

**CRA-W Career Mentoring Workshop,
Workshop at FCRC - June 6, 2003**



**A Short Stroll down Memory Lane:
Reflections on Women in Computing in
the Last Decade and a Half**

Caroline Wardle
Senior Science Advisor, CISE/EIA
National Science Foundation
cwardle@nsf.gov

... the 80's



- 1982: “Chilly Classroom Climate for Women” by Association of American Colleges.
- 1984: Martha Sloan first female president of IEEE Computer (women=5 out of 40)
- 1987: Cooper-Huff experiment on sex-stereotyping in educational software
- 1987: “Systers” mailing list founded by Anita Borg.
- 1989: Report to NSF , “Women in Computer Science”, by Nancy Leveson of UC, Irvine.

... the early 90's



- 1990: “They’re not Dumb, they’re Different” by Sheila Tobias.
- 1990: ACM-W established. Headed by Shari Pfleeger.
- 1990: “Becoming a Computer Scientist” by ACM-W.
- 1991: “Why are there so few female computer scientists?” by Ellen Spertus of MIT.
- 1991: CRA-W established. Headed by Nancy Leveson and Maria Klawe.
- 1992: NSF workshop on expanding opportunities for women in computing . Organized by Susan Conry of Clarkson University.

... the mid 90's



- 1993: Martha Sloan first female president of IEEE (women=1 out of 42).
- 1993: First CRA-W workshop on academic careers for women in CS at FCRC'93.
- 1994: First Grace Hopper Celebration. Organized by CRA-W under leadership of Anita Borg & Telle Whitney.
- 1994: First Distributed Mentoring Project. Organized by Joe O'Rourke of Smith College.
- 1996: Nico Habermann Award to Caroline Wardle, NSF.
- 1997: "The Incredible Shrinking Pipeline", by Tracy Camp of Colorado School of Mines.

... The late 90's



- 1997: Welcome Address at 2nd. Grace Hopper Celebration, Caroline Wardle.
- 1997: Institute for Women in Technology (IWT) established by Anita Borg.
- 1998: Doris Carver elected president of IEEE Computer Society (women=5 of 30).
- 1999: Carly Fiorina appointed CEO of Hewlett-Packard.
- 1999: NSF virtual workshop on expanding opportunities for women in IT. Organized by Doris Carver of Louisiana State.
- 1999: MIT Study on the Status of Women Faculty in Science. Led by Nancy Hopkins of MIT.

... The early 2000's



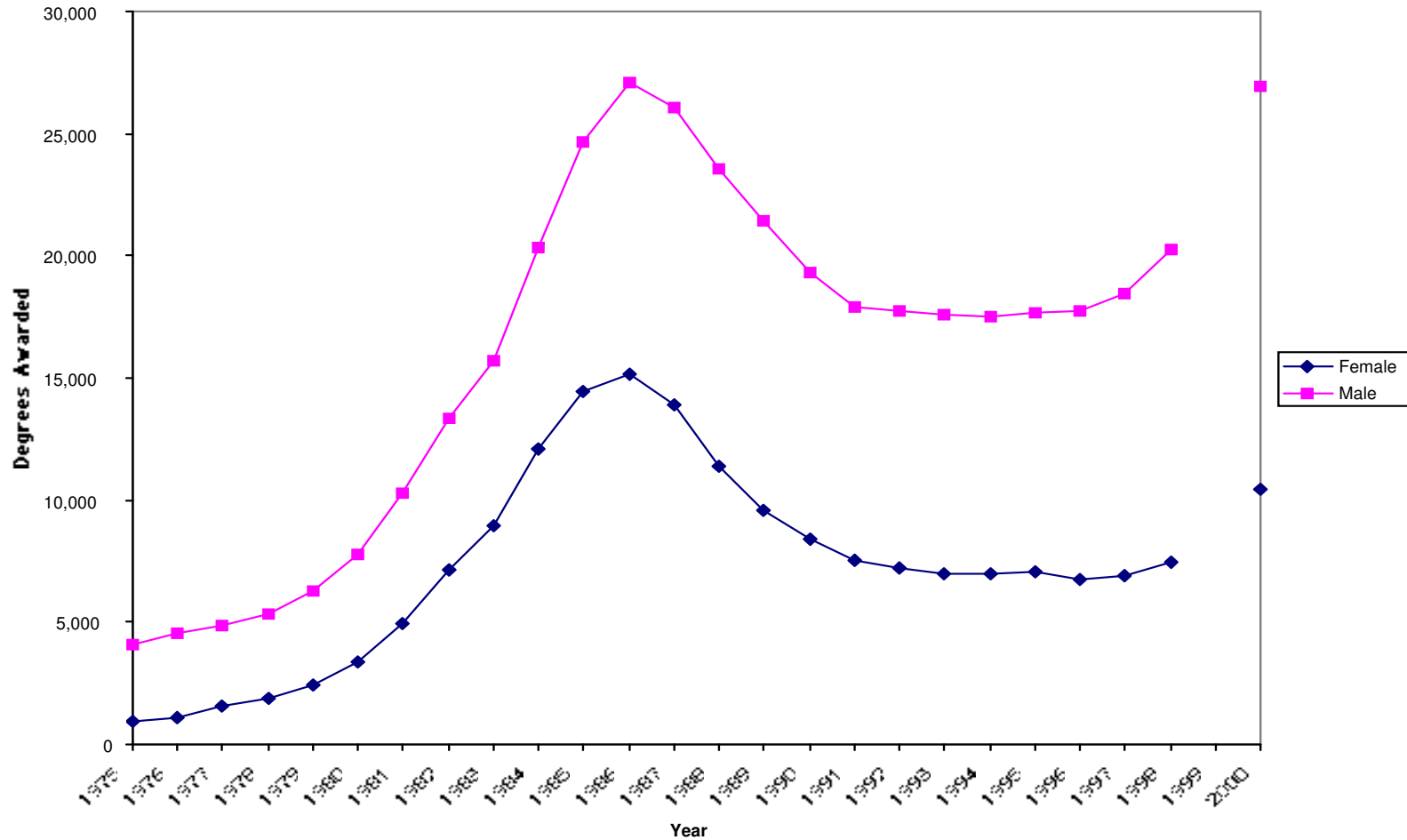
- 2000: “Tech-Savvy, Educating Girls in the New Computer Age” by AAUW.
- 2000: “Obtaining Federal Funding” in CRA-W’s “Career Mentoring Workshops”, by Caroline Wardle.
- 2000: First NSF ITWF competition. Directed by Caroline Wardle.
- 2001: Fran Berman appointed Director of SDSC and NPACI.
- 2002: “Unlocking the Clubhouse: Women in Computing” by Jane Margolis and Allan Fisher.

... Reaching 2003



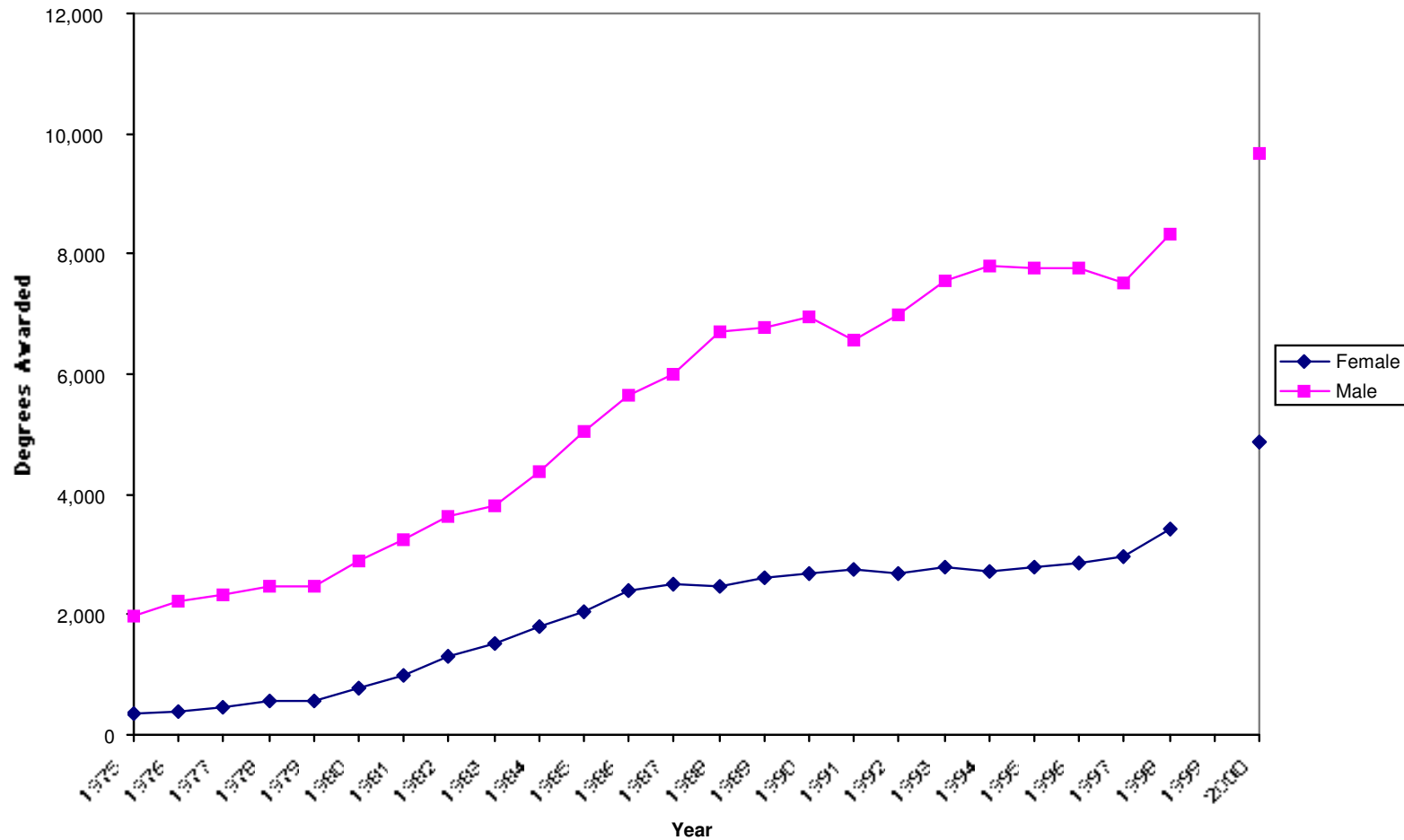
- 2002: ACM SIGCSE Special Issue on Women and Computing, editors John Impagliazzo and Tracy Camp.
- 2002: SET Fair (Report on Women in Science, Engineering, and Technology) by Baroness Greenfield, U.K.
- 2002: Maria Klawe elected president of ACM (women=5 of 29).
- 2003: Maria Klawe appointed Dean of the School of Engineering and Applied Science, Princeton U.

CS bachelor's degrees awarded, by sex: 1975-1998, 2000



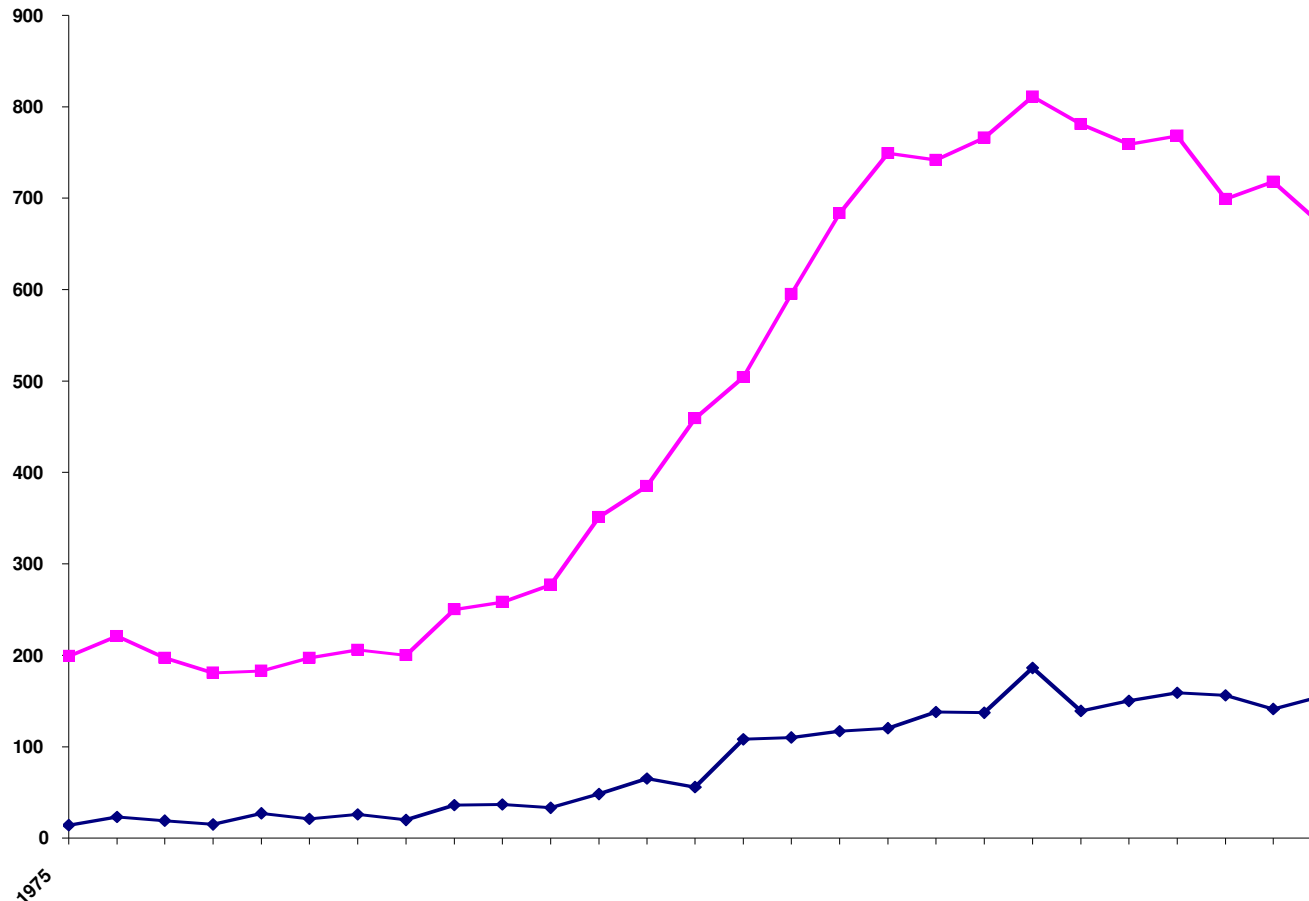
Source: National Science
Foundation SRS Data

CS master's degrees awarded, by sex: 1975-1998, 2000



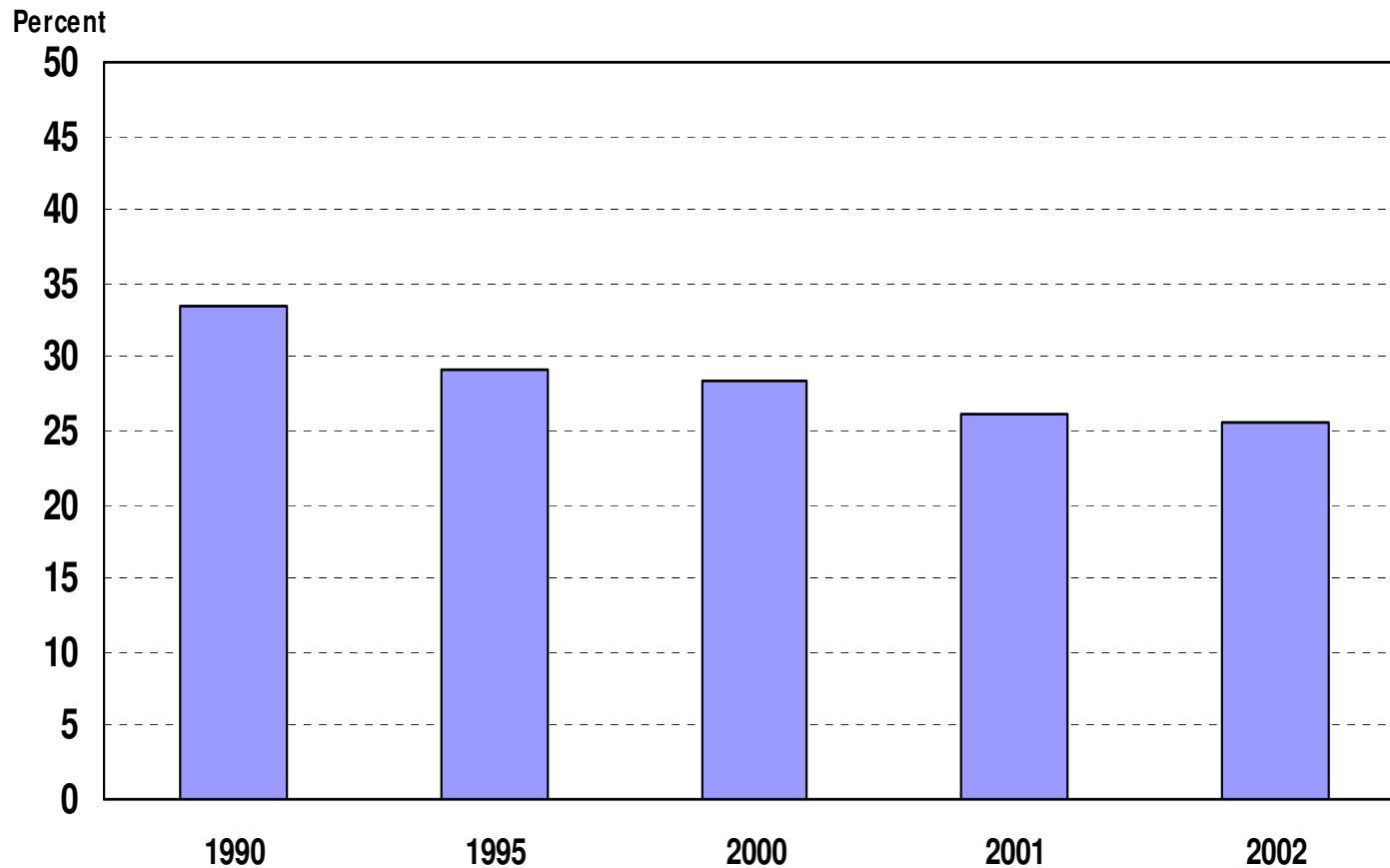
Source: National Science
Foundation SRS Data

CS doctoral degrees awarded, by sex: 1975-2001



Source: National Science
Foundation SRS Data

Women as a percent of IT workers with college degrees (includes non-citizens)



NOTE: IT workers are computer programmers and computer systems analysts and scientists with at least a bachelor's degree. Annual estimates are averages of 12 months.

SOURCE: U.S. Bureau of the Census, Current Population Survey.

CISE Support for Increasing the Representation of Women in IT



Note: CISE funds additional NSF-wide programs such as ADVANCE