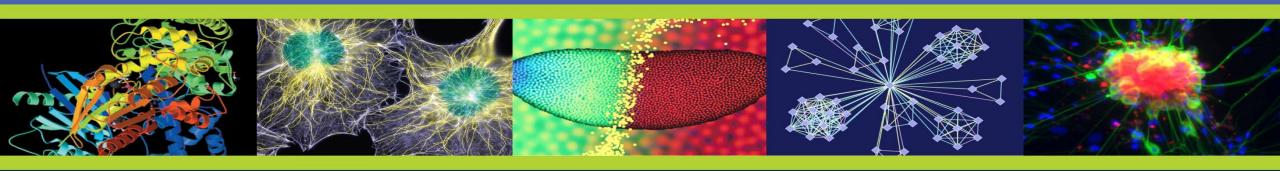# Maximizing Investigators' Research Award (MIRA, R35) for Non-ESIs, PAR-22-180

Jon Lorsch, Zhongzhen Nie, Lisa Moeller, Brett Hodgkins, Maqsood Wani

Opening Remarks

Jon Lorsch, Ph.D.
Director
National Institute of General Medical Sciences

MIRA Award Rates as Compared with R01

Cohort	Renewal/ Conversion Rates	Funding Change Median %					
	Cohort-Wide	Cohort-Wide	Career Stage		Prior Funding		
			ex-ESI	EI	<$200k	>= $200k, <$400k	>= $400k
R01 Renewal	45.3%	3.0	6.5	3.0	6.5	3.0	-0.8
R35 Renewal	86.0%	3.0	8.3	3.0	27.6	4.7	3.0
R01/R35 Conversion	52.0%	14.1	19.3	11.1	28.2	11.1	-10.7

https://loop.nigms.nih.gov/2022/02/mira-renewals-award-rates-and-budget-changes/

NIH National Institute of General Medical Sciences

Key Elements of the MIRA Concept

- A single NIGMS grant per PI to provide support for the NIGMS-related research in an investigator's lab, reduced administrative burden

- Five-year funding, flexibility in future research directions, higher stability

- PI relinquishes other NIGMS support with some exceptions, e.g., resource, training, small business grants

- Award levels based on current support

- Renewals – lower application numbers, higher success rates, flexible funding levels

Eligibility for MIRA Application

New applications converted from a qualifying award

- A single-PI R01-equivalent GM award (DP1, DP2, R01, R37, SC1, NRMN U01)
- By the end of the fiscal year following the one in which your qualifying award was originally set to expire (NCE has no effect on eligibility time window)
- A PD/PI may have more than one qualifying award

New applications from New Investigators (always talk to us before applying)

- A PD/PI working in GM mission
- Not a project leader on a multi-component award from NIH (except for NIGMS COBRE, IDeA-CTR, and NARCH)
- ESIs should apply through the ESI MIRA FOA (PAR 20-117 will be reissued). If you are an ESI, this webinar is not for you.

Renewal applications

- Both EI MIRAs and ex-ESI MIRAs will be renewed through this FOA
- By the end of the 2nd fiscal year following the one in which your current MIRA was originally set to expire

A PEDP Is Required for MIRA Applications

A Plan for Enhancing Diverse Perspective (PEDP)
- A summary of strategies to increase the merit of research via inclusivity
- A one-page attachment required for all applications (will return appl if missing)
- A scorable criterion at scientific review

Please refer to the NIH Brain Initiative Webpage for Additional Information
- General Description (Plan for Enhancing Diverse Perspectives (PEDP) | Brain Initiative (nih.gov)
- Key Elements and Examples (PEDP Key Elements and Examples | Brain Initiative (nih.gov)
- Frequently Asked Questions (PEDP Frequently Asked Questions | Brain Initiative (nih.gov)

Distinct Features of MIRA Applications

Features of MIRA Applications
- No specific aims: flexible to follow new research directions
- Scientific topics: within the scientific mission of NIGMS
  (https://www.nigms.nih.gov/about-nigms/who-we-are/overview)
- Research strategy: 6 pages (background, recent progress, future research)
- Biosketch: tailored
- Budget request: A single line of budget for each year, no detailed budget

NIH National Institute of General Medical Sciences

Receipt and Review Dates for MIRA Applications

Receipt date	Jan 17, 2023	May 16, 2023	Jan 16, 2024	May 16, 2024	Jan 16, 2025	May 16, 2025
Scientific review	July 2023	Nov 2023	July 2024	Nov 2024	July 2025	Nov 2025
Council	Oct 2023	Jan 2024	Oct 2024	Jan 2025	Oct 2025	Jan 2026
Start date	Dec 2023	April 2024	Dec 2024	April 2025	Dec 2025	April 2026

NIH National Institute of General Medical Sciences

Most Common Page Allotment
(6 pages for research strategy)

Background and key knowledge gaps
- One to one and half pages

Recent progress by the PD/PI
- One to one and half pages
- Focus on the past five years

Overview of future research
- Three to four pages

Note that this is different than your R01 components: significance, innovation, approach

Biosketches

Personal Statement

- Tailored to the unique attributes and requirement of MIRA
- Service to the scientific community (beyond your institutional duties)
- When applicable, describe factors that may have reduced productivity

Contributions to Science

- Focus on the past five years (but is not "limited to")
- Within the NIGMS mission (emphasized in the FOA)
- Supported by NIGMS (emphasized in the FOA)
- List grant citations as acknowledged in the publications (emphasized)

Hypertext (Hyperlinks and URLs)

- Do not use hypertext other than for the PD's/PI's my NCBI page

New requirement about biosketch and other support

- An independent attachment of current and pending support required
- Section D eliminated

MIRA Budget Request and Award Level

Budget request
- Follow budget instructions outlined in the FOA
- No detailed budget (only DC, F&A, Total Costs for each year)
- **No inflationary escalations (per NIH policy)**
- Indirect costs should be requested
- Equipment purchase with the $750,000 budget limit
- No prior approval required if annual DC over $500K

New MIRA award levels generally adjusted based on current GM support
- >400K: 12% reduction in general
- $250K - $400K: same, reduced, or slightly increased
- <$250K: increase to $250K in most cases
- Budget for New Investigators will be generally $250K

PD/PI Minimum Effort Requirement

- PD/PI is required to devote at least 51% of the PD/PI's total research effort to MIRA

- Total research effort should include the PD/PI's combined research effort at all institutions where the PD/PI holds an appointment

- Express effort in person-months

- NIGMS staff will verify the MIRA research effort requirement met by using the other support documentation and will exclude support for which the purpose is education, training or enhancing workforce diversity

NIH National Institute of General Medical Sciences

Review Information

Applications are reviewed at Study Sections organized by CSR

- MRAA (https://public.csr.nih.gov/StudySections/DBIB/MGG/MRAA)
- MRAB (https://public.csr.nih.gov/StudySections/DBIB/MBBC/MRAB)
- MRAC (https://public.csr.nih.gov/StudySections/DBIB/CDB/MRAC)
- MRAD (https://public.csr.nih.gov/StudySections/DBIB/CDB/MRAD)
- SEPs as needed

Panels review only MIRA applications

Majority of applications are discussed

Applications are reviewed relative to the PI's career stage, (e.g., applications from ex-ESIs are clustered together)

An overall impact score provided, no individual criterion scores

NIH National Institute of General Medical Sciences

Review Criteria

Scorable Review Criteria	Significance
	Investigator(s)
	Innovation
	Approach
	Environment
Additional Scorable Review Criteria	Study Timeline; Inclusion Plans
	Protections for Human Subjects
	Vertebrate Animals
	Plan for Enhancing Diverse Perspectives
	Biohazards
Non-scorable Review Considerations	Authentication of Key Resources
	Budget and Period of Support
	Resource Sharing Plans

Specific Considerations for MIRA Review

- Is the research program substantive and appropriate for long-term pursuit?
- Has the PD/PI been conducting and reporting rigorous, reproducible, transparent, and cost-effective research?
- Does the PD/PI have a record of significant service to the scientific community?
- Are the PD's/PI's productivity and impact commensurate with their level of funding and career stage?
- Is there evidence that the freedom and flexibility of the MIRA will lead to innovation?
- Is there a logical plan for sustained progress of this research program?
- Is there evidence that the research program will evolve appropriately?

NIH National Institute of General Medical Sciences

Specific Considerations for MIRA Review (Cont'd)

Renewals

- For ex-ESI MIRAs, has the PD/PI established a research program with the potential for continued growth and enhanced scientific impact?

- For Est. Inv. MIRAs, has the PD/PI maintained a productive research program with strong evidence of impactful contribution to the field and recognition of new opportunities and directions?

NIH National Institute of General Medical Sciences

Frequently Asked Questions

Am I eligible if all my NIGMS research funding come from several MPI R01s?

No. The qualifying award must be a single-PI R01 or equivalent.

Why are letters from collaborators not encouraged?

Flexibility of MIRA research (specific techniques, reagents).

Consortium will be rare and extremely well justified.

Can I submit again if my application does not review well?

Yes, if eligible. Subsequent applications will be A0s.

Why are A1s NOT accepted?

The review should focus on the scientific merit instead of responsiveness to the previous review.

NIH National Institute of General Medical Sciences

Frequently Asked Questions

What should I do if my T2A0 doesn't score well?

Don'ts

- Do not submit an T2A1 application. It will be a T1A0.

- Do not talk about the previous review in your new application.

- Do not include an introduction page.

- Do not include a progress report publication list.

Dos

- Cite publications in Biosketch under contributions to science (5 areas with 4 papers under each, with grant #s).

- Report progress in section II under Research Strategy: "recent progress by the PD/PI which focuses on the past 5 years."

NIH National Institute of General Medical Sciences

Frequently Asked Questions (Cont'd)

What are the common reasons for applications to be returned without review?

- Proposing research outside the scientific mission of NIGMS
- Missing the required attachment of "Current and Pending Support"
- Missing the required attachment of PEDP
- Unallowable hypertext (Hyperlinks and URLs) in application
- Overstuffing: unallowable information in non-page limited sections
- Ineligible Status

  Conversion of R01-equivalent GM award(s) to MIRA: 1 FY beyond expiration
  Renewal of MIRA: 2 FYs beyond expiration

NIH National Institute of General Medical Sciences

Questions?

*** Please note the new Data Management and Sharing Policy, [Data Management and Sharing Policy | Data Sharing (nih.gov)](), **effective January 25, 2023.**