Maximizing Investigators’ Research Award Early Stage Investigators (R35)

Jon Lorsch, Director, NIGMS
Kris Willis, Program Director
Brian Pike, Office of Scientific Review
Lisa Moeller, Grants Management Branch

Webinar July 10, 2017, 1:30 p.m. EDT
NIGMS Goals for the MIRA Program

• Improve the efficiency and effectiveness of its support for basic biomedical research

• Increase the stability of investigator funding

• Enhance investigators’ ability to take on ambitious scientific problems creatively

• Increase the flexibility for investigators to follow important new research directions

• Improve the distribution of funding to improve overall scientific productivity and the chances for important breakthroughs

• Reduce the time spent by researchers writing and reviewing grant applications
Initial Tests of MIRA Concept

• RFA-GM-16-002 Maximizing Investigators’ Research Award (R35)
  ○ 123 Awards made in FY2016 – Feedback Loop April 14, 2016

• RFA-GM-16-003 Maximizing Investigators’ Research Award for New and Early Stage Investigators
  ○ 94 Awards made in FY2016 – Feedback Loop August 18, 2016

• RFA-GM-17-002 Maximizing Investigators’ Research Award (R35)
  ○ Currently making awards

• RFA-GM-17-004 Maximizing Investigators’ Research Award for Early Stage Investigators (R35)
  ○ Applications received November 4, 2016
Eligibility for PAR-GM-17-190

• You must be an NIH defined Early Stage Investigator
• This means you must be within 10 years from completion of your terminal degree (PhD or equivalent)
• MD and other medical professional degrees within 10 years of completing residency training (or the equivalent)
• You must not have received substantial NIH funding as the PI of an independent research award
• ESI status may be extended upon request for family care responsibilities, extended training, disability or illness, active military service, and certain other reasons.
Research must be in the mission of the National Institute of General Medical Sciences

- NIGMS supports basic research that increases understanding of biological processes and lays the foundation for advances in disease diagnosis, treatment and prevention. See: [About NIGMS](#)

- The Institute also supports research in certain clinical areas: anesthesiology; sepsis; trauma, burn injury, & wound healing; clinical pharmacology; medical genetics.

- See: [NIGMS Strategic Plan](#)

- See: [Overview Divisions and Program Contacts](#)

- Work supported by the Center for Research Capacity Building (IDeA, COBRE, INBRE, NARCH) may or may not be appropriate for NIGMS support using the MIRA grant mechanism.
PAR-GM-17-190  Award Information

• Requests up to $250,000 direct costs (DC) per year for 5 years are allowed, but annual inflationary increases should not be included.

• The actual number of awards will depend on the number of applications for R35 in comparison with the number of R01 applications from Early Stage Investigators.

• NIGMS expects to fund approximately as many early stage investigators through all its grant mechanism as it has in recent fiscal years.

• Foreign collaborations allowed, but funding will be provided only when a consortium arrangement is essential to the research program, represents a unique scientific opportunity, and cannot be supported by the collaborator. This situation is expected to be rare.
Application Submission Information

• SF424 R&R – All sections as needed, except no Specific Aims

• New Format Biosketch ≤ 5 pages, including form page
  – Personal Statement (≤ 4 publications)
  – Positions and Honors
  – Contributions to Science (≤ 5 x ≤ 4 publications each)
  – Research Support (Past 3 years)

• Current & Pending Support (Equivalent of JIT information – direct costs per year to PI lab)

• R&R Detailed Budget – Consortia (well justified and with letter of explanation)

• **Required for all applications:**
  – Resource Sharing Plan
  – Data Sharing Plan
  – Plan for Authentication of Key Biological and/or Chemical Resources

• Information on Animal/Human Subjects as needed
Application Submission Information

• Research Strategy ≤ 6 pages
  – Background, gaps, challenges
  – Recent Progress
  – Proposed Research
  – Cite papers in bibliography, not progress report

• Letter of Support from Institutional Official

• Letter of Support from Dean or Chair

• Appendix, Updates – standard NIH policies apply
  – N.B. that per NOT-OD-17-035 appendix materials are limited to blank informed consent forms and blank surveys/questionnaires/data collection instruments
  – Non-compliant applications will be returned without review!

• New this year: ESIs can have BOTH an R01 & R35 application under consideration simultaneously (but even if both score well only one may be awarded)
Letter from the Institution

- Institutional authorized representative must acknowledge that the PI will be able to devote 51% of his/her *research effort* (reported in person months), not including effort expended toward teaching, administration, and/or clinical duties.

- Must acknowledge that the PI will relinquish current NIGMS support and will be unable to accept other forms of NIGMS support except as noted in the FOA.
Letter from the Dean or Chairperson

• Describes the institutional commitment to development of the investigator, including a mentoring plan for the PD/PI.

• Could include information on start-up packages and other institutional research support; space available to the PD/PI; salary support commitment; skills and career development opportunities; mentoring during the promotion and tenure process; and career advancement prospects for non-tenure track applicants.
Review Information

• Applications will be reviewed by Special Emphasis Panels organized by the NIGMS Office for Scientific Review

• Panels will review only applications in response to PAR-GM-17-190 (MIRA for Early Stage Investigators)

• Reviews will use modified review criteria that emphasize the importance of the questions being asked, past productivity and future potential of the PI, conduciveness of the environment to the success of the PI, and deemphasize details of approach.

• Only a single overall impact score will be voted, no separate criterion scores. Depending on numbers of applications, the lower one-third to one-half of applications may not be discussed.
Receipt and Referral

• All applications are due on October 3, 2017
• No late applications will be accepted for this FOA
• Applications will be reviewed for completeness by the Division of Receipt and Referral, CSR, NIH
• Eligibility to apply is defined by the ESI status of the PI in the NIH record system on the receipt date
• Applications will be reviewed for responsiveness to the FOA by NIGMS staff
• Applications not in the NIGMS mission will be returned
Review Criteria

• Significance
  Is the research program substantive in scope/adequately broad and ambitious? Will it permit the PI to establish a uniquely independent place in the field?

• Investigator
  Does the PI have appropriate training, have a record of productivity/impact, and shown evidence of creativity/adaptability, potential to establish successful independent program of research, promise as a mentor of others?

• Innovation
  Is there evidence that creative strategies will be employed as needed and appropriate to address the research questions posed?
Review Criteria (Continued)

• **Approach**
  Is there a sound basis for the proposed research, evidence that the research program will evolve appropriately as the work is performed, that the research will be performed rigorously and the results interpreted carefully, and planned with sensitivity to the need for cost effectiveness in research?

• **Environment**
  Is there evidence that the PI has an independent research position, that the environment will be conducive to the development of the PI, and of institutional support and mentoring?
Award Administration

• PI must commit 51% of research effort to MIRA award

• Other NIGMS funding must be relinquished, and NIGMS will not provide further funding
  exceptions as defined in the FOA

• Permanent change of PI not permitted, usual temporary change exceptions apply

• Transfer to new U.S. institution allowed (not to foreign institution)

• Changes in scope require prior approval, including for example addition of animals, human subjects.

• Annual reporting via RPPR with some supplemental instructions – mainly dealing with changes in research direction and other support of the lab.
MIRA Program Evaluation

- Number of investigators who apply for MIRA and their current levels of NIH grant support
- Publication rate by career stage and field of NIGMS MIRA grantees in comparison with non-MIRA grantees and in comparison with their own previous publication record
- Citation rate by career stage and field of NIGMS MIRA grantees in comparison with non-MIRA grantees and in comparison with their own previous citation record
- Impact of MIRA awards on the biomedical research, the scientific landscape, and sociology of science
- Level of interest of NIGMS grantees and other applicants in obtaining a MIRA
- Changes in NIGMS funding distribution and number of investigators supported by the Institute
- Changes in the distribution of research topics studied by NIGMS MIRA versus non-MIRA grantees
- Number of MIRA awardees who elect to renew their MIRA award
- Feedback from:
  - study sections that review MIRA applications
  - MIRA grantees
  - other stakeholders
MIRA Resources

- Be sure to look at the currently open Funding Announcement, PAR-GM-17-190
- NIGMS Feedback Loop Posts on MIRA
  Look for future postings on Awards and Program Evaluation
- MIRA page of the NIGMS Website
  - MIRA Answers to Frequently Asked Questions (PAR-GM-17-190)
  - Webinar Link - archive and slides will be posted
- Links to NIH Guide
  - Example Biosketch
  - Example Current & Pending Support Page
Contacts for MIRA

• Kris Willis, Ph.D.; Program Director, NIGMS
  - 301-594-0943; kristine.willis@nih.gov
  - Please contact Dr. Willis or a program director in your area of research **BEFORE** you submit your application!

• Brian Pike, Ph.D.; Office of Scientific Review, NIGMS
  - 301-594-3907; pikbr@nigms.nih.gov

• Lisa Moeller; Grants Management Branch, NIGMS
  - 301-594-3914; moellerl@mail.nih.gov

• Thank you for interest in the MIRA program!