

SUMMARY

For the past several decades, NIH and NIGMS have led efforts to increase diversity among biomedical scientists. Despite committing great financial and human resources to this goal, relatively little progress has been made, especially among science faculty. Many explanations and theories for this lack of improvement in faculty diversity have been put forth, but no studies have systematically attempted to determine if this low rate of improvement is due to inadequate preparation or trainees, ongoing discrimination, or the active decision of young minority students not to pursue academic careers. This last possibility will be studied in the proposed research because it has broad implications for the other possible explanations as well. Interview-based qualitative research methods will be used to study the career decision making of young scientists and accomplish the following Specific Aims: 1) Determine the career paths and decision making criteria of students first interviewed between 1997 and 2000, prior to their entrance into biomedical PhD training; 2) With a new sample of students, determine the processes and criteria used to make career decisions, especially related to academic careers, of undergraduate MARC, RISE, IMSD students, and PREP scholars, at several stages of training; 3) Determine how activities of MARC, RISE, IMSD and PREP programs contribute to students' perceptions of and interest in academic careers; 4) Compare the decision making criteria of these students with non-minority students who enter the same or similar U.S. biomedical PhD programs; 5) Determine if themes previously shown to predict students likely to enter biomedical PhD programs also predict persistence to PhD completion and/or interest in academic careers; 6) Determine the degree to which refinement of career decisions can be explained by Social Cognitive Career Theory, and if lower perceptions of self-efficacy, outcome expectations or performance goals associate with reluctance to commit to and work toward an academic career for minority and/or non-minority students; 7) Based on the results of the study, propose short and longer-term interventions to address identified negative influences impacting minority students' willingness and/or ability to seek academic careers.

NARRATIVE

Progress to improve public health depends on diverse perspectives of biomedical scientists. Despite sizeable efforts, only minimal progress has been made in the past decades to increase 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 study the decision-making processes of young scientists to determine what has to be done differently to increase diversity among university life science faculty.