

# ***Major Research Instrumentation (MRI)***

---

**“Council on Undergraduate Research DIALOGUES 2003”**

**Hosted by George Mason University, Fairfax, VA  
February 24, 2003**

***Dragana Brzakovic, Staff Associate***

***Office of Integrative Activities***

***National Science Foundation***

***4201 Wilson Blvd., Room 1270, Arlington, VA 22230 USA***

***Tel. 703-292-8040 ~ <http://www.nsf.gov/od/oia/start.htm> ~ [dbrzakov@nsf.gov](mailto:dbrzakov@nsf.gov)***

---



# ***MRI Purpose***

---

- The MRI program is designed to increase access to scientific and engineering equipment for research and research training in U.S. academic institutions.
- The MRI program seeks to improve the quality and expand the scope of research and research training in science and engineering, and to foster the integration of research and education by providing instrumentation for research-intensive learning environments.
- The MRI program encourages the development and acquisition of research instrumentation for shared use across academic departments, among research institutions, and in concert with private sector partners.



# Goals

- Support the acquisition, through purchase, upgrade, or development, of major state-of-the-art instrumentation for research, research training, and integrated research/education activities at U.S. Institutions;
- Improve access to and increase use of modern research and research training instrumentation by scientists, engineers, and graduate and undergraduate students;
- Enable academic departments or cross-departmental units to create well-equipped learning environments that integrate research and education;
- Foster the development of the next generation of instrumentation for research and research training; and
- Promote partnerships between academic researchers and private sector instrument developers.



# *Eligible Institutions*

---

- U.S. Institutions of Higher Education
  - Independent Non-Profit Research Institutions
  - Research Museums
  - Legally Incorporated Consortia of Eligible Institutions
- ✓ Note: MRI will accept RUI proposals from institutions eligible to participate in NSF Research in Undergraduate Institutions (RUI) Program



# Evaluation Criteria

---

- Intellectual merit
- Broader impacts of the proposed activity

## Additional Considerations

- Geographic distribution;
- Instrumentation advances NSF's strategic goals;
- Non-Ph.D. granting and minority institutions;
- Ability to demonstrate the shared use of the instruments for research and/or research training.



# Program Administration

---

- MRI solicitation (NSF 01-171) published electronically on the NSF homepage-hard copy not available; Other MRI resources available --
  - ✓ FAQ's
  - ✓ lists of MRI awards (1996-2002)
  - ✓ MRI presentations
- Proposals required to be submitted electronically using the NSF FastLane system;
- At time of submission, PI's asked to identify an NSF division to review proposal.



# ***MRI Committee of Visitors (COV) - FY 2000***

---

- In June, 2000, panel of 12 external experts assessed both the process and the results of the MRI program
- Major findings of the COV:
  - ✓ MRI awards are consistently high quality
  - ✓ MRI awards result in supportive state-of-the-art instrumentation being placed in appropriate labs across the research community
  - ✓ MRI portfolio is balanced among high-risk, multidisciplinary, and innovative projects
- Major recommendations of the COV:
  - ✓ Increase attention to “broader impacts” by proposers, reviewers, and NSF program officers
  - ✓ Encourage submission of MRI proposals by non-Ph.D. granting institutions
  - ✓ Encourage submission of development proposals



# FY 2003 Overview

- Instrumentation Acquisition or Development
- Two proposals for acquisition or development; a third for development. An institution may be part of a consortium
- Award size--\$100,000 to \$2 Million
  - ✓ (exceptions for non-Ph.D. granting institutions and for mathematical and social, behavioral and economic sciences)
- Cost sharing--30% required
  - ✓ (exceptions for development proposals and for non Ph.D. granting institutions)
- Deadline for proposal submission: January 23, 2003

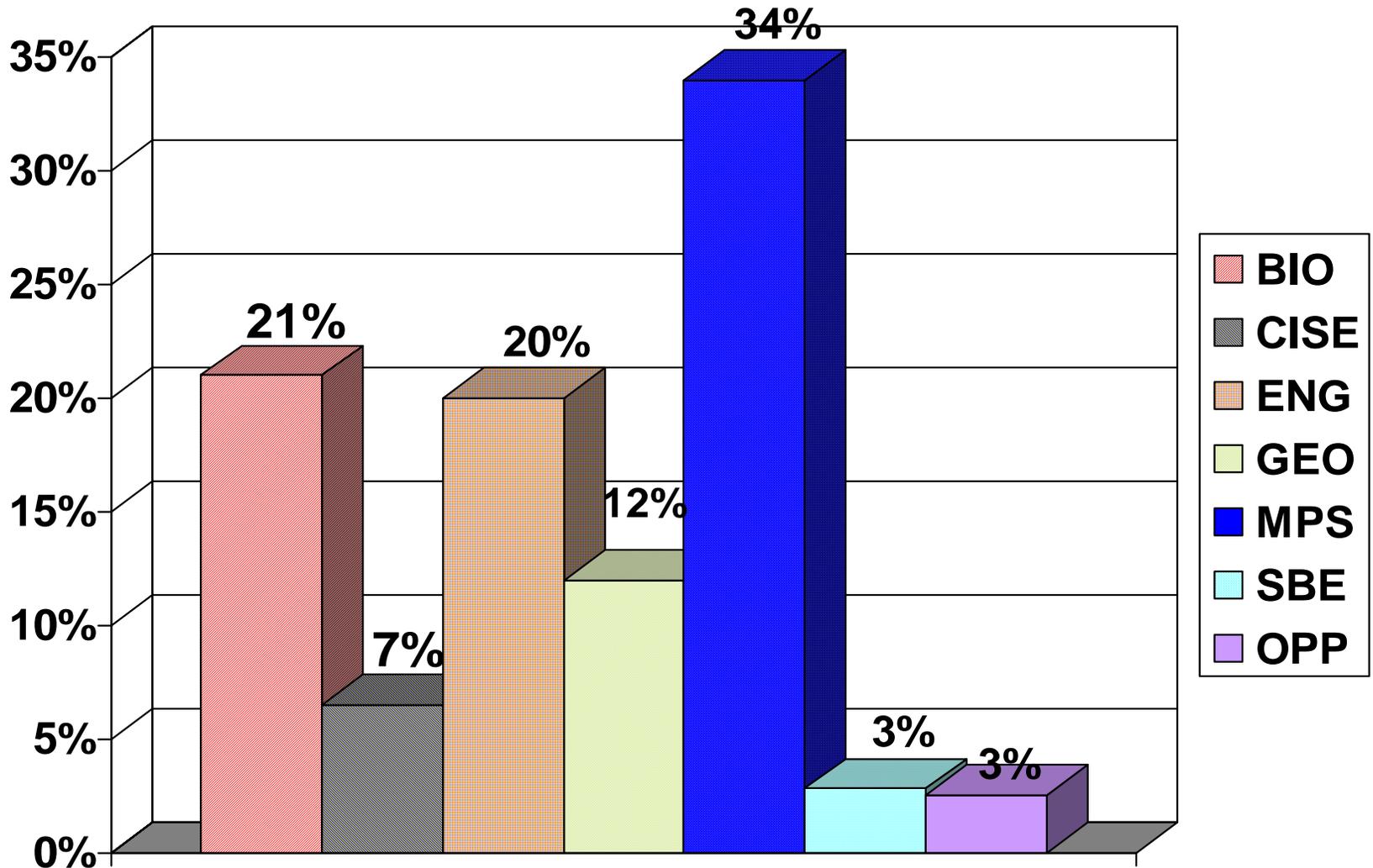


# Cost Sharing

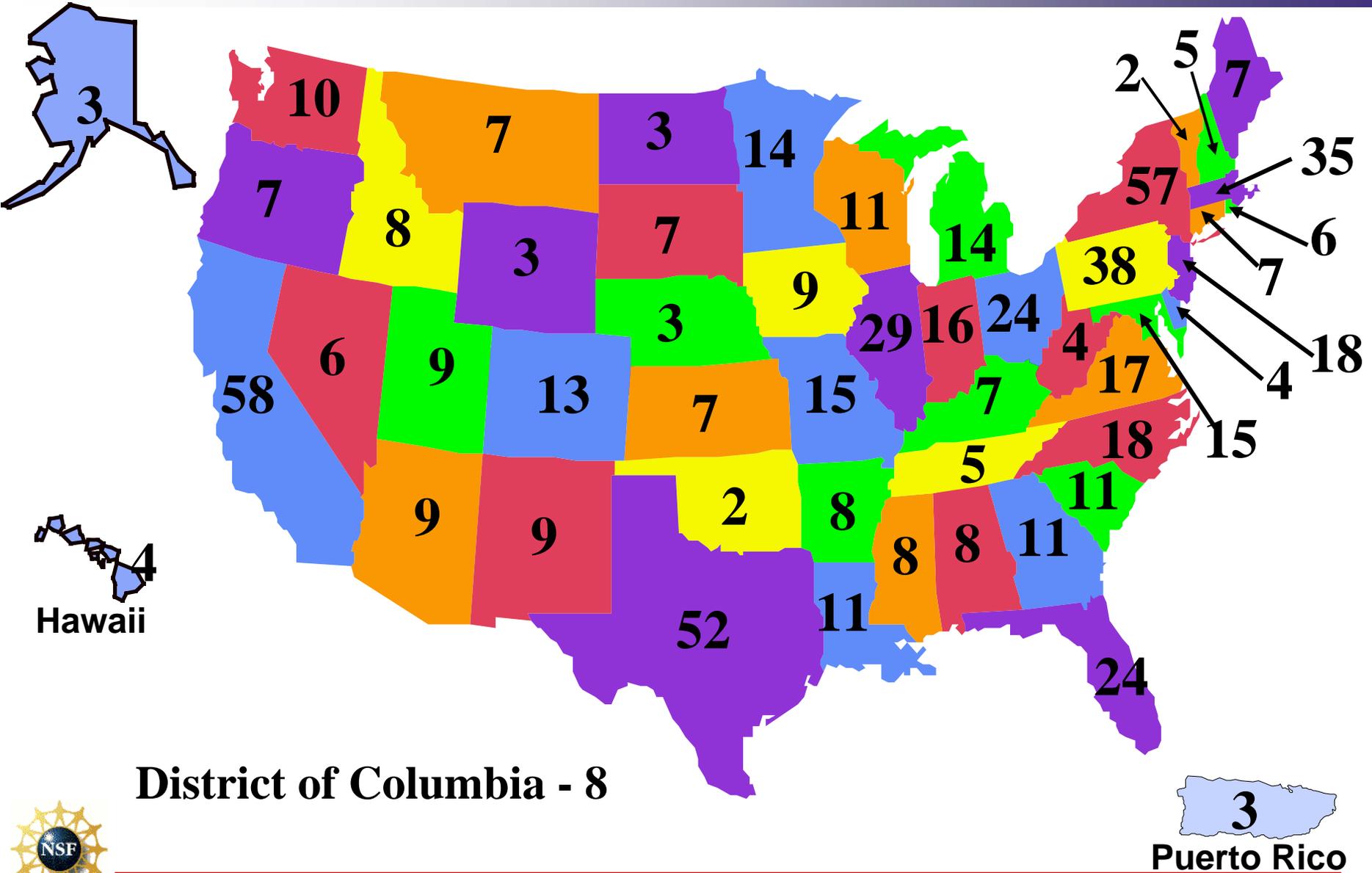
- Standard
  - ✓ 30% of total eligible project cost
- Exception for Development Proposals
  - ✓ 30% of total equipment cost
- Exception for Non-Ph.D. Granting Institutions
  - ✓ No cost sharing required for non-Ph.D. granting institutions



# FY 2002 Awards by Directorate



# FY 2002 Proposals Submitted by State



# ***FY2002 Snapshot***

---

- Number of Proposals Submitted: 692
- Dollars Requested: \$296,581,578
- Number of Awards: 279
- Dollars Awarded: \$81,624,367
- Success Rate: 40%
- Average Award: \$292,560
- Number of States Represented: 50
- Number of Institutions that Participated: 373
- Number of Institutions Awarded: 222



# ***MRI Proposal and Award Information by Fiscal Year (FY 1997-2002)***

<b>Fiscal Year</b>	<b># Proposals</b>	<b>\$ Requested</b>	<b># Awards</b>	<b>Total NSF Funding</b>
1997	503	\$269,837,421	164	\$59,260,773
1998	479	\$248,512,726	165	\$56,363,744
1999	472	\$261,520,174	166	\$56,772,169
2000	476	\$251,903,360	156	\$53,138,543
2001	741	\$304,336,164	308	\$78,569,885
2002	692	\$296,581,578	279	\$81,624,367
<b>TOTAL:</b>	<b>3,363</b>	<b>\$1,632,691,432</b>	<b>1238</b>	<b>\$385,729,481</b>



# ***MRI: Non Ph.D. Granting Institutions***

---

## **FY 2001**

- Number of Proposals Submitted: 302
- Dollars Requested: \$54,853,487
- Number of Awards: 170
- Dollars Awarded: \$25,327,090
- Success Rate: 56%
- Average Award: \$148,983
- Number of States Represented: 44
- Number of Institutions Represented: 228

## **FY 2002**

- Number of Proposals Submitted: 251
- Dollars Requested: \$56,893,260
- Number of Awards: 130
- Dollars Awarded: \$24,344,862
- Success Rate: 52%
- Average Award: \$187,268
- Number of States Represented: 47
- Number of Institutions Represented: 187



# ***MRI: Minority Serving Institutions***

---

## **FY 2001**

- Number of Proposals Submitted: 66
- Dollars Requested: \$23,027,797
- Number of Awards: 25
- Dollars Awarded: \$5,433,926
- Success Rate: 38%
- Average Award: \$217,357
- Number of States Represented: 16
- Number of Institutions Represented: 39

## **→FY 2002**

- Number of Proposals Submitted: 75
- Dollars Requested: \$32,183,696
- Number of Awards: 32
- Dollars Awarded: \$8,375,641
- Success Rate: 43%
- Average Award: \$261,739
- Number of States Represented: 18
- Number of Institutions Represented: 44



# ***MRI: Minority Serving Institution Definition***

---

- Per 20 UCSA Section 1067k(3), a minority postsecondary institution is defined as an institution “whose enrollment of a single minority or a combination of minorities...exceeds 50 percent of total enrollment”;
- Per 20 USCA Section 1101a(5), a Hispanic Serving institution is defined as “an institution whose enrollment of Hispanic students reaches, or exceeds, 25% of full time equivalent undergraduate enrollment”;



# Minority Serving Institution (MSI) Data

