

**Genetics Society of America Response to NIGMS Request for Information
Maximizing Investigators' Research Award (MIRA)**

August 15, 2014

[Request for Information](#) • [Input Form](#)

Responses are limited to 500 words per topic. All responses must be submitted by August 15, 2014.

1. The merits of this funding program for established and early stage investigators.

The Genetics Society of America (GSA) appreciates efforts to enhance the efficiency of the research funding system, including the opportunity for investigators to spend more time conducting research and less time writing proposals. As strong proponents of investigator-initiated basic research, GSA especially values the opportunity offered by the MIRA program for PIs to be able to pursue promising new research directions without being bound by specific aims proposed in advance. We share NIGMS' hope that the freedom offered by MIRAs, coupled with longer funding periods, would encourage investigators to pursue more ambitious scientific projects, especially those with longer time horizons. The revised review criteria for MIRAs, which emphasize a "holistic evaluation of the investigator's track record and the overall potential importance of the proposed research program," should help focus peer review on the most important elements of the proposed research program and its likelihood of advancing the field. We support the expectation that PIs will commit at least 50 percent research effort to a MIRA-funded program, which will ensure that PIs remain engaged in the proposed work rather than be spread too thinly across a large number of separate projects. Finally, GSA appreciates the stability afforded by not terminating a MIRA grant immediately if renewal is unsuccessful.

2. The likelihood that established and early stage investigators would apply for NIGMS MIRAs.

The Genetics Society of America (GSA) believes that the additional stability offered by the MIRA program will be attractive to many investigators. However, we worry that some researchers will be hesitant to lose the safety net they currently receive from multiple overlapping grants. In addition, funding from the MIRA program is also likely to be less than the sum of multiple NIGMS awards to a single investigator, which may provide a further disincentive for the most successful PIs to apply for an NIGMS MIRA.

There are also many investigators whose research interests may be sufficiently diverse to encompass several seemingly unrelated projects. These different research strands are often synergistic in unexpected ways, bringing together approaches and expertise from different fields—and helping advance science. Because of this breadth, however, it is unlikely that these projects could be brought together in a single MIRA proposal that could be evaluated fairly by a single peer review committee.

Although GSA is strongly committed to the advancement of early stage investigators (ESIs), we do not believe that the MIRA program is the right mechanism. We question whether most beginning investigators will have developed a sufficiently broad research program to be competitive for such funding. Even the most promising ESIs will not have a sufficient track record for a grant mechanism that is largely focused on past achievement. Should NIGMS wish to make the program available to ESIs, it should be made clear that they will not be expected to have achieved as much as more established investigators, and the solicitation should provide more specificity concerning evaluation criteria.

3. Concerns about the NIGMS MIRA proposal.

While the Genetics Society of America (GSA) appreciates the effort to increase the efficiency and effectiveness of the funding system, we do not believe the MIRA program will lead to significant change in the major challenges faced by many members of our community: the low funding rates and the largely stochastic nature of the current review process.

GSA is concerned that the program could concentrate NIGMS resources to a small number of investigators at a limited number of institutions. While the goal of the program is to increase the efficiency of supporting those who would succeed under the current funding environment, we want to make sure that NIGMS continues to provide robust support to a broad range of researchers. For example, we are concerned that PIs with smaller research programs may be less competitive for MIRAs. GSA encourages NIGMS to continue to provide substantial support for non-MIRA funding programs, especially those likely to be least competitive for MIRAs.

As much as GSA appreciates the benefit of reducing the amount of time spent on grant writing, we also see a value in this process. Many PIs understand the intrinsic value of the intellectual rigor that goes into producing the detailed proposals that are part of the present system, and indeed many good ideas emerge from that concentrated thought and planning. Indeed, it is not uncommon for investigators to have a “eureka moment” when preparing proposals, inspired by a need to impress a critical study section and to think carefully about the details of the proposed research.

The impact of the MIRAs in supporting a laboratory's research program will be complicated by the ability of other public and private funding agencies to provide grant support independent of the MIRAs. How will NIGMS consider these other sources of support at the time of application? Will the institute adjust funding levels during the award period for additional grants that begin or end?

It is also unclear how NIGMS plans to appropriately calibrate funding levels when specific aims are not included in the proposal.

4. Suggestions for changes to improve the NIGMS MIRA proposal or associated processes.

The Genetics Society of America (GSA) suggests that NIGMS provide additional information about how funding levels will be adjusted to reflect changes in productivity. In particular, NIGMS should provide additional information about the criteria that NIGMS program staff will use to adjust funding levels and clarify the role of staff, study sections, and Council in these decisions. We also suggest more detail about how NIGMS will provide enough assurance to investigators that funding will not be cut quickly, while also allowing the flexibility to respond to changes in productivity and the uncertainty of available funding—and guidance on how long NIGMS will provide support before funds are cut entirely.

We encourage NIGMS to provide additional specificity on how success of the MIRA program will be evaluated, especially in comparison to other funding mechanisms that include the status quo. We encourage NIGMS to focus on the quality and creativity of the supported research and to avoid use of irrelevant statistics such as journal impact factors. We also suggest that NIGMS examine the applicant and awardee pools to ensure that the program is appropriately attractive to investigators across the full breadth of the biomedical research community.

The review process will be even more important for the MIRA program because of the larger size and longer period of support. But it will also be different from typical review processes, as reviewers will be asked to assess the promise of an application without as much detail on the proposed research. To that end, it will be essential to recruit experienced reviewers to serve on study sections for the MIRA program. There are several public- and private-sector funding mechanisms that focus on similarly broad assessments of achievement and promise, such as those that support people rather than specific projects; we encourage NIGMS to consider the criteria and review processes these entities use. We also suggest that NIGMS explore the use of creative incentives to induce more experienced investigators to return for additional service on study sections. GSA would be happy to work with you to suggest some ideas.

5. Additional comments.

While the Genetics Society of America (GSA) appreciates the motivation behind the proposed MIRA program—and thinks that it may be an effective mechanism for some investigators—we also emphasize that the program will not address the needs of many PIs. For that reason, it is important that NIGMS undertake MIRA as an experiment while ensuring that the bulk of NIGMS extramural support for the current system remains intact.

GSA further encourages NIGMS to provide more information about the number of expected awards to be made by the program and the percentage of extramural funds that would be dedicated to MIRA.

While the five-year funding period and relative stability offered by the MIRA program are improvements over the status quo, they are more akin to a time in the recent past when five-year awards were common and the James A. Shannon Director Award was available to provide merit-based bridge funding.

GSA appreciates the opportunity to provide input into the proposed MIRA program and looks forward to continuing to work with NIGMS and our sister societies to promote efficient and effective support for biomedical research.