Recommendations for a Strong and Diverse Trainee Pipeline

Build connections and encourage formal partnerships across training programs and workforce entities.

This will allow trainees to recognize and learn to navigate connected pathways between their current positions and positions they wish to attain in the future.

Increase access to training for all trainees.

Using technology to explore alternative training methods may make training more accessible. Developing and widely disseminating research education tools can also enhance training.

Emphasize early interventions for research training.

Education outcome differences begin at a very early stage. It is important to improve K–12 education efforts to minimize disparities for underrepresented racial and ethnic minority individuals later in their education and in their careers.

Provide consistent professional and wellness support.

To maximize the positive impact of a training experience, it is important to institute consistent, holistic professional support for the trainee and nurture the trainee's physical and mental wellness. This is the foundation of a trainee's advancement in their research education and career.

Encourage approaches that are tailored to specific populations.

One size does not fit all in research education and training. Students and scientists from different backgrounds have different needs, and training programs that endeavor to address specific needs will improve recruitment and retention outcomes.

Require the tracking of trainees and evaluation of training programs.

To assess the impact of training efforts and to share best practices, tracking and evaluation standards need to be established and widely accepted. Importantly, evaluation needs to be integrated into program planning from the initial stages through implementation and completion.

Emphasize training in focused areas to address current gaps and anticipate future needs.

These may include cancer health disparities research that engages students in service-learning activities at the graduate and undergraduate levels and, for advanced trainees, special fellowships or additional training opportunities to support a concentration in health disparities and health equity. Additionally, training may emphasize the quantitative science disciplines, including but not limited to big data, -omics, imaging, mathematical modeling, bioinformatics, systems biology, and epidemiology. Strengthening training in these areas will increase the probability of a more diverse workforce in these areas of high potential.

Strengthen the mentoring infrastructure and grow a systematic network of mentors and mentor advocates.

Mentorship is a cornerstone of research training. Mentors offer support and encouragement and model and teach success. It is a priority to develop and broadly distribute evidence-based, culturally inclusive mentorship advocacy training. Mentor training should be part of all training programs so that good mentoring becomes part of the academic and research culture. Team mentoring should be encouraged to better provide diverse perspectives and expertise.