

American Society for Biochemistry and Molecular Biology 11200 Rockville Pike, Suite 302 Rockville, Maryland 20852-3110

## Next Generation Researchers Initiative – ASBMB Policy Recommendations

The American Society for Biochemistry and Molecular Biology (ASBMB) strongly supports the goals of the Next Generation Researchers Initiative (NGRI) and actions by the NIH to ensure the long-term viability and sustainability of the biomedical research enterprise. We have identified 5 policy areas of importance to our membership, which we submit for consideration by the NGRI Working Group. The policy recommendations below are meant to serve as guides; specific numbers associated with them should be adjusted based upon an analysis of the relevant data.

# 1. Establish a Program to Fund Early Stage Investigators (ESIs) Definition

Recommendation: An investigator, without an R01-equivalent federal grant, who is within their first 6 years of an independent faculty position.

Rationale: This defines the ESI based on the time of their first hiring as an independent investigator, thereby equalizing potential differences in time spent in post-doctoral fellowship and eliminating disincentives to extend PhD training.

## **Funding Threshold**

Recommendation: We concur with the <u>report on Open Mike</u> (June 16, 2017) that targets funding ESIs with R01-equivalent applications that score in the top 25<sup>th</sup> percentile.

Rationale: This gives ESIs an advantage over established investigators, thus decreasing the ESI funding gap.

### **Submission Windows**

Recommendation: Implement a Continuous Submission policy (NOT-OD-17-042) to ESIs for R01-equivalent applications.

Rationale: This permits ESIs increased turn around for grant submission, review and potential funding as has been successfully accomplished in other special cases (for example, HIV-related applications/reviews are accelerated by a full cycle).

# 2. Establish a Program to Retain At-Risk Established Investigators Definition

Recommendation: An investigator who has lost all R01-equivalent research support within the last 3 years or is at risk of losing all R01-equivalent research support if they are not funded by competing awards this year.

Rationale: Retaining successful established investigators in the scientific work force maximizes prior grant dollar investment. Establishing funding stability would contribute to the desirability of this career path to the next generation.

### **Funding Threshold**

Recommendation: Institutes should determine an appropriate modified payline for at-risk investigators. Rationale: This gives at-risk established investigators a small advantage over other established investigators, thus retaining highly trained and successful academic scientists in the workforce.



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#### **Submission Windows**

Recommendation: Implement a Continuous Submission policy (NOT-OD-17-042) to at-risk established investigators for R01-equivalent applications.

Rationale: This permits at-risk established investigators increased turn around for grant submission, review and potential funding as has been successfully accomplished in other special cases (for example, HIV-related applications/reviews are accelerated by a full cycle).

# 3. Establish a Cross-NIH Sliding Scale for the Funding of Multiple Awards Definition

Recommendation: A principal investigator with 2 funded R01-equivalent grants will be required to meet an increasingly higher threshold for the funding of each subsequent new proposal. NIH should also take into account how to appropriately weigh the contribution of investigators in multi-PI grants or subcontracts so as not to discourage team-based science.

Rationale: This mechanism will free up funds to support ESIs and at-risk established investigators, and will ensure that meritorious scientific research can still be funded while taking into account the report (Lorsch, 2015) of a productivity plateau for increasing levels of funding.

### **Setting New Funding Thresholds**

Recommendation: The funding threshold for an investigator's first 2 R01-equivalent research awards will remain unchanged. Funding of each additional R01-equivalent research award will occur at increasingly higher thresholds with each subsequent proposal. We recommend that the funding threshold for each subsequent grant be reduced by 1/3 of that of the previously funded proposal. Rationale: A stepped reduction in funding threshold does not preclude the funding of meritorious research. Rather, it spreads the funding among a larger number of investigators proposing equally meritorious research. Basing thresholds on the number of grants held by an investigator, as opposed to setting a dollar limit, takes into account the different costs that are incurred in different research areas.

### **Training Grant and Administrative Core Exception**

Recommendation: Training grant awards and the administrative core portion of program project grants shall not count as R01-equivalent research awards for the purpose of determining funding thresholds, as these activities are a service for training the next generation and to the broader research enterprise. Rationale: Investigators should not be punished for service-related funding that brings little to no research funding to the investigator's laboratory.

## 4. Set Salary Support Limit

Recommendation: NIH should consider placing limits on the overall percentage of salary support available to every investigator who receives NIH funding, in addition to the current salary limitation guidelines (NOT-OD-18-137). In so doing, the ability to fund meritorious research can be extended while advancing the intended partnership with academic and research institutions. The absence of publicly available data on salary support precludes recommendation of a definitive overall percentage cutoff.

Rationale: A salary support limit may free up funds and will help codify the partnership between institutions and the NIH in conducting biomedical research.



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## 5. Establish a Program to Promote Re-entry

#### Definition

Recommendation: An established investigator with an independent faculty position who has lost all NIH grant support for more than 3 years.

Rationale: This program would retain highly-trained scientists in the workforce and permit realization of lost potential from the volatility of the biological research funding climate.

### **Funding Mechanism**

Recommendation: Relax eligibility circumstances for PA-15-321, Research Supplements to Promote Re-Entry into Biomedical and Behavioral Research Careers to include faculty with long-term loss of R01-equivalent funding. The new or refined mechanism should provide both salary support and research support to promote successful re-entry.

Rationale: A mentored, collaborative research experience may be critical for re-entry of some facultylevel scientists following a funding hiatus.

Thank you for taking our policy recommendations into consideration. If you have any questions or concerns about any of our recommendations please do not hesitate to contact Benjamin Corb, director of public affairs, at bcorb@asbmb.org.

**Next Generation Working Group** Public Affairs Advisory Committee American Society for Biochemistry and Molecular Biology April 2018