

Mary Ann Horn Division of Mathematical Sciences Fahmida Chowdhury Division of Graduate Education



Trends in Engineering and Mathematical Sciences

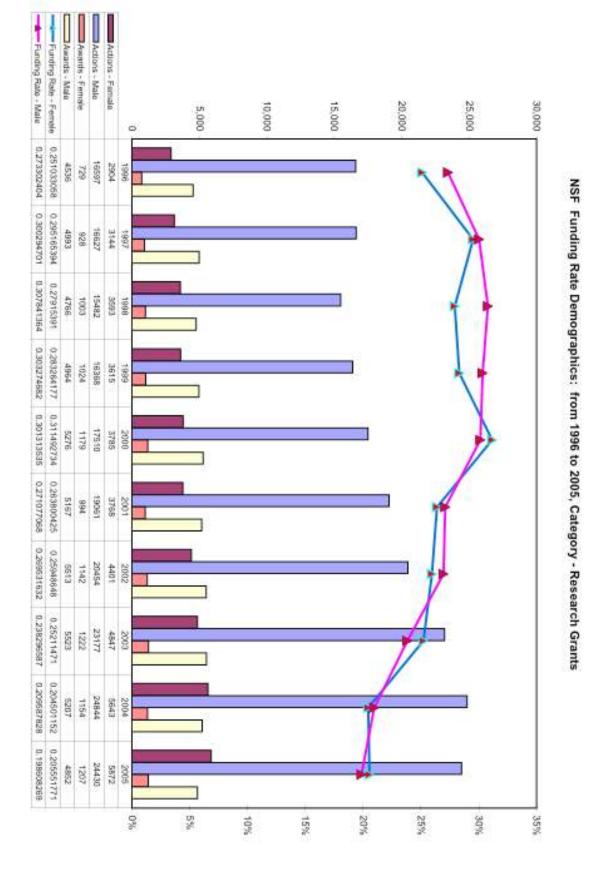
- The following slides show various funding trends within NSF in engineering, computer sciences and mathematical sciences
- Educational grants are not included in the graphical data
- Slide descriptions precede each graph

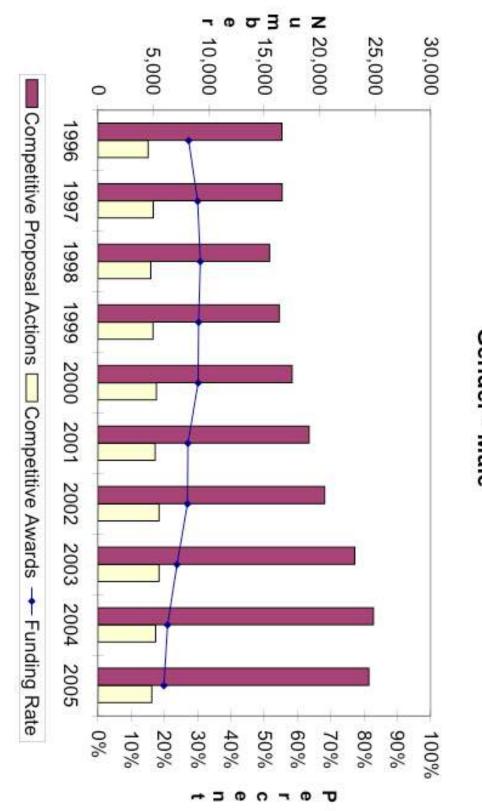


Graph Set 1: Overall Research Grants 1996-2005

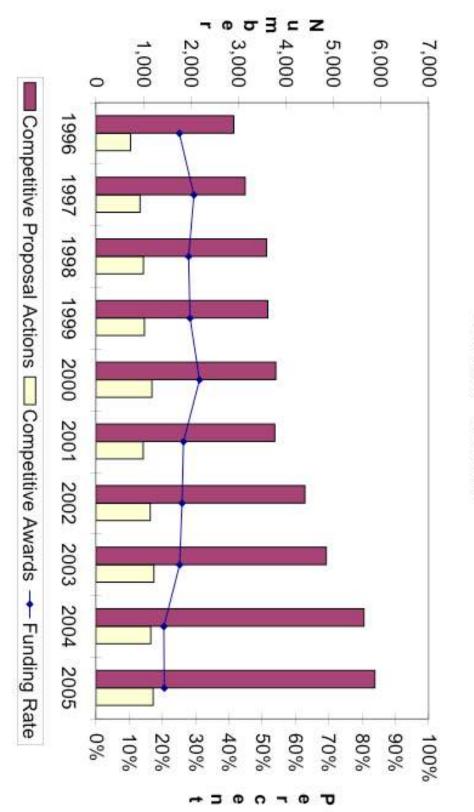
- Women submit a fraction of the number of the proposals, typically between 20-25% of total research proposals submitted
- Total number of research proposals submitted has steadily increased
- Overall funding rate has gradually decreased in recent years
- Percentage overall funding rate for men and women is approximately the same









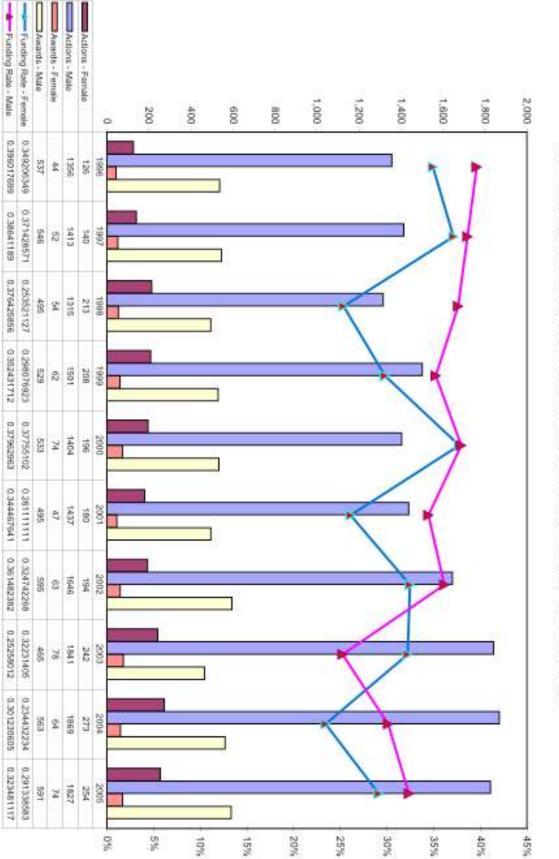




Graph Set 2: DMS Research Grants 1996-2005

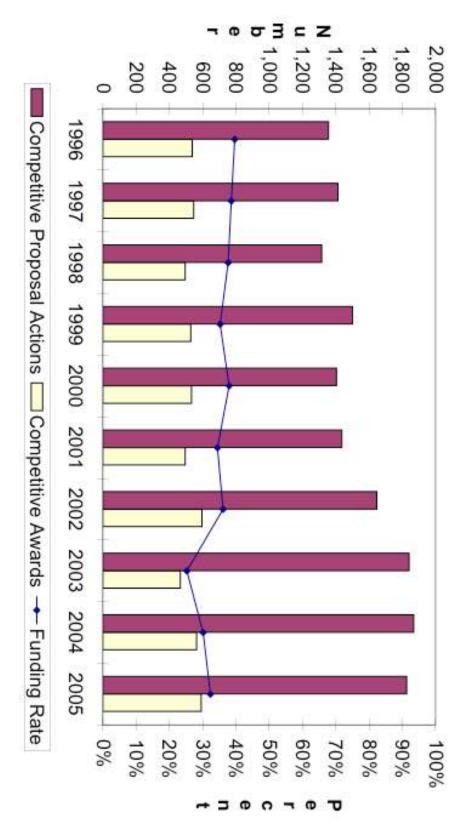
- Percentage funding rate for women has been higher than men during most years
- DMS funding rates run between 25-30%
- Women submit a fraction of the number of the proposals, typically between 10-15% of research proposals submitted to DMS
- Total number of research proposals submitted has steadily increased, but leveled off in 2005

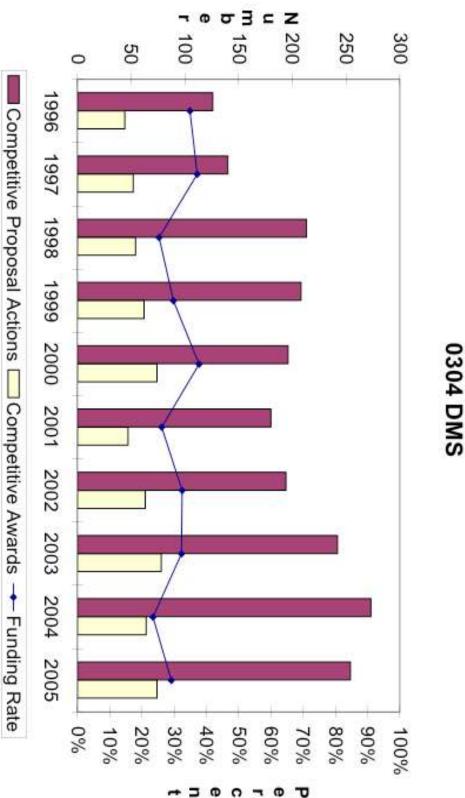


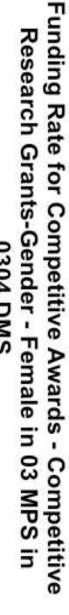


NSF Funding Rate Demographics: from 1996 to 2005 in DMS, Category - Research Grants





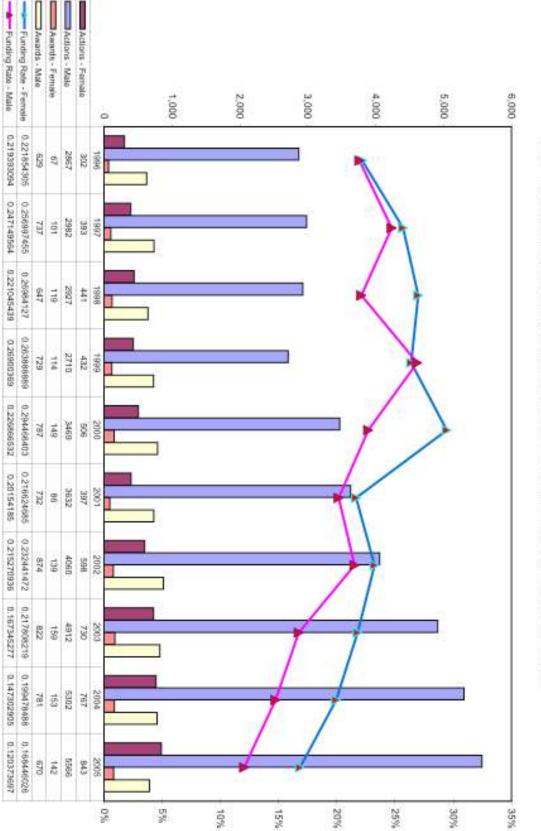




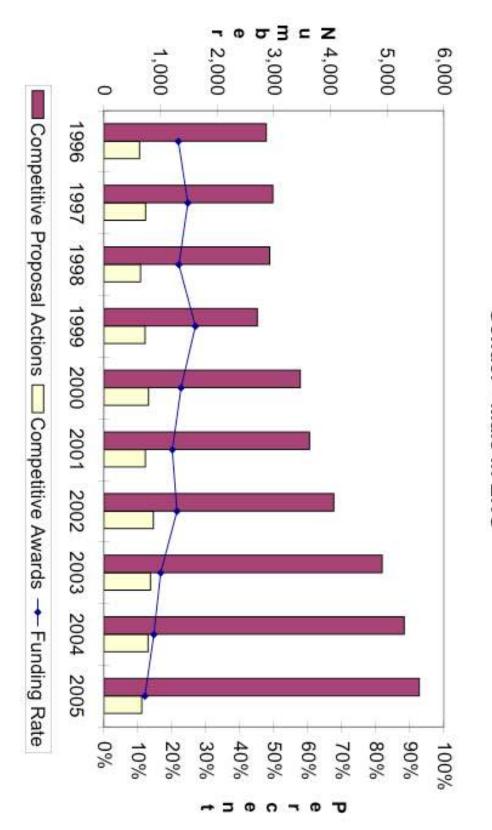
Graph Set 3: ENG Research Grants 1996-2005

- Percentage funding rate for women has been higher than men during most years
- ENG funding rates currently run between 10-15%
- Women submit a fraction of the number of the proposals, typically between 10-15% of research proposals submitted to ENG
- Total number of research proposals submitted has steadily increased

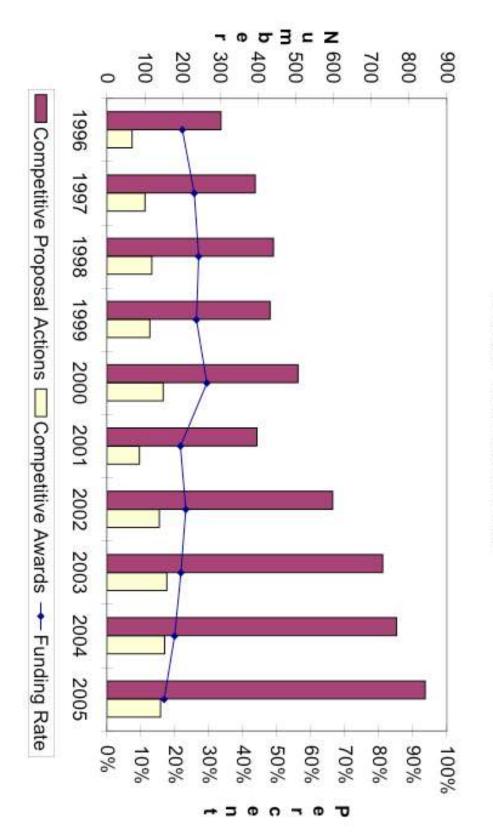








Funding Rate for Competitive Awards -Competitive Research Grants-Gender - Male in ENG

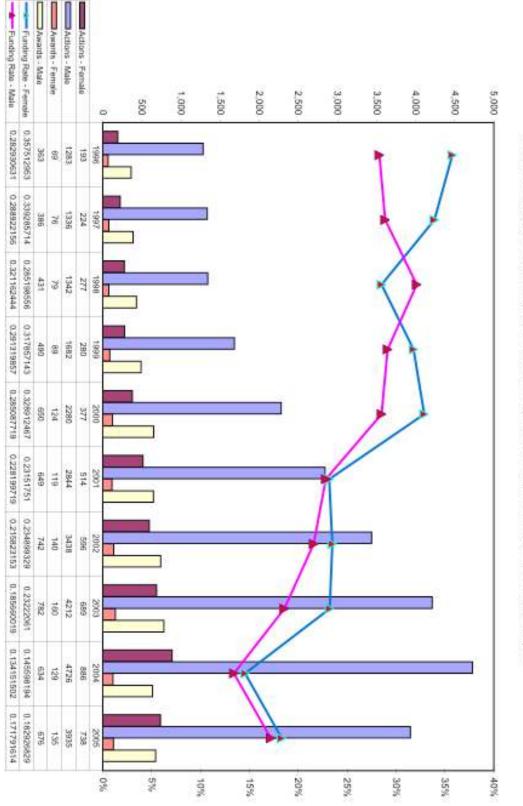


Funding Rate for Competitive Awards -Competitive Research Grants-Gender - Female in ENG

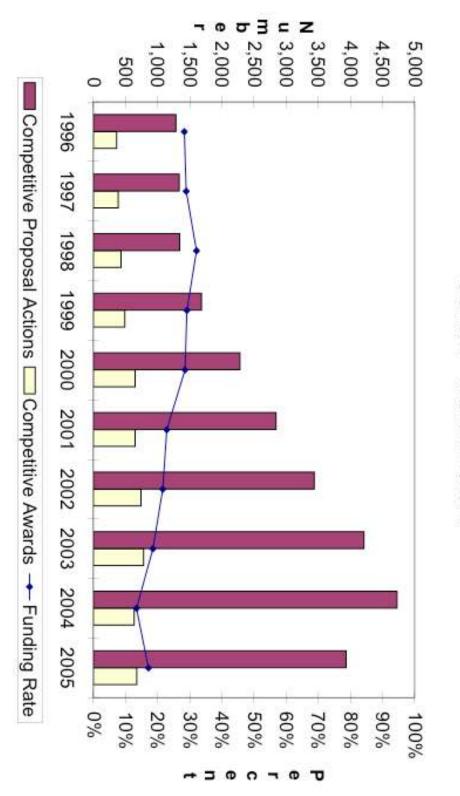
Graph Set 4: CISE Research Grants 1996-2005

- Percentage funding rate for women has been higher than men during most years
- CISE funding rates have decreased through 2004 and were between 15-20% in 2005
- Women submit a fraction of the number of the proposals, typically between 15-20% of research proposals submitted to CISE
- Total number of research proposals submitted has steadily increased through 2004, but dropped off in 2005

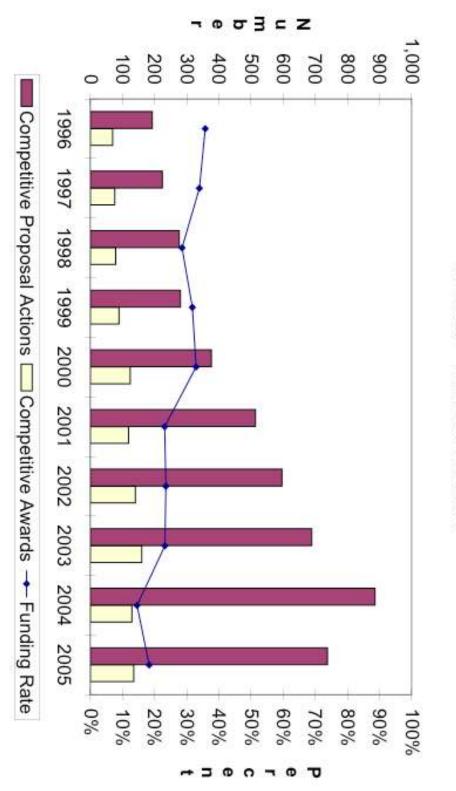




NSF Funding Rate Demographics: from 1996 to 2005 in CISE, Category - Research Grants









Discussion Questions

- Why are so few women submitting proposals?
 - Percentage of women as research faculty still relatively low. Why?
- Does the low participation of women in research affect students and younger generations of researchers? How?
- How can this be changed? What can or should the community do to help?
- What can the community (IEEE, AMS, SIAM, universities, departments, etc.) do to help?
- How is NSF trying to address the issue?

