM students. This synthesis has never been done. Preliminary work has revealed how complex and time-intensive it will be. Once completed during the two years of the Supplemental request, it will allow for much more rapid and precise analysis of our interview data and could be used for other studies of career decision-making in the sciences. The proposed research and synthesis is directly related to the Aims of the Parent Grant and provides a new position for a social science researcher to work in collaboration with the multi-disciplinary research group assembled for the ongoing study.

**RELEVANCE**

Despite sizeable efforts, only minimal progress has been made in the past decades toward increasing the diversity of college and university science faculty, those who decide what research questions to study and serve as role models and mentors for future generations of biomedical scientists. The proposed research will provide a major advance in our understanding of the decision-making processes of young minority scientists.