

Outcomes and Uses of the *Sustaining Discovery* *Discussion Framework*

Summary:

FASEB was guided by three major goals when it undertook the *Sustaining Discovery* effort: (1) to raise the issue of instability in the biological research enterprise and generate further dialog with the research community; (2) to ensure that our members' voices were heard in policy discussions on this subject; and (3) to seek consensus on the key contributors to instability and potential solutions or approaches to mitigate them. The document has been cited broadly and has led to invitations and other opportunities to engage with different groups and organizations. Furthermore, *Sustaining Discovery* has helped develop FASEB's position on a variety of policy issues and will continue to serve as a foundation for future activities.

***Sustaining Discovery* has provided a valuable foundation for FASEB's policy activities:**

- The discussion of alternative funding mechanisms (funding of investigators versus research programs versus research projects) provided an important foundation for developing [comments](#) on the National Institute of General Medical Sciences's proposed Maximizing Investigators' Research Award (MIRA) ([NOT-GM-14-122](#)) (August 21, 2014)
- *Sustaining Discovery* discussions informed our participation in the National Academy of Science Collaborative Workshop to Improve Postdoctoral Training (February 25, 2015)
- The document served as the basis for [FASEB's comments](#) on the NIH request for information (RFI) on "Optimizing Funding Policies and Other Strategies to Improve the Impact and Sustainability of Biomedical Research" ([NOT-OD-15-084](#)) (May 15, 2015)
- Sections were used to develop our responses to drafts of the 21st Century Cures Bill (March 4, 2015; April 9, 2015; and June 12, 2015)
- Feedback from the research community on *Sustaining Discovery* was collected through a survey, and summary results were presented to the FASEB Board to inform next steps in these policy areas (July 7, 2015) (*A summary of these findings can be found in [Appendix D](#)*)
- To further work on enhancing the deployment and use of resources, as called for in *Sustaining Discovery*, FASEB has initiated a new science policy subcommittee, [Shared Research Resources](#) (September 2015)
- While updating workforce datasets used in *Sustaining Discovery*, FASEB staff found the growth trend in the number of postdoctoral positions had begun to reverse. This led to the publication: Garrison HH, Justement LB, Gerbi SA. [Biomedical science postdocs: an end to the era of expansion](#). FASEB J. 2015 Oct 6.

It has also raised FASEB's profile in the community, leading to invited talks and participation in additional meetings:

- FASEB President, Joseph R. Haywood, PhD, presented *Sustaining Discovery* and described past FASEB efforts on regulatory burden at the annual Council On Governmental Relations (COGR) (March 6, 2015)

- Louis Justement, PhD, Chair of the FASEB Training and Career Opportunities Subcommittee, and Yvette Seger, PhD, Director of Science Policy at FASEB, participated in the University of Michigan Future of Biomedical Graduate and Postdoctoral Training Meeting (May 4-5, 2015)
- Dr. Haywood also gave an invited talk on *Sustaining Discovery* to the Federal Demonstration Partnership (FDP) (May 11, 2015)
- Bethany Drehman, PhD, Science Policy Analyst at FASEB, attended New York University's first Postdocs Interdisciplinary Symposium as a networking guest to discuss *Sustaining Discovery* and science policy careers (May 21, 2015)
- Dr. Haywood's science policy talk at the Medical College of Wisconsin featured *Sustaining Discovery* (May 2015)
- Howard Garrison, PhD, Director of the Office of Public Affairs at FASEB, and Dr. Haywood discussed *Sustaining Discovery* at the American Society for Nutrition Business Meeting and Nutritional Science Council Business Meeting (June 2015)
- FASEB Treasurer, Mark Lively, PhD, was an invited participant in a strategic planning conference organized by the NIH Office of Research Infrastructure Programs and shared recommendations from *Sustaining Discovery* for possible inclusion in the office's strategic plan (July 2015).
- FASEB President, Parker Antin, PhD, gave the key note speech at the tenth annual Northeast Regional Life Sciences Core Directors Meeting, in which he described major findings of *Sustaining Discovery* and highlighted select recommendations (October 15, 2015)
- To help inform the development of a Government Accountability Office (GAO) report, FASEB leadership and staff met with GAO staff to share our perspective on regulatory and administrative burden and recommendations to mitigate them (September 9, 2015)
- Dr. Haywood presented key findings and recommendations from *Sustaining Discovery* at the Association of Independent Research Institutes annual meeting (September 29, 2015)

***Sustaining Discovery* has been cited broadly, generating further conversation on these critical issues:**

- Featured in a [ScienceInsider](#) article (January 9) and [Science Careers](#) blog post (January 9, 2015)
- Included in the Bloomberg BNA "Medical Research Law & Policy Report" (January 12, 2015)
- Shared by many FASEB societies through newsletters, social media, direct emails, and other outreach (January 2015 to present), for example:
 - Executive Summary published in American Physiological Society's newsletter, *The Physiologist*
 - Articles in the American Society for Pharmacology and Experimental Therapeutics newsletter, *The Pharmacologist*, the International Society for Computational Biology's Community Blog, and the American Society for Bone and Mineral Research's *e-News Weekly* newsletter
 - Included on websites of several societies, including the American Society for Investigative Pathology and the Society for the Study of Reproduction
- Featured on the Future of Research Group [blog](#), which also encouraged postdocs to share their feedback through the survey tool (February 9, 2015)
- Cited by NIH in its roll out of the RFI on "Sustaining the Biomedical Workforce and a Potential Emeritus Award for Senior Researchers" ([NOT-OD-15-064](#)) (described FASEB's recommendation to explore the creation of a transition award) (February 18, 2015)

- Select figures and findings from *Sustaining Discovery* were used in presentations at the University of Wisconsin-Madison meeting on “Rescuing Biomedical Research” (April 11, 2015) and the document was also cited in the meeting report: Kimble J, et al. Strategies from UW-Madison for rescuing biomedical research in the US. *Elife*. 2015 Jun 30;4:e09305.
- Cited by Jon Lorsch, PhD, Director of the National Institute of General Medical Sciences, in the following article: Lorsch JR. Maximizing the return on taxpayers' investments in fundamental biomedical research. *Mol Biol Cell*. 2015 May 1;26(9):1578-82.
- Included on the [reading list](#) for the University of Michigan Future of Biomedical Graduate and Postdoctoral Training Meeting (FASEB also participated in the meeting) (May 4-5, 2015)
- Referenced by several FASEB societies and advocacy partners in their own comments to the NIH “Sustainability of Biomedical Research” RFI ([NOT-OD-15-084](#)) (May 2015)
- Listed on the [resource page](#) (under “Reports and Research Articles”) of the Rescuing Biomedical Research website, a project initiated by Bruce Alberts, PhD, Marc W. Kirschner, PhD, Shirley Tilghman, PhD, and Harold Varmus, MD (May 2015)
- Shared with ten NIH Institute and Center Directors and heads of several other NIH offices as a part of the FASEB Public Affairs Committee visits (May 5, 2015)
- The American Association of Universities (AAU), COGR, and the AAU Biomedical Research Policy Working Group submitted joint comments on *Sustaining Discovery*, initiating further dialog with FASEB (June 19, 2015)
- *Sustaining Discovery* was one of nine reports analyzed in the article: Pickett CL, Corb BW, Matthews CR, Sundquist WI, Berg JM. [Toward a sustainable biomedical research enterprise: Finding consensus and implementing recommendations](#). *Proc Natl Acad Sci*. 2015 Sep 1;112(35):10832-6.
- The National Academies report “[Optimizing the Nation's Investment in Academic Research: A New Regulatory Framework for the 21st Century: Part 1](#)” cited *Sustaining Discovery* and several other FASEB documents. FASEB staff also supplied an updated figure and data from the discussion framework for inclusion in the report (see pages 30-32) (September 22, 2015)