[Future of Research](#) supports the initiative to expand the capacity of the scientific workforce and infrastructure to support innovative research. We endorse increasing collaboration, transparency and establishing research practices that promote rigor and reproducibility. In supporting the research independence of trainees, we recommend the proportion of graduate students and postdocs currently supported on training grants and fellowships increase. This would allow funding to be based on mechanisms prioritizing their training. This also highlights the obligation of both institutions and federal agencies to track all trainees supported by federal dollars and their career outcomes. Beyond training, improved measures to assess the skills learned, and outcomes gained from this process will be imperative for measuring the success of the biomedical workforce.

In addition, while providing both research training and career development opportunities for postdocs is valuable, this practice should extend to earlier stages, in particular to undergraduate and graduate students. One possible way to provide more enriching opportunities for the scientific workforce would be to institute a multi- or interdisciplinary training mechanism, with additional mentors who can provide different types of expertise. In addition to co-mentorship, informal mentorship is also valuable to the success of research projects. A diversity of training and mentoring structures should be employed and incentivized, to recruit and retain a diverse, inclusive and equitable scientific workforce.

Continuous assessment of how administrative systems and policies align with anticipated workforce needs is critical and would require collaborations between researchers and individuals in other sectors, which might result in shared resources and technologies to generate more innovative research ideas. This is particularly important given the current disparity in both research funding and resources between labs, where collaboration is critical to everyone's success.

Improving rigor, transparency and reproducibility of federally-funded research could be achieved by promoting the use of preprints and other interim research products in all agencies. In addition, providing the biomedical workforce with training in peer review needs to be incentivized in particular in conjunction with open access publishing. Training scientists in these aspects as a priority is a barrier in today's hypercompetitive environment. However, rewarding those who perform these tasks well, as well as holding accountable those with unethical behaviors, will overtime lead to an improved research landscape.