RE: Comments to NIGMS Advisory Council

The American Society for Biochemistry and Molecular Biology (ASBMB) is an international nonprofit scientific and educational organization that represents more than 12,000 students, researchers, educators and industry professionals. The ASBMB strongly advocates for strengthening the science, technology, engineering and mathematics (STEM) workforce, supporting sustainable funding for the American research enterprise, and ensuring diversity, equity and inclusion in STEM.

The ASBMB applauds the National Institute of General Medical Sciences for its commitment to diversity, equity, inclusion and accessibility (DEIA), especially efforts being made through the UNITE program. The newly approved concept of the Excellence in DEIA Professor’s Award is transformative and will give much-needed recognition to investigators at institutions who are committed to mentoring the next generation of historically marginalized scientists. Furthermore, programs such as this ensure that investigators are rewarded and not discouraged from maintaining DEIA initiatives.

In addition to current NIGMS programs and committees, such as Striving Towards Racial Inclusion, Diversity and Equity (STRIDE) and Maximizing Investigators’ Research Award (MIRA) conversions from R01 to R35 grants, the ASBMB strongly recommends that the National Institute of Health continue to create and support programs and awards geared toward strengthening the STEM workforce by (1) expanding existing undergraduate training programs and increasing grant awards to institutions in states that have Institutional Development Award (IDeA) and (2) continuing the renewal of MIRA awards.

Increase funding for STEM training pipeline by expanding undergraduate diversity training programs and awards to IDeA-eligible states

While NIGMS has programs to increase diversity in STEM, from the undergraduate to postdoctoral level, there is a significant loss of talent in the transition between high school and undergraduate programs that would benefit from the establishment of a new program. The Research Initiative for Scientific Enhancement and Maximizing Access to Research Careers programs fund undergraduate students from only sophomore to senior year. These programs should be expanded to support first-year students. Immersing students early in their undergraduate education will increase the number who stick with science and choose it as a career.

To expand on the NIH’s current efforts to build research capacity in states that have had historically low levels of NIH funding, there should be an increase in awards offered for IDeA
states to guarantee their availability. We recommend that NIGMS increase the number of IDeA awards from one to two awards per state, and publish data from these awards to NIGMS Loop.

**Continue the issuance and renewal of MIRA awards**

The ASBMB is enthused that the rate of MIRA renewals is twice that of traditional R01 renewals. This demonstrates the benefits of giving researchers enhanced flexibility to pursue novel ideas and explore unexpected findings that would have otherwise not met the narrow research aims proposed in R01 grants. We hope to see this program expand to provide new awards to more researchers, since the current MIRA awardee pool largely consists of historically well-resourced labs. By providing more MIRA awards, NIGMS can extend the benefit of stable and flexible funding to a greater proportion of the scientific community.

We encourage NIGMS to replicate the success of MIRA awards beyond the initial pool of MIRA awardees to investigators at minority-serving institutions particularly historically Black colleges and universities, that would hugely benefit from the optimized structure of the MIRA program. The ASBMB also urges the NIGMS council to remain diligent in conducting research on funding disparities and rectifying the proportionally low representation of historically marginalized investigators among the R01 and MIRA awardees.