

August 19, 2026

National Institutes of Health
Office of Science Policy
6705 Rockledge Drive, Suite 750
Bethesda, MD 20817

Re: Request for Information on Measuring and Rewarding Scientific Impact (NOT-OD-26-087)

To Whom It May Concern:

The Massachusetts Biotechnology Council (MassBio) appreciates the opportunity to respond to the National Institutes of Health (NIH) Request for Information on Measuring and Rewarding Scientific Impact. MassBio represents more than 1,700 member organizations, including biotechnology and pharmaceutical companies, academic medical centers, research universities, disease foundations, and the service providers that support them. Our members include many institutions and companies that perform NIH-funded research, with Massachusetts a national leader, receiving approximately \$3.5 billion in NIH funding annually, more per capita than any other state. The funding translates into new treatments for patients, high wage jobs and a growing workforce, and significant economic development across the State and the country.

We support the premise of this RFI. Publication counts and citation metrics capture only one dimension of the value NIH creates. They also render invisible much of the activity that actually moves a discovery toward a patient. Realigning NIH measures of success is a worthwhile undertaking that if implemented successfully will unlock new transformative innovations for patients across the country. We focus our comments on three of the areas identified in the notice: entrepreneurship and translation, foundational scientific exploration, and public impact.

Entrepreneurship and Translation

An investigator whose work yields an issued patent, an executed license, a company, an IND, and a first-in-human trial has produced precisely the public value this RFI describes. Under current metrics, almost none of it registers. NIH already collects much of the data needed to change that. What is missing is the decision to treat these as measures of scientific impact rather than as compliance filings.

Recommendations

- Establish a defined set of translational indicators. We recommend: license and option agreements executed; companies formed; follow-on private capital raised by those companies; SBIR and STTR awards received; INDs and investigational device exemptions filed; clinical trials initiated; FDA designations granted, including Orphan Drug, Fast Track, Breakthrough Therapy, and Regenerative Medicine Advanced Therapy; and

approved products traceable to the award. Making these indicators publicly available would itself change institutional behavior, at minimal marginal cost.

- Reduce the structural frictions facing investigator-founders. Certain current rules, such as founder equity and SBIR primary employment requirements, routinely necessitate management plans that distance the founder from the research. NIH should examine whether these rules match how academic discoveries actually reach companies.
- Strengthen SBIR and STTR as the translational bridge and measure the bridge. The most consequential failure point is between Phase II completion and the first institutional private financing.
- Recognize translational effort that does not succeed commercially. A program that fails for reasons of biology after a genuine translational attempt should not be scored below a program that never attempted translation at all.

Foundational Scientific Exploration

Private capital cannot fund foundational research. Venture funds operate on defined horizons and cannot underwrite ten to fifteen years of basic research work with an unknown endpoint. The reason our members can build companies at all is that NIH does the work that no investor will fund. Applying near-term translational indicators to that portfolio would be self-defeating. It would shift NIH toward the incremental, fundable work the private sector is already positioned to do.

Recommendations

- Protect a defined share of the portfolio from any translational metric. NIH should identify basic and high-risk mechanisms as explicitly exempt, so that investigators and study sections can rely on it.
- Evaluate high-risk programs on the distribution of outcomes, not the average. A portfolio of transformative awards in which most projects fail and a few change a field is a successful portfolio.

Public Impact

Public impact is the hardest of these areas to measure and the most important to measure well, because it is the basis on which sustained federal investment in biomedical research is justified.

Recommendations

- Report health outcomes traceable to NIH funding: approved therapeutics, diagnostics, and devices with a documented line back to NIH-supported research; changes to clinical practice guidelines citing NIH-funded evidence; and, where data permit, patient populations reached.
- Report economic impact at the state and regional level. NIH funding supports employment, institutional research capacity, and regional cluster formation. Massachusetts is the clearest available case study of the full sequence, from NIH-funded academic discovery through

spinout formation, private financing, clinical development, manufacturing, and employment. Estimates commonly place significant returns on economic activity per every dollar of NIH funding. NIH should adopt a consistent methodology, publish results by state, and update them annually.

Conclusion

MassBio appreciates NIH taking on this important effort. We would welcome the opportunity to discuss these recommendations further, and we are prepared to convene NIH staff with our member companies, academic medical centers, and investors to work through implementation and feasibility questions in more detail.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kendalle' followed by a stylized surname.

Kendalle Burlin O'Connell
Ceo & President
Massachusetts Biotechnology Council (MassBio)