

National Science Foundation

Major Research Instrumentation (MRI) Program Summary

April 26, 2010

Dr. Randy Phelps

mri@nsf.gov 703-292-8040

<http://www.nsf.gov/od/oia/programs/mri/>

¹The MRI program is coordinated by the Office of Integrative Activities (OIA) in collaboration with Directorates and Offices across NSF.



OFFICE OF INTEGRATIVE ACTIVITIES

A vertical graphic with a blue and green background. At the top left is the NSF logo. To its right, the text reads 'NATIONAL SCIENCE FOUNDATION MAJOR RESEARCH INSTRUMENTATION'. Below this, under the heading 'MRI GOALS', is a list of six bullet points. To the right of the text is a vertical column of small, square images showing various scientific instruments and research environments. At the bottom left of the graphic, the text reads 'MRI@NSF.GOV' and 'www.nsf.gov/od/oia/programs/mri'.



NATIONAL SCIENCE FOUNDATION
MAJOR RESEARCH
INSTRUMENTATION

MRI GOALS

- Catalyzing new knowledge and discoveries
- Empowering the Nation's scientists and engineers
- Providing state-of-the-art research instrumentation
- Enabling research-intensive learning environments
- Building capacity for a diverse workforce
- Developing next-generation instrumentation
- Promoting academic-private sector partnerships

MRI@NSF.GOV
www.nsf.gov/od/oia/programs/mri

MRI: Overall Goals

- Supporting the **acquisition** of major state-of-the-art instrumentation, thereby improving access to, and increased use of, modern research and research training instrumentation shared by the Nation's scientists, engineers, and graduate and undergraduate students;
- Fostering the **development** of the next generation of major instrumentation, resulting in new instruments that are more widely used, and/or open up new areas of research and research training;
- Enabling academic departments, disciplinary and cross-disciplinary units, and multi-organization collaborations to **integrate research with education**;
- Supporting the acquisition and development of research instrumentation that makes use of, advances, and/or expands the Nation's **cyberinfrastructure** and **high performance computing capability**;
- Promoting substantive and meaningful **partnerships for instrument development** between the academic and private sectors

The MRI program does not support sustaining infrastructure



OFFICE OF INTEGRATIVE ACTIVITIES

MRI Proposals: The Basics

- **Submission limit:**

- 3 per organization: *If three proposals are submitted, at least one of the proposals must be for instrument development.*

- **Cost-sharing** at the level of 30% of the **total project cost** is required for Ph.D.-granting institutions and non-degree-granting organizations.

- Cost-sharing is not required for non-Ph.D. granting institutions***

- At the time of submission, PI's are asked to identify an NSF division(s) to review proposal – NSF reserves the right to place proposals in appropriate divisions for review (***OIA should not be selected***)

- Restrictions on organization submission eligibility (see solicitation)



OFFICE OF INTEGRATIVE ACTIVITIES

MRI: Eligible Organizations

- **Ph.D. granting institutions of higher education:** accredited colleges and universities that have awarded more than 20 Ph.D.s or D.Sci.s in all NSF-supported fields during the combined previous two academic years. Additionally, any organization that has awarded a Ph.D. or D.Sci. in NSF-supported fields during the combined previous two academic years is considered to be a Ph.D.-granting institution if the only degrees it awards in NSF-supported fields are Ph.D.s or D.Sci.s.
- **Non-Ph.D. granting institutions of higher education:** accredited colleges and universities (including two-year community colleges) that award Associate's degrees, Bachelor's degrees, and/or Master's degrees in NSF-supported fields, but have awarded 20 or fewer Ph.D./D.Sci. degrees in all NSF-supported fields during the combined previous two academic years.
- **Non-degree granting organizations:** Organizations that do not award Associate's degrees, Bachelor's degrees, Master's degrees, and/or Ph.D.s or D.Sci.s. Non-degree-granting organizations also include institutions of higher education that award all of their degrees outside of NSF-supported fields.



OFFICE OF INTEGRATIVE ACTIVITIES

MRI-FY08¹

Major Research Instrumentation – FY08

**2008 Award
Snapshot - Overall**

Number Reviewed: 810

Dollars Requested : \$515.8 million

Number of Awards: 224 (39 DEV, 185 ACQ)

MRI Amount Awarded: \$93.2 million

NSF Amount Awarded: \$101.0 million

Overall Success Rate: 27.7%

Mean Award: \$451,000

Median Award: \$330,000

Number of Institutions that Participated: 449

Number of Institutions Awarded: 184

¹Last MRI competition not affected by one-time funding from the American Recovery and Reinvestment Act



OFFICE OF INTEGRATIVE ACTIVITIES

MRI-FY08¹

Major Research Instrumentation – FY08

2008 Award Snapshot – By Institution Type

	Ph.D.	non-Ph.D.	Non-degree	MSI
# reviewed	472	304	34	74
Mean request	\$765 K	\$430 K	\$704 K	\$555 K
Median request	\$568 K	\$323 K	\$559 K	\$397 K
# awards	129	84	11	24
NSF \$ awarded	\$73.7 M	\$22.4 M	\$4.8 M	\$9.8 M
MRI \$ awarded	\$67.8 M	\$21.2 M	\$3.9 M	\$9.3 M
Success rate	27.3%	27.6%	32.4%	32.0%
Mean award	\$571 K	\$267 K	\$440 K	\$407 K
Median award	\$465 K	\$211 K	\$474 K	\$309 K



¹Last MRI competition not affected by one-time funding from the American Recovery and Reinvestment Act

OFFICE OF INTEGRATIVE ACTIVITIES

MRI-FY08¹

Major Research Instrumentation – FY08

**2008 Award
Snapshot – EPSCoR**

Number of Proposals Reviewed: 181

Dollars Requested : \$116.5 M

Number of EPSCoR-eligible Awards: 50

Amount Awarded to EPSCoR-eligible Awards: \$20.2 M

EPSCoR Amount Awarded to MRI Awards: \$2.0 M

EPSCoR-eligible Success Rate: 27.6%

Eligible proposals co-funded by EPSCoR: 17

Mean award: \$404,000

Median award: \$295,000



¹Last MRI competition not affected by one-time funding from the American Recovery and Reinvestment Act

OFFICE OF INTEGRATIVE ACTIVITIES

Thank You!



OFFICE OF INTEGRATIVE ACTIVITIES