



Doctoral Completion of NSF Graduate Research Fellows 1989-1998 cohorts

William Hahn
GRF Program Director
National Science Foundation



NSF GRF Program Highlights and History

- ❖ Initiated in 1952 – oldest NSF program
- ❖ >43,000 students including FY2008 awards
- ❖ 2,031 Minority Graduate Fellowships, 1978-1998
- ❖ High rates of PhD completion, shorter time to degree completion, faculty position placement, research productivity, other measures of success



Graduate Research Fellowship Features

- ❖ 3 yrs of funding (stipend and cost of education allowance) to be used within 5 yrs of award
- ❖ Flexible - choice of NSF-supported discipline, graduate institution (US or foreign), academic program and advisor, no service requirement
- ❖ Travel and cyberinfrastructure support
- ❖ Monetary value has varied – response in applicant #
 - ❖ Funding rates have ranged from 8.0-22.9%



GRF Review and Award Process

Rank	Applic. #	Score	Target	AWARD	
1	1903	48.5	F	X	
2	5354	48.3		X	
3	0543	47.9	URM	X	QG 1
4	6198	47.7	F	X	
5	1865	47.3	F/S	X	
6	2933	46.5		X	
7	8037	46.4	URM/F	X	
8	2144	45.2	F	X	
9	4982	44.3		X	
10	5392	42.7	F		
11	3419	42.1			QG 2
12	0974	41.9	S	X	
13	4911	40.5			
14	7632	40.4			
15	2547	39.1	S		
16	3481	38.5	URM		
17	6583	37.4	F		
18	1862	36.9			
...					
99	3820	14.7	S		QG 3 & QG 4
100	7629	11.2			

KEY

QG = Quality Group

F = Female

**URM = Underrepresented
Minority**

S = High School State



Evaluation Caveats

- ❖ Review of '89-'98 applicant/fellow data incomplete
 - ❖ 3 contractors, 4 different database packages
 - ❖ Migration to FastLane
 - ❖ QG2 unfunded, discipline, demographic & MGF data still under review

- ❖ End of MGF program in 1998
 - ❖ Merged data & applicant pool

- ❖ Changing program management
 - ❖ Eligibility criteria, panelist demographics, review criteria

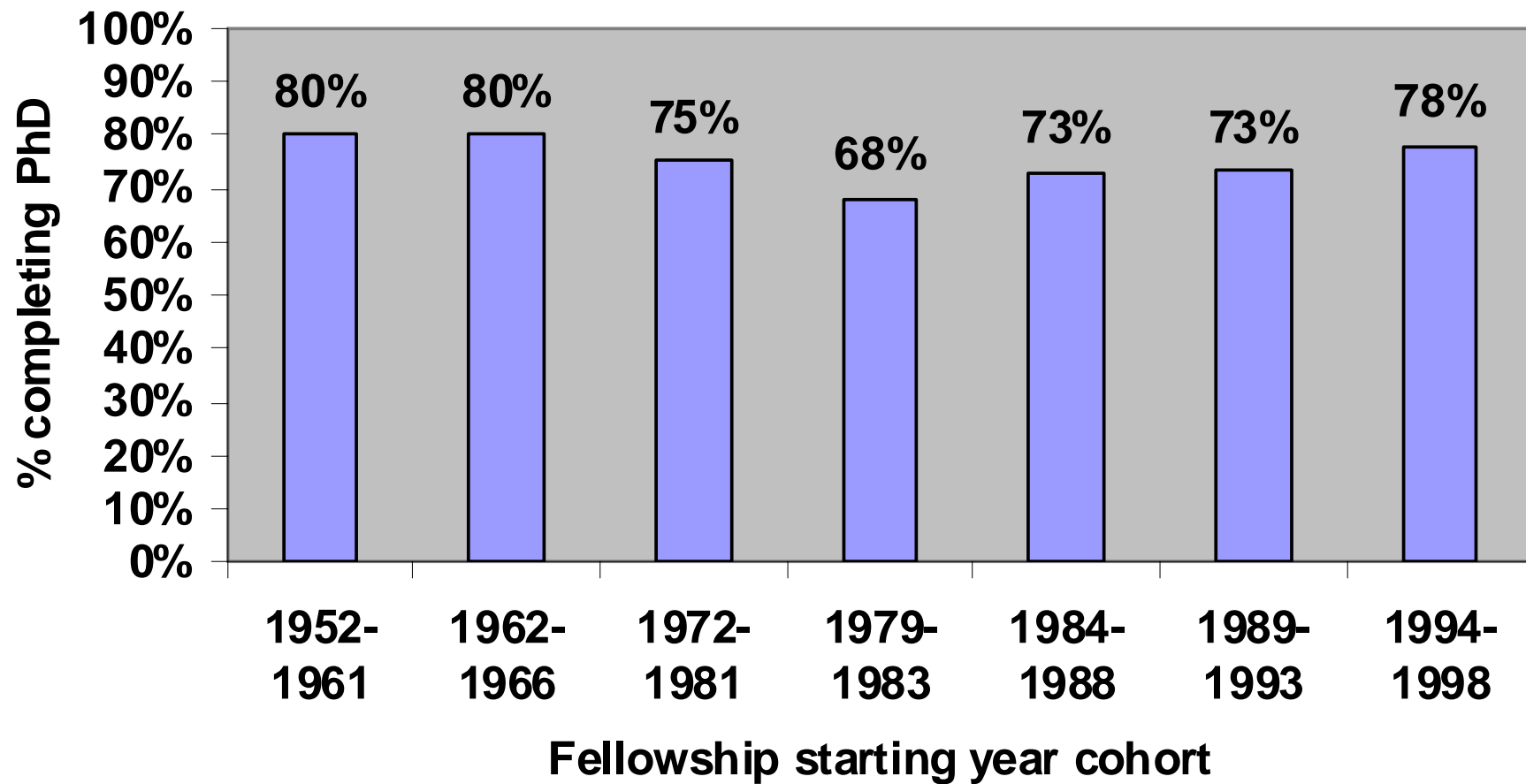


GRFP Evaluation History

- ❖ Harmon (1977) – PhD completion by 1974
 - ❖ 80%* for 1952-1961 & 1962-1966 cohorts
- ❖ Snyder (1988) – PhD completion by 1984
 - ❖ 75% of 1972-1976 (sample)
- ❖ Baker (1994) – PhD completion by 1988
 - ❖ 75% of 1972-1981 (full census)
- ❖ WestEd (2002) – PhD completion by 1999
 - ❖ 68% for 1979-1983; 73% for 1984-1988 cohort
- ❖ Current: GRFP/SRS/NORC
 - ❖ Overall awardees & gender comparison for 1989-1998

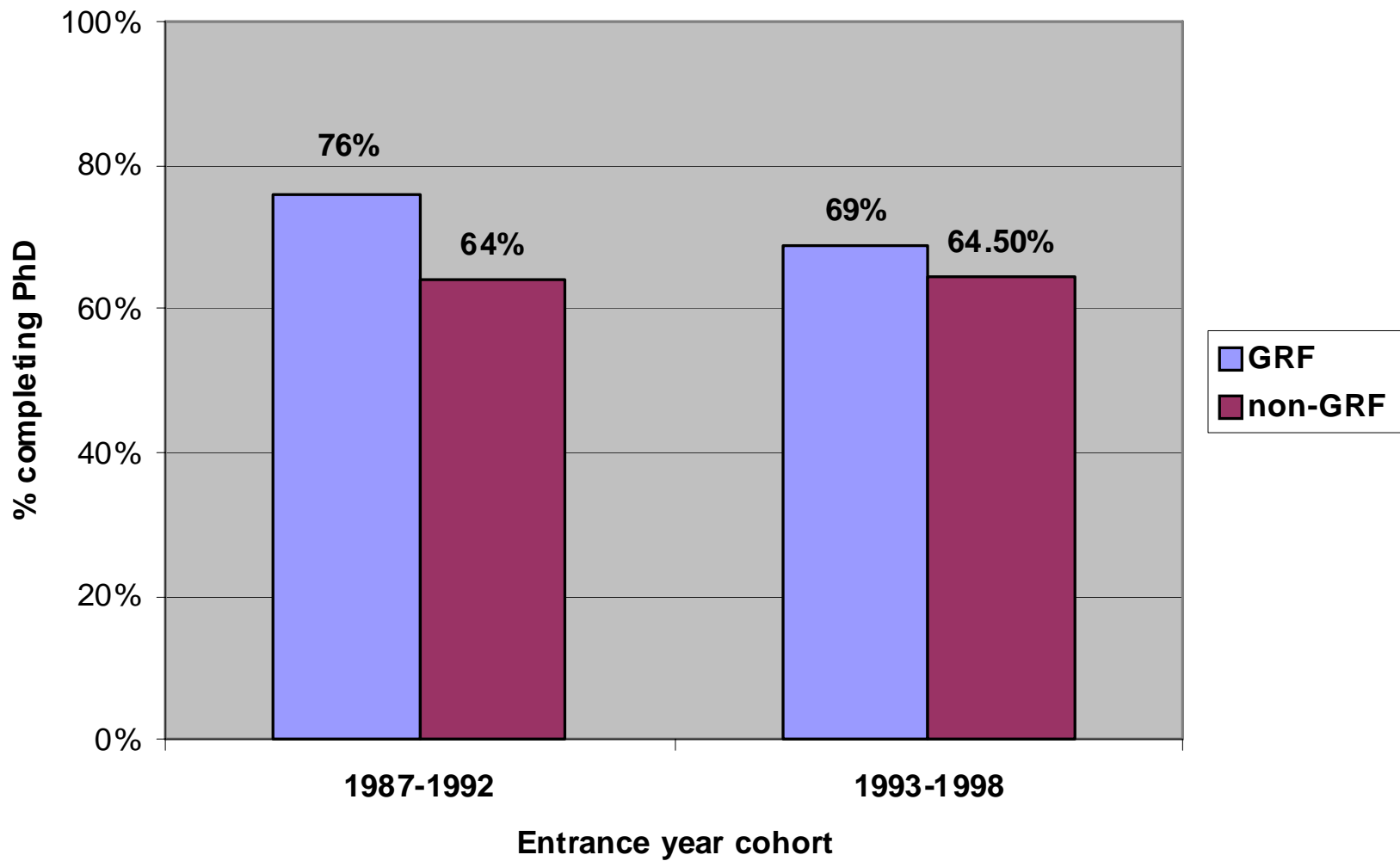


GRF Awardee 11(8)-yr PhD Completion Rates



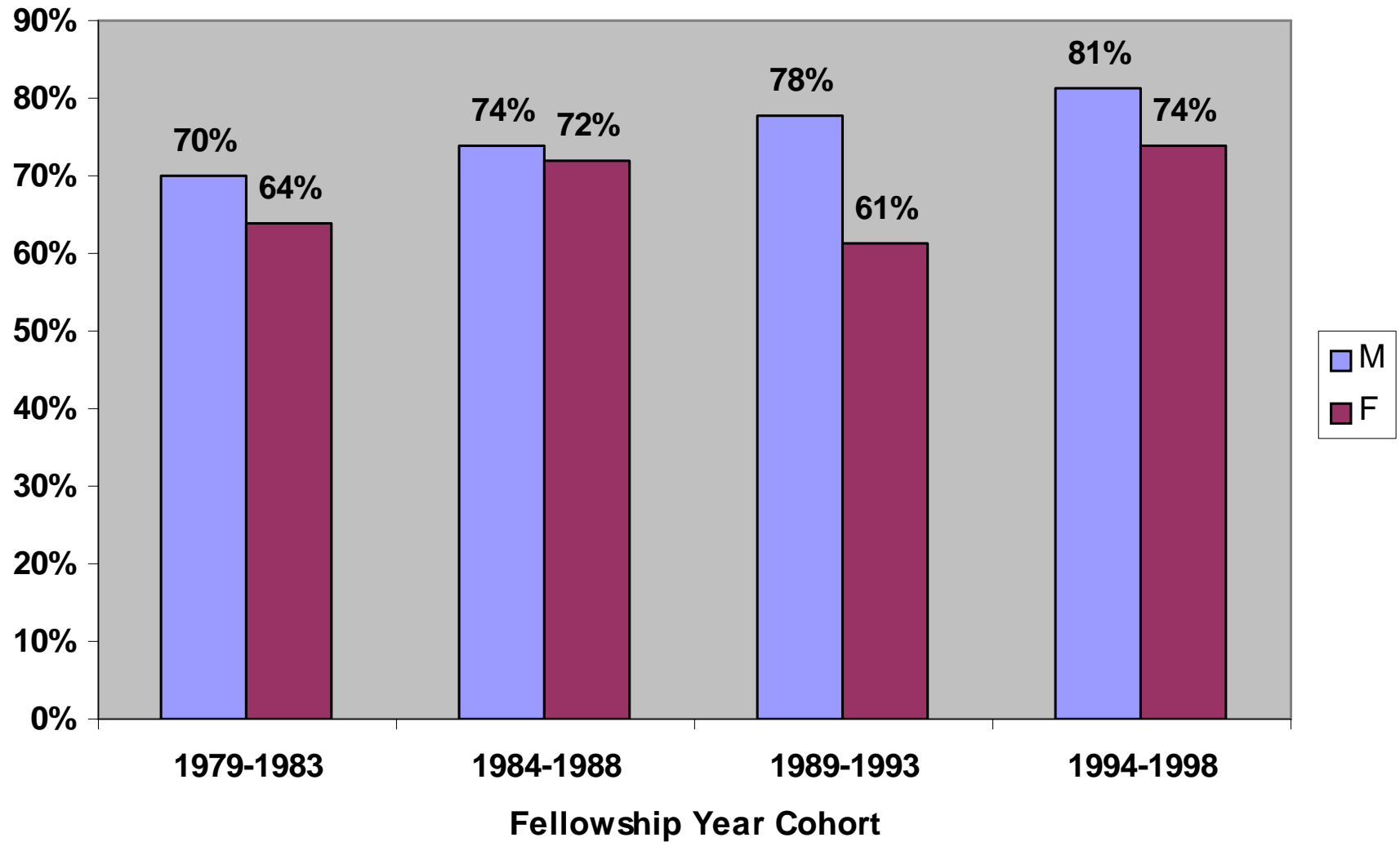


UC Berkeley STEM PhD completion rates (source: Judi Sui, 3/08)





Comparison of Male and Female GRF 11(8)-yr PhD Completion Rates





Other Considerations

- ❖ "Graduate" research fellowship – Master's degree
- ❖ Decline of award offers
 - ❖ >100/yr for 1980's & 1990's
 - ❖ <10/yr for past 6 years
- ❖ Mixed models of graduate funding
 - ❖ Comparison with traineeships, RAships
 - ❖ Comparison with other fellowship programs



Summary & Acknowledgements

- ❖ GRF graduation rates remain high
- ❖ Female GRF graduation rates variable
- ❖ URM graduation rate still to be determined

- ❖ DGE - Carol Stoel, Lew Siegel, Laura Petonito,
Dean Gerdeman
- ❖ SRS - Jaqui Falkenheim, Steve Cohen
- ❖ NORC - Vince Welch, Brianna Groenhout