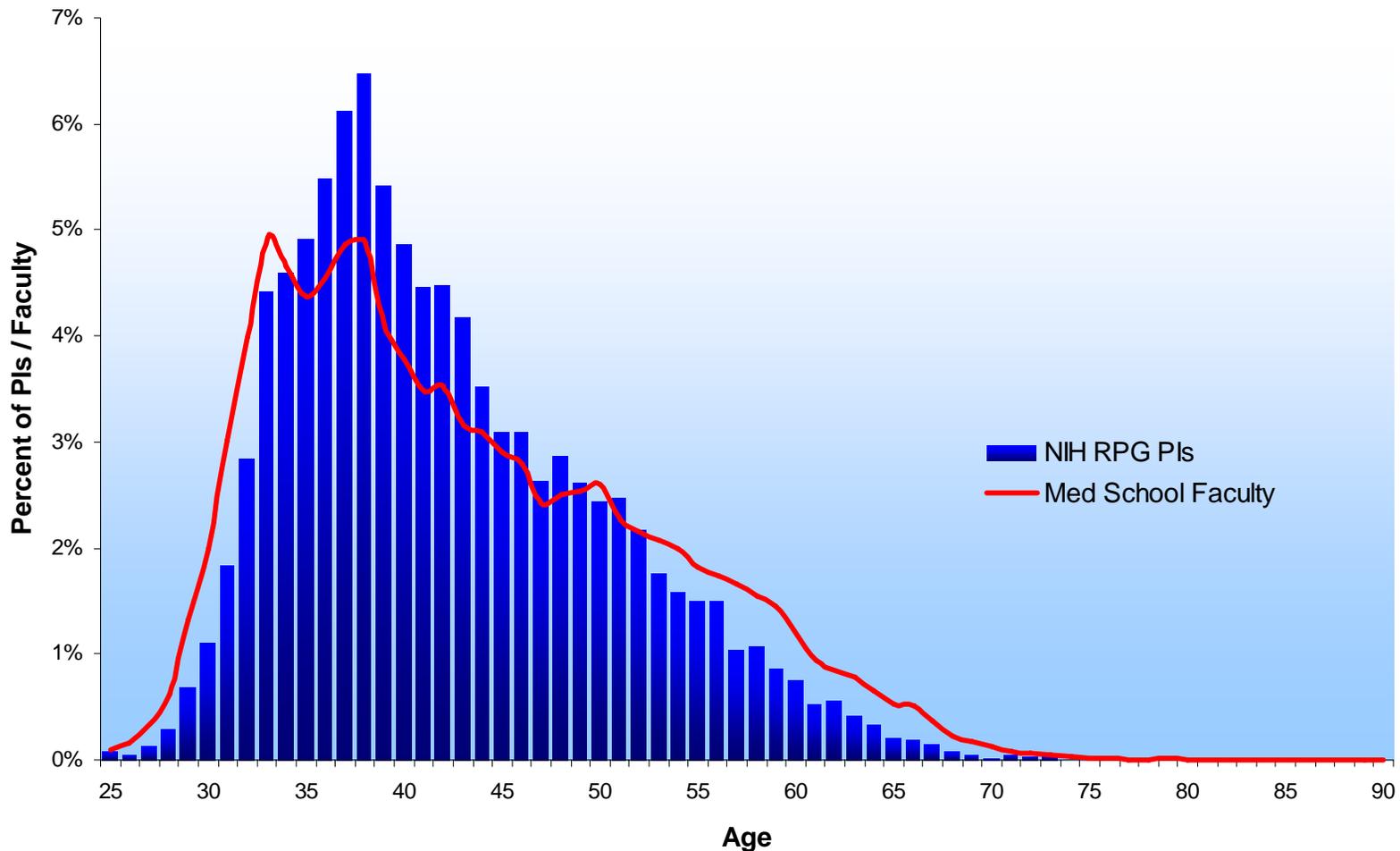




Some Observations on Demographics of NIH-funded Scientists

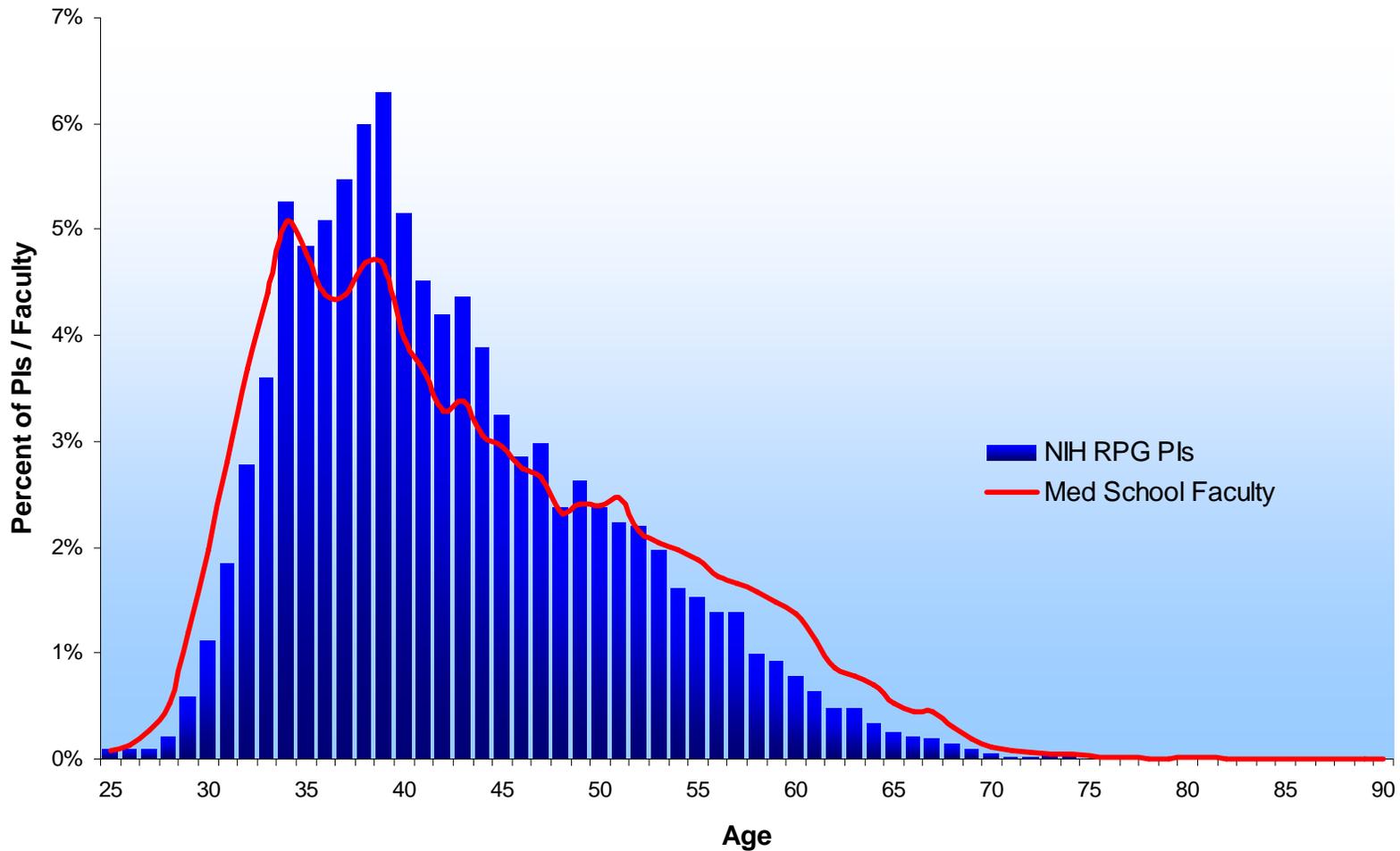
Policy Implications for New Investigators

Comparison of the Age of NIH PIs and 1980 Medical School Faculty



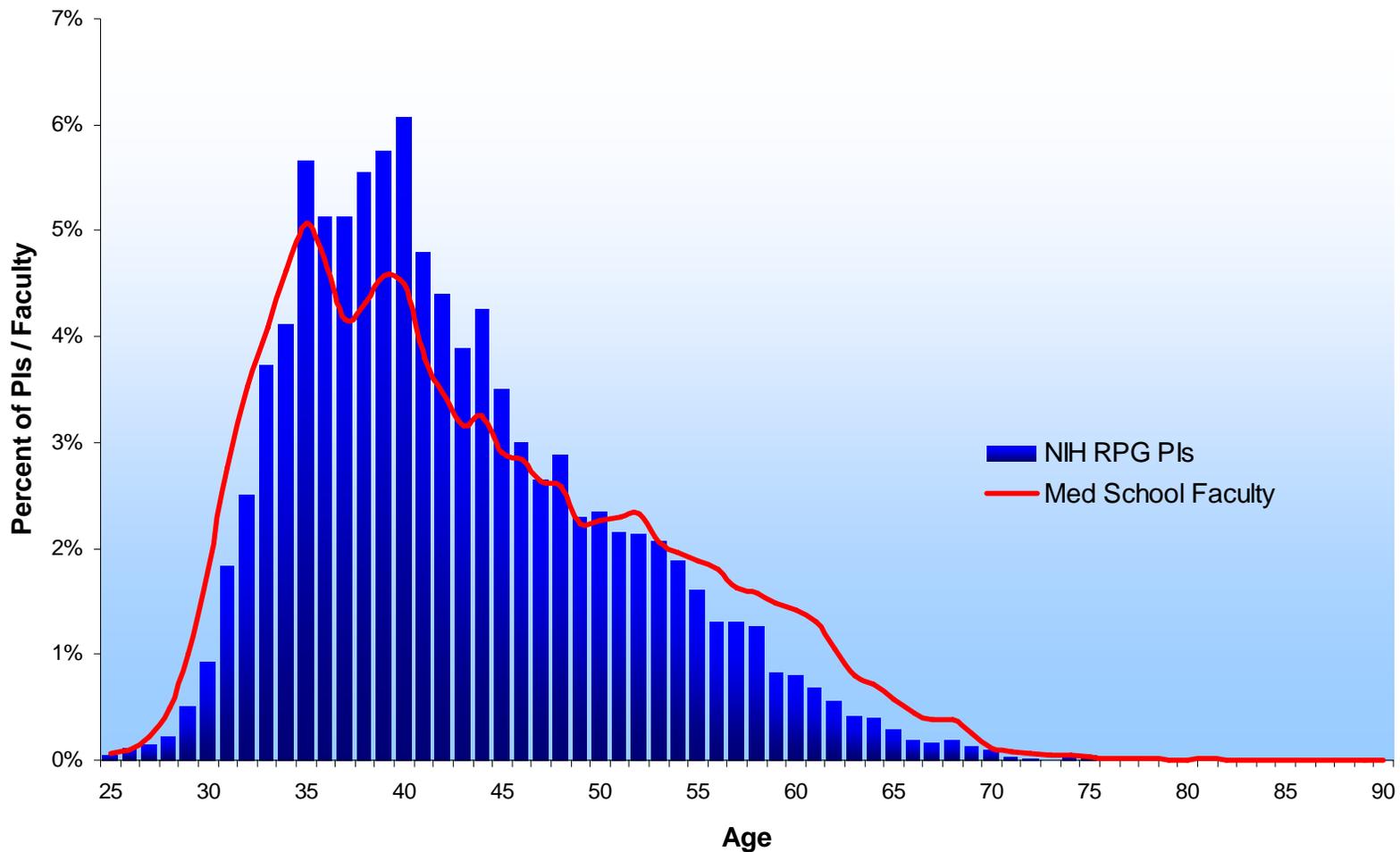
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH Pls and 1981 Medical School Faculty



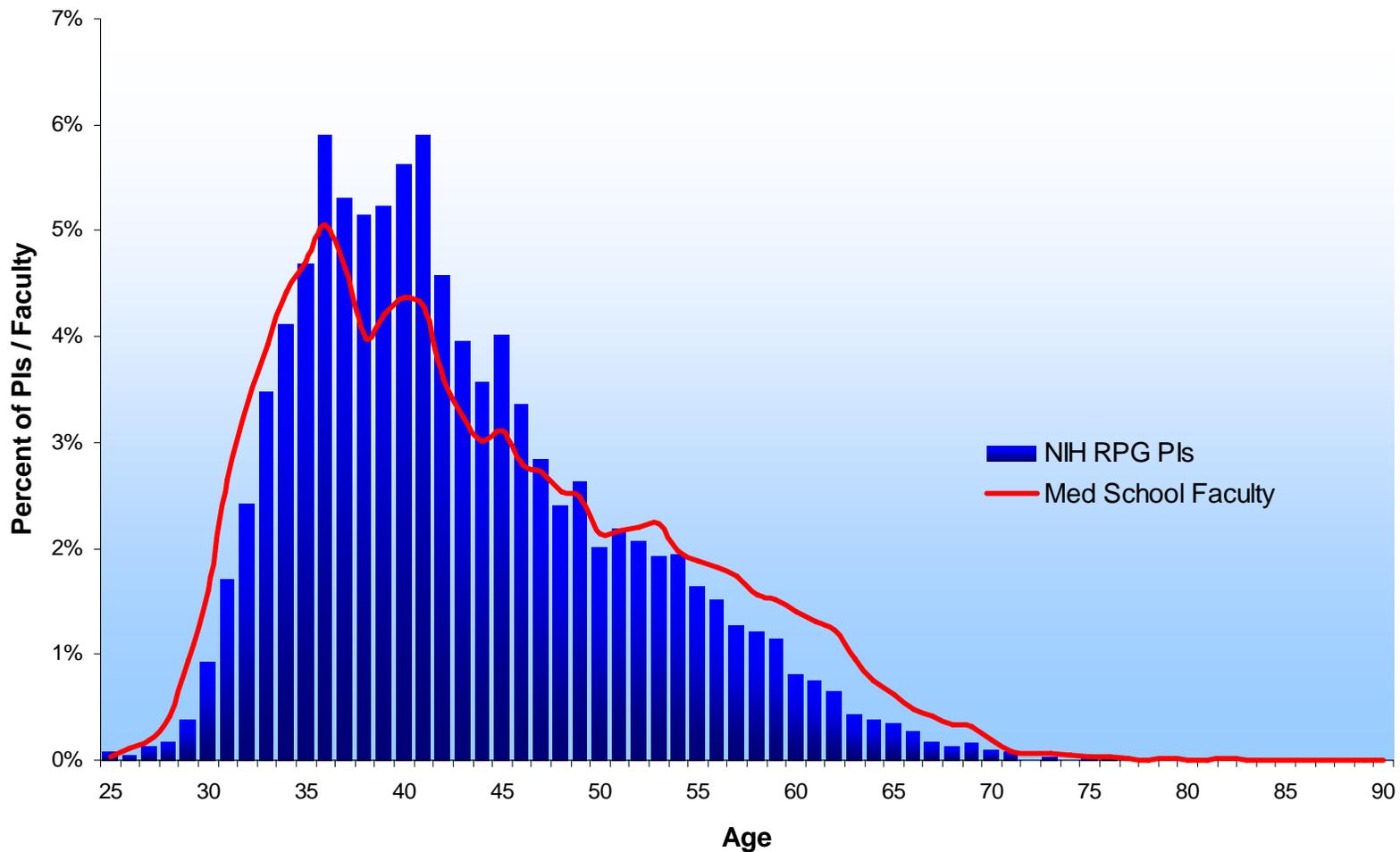
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1982 Medical School Faculty



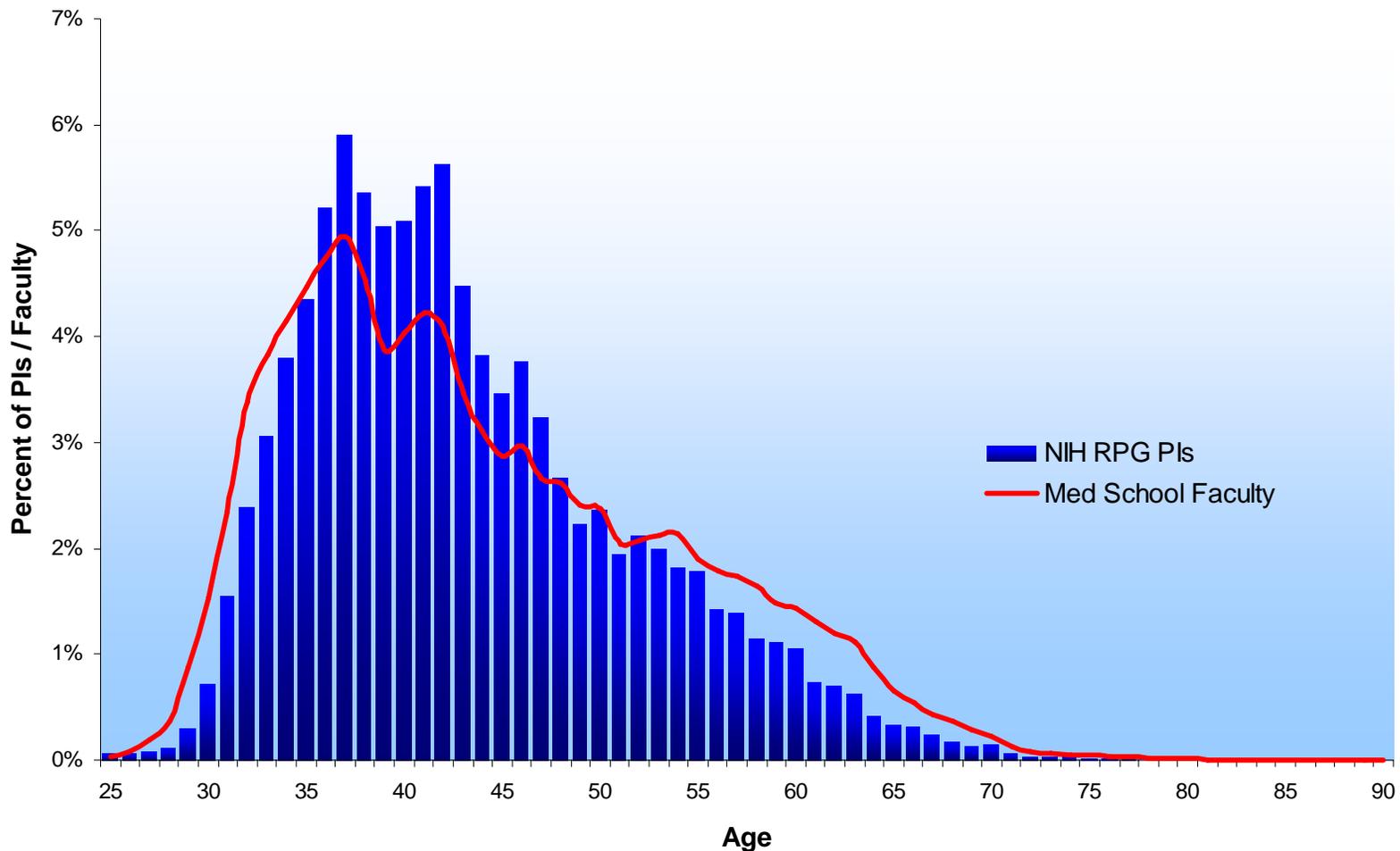
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1983 Medical School Faculty



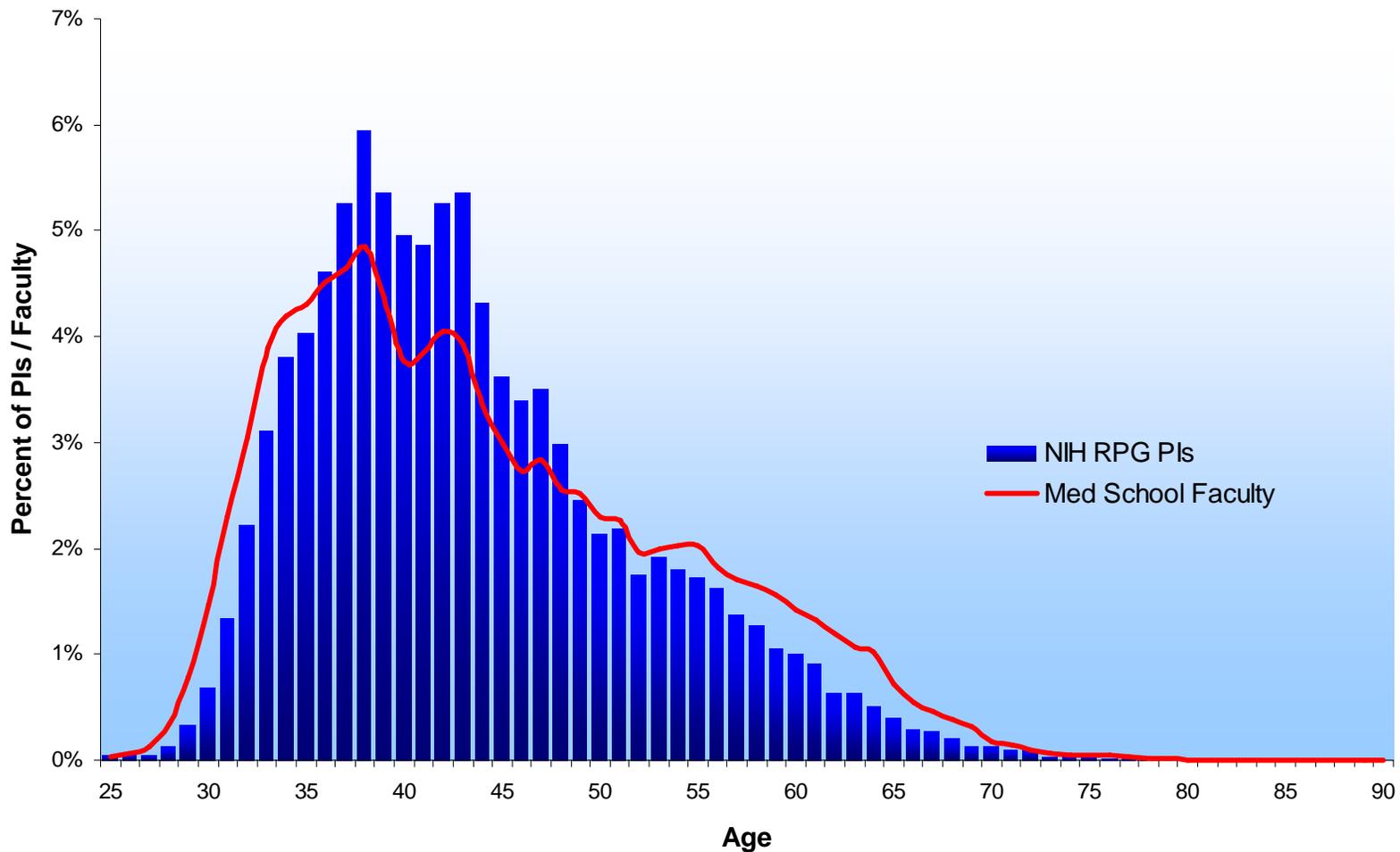
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1984 Medical School Faculty



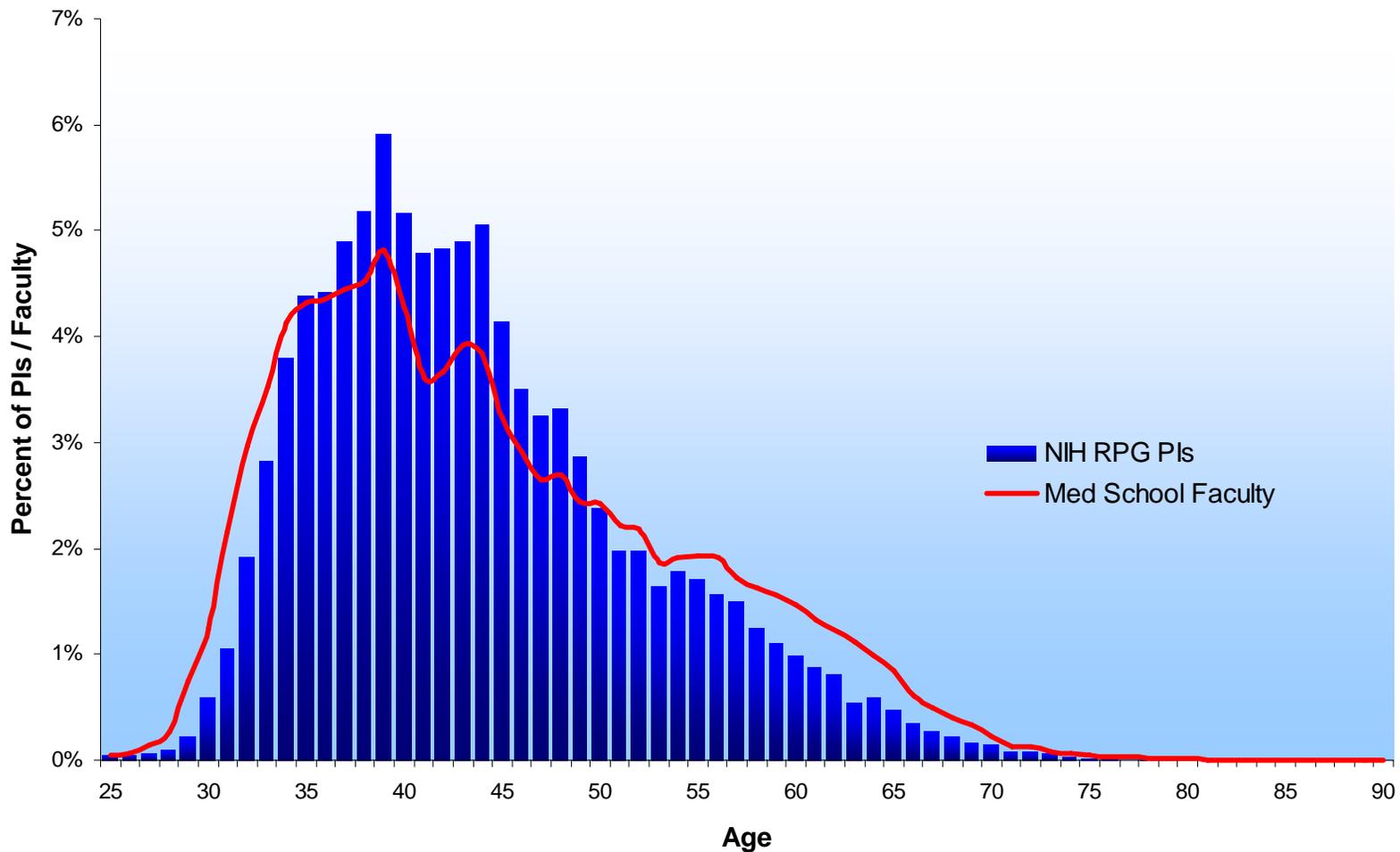
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1985 Medical School Faculty



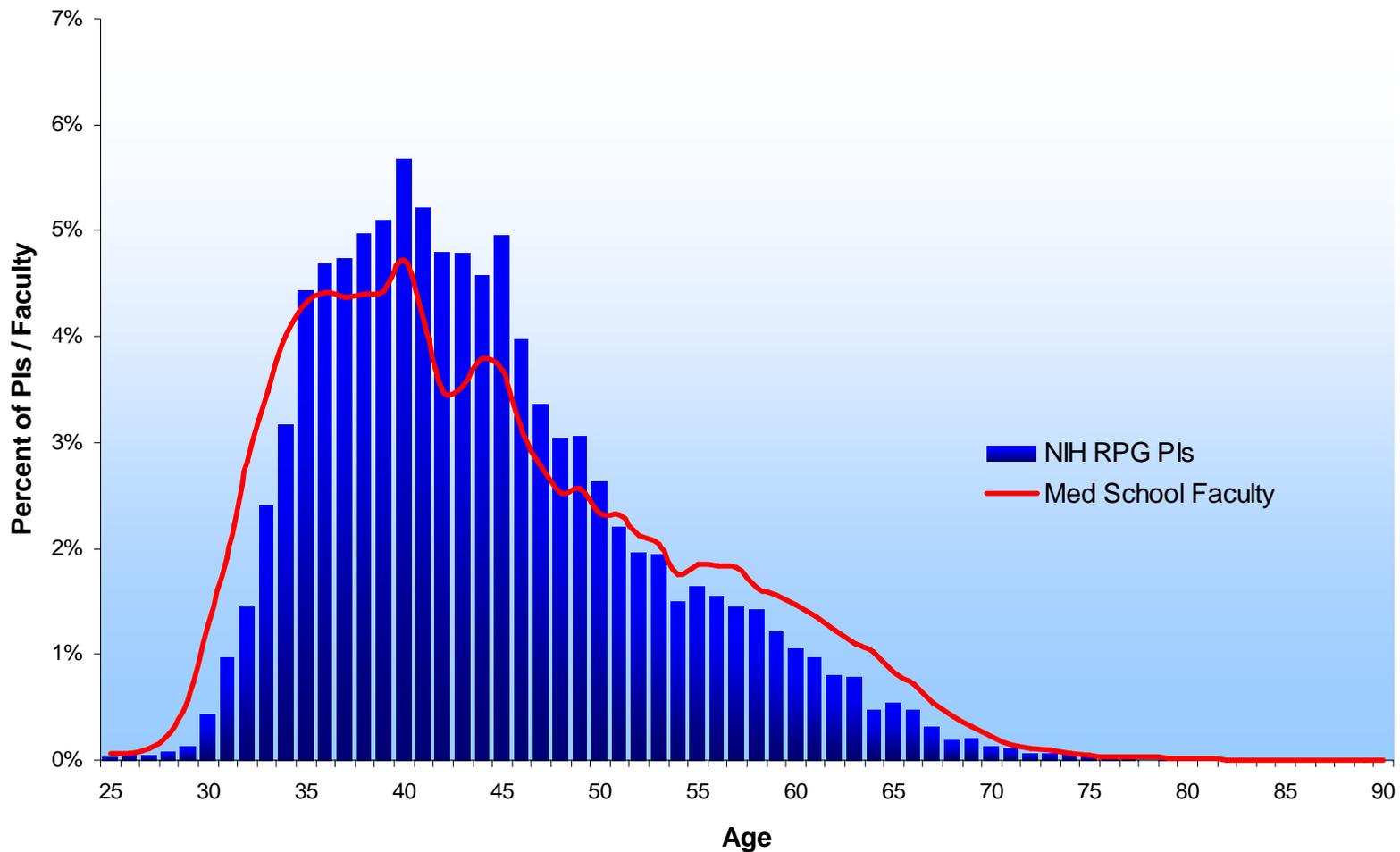
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1986 Medical School Faculty



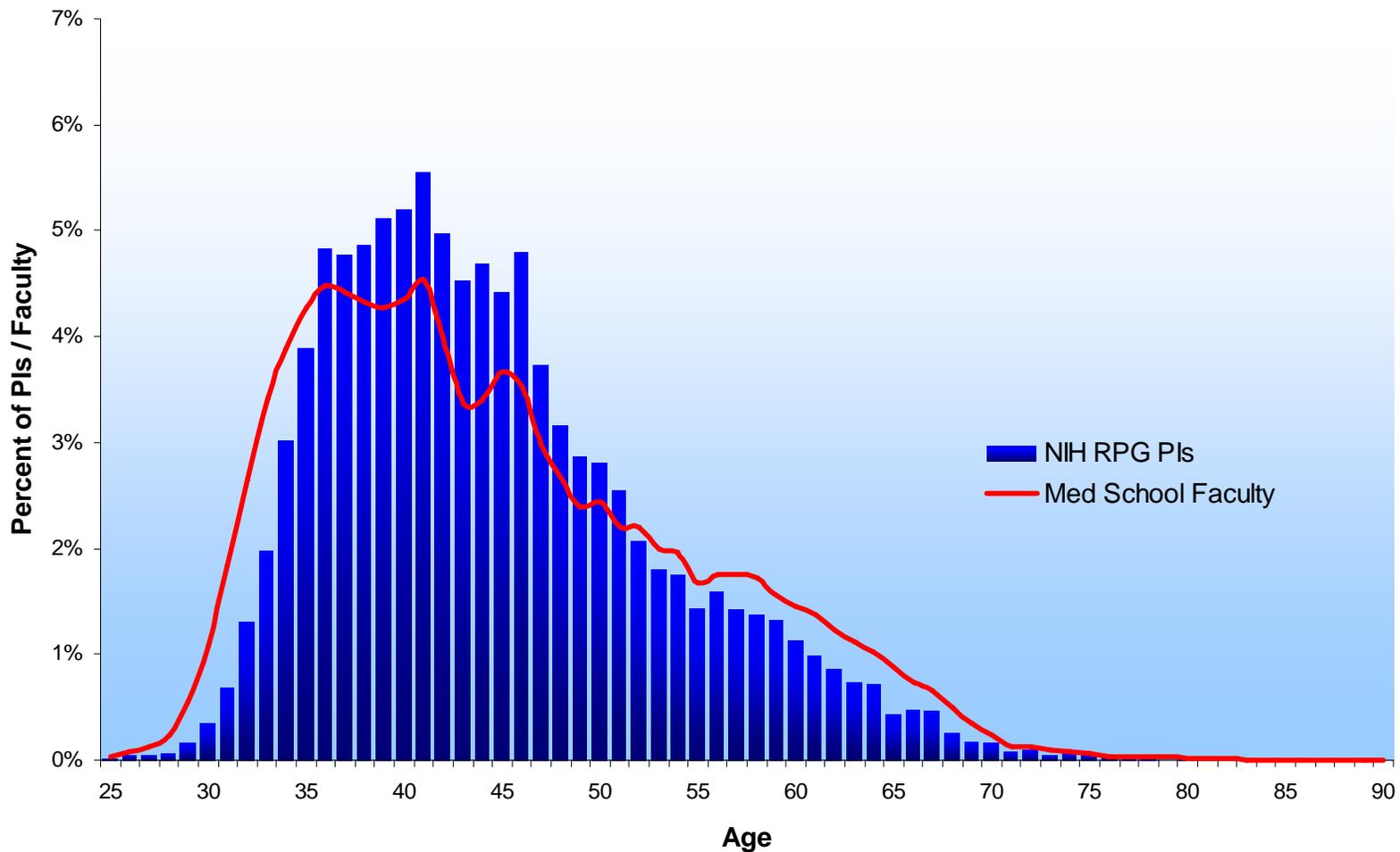
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1987 Medical School Faculty



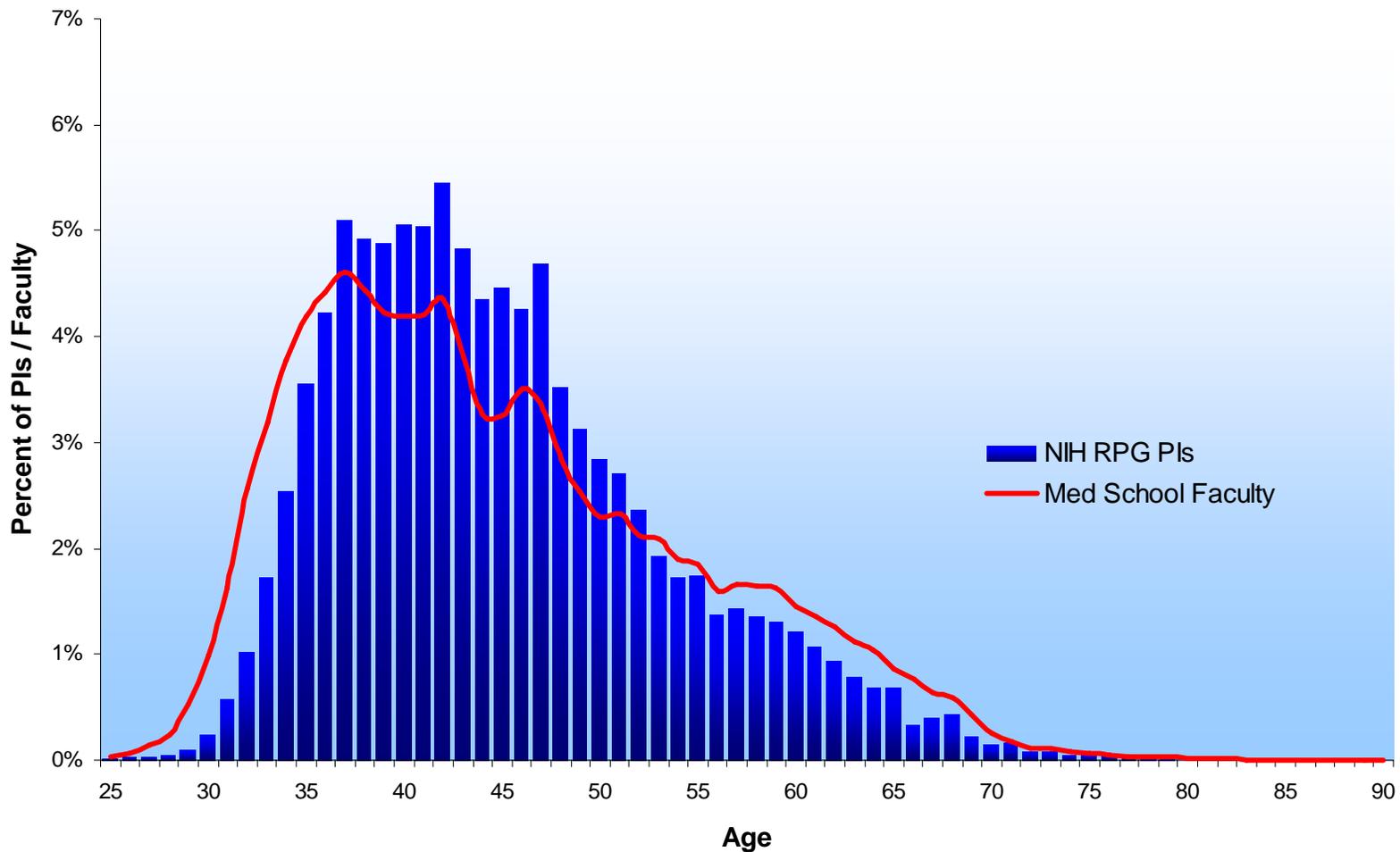
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1988 Medical School Faculty



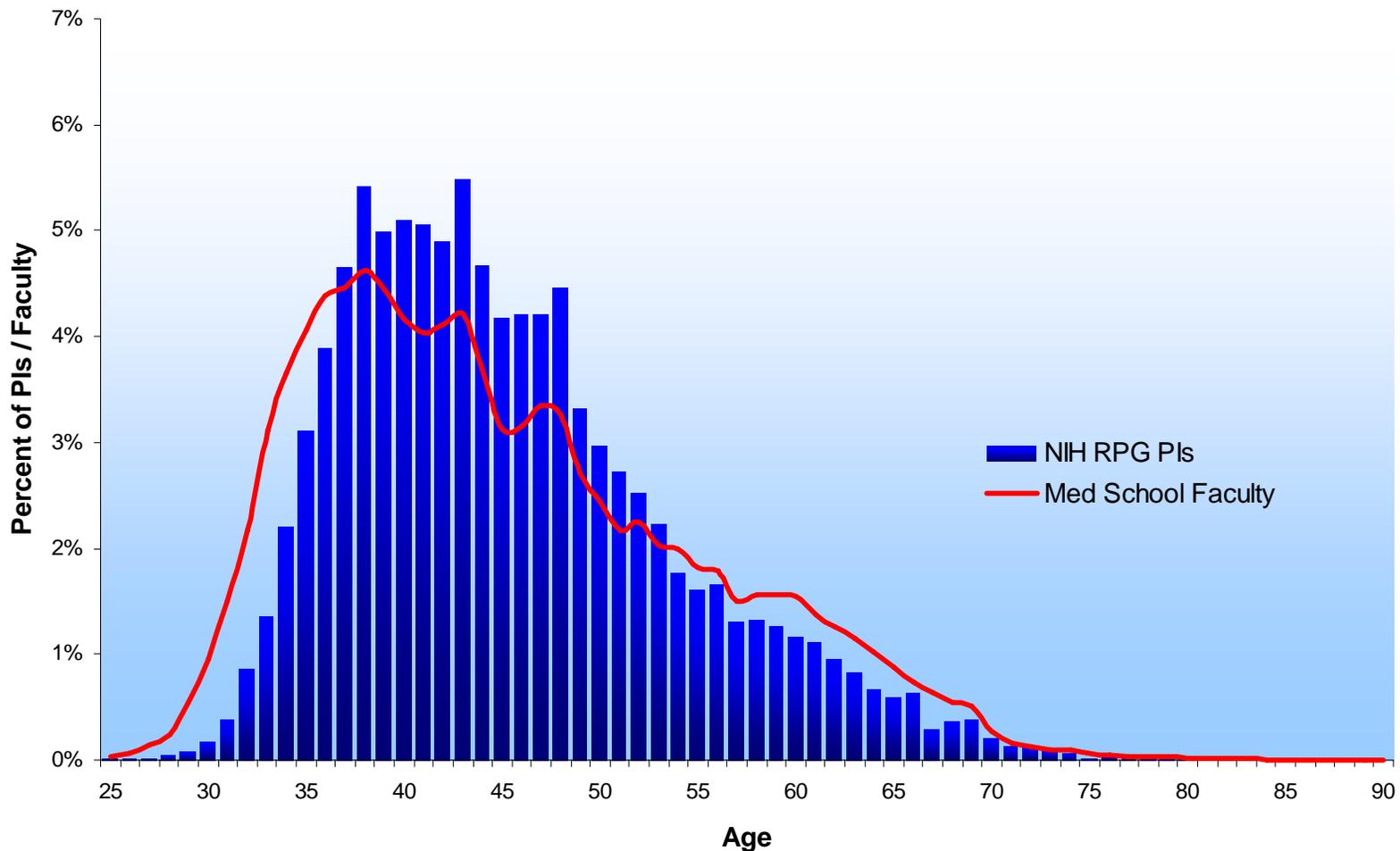
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1989 Medical School Faculty



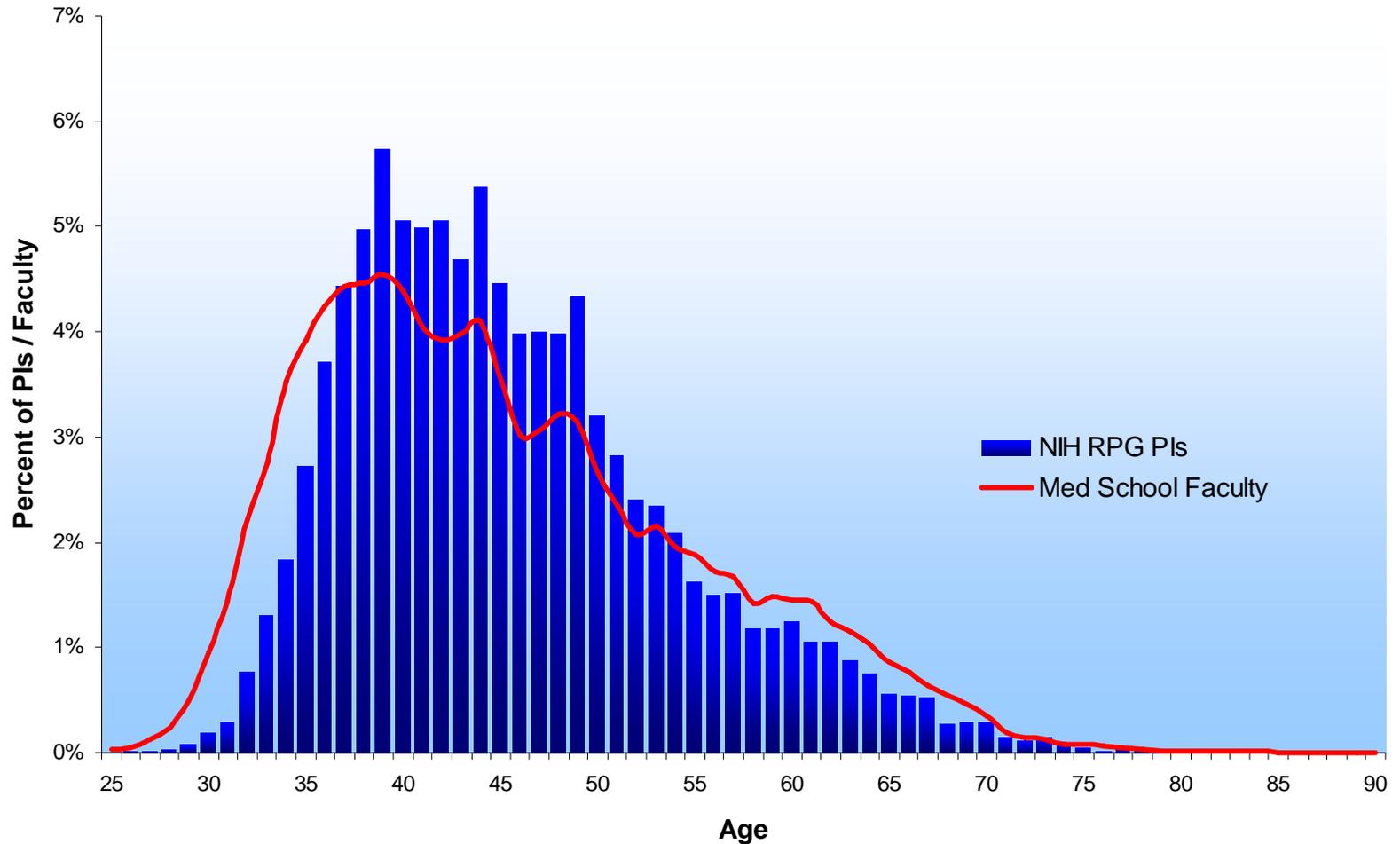
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1990 Medical School Faculty



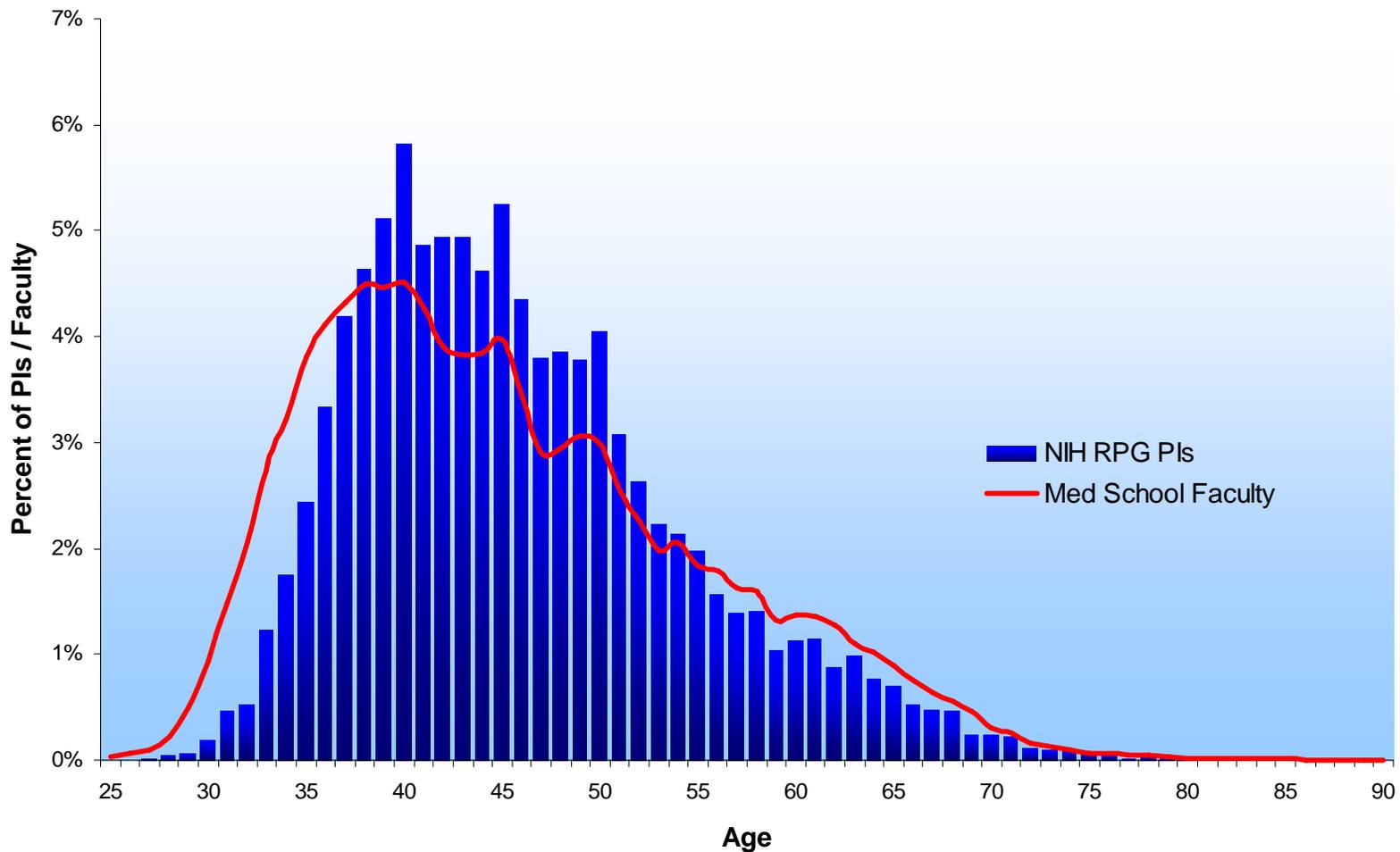
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1991 Medical School Faculty



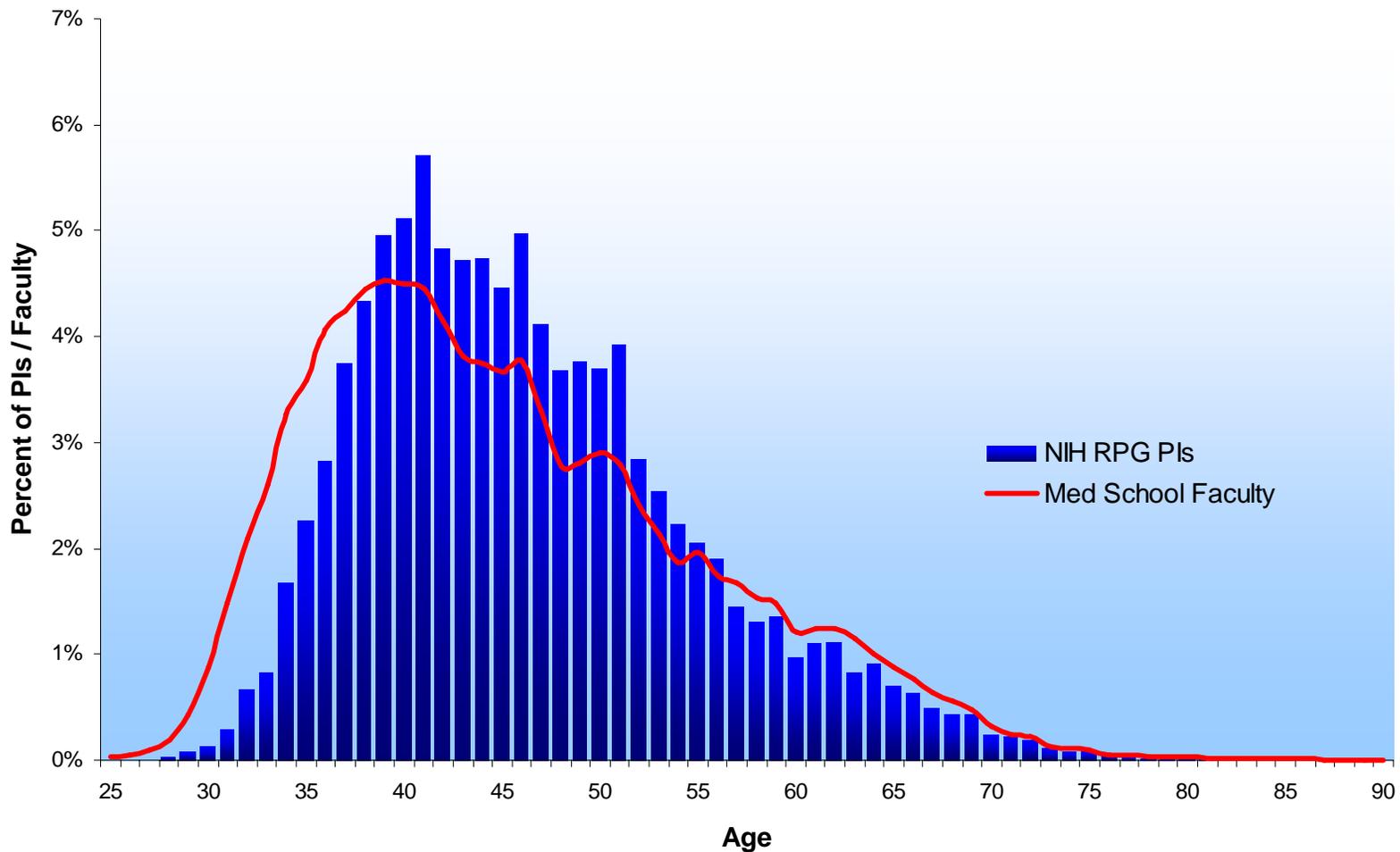
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1992 Medical School Faculty



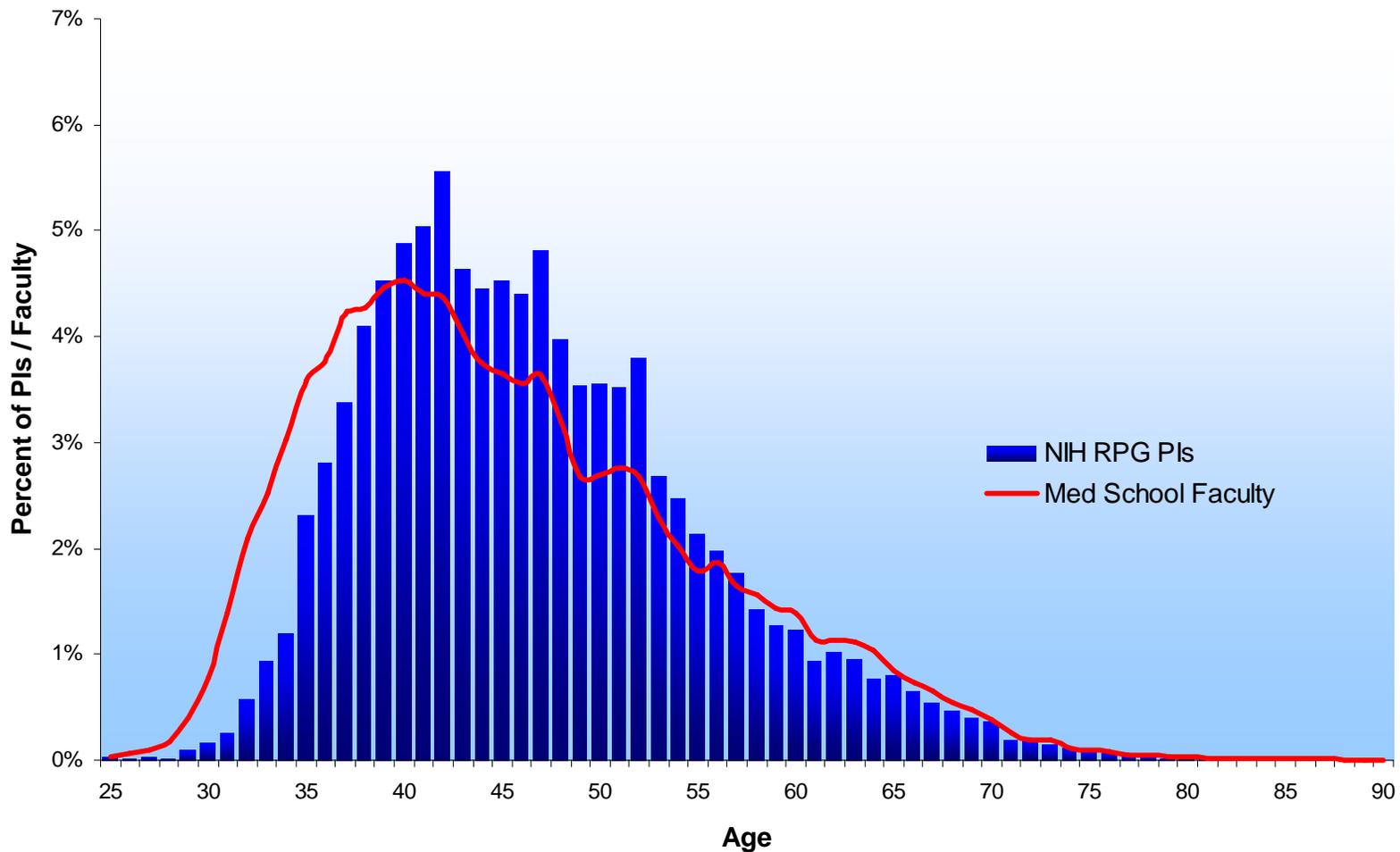
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1993 Medical School Faculty



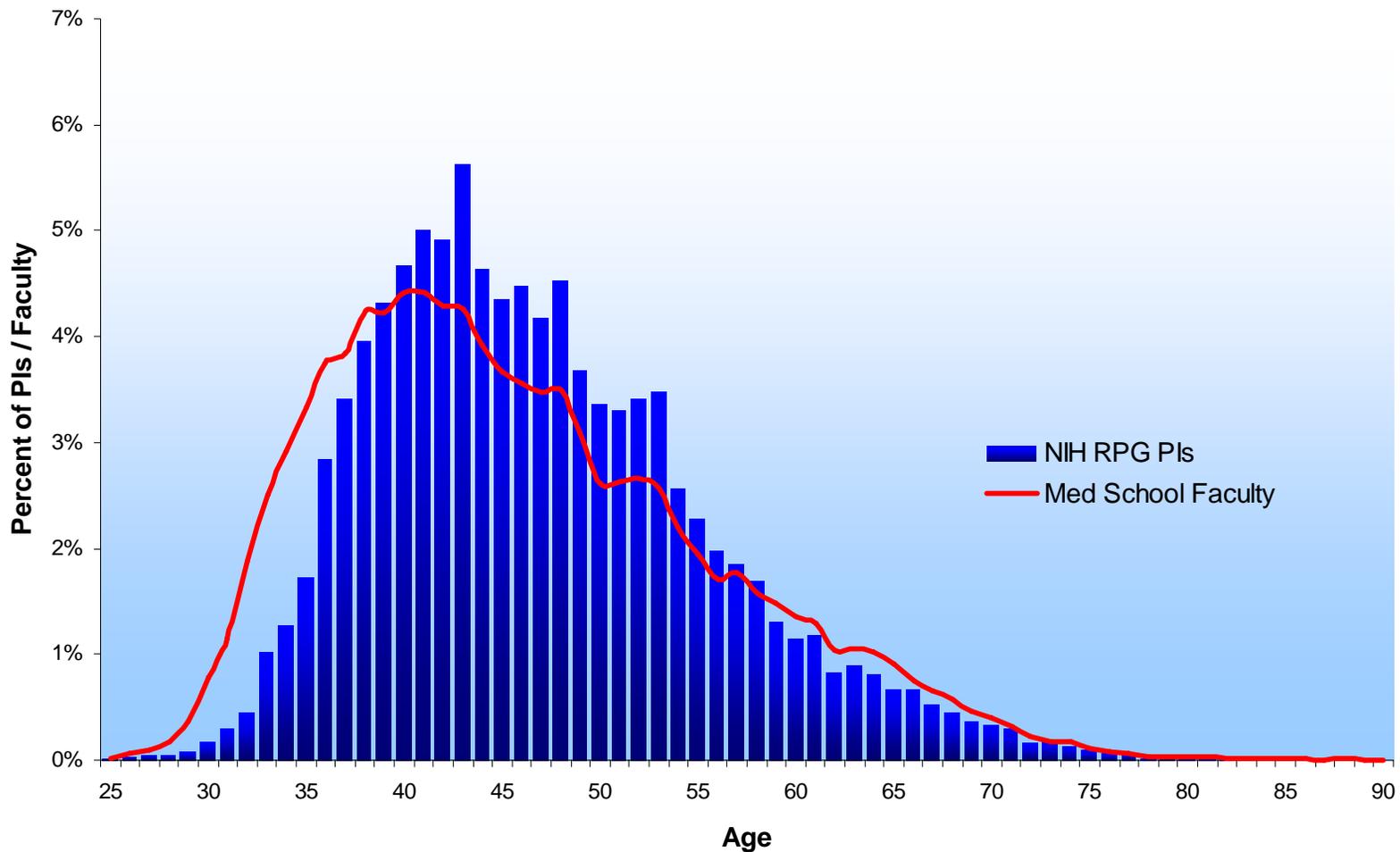
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Comparison of the Age of NIH PIs and 1994 Medical School Faculty



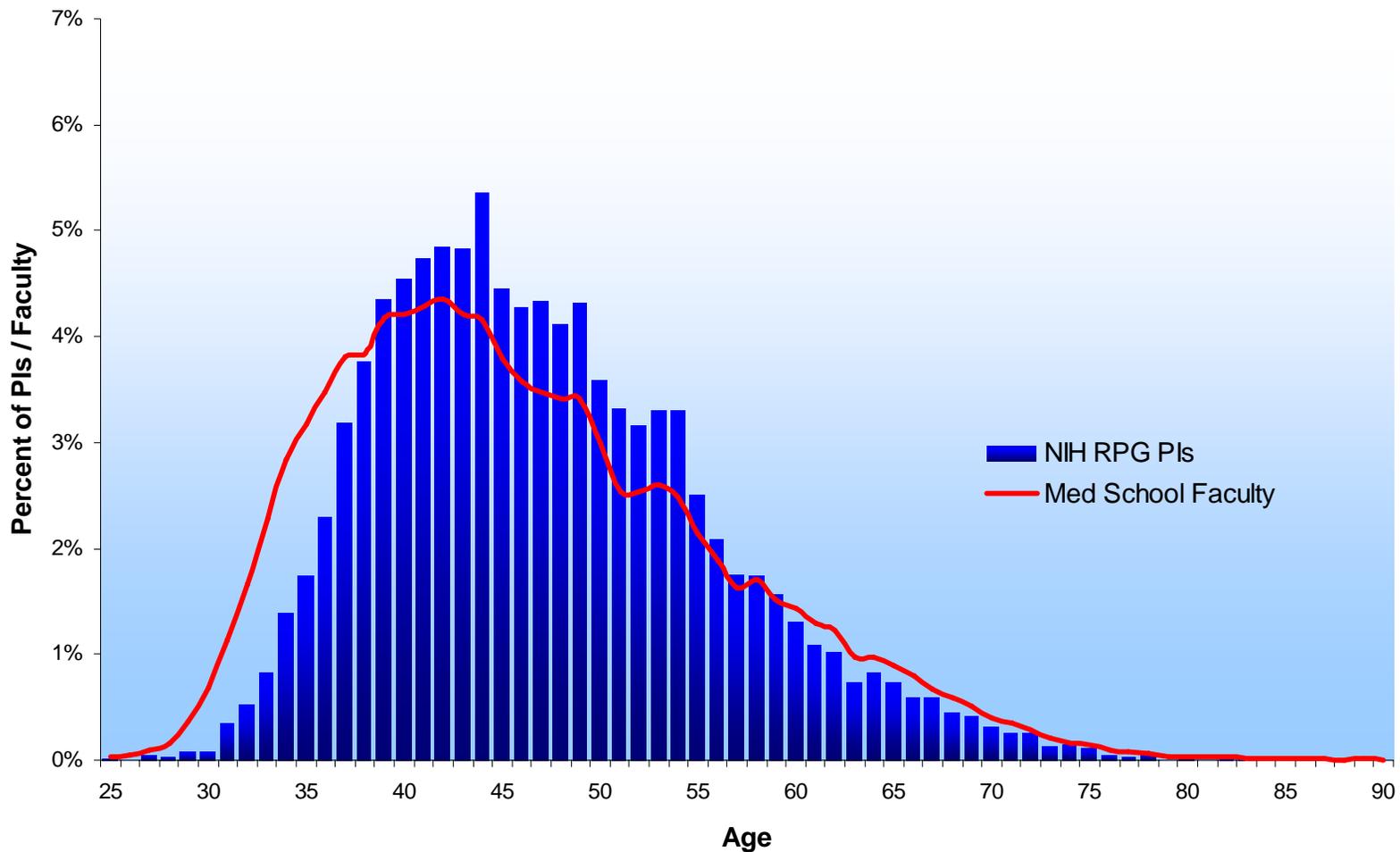
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1995 Medical School Faculty



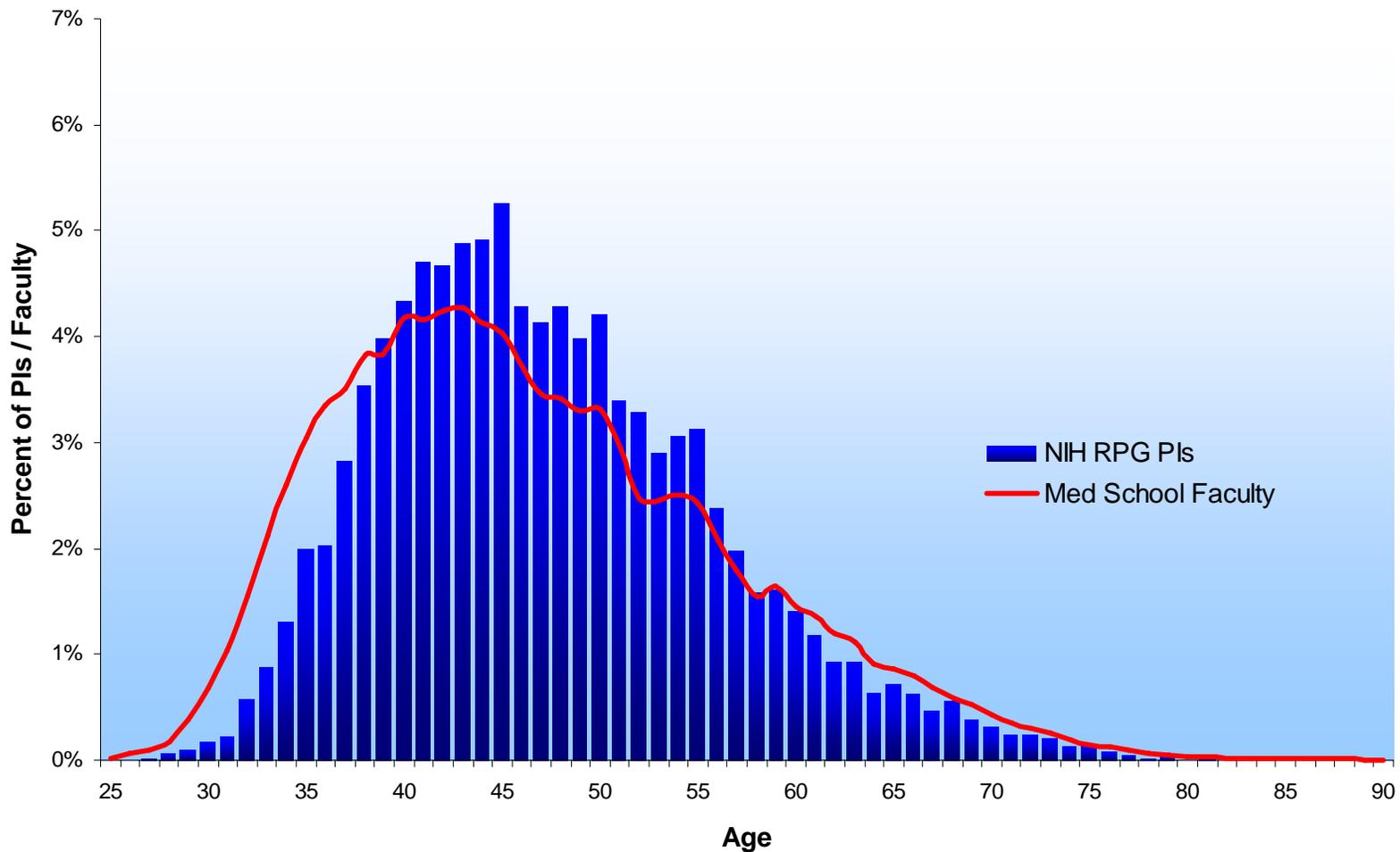
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1996 Medical School Faculty



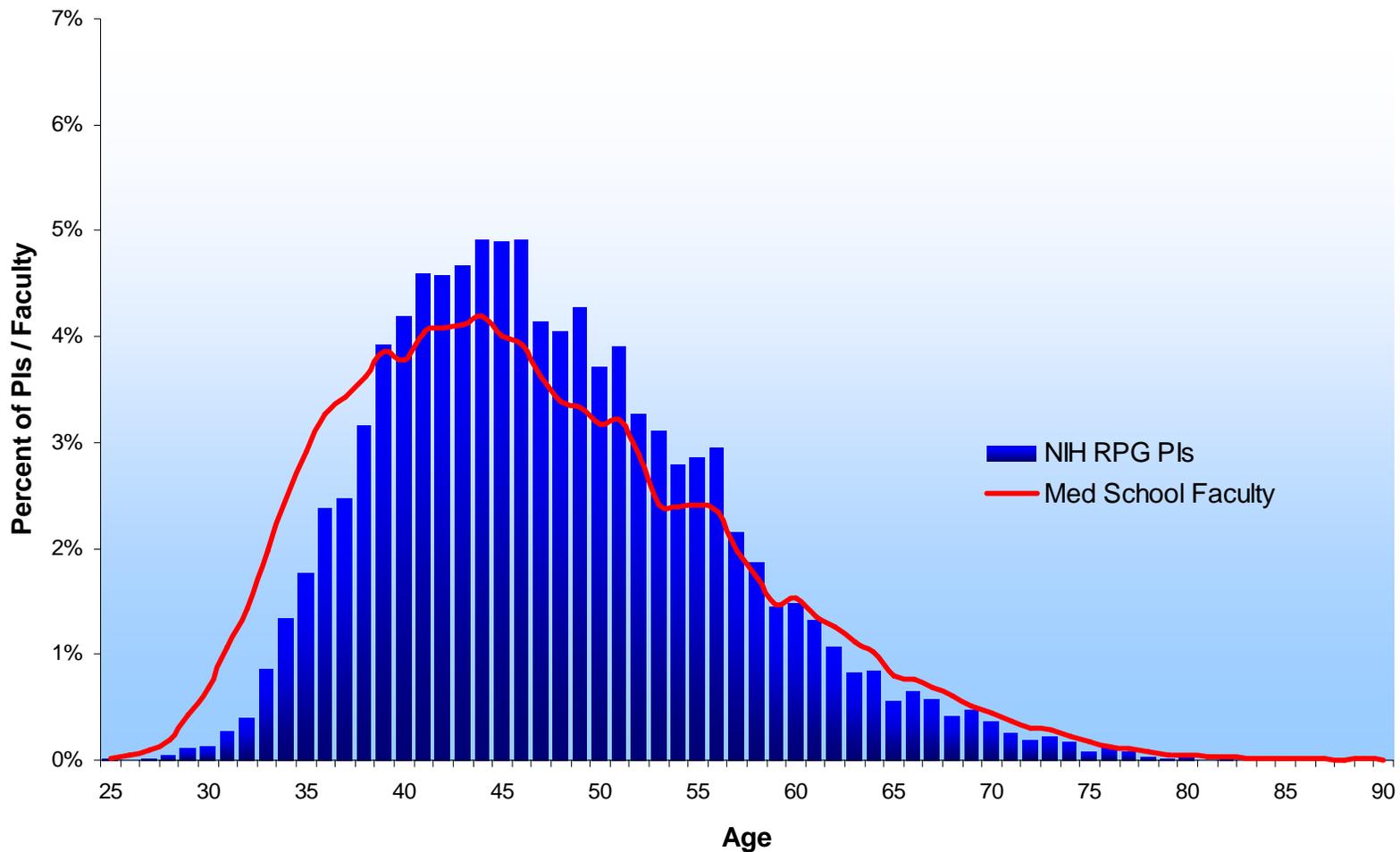
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1997 Medical School Faculty



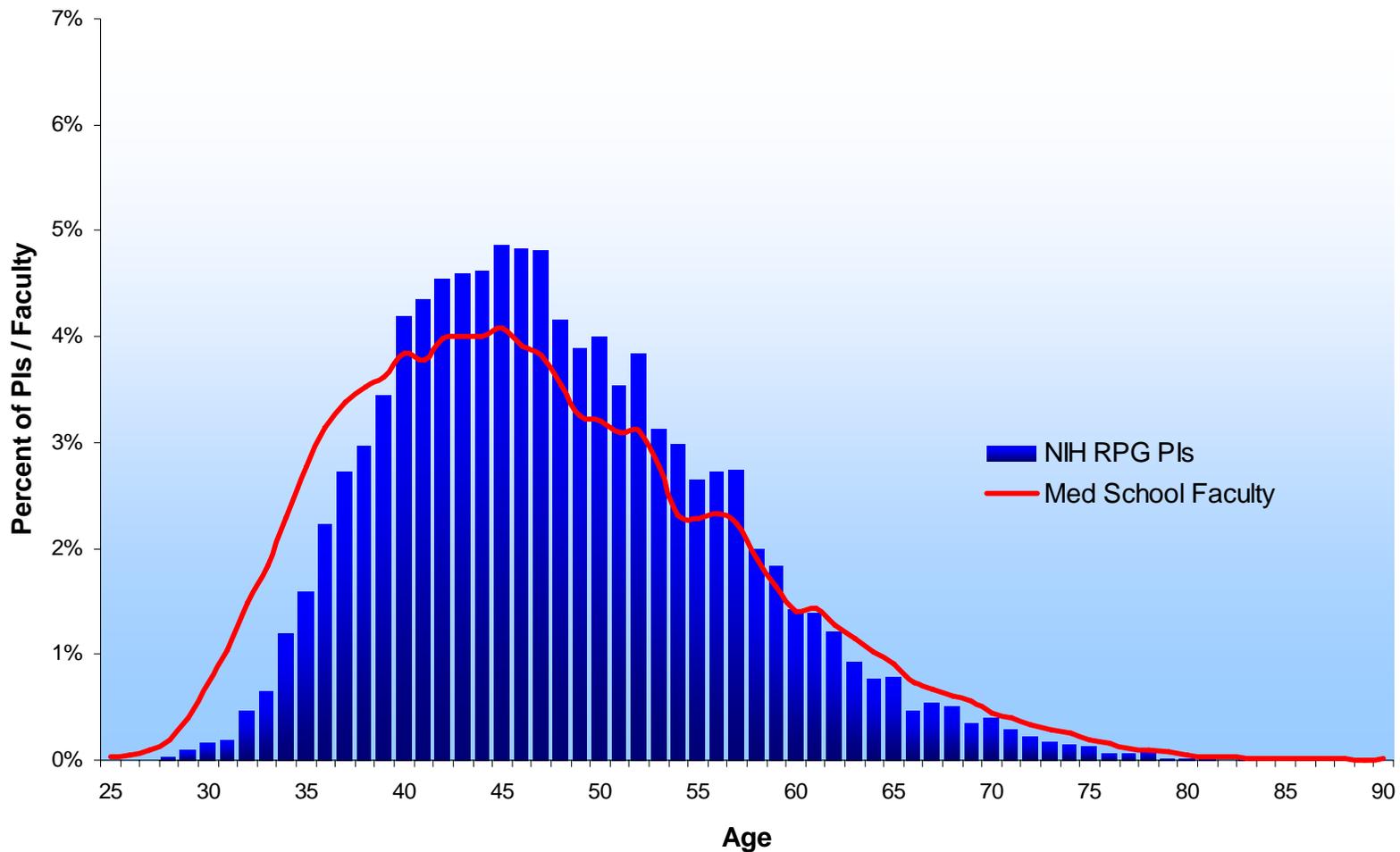
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1998 Medical School Faculty



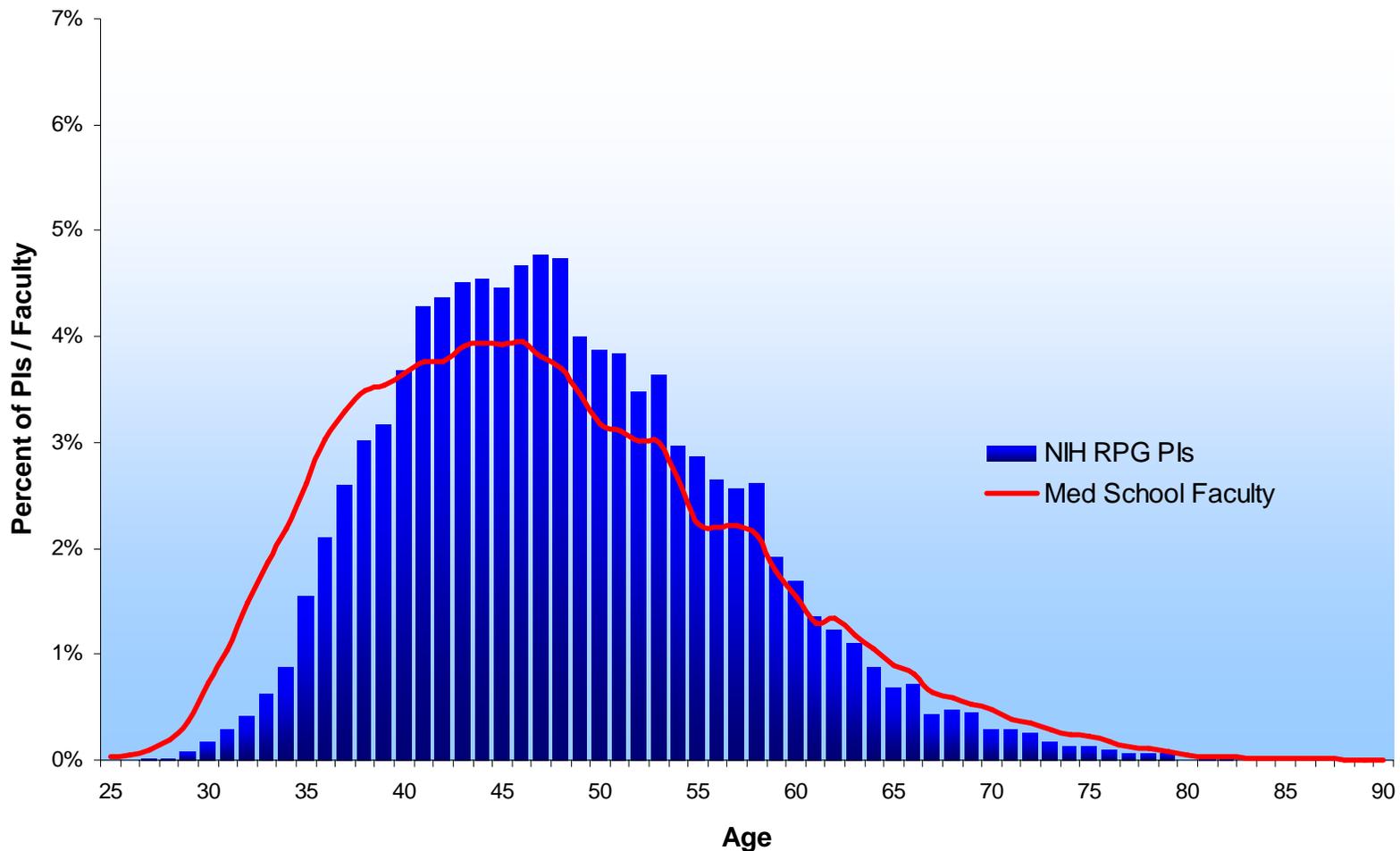
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 1999 Medical School Faculty



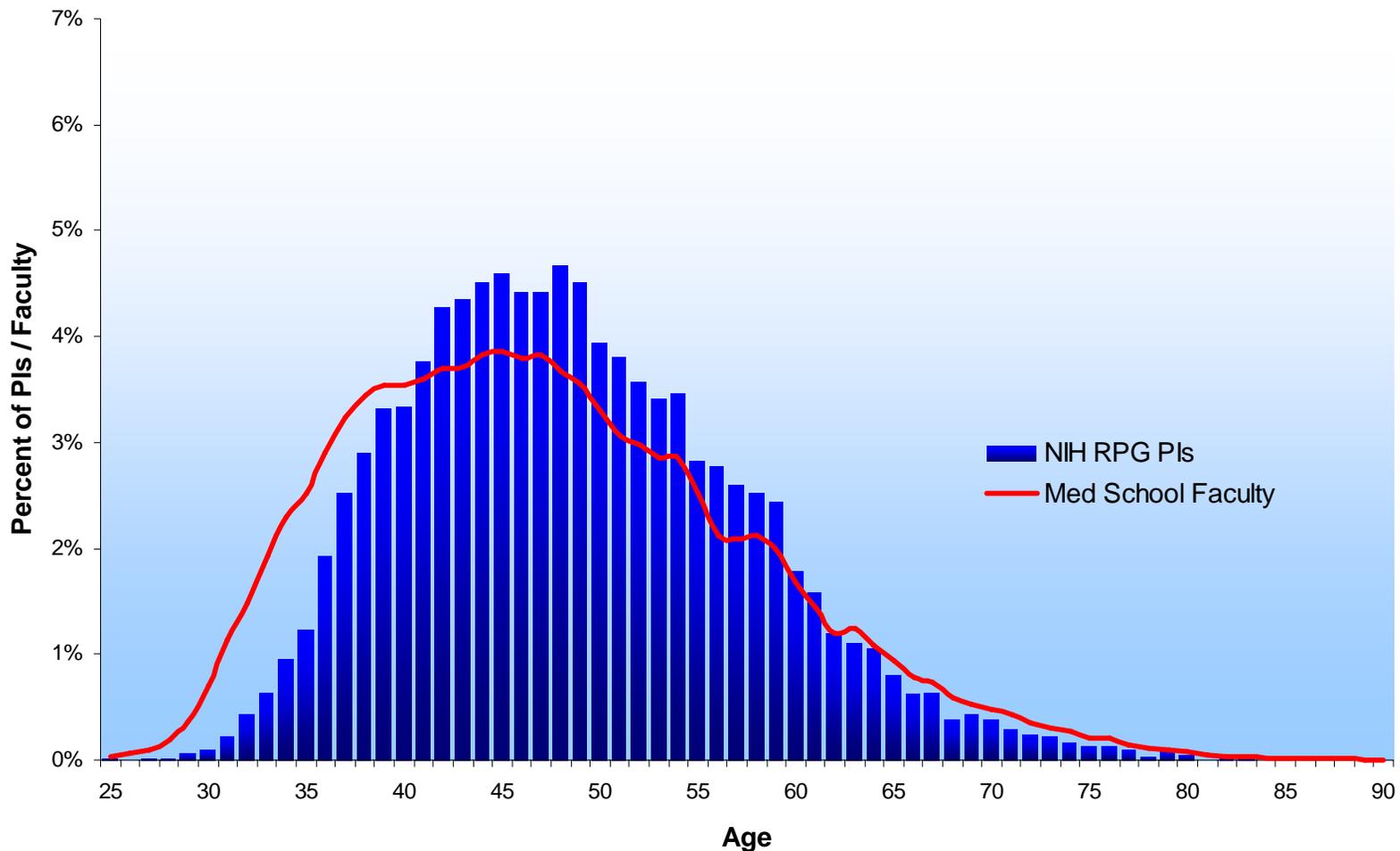
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 2000 Medical School Faculty



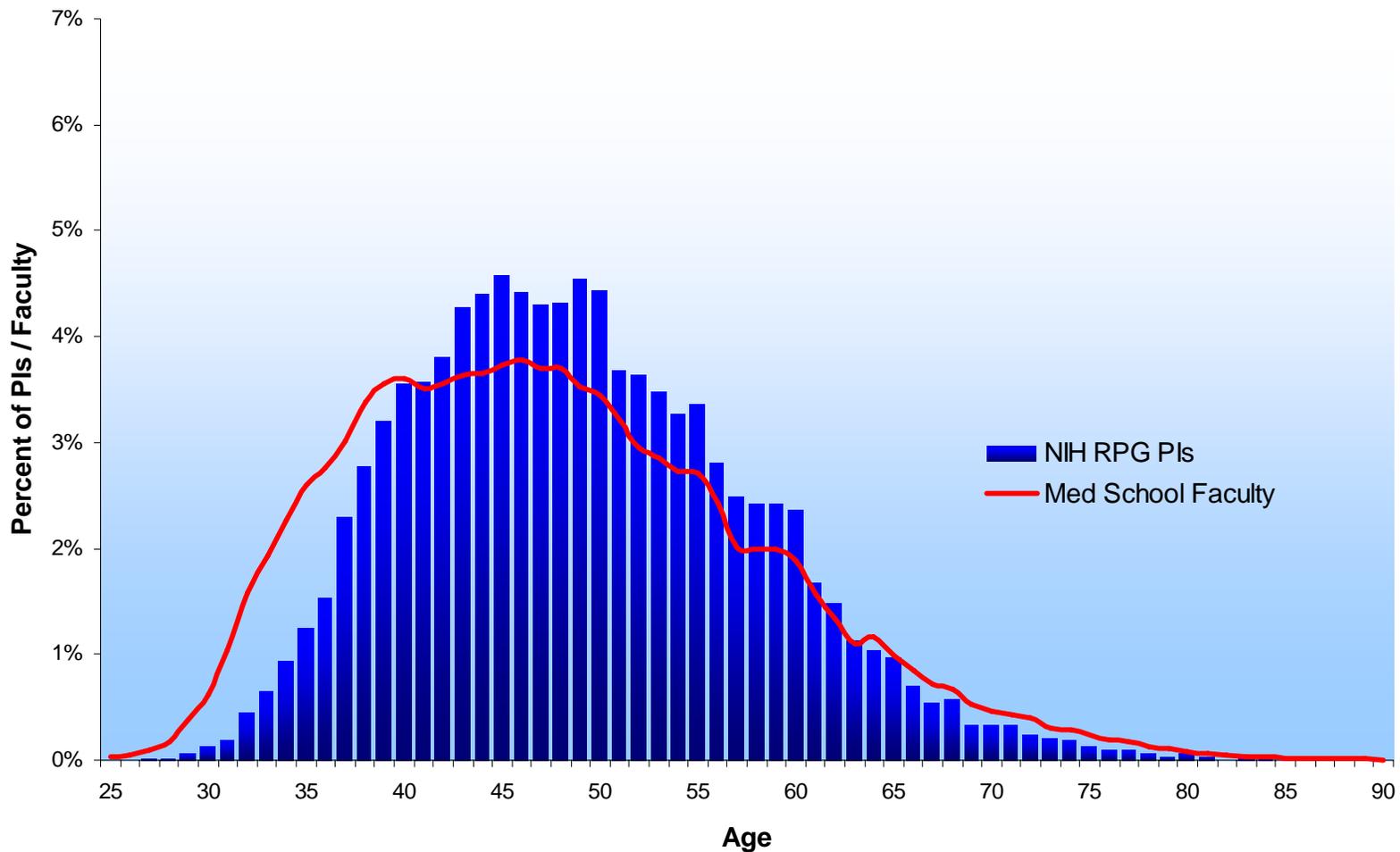
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 2001 Medical School Faculty



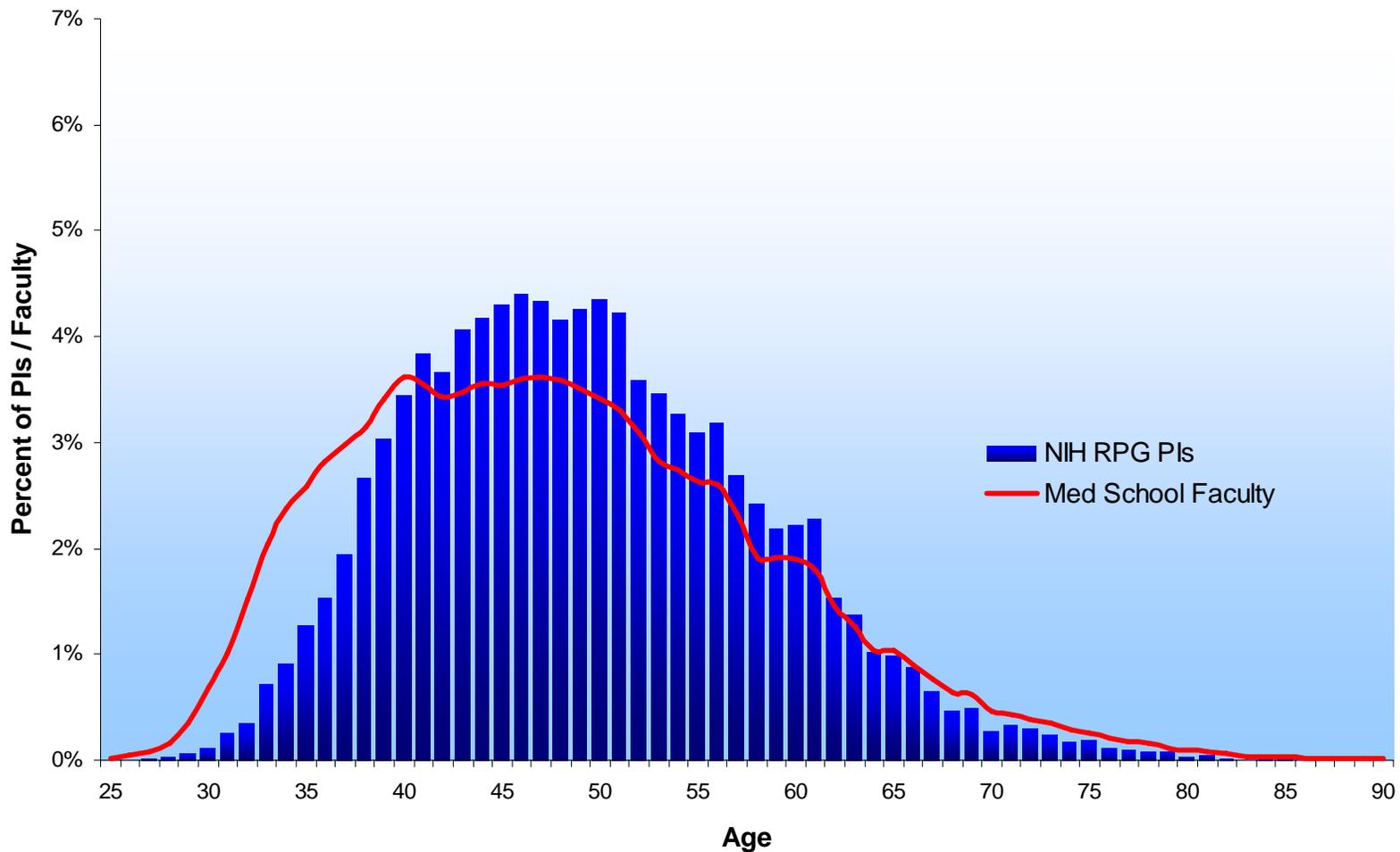
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 2002 Medical School Faculty



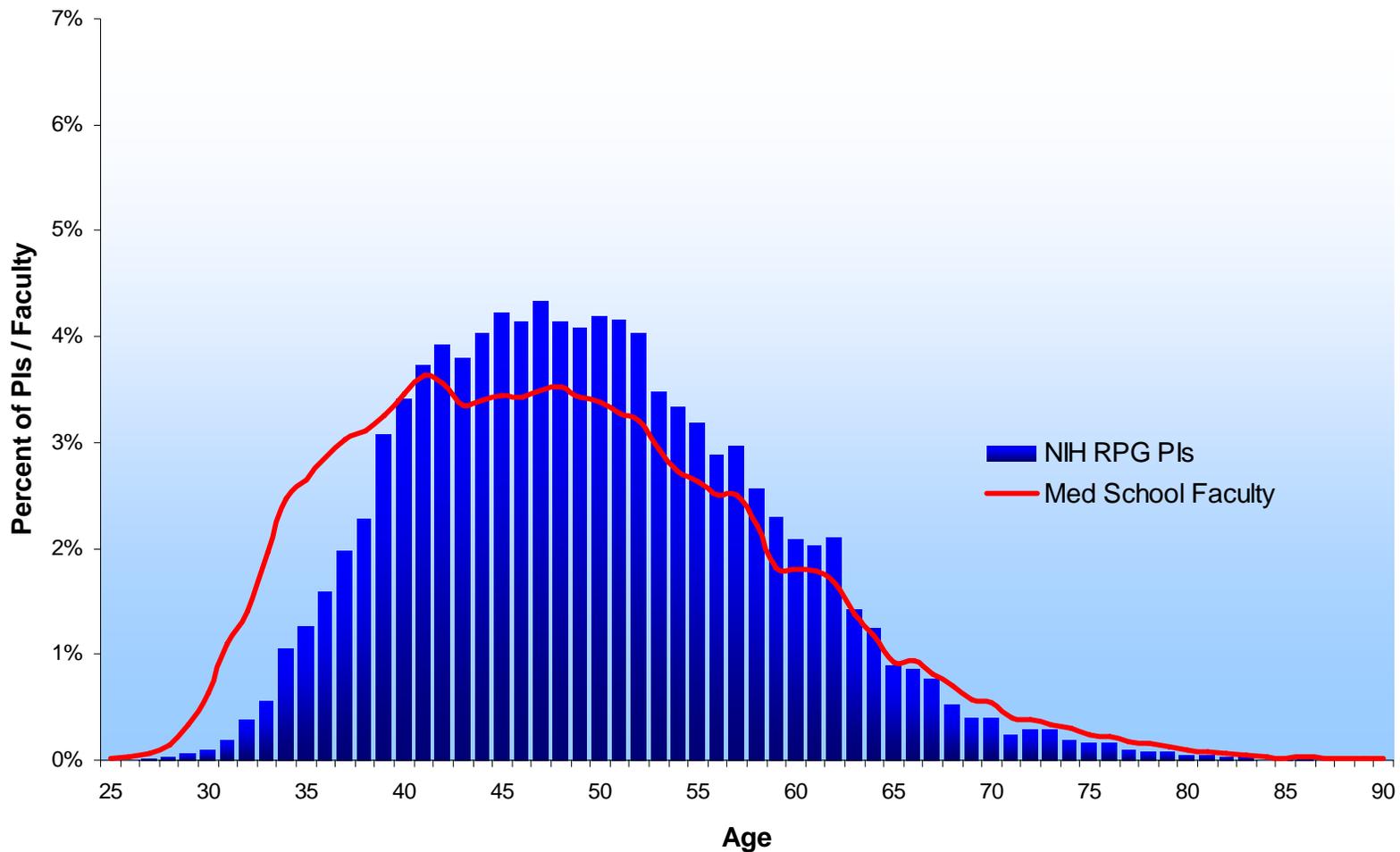
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 2003 Medical School Faculty



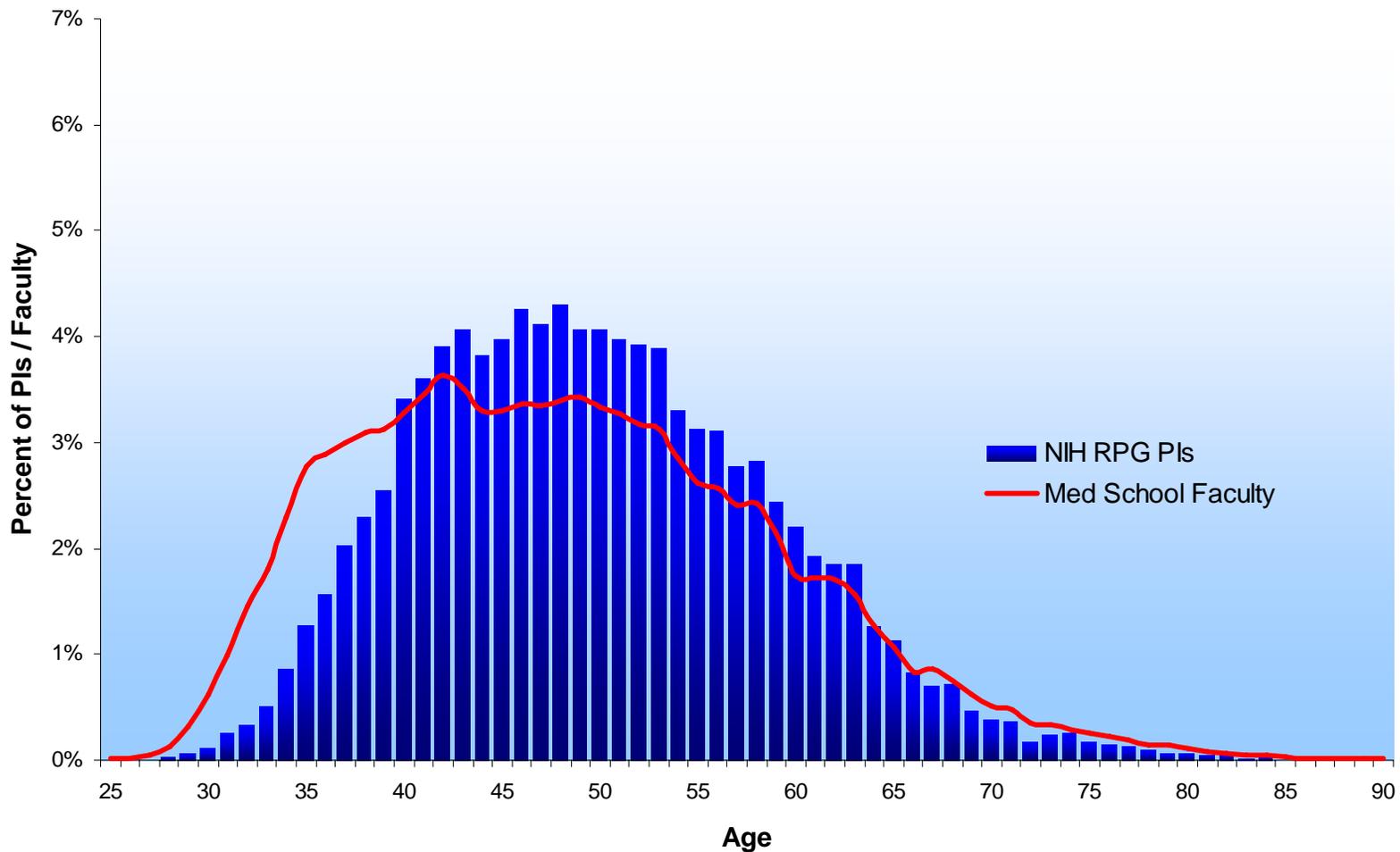
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 2004 Medical School Faculty



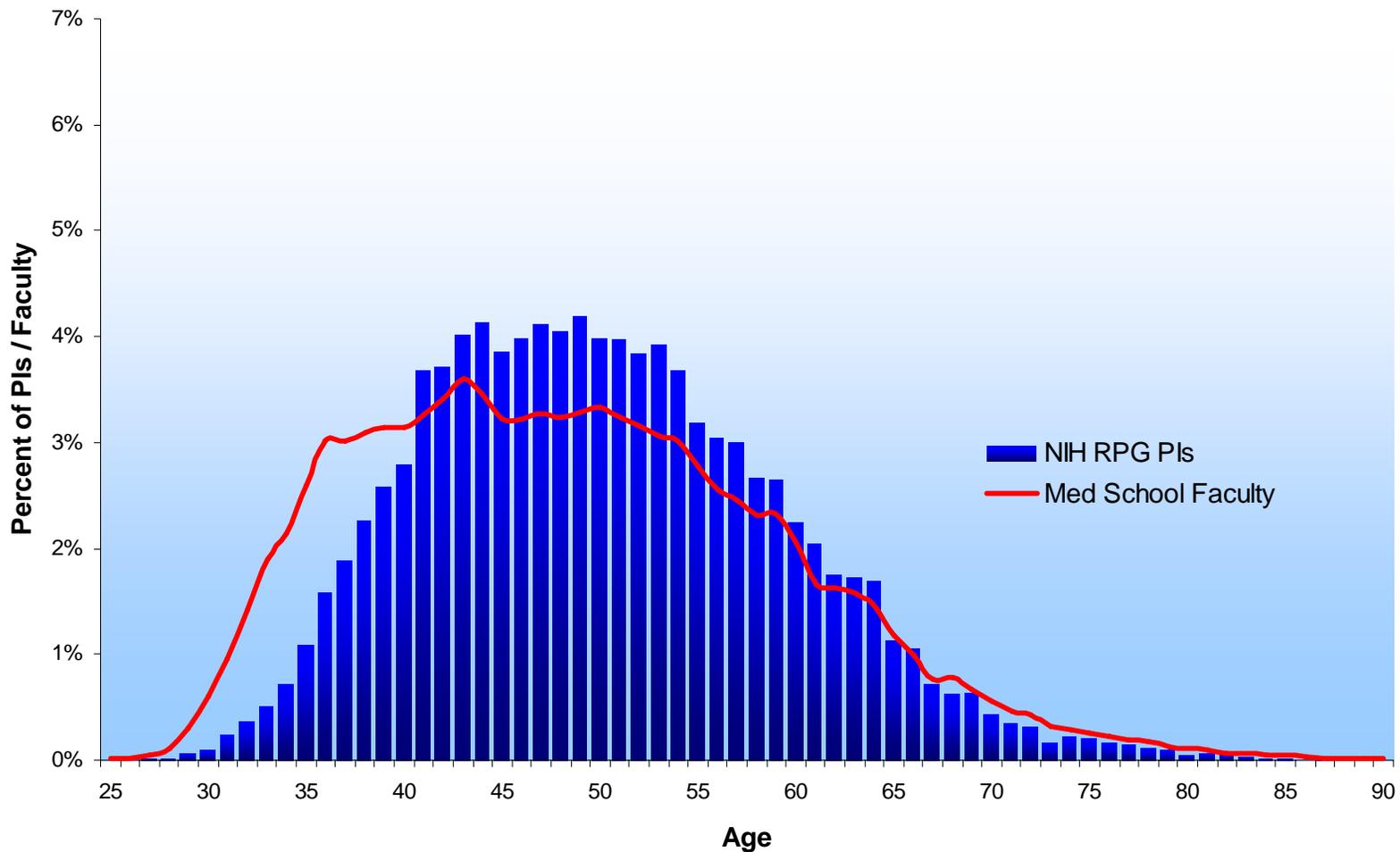
Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Comparison of the Age of NIH PIs and 2005 Medical School Faculty



Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

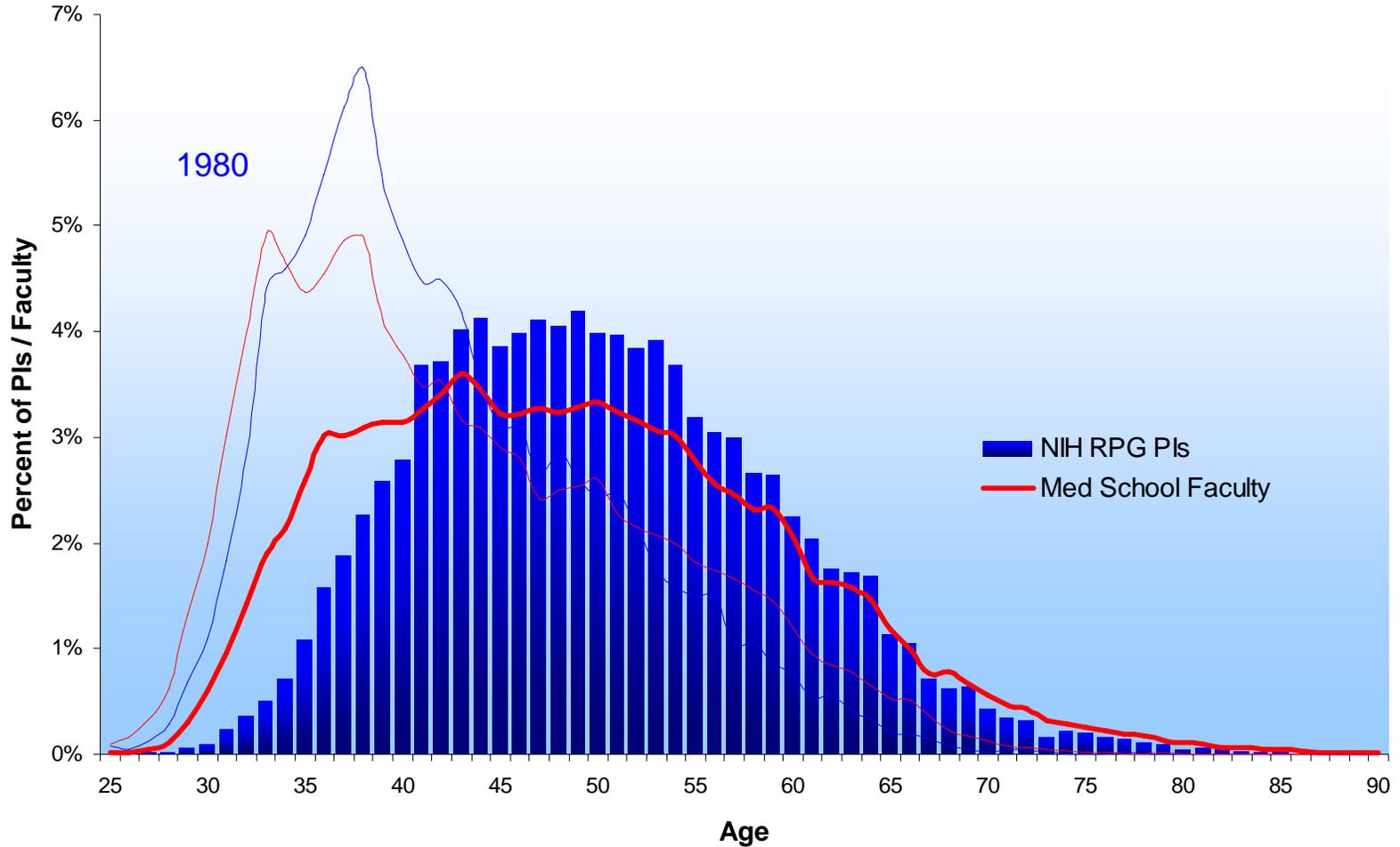
Comparison of the Age of NIH PIs and 2006 Medical School Faculty



Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

Aging of Both NIH Grantees and Medical School Faculty Cohorts Since 1980

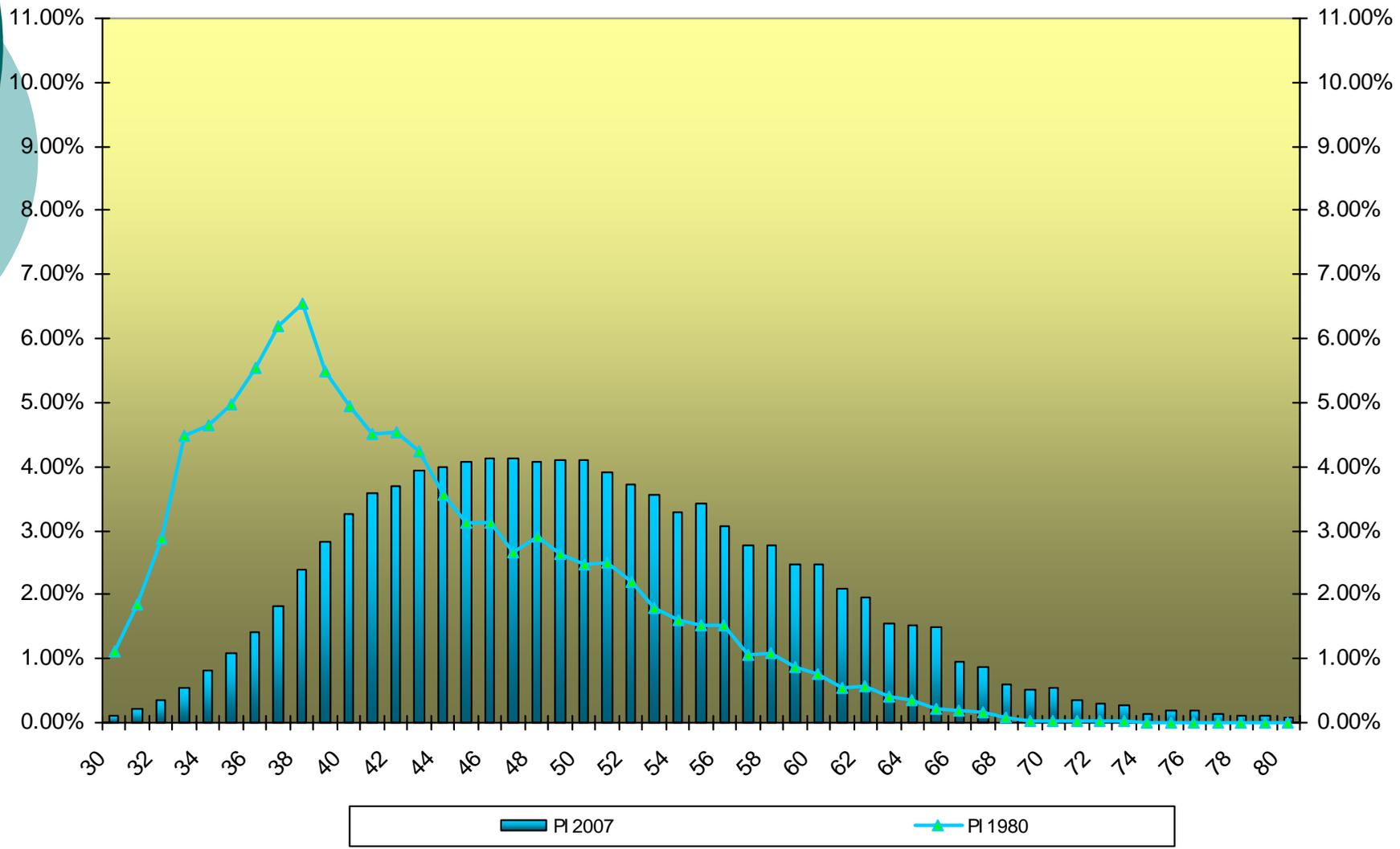
2006



Sources: IMPAC II Current and History Files and AAMC Faculty Roster System

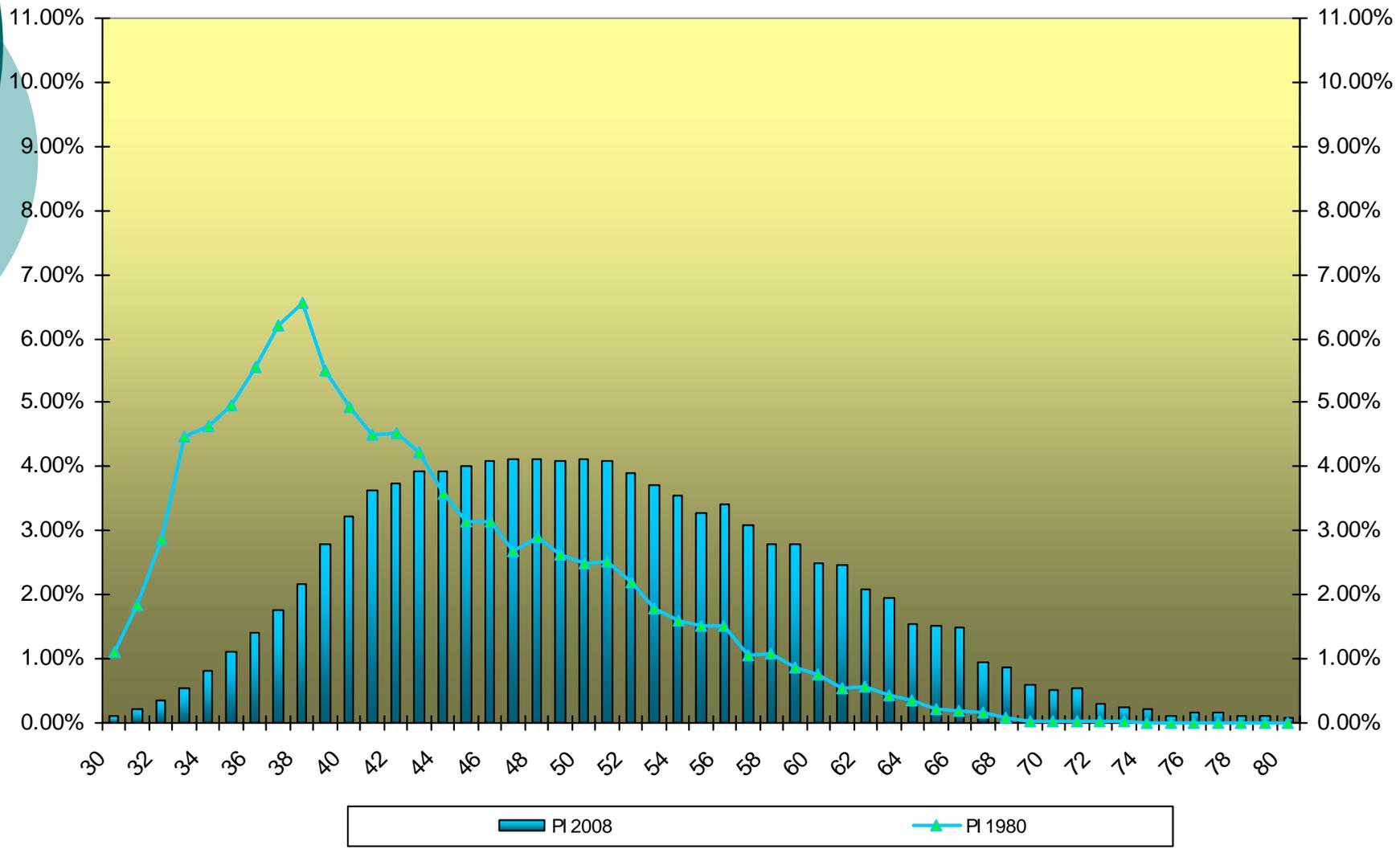
Age Distribution of PIs

2007 (Projection)



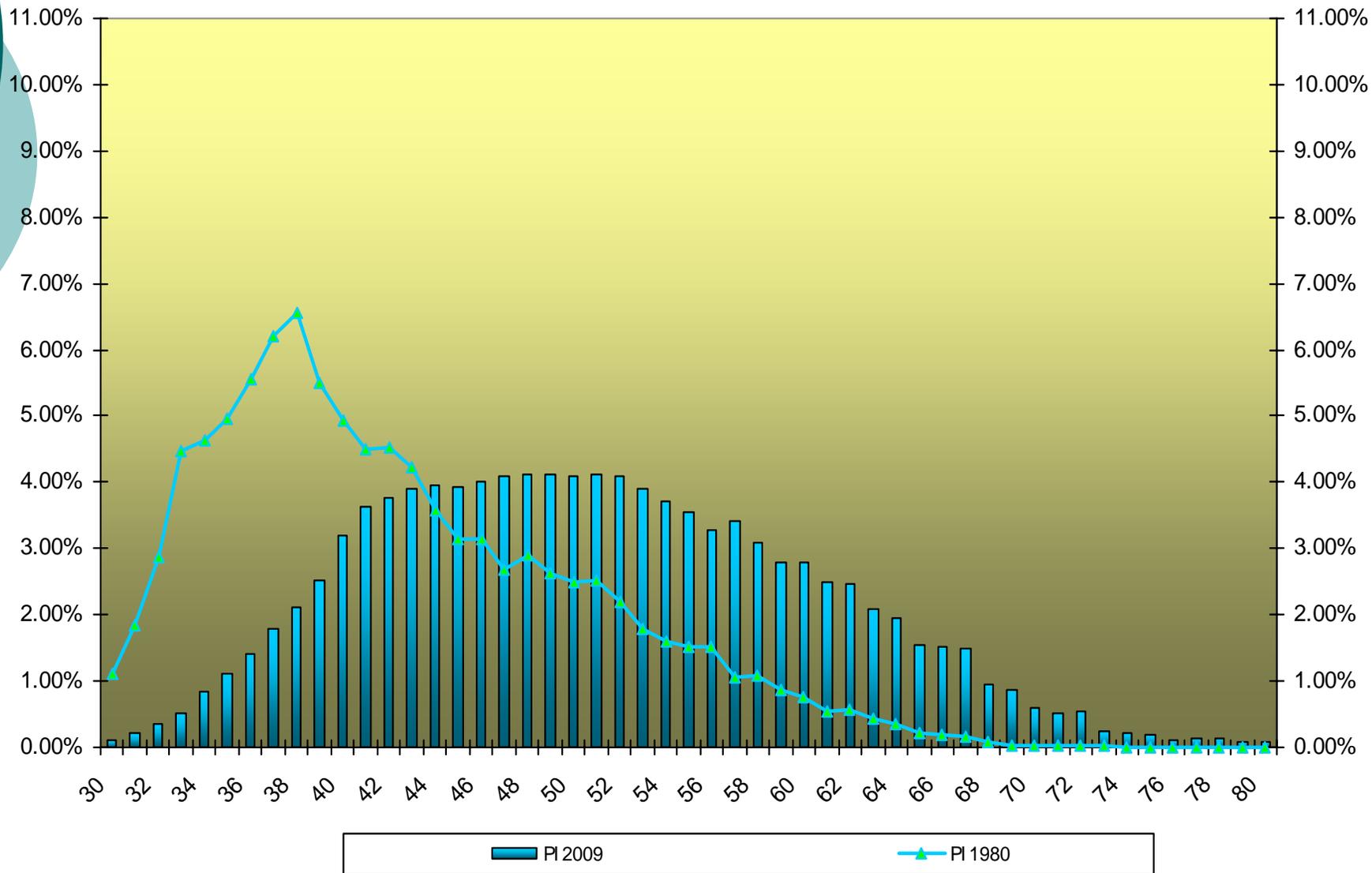
Age Distribution of PIs

2008



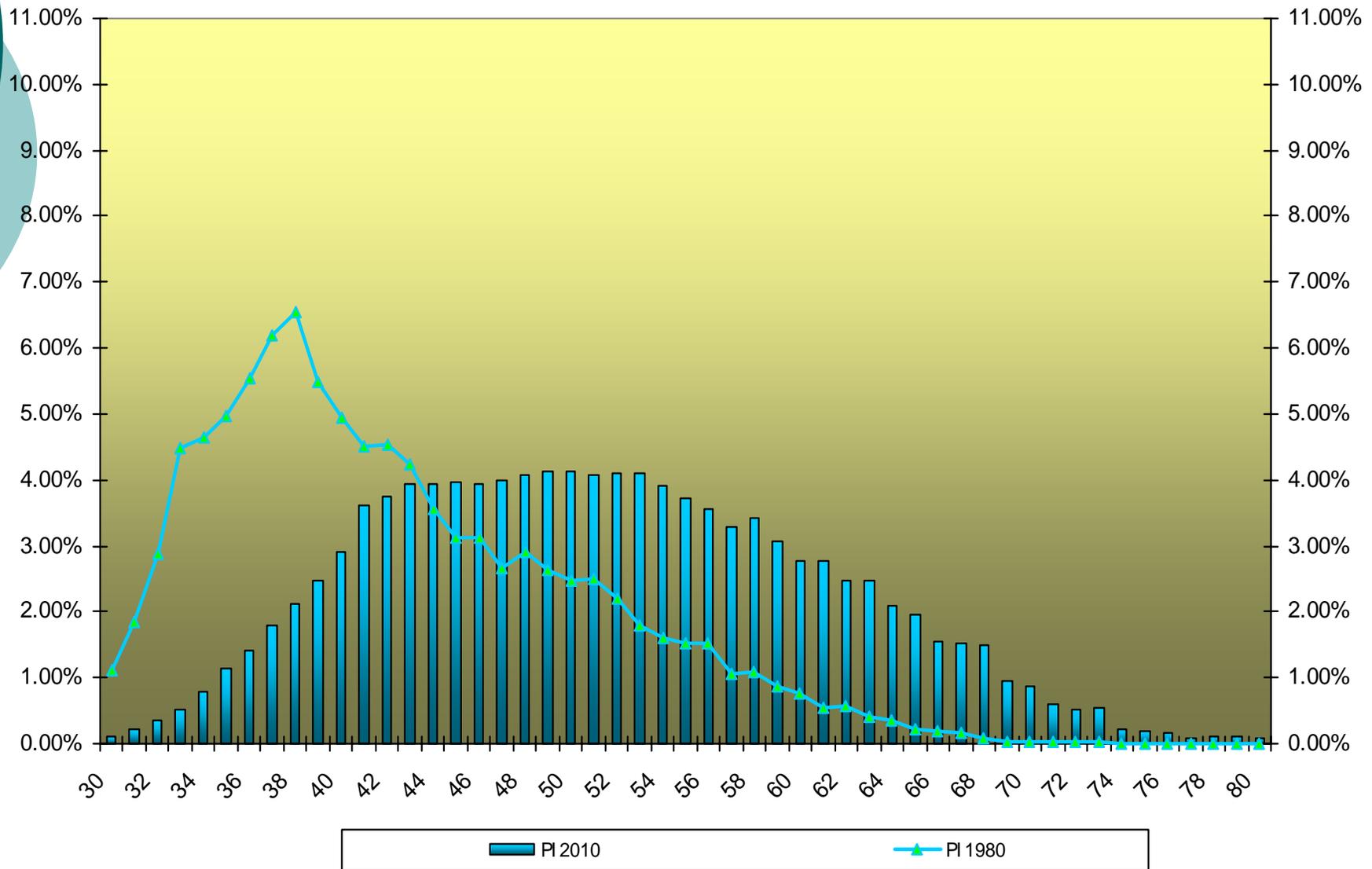
Age Distribution of PIs

2009



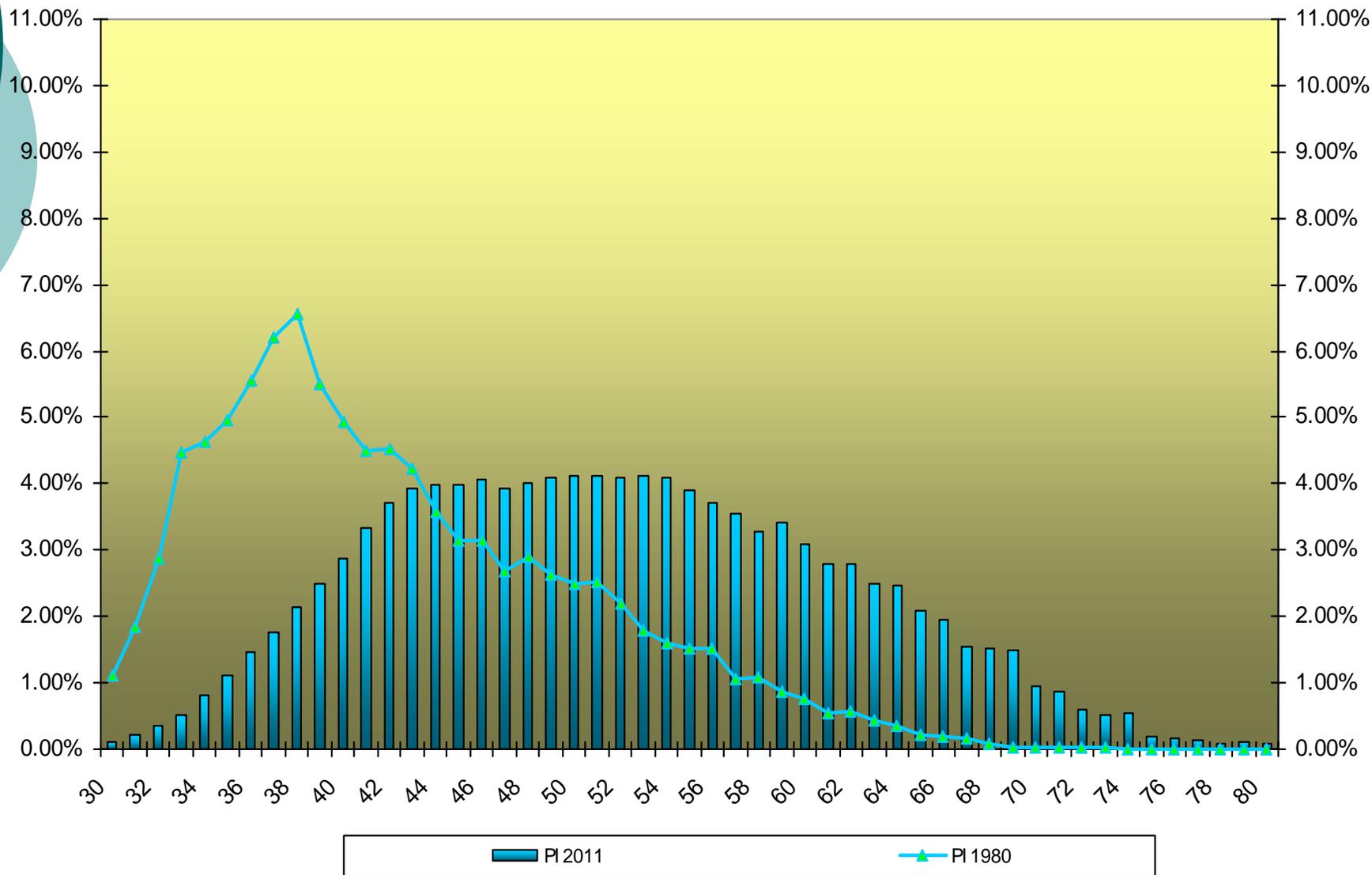
Age Distribution of PIs

2010



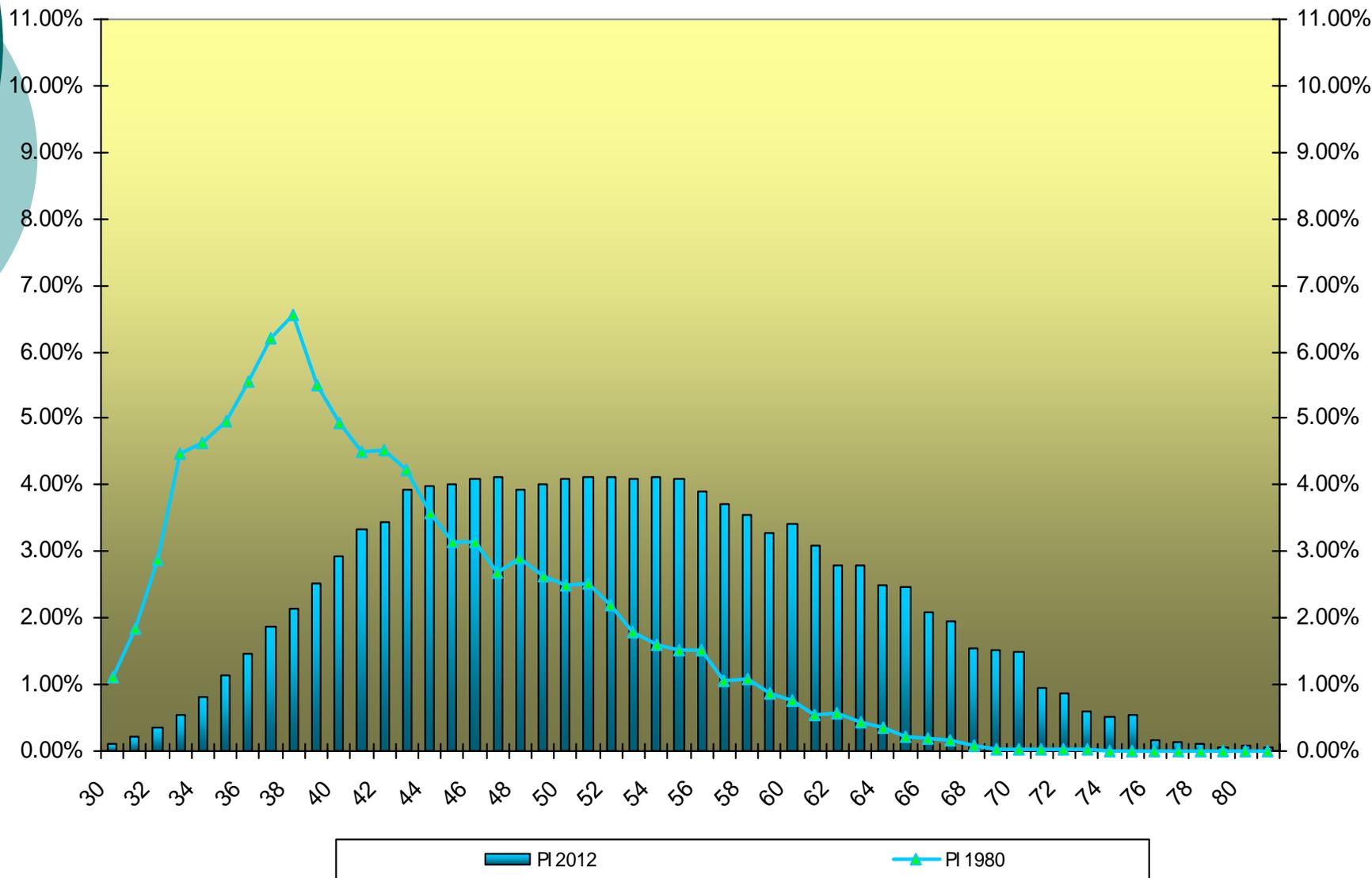
Age Distribution of PIs

2011



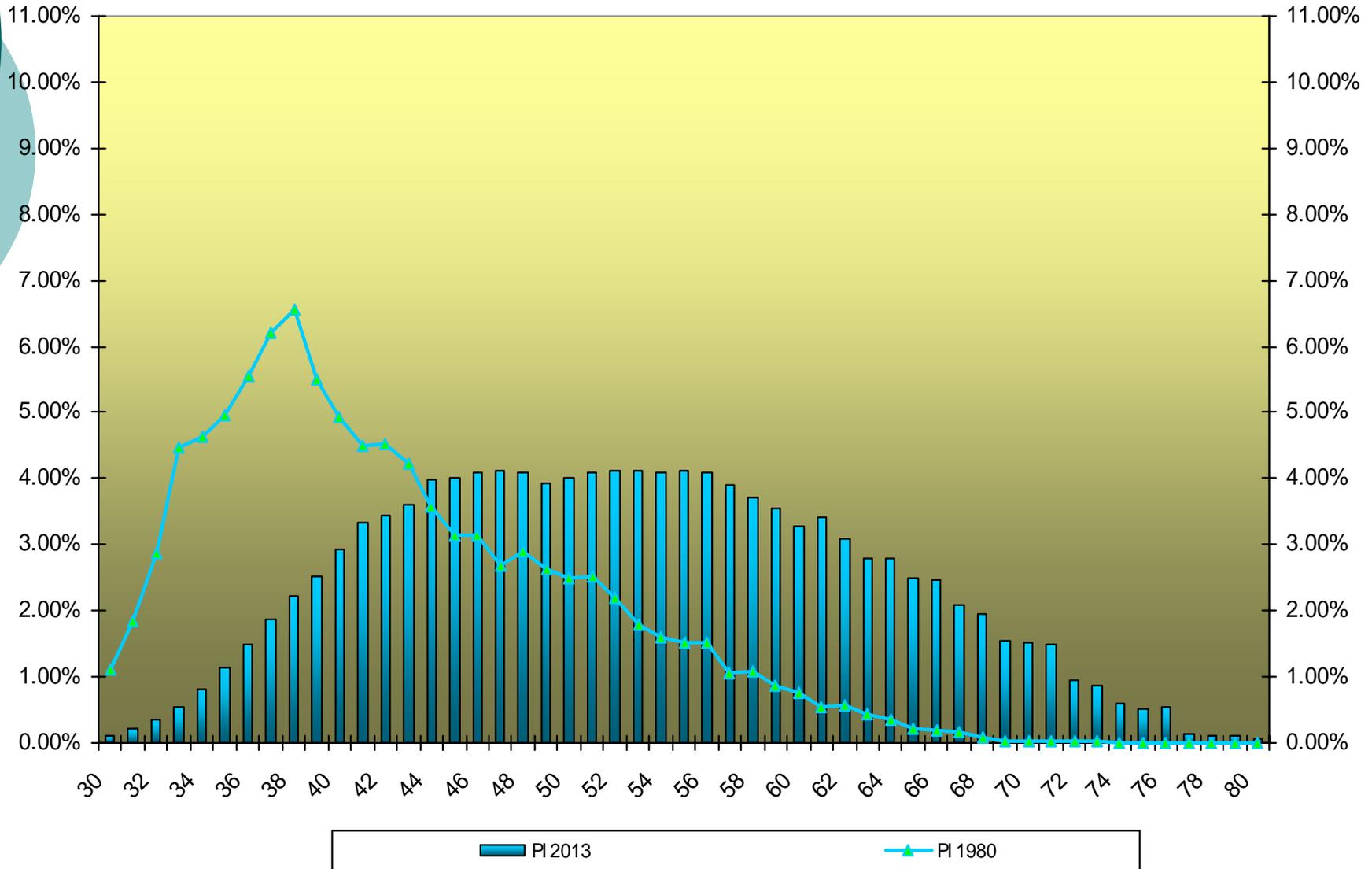
Age Distribution of PIs

2012



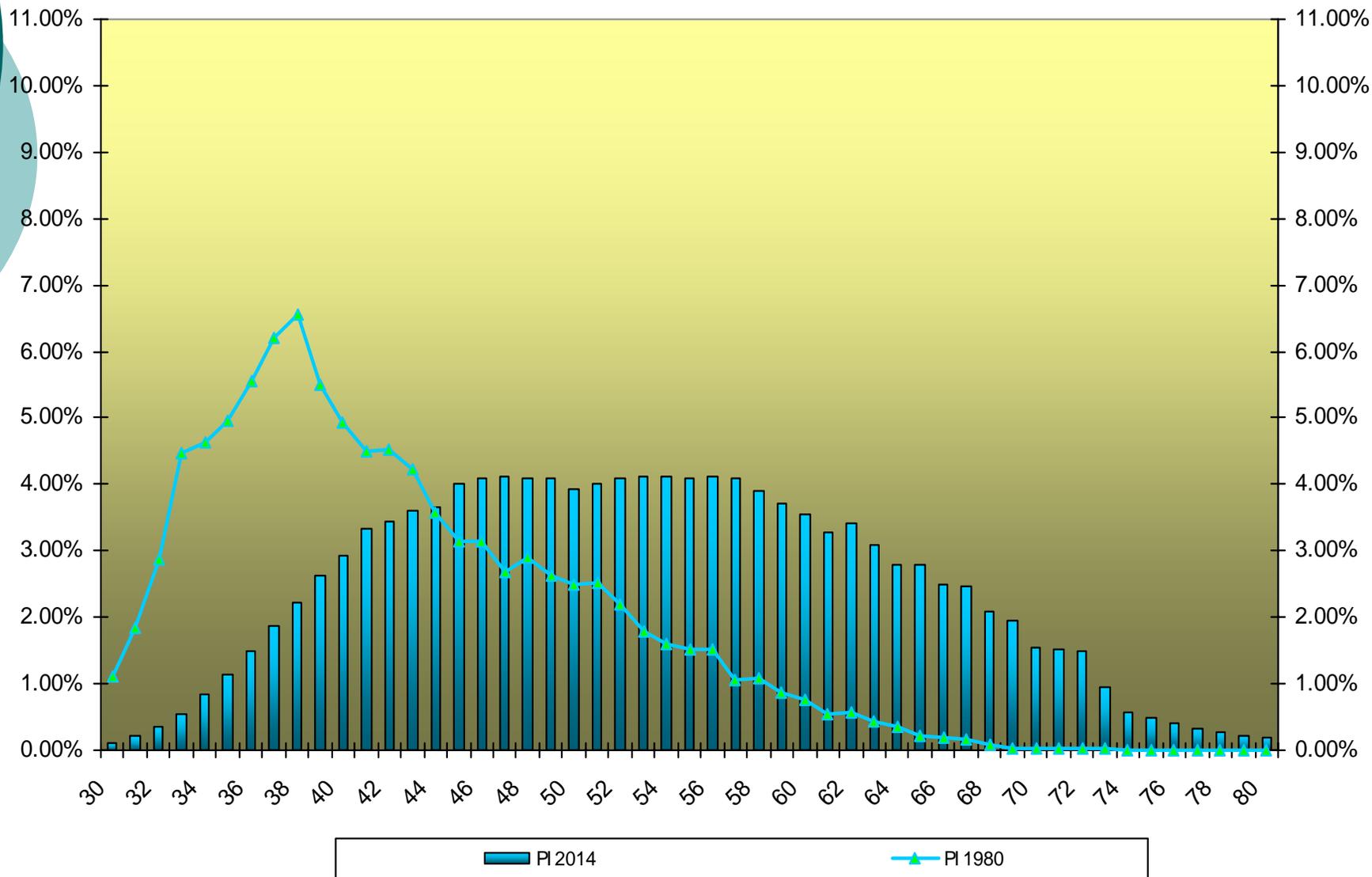
Age Distribution of PIs

2013



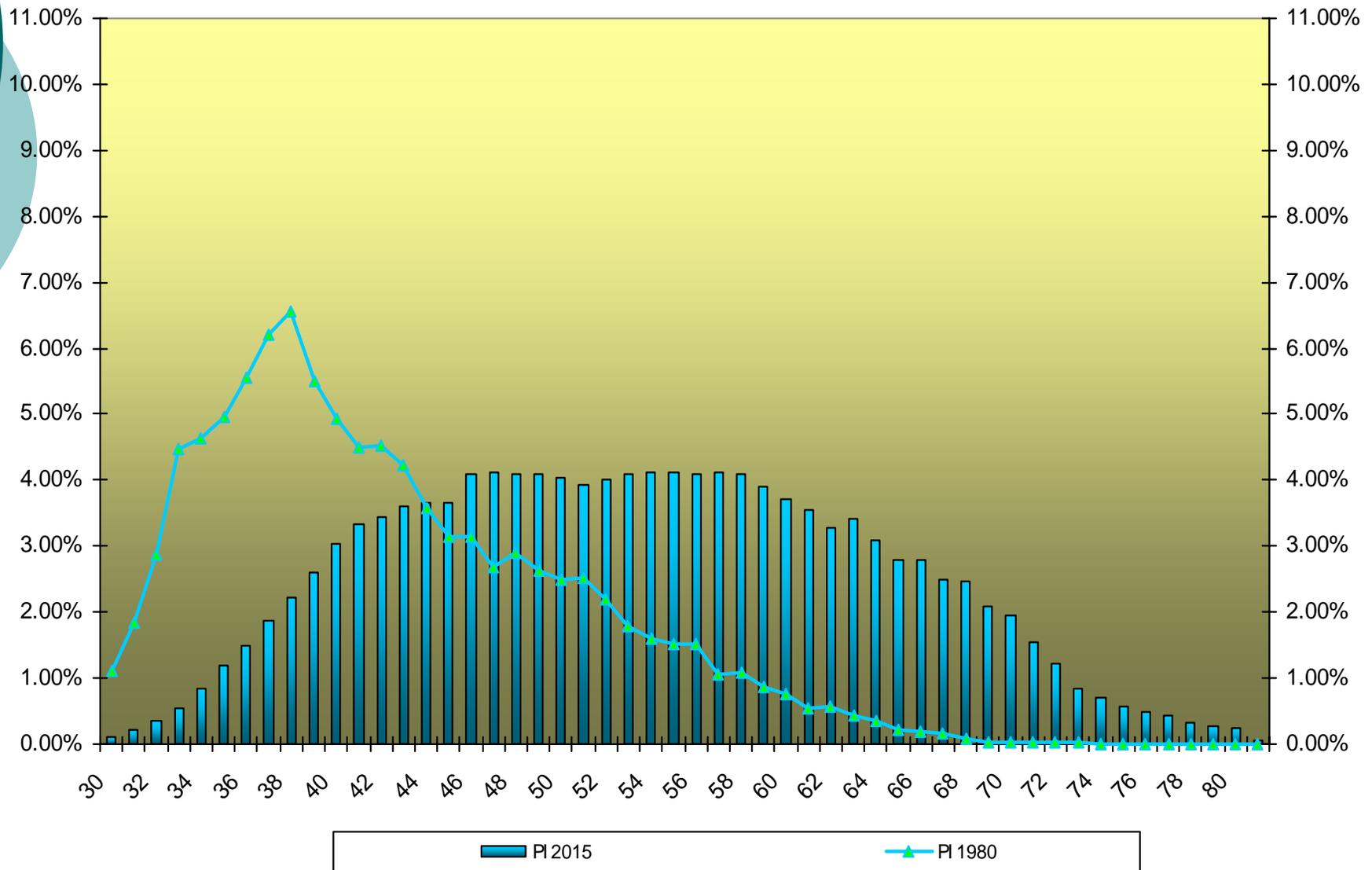
Age Distribution of PIs

2014



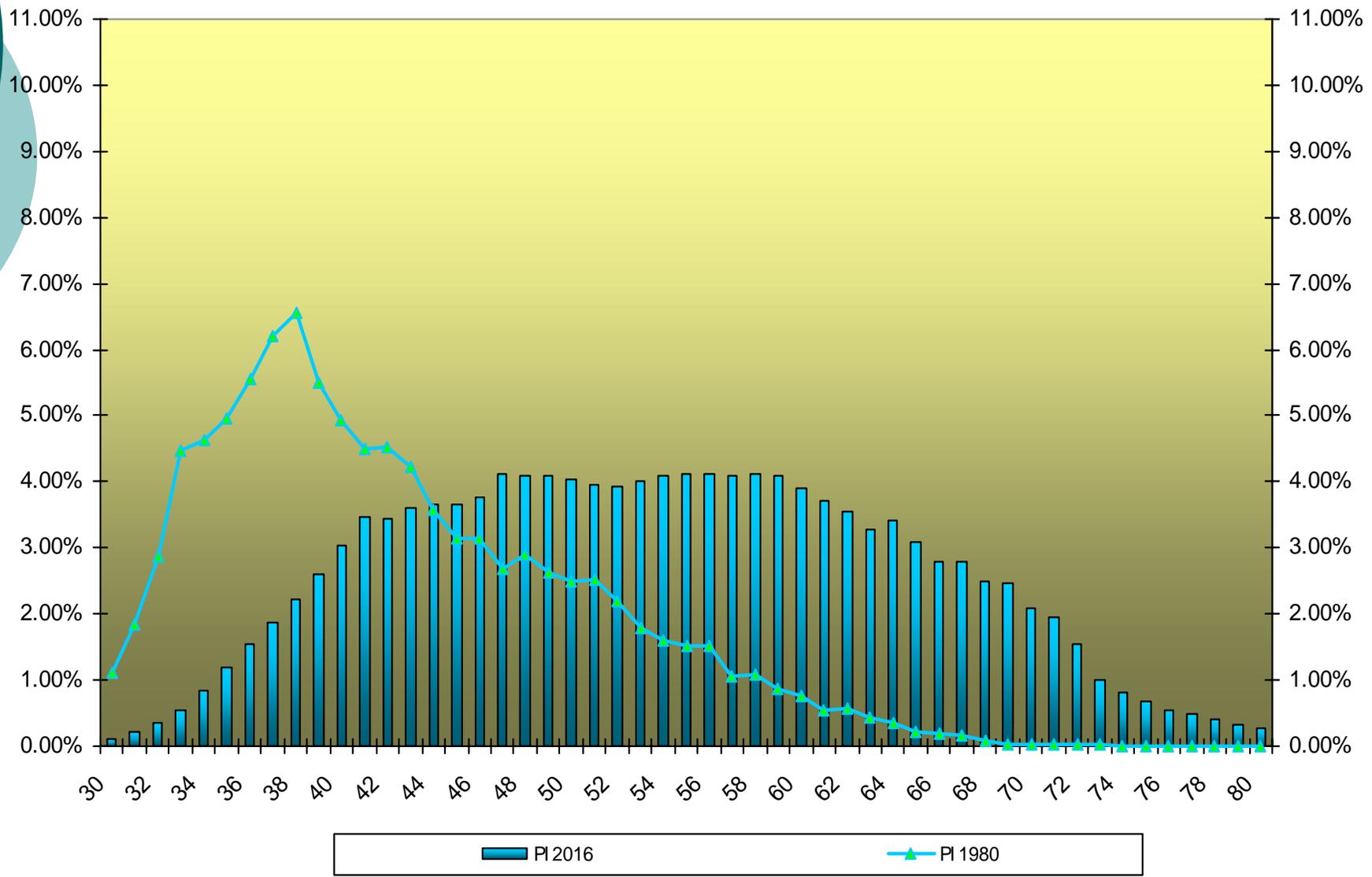
Age Distribution of PIs

2015



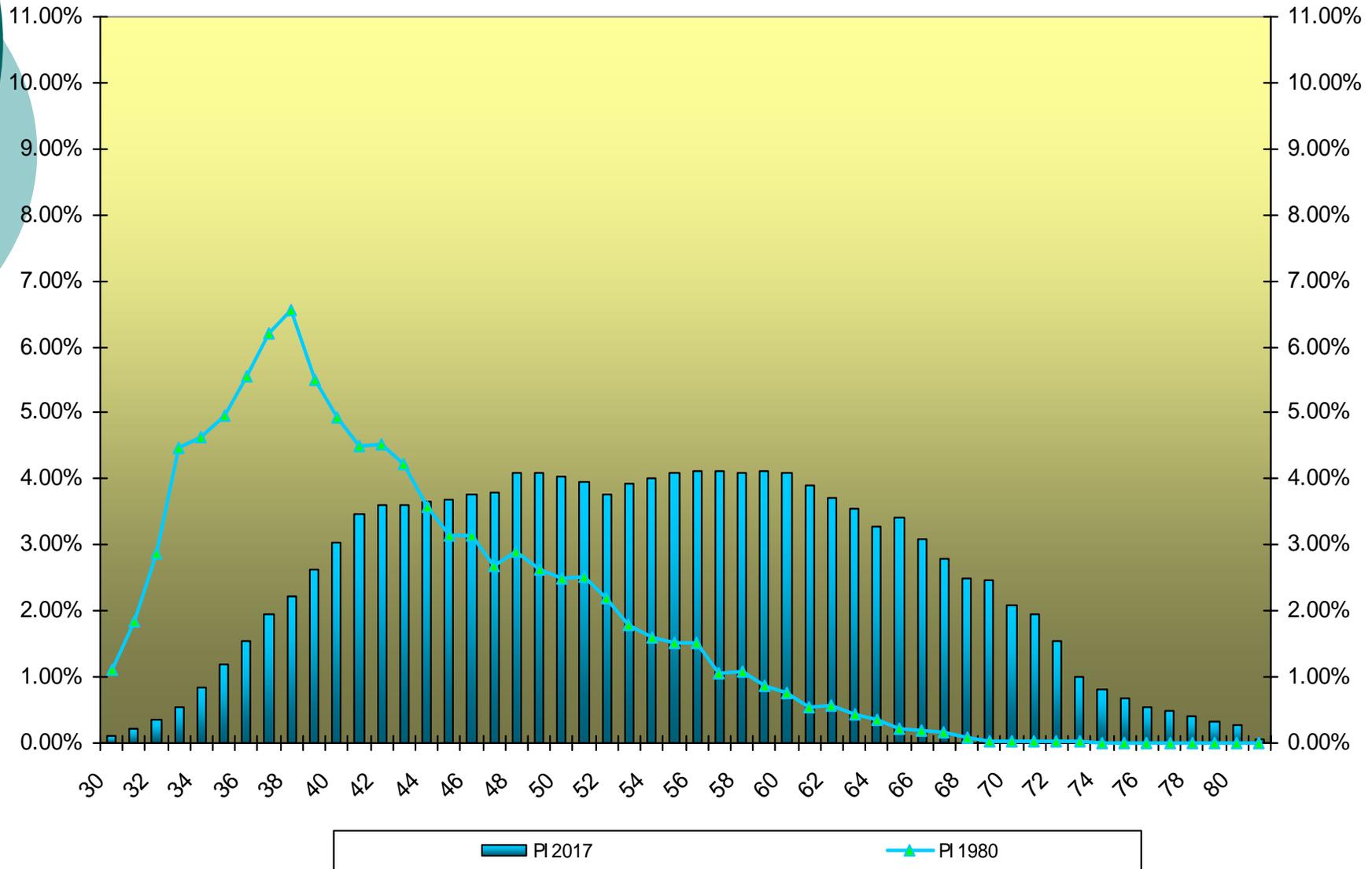
Age Distribution of PIs

2016



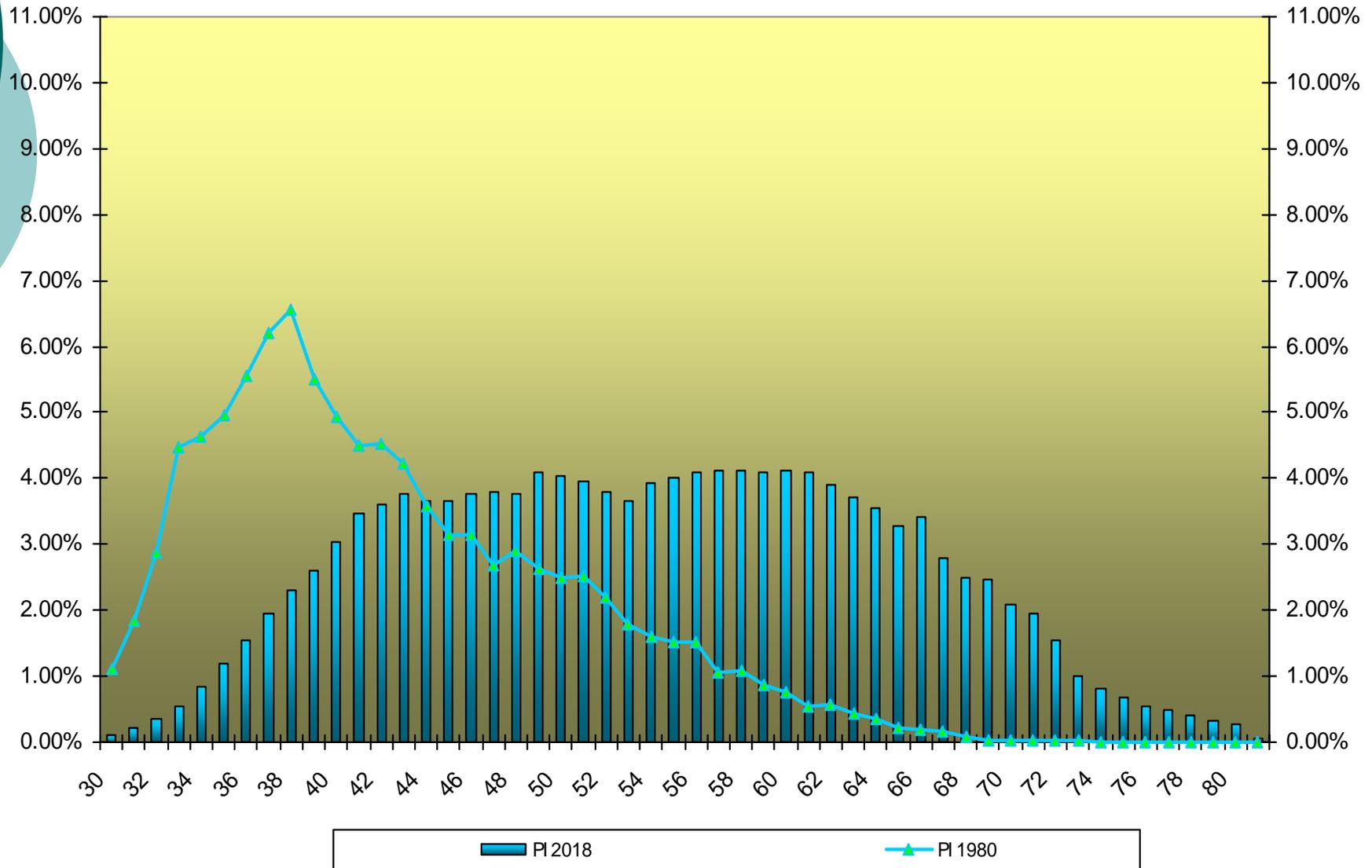
Age Distribution of PIs

2017



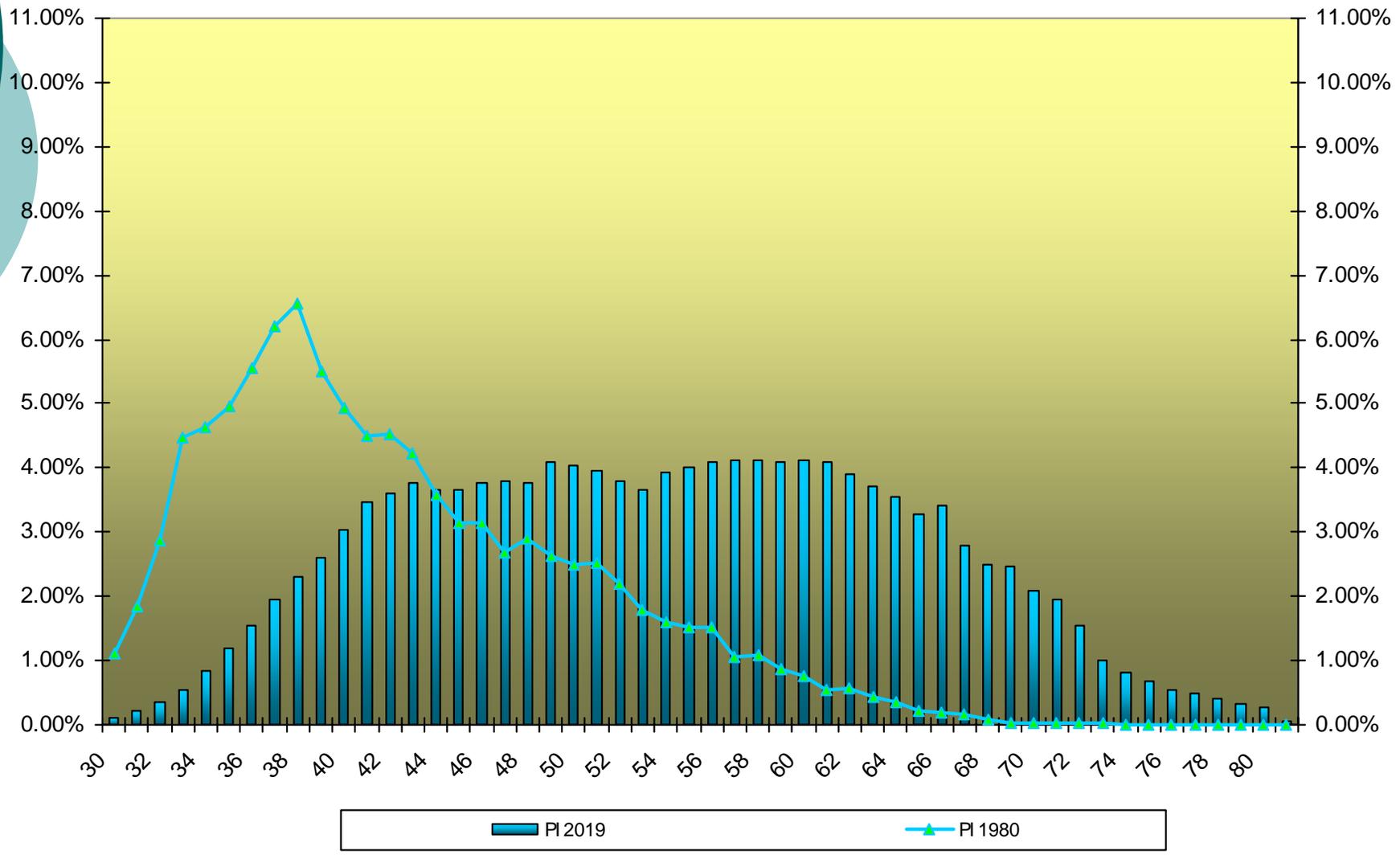
Age Distribution of PIs

2018



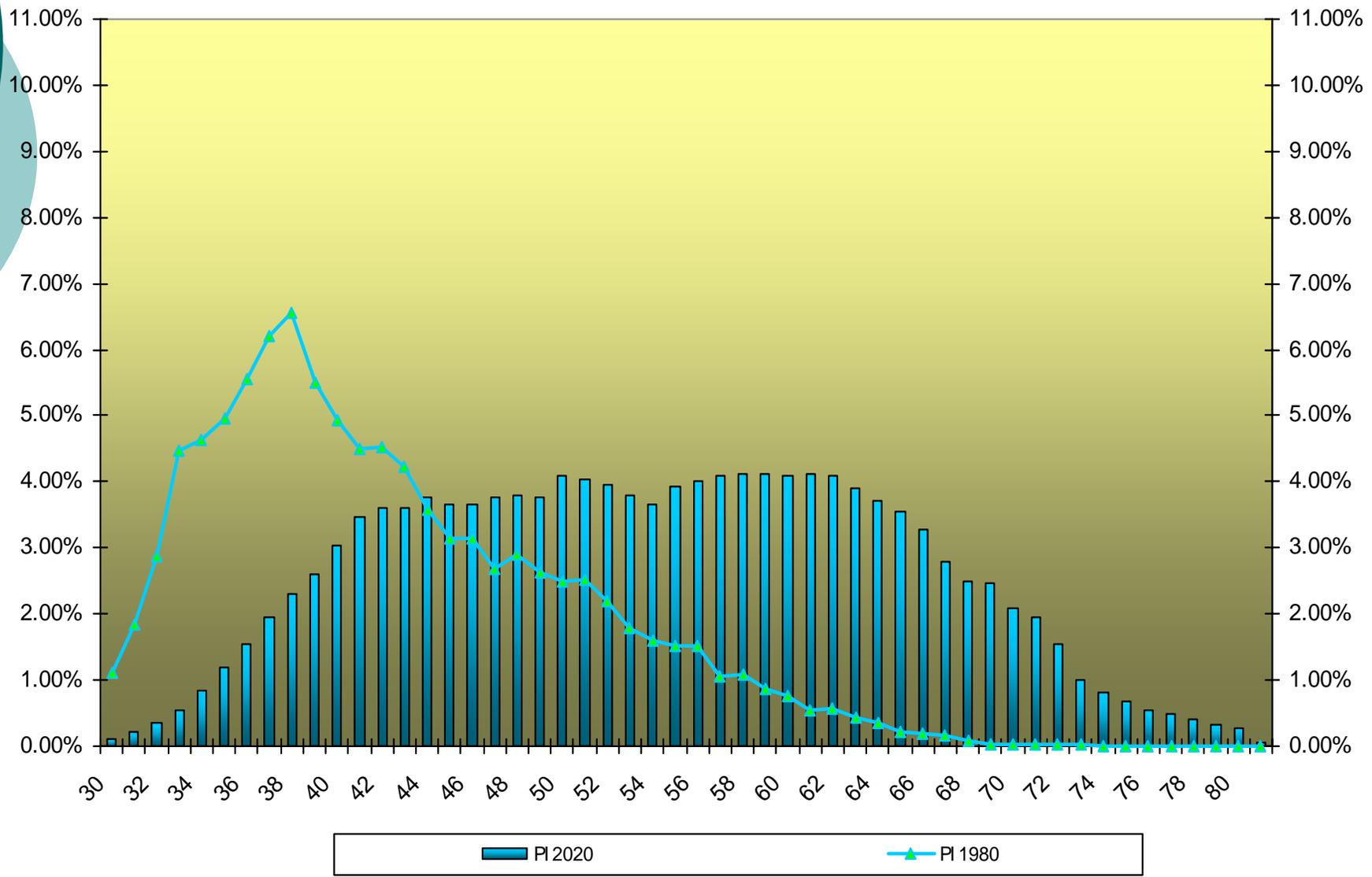
Age Distribution of PIs

2019



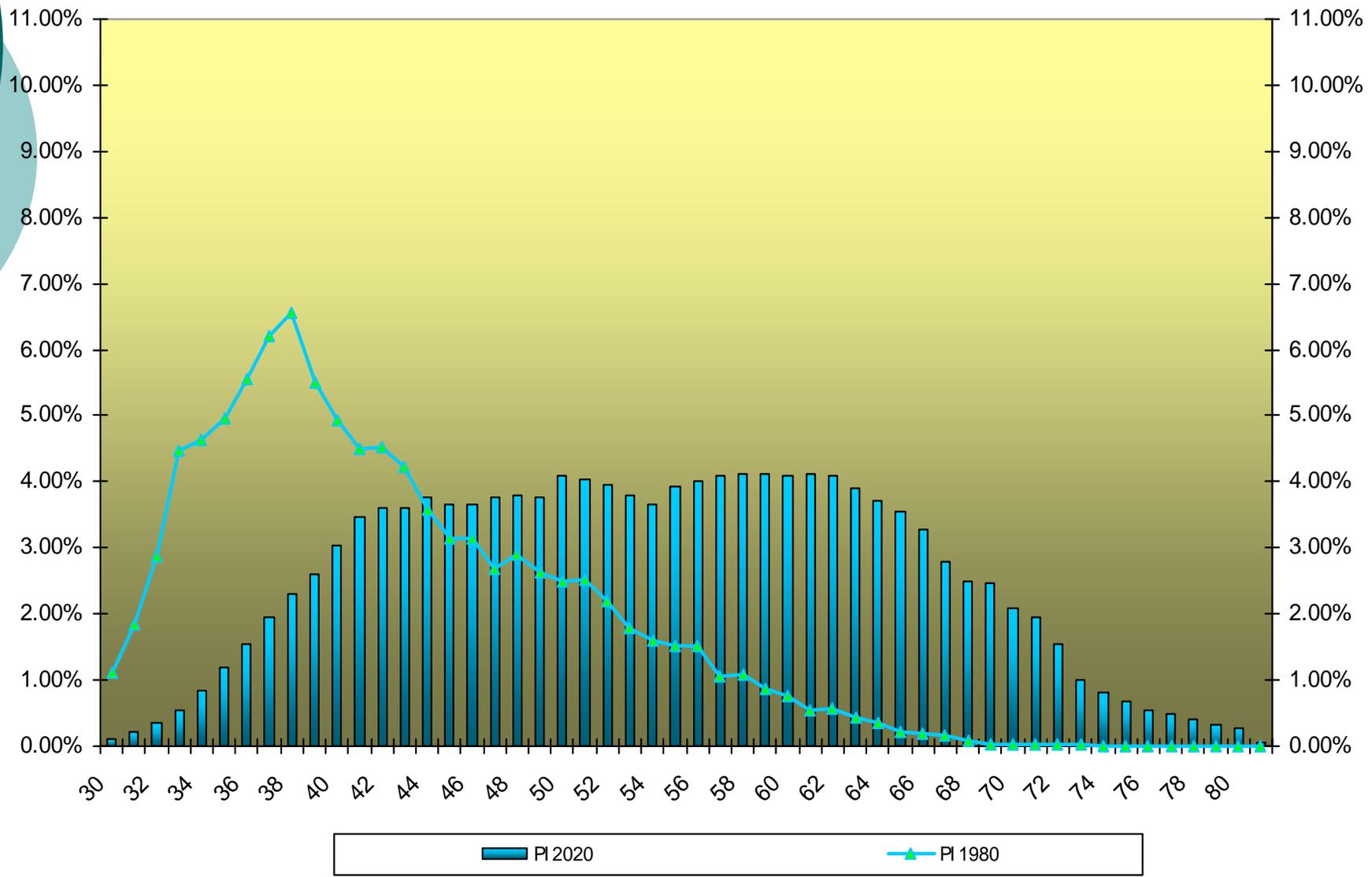
Age Distribution of PIs

2020



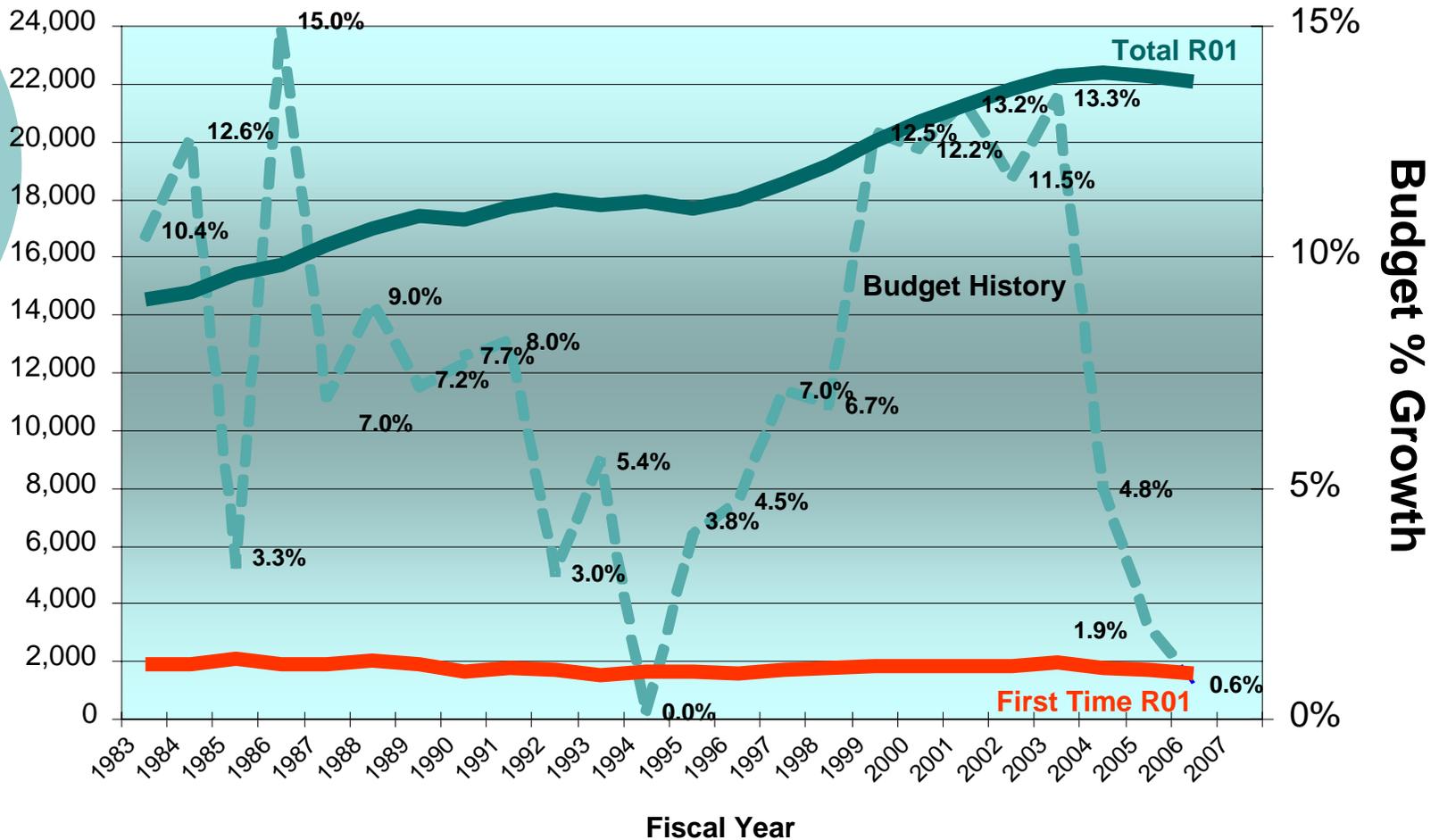
Age Distribution of PIs

2020



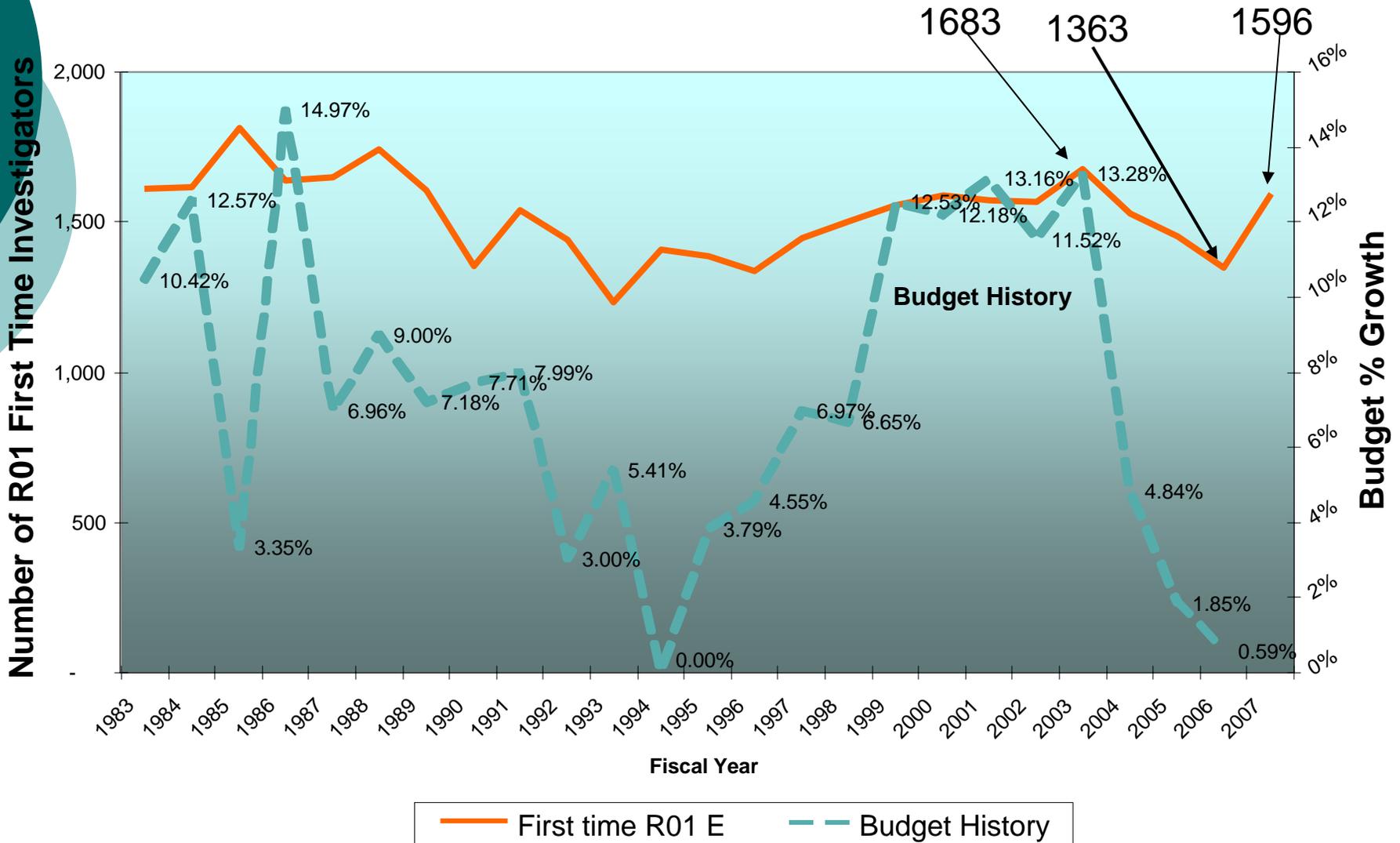
Number of R01 Investigators Is Not Closely Tied to Budget Growth

Number of Investigators



--- Budget History
 --- Total R01
 --- First Time R01 E

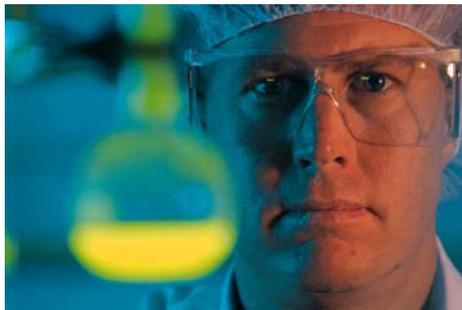
First Time R01, Budget History



RPG Funding Rates and Success Rates 1998-2007

FY	Applicants	Awardees	Funding Rate	Applications	Awards	Success Rate
1998	19,662	6,974	35.5%	24,151	7,518	31.1%
2000	22,174	8,022	36.2%	27,798	8,765	31.5%
2002	23,771	8,605	36.2%	30,068	9,396	31.2%
2004	30,258	9,125	30.2%	40,861	10,052	24.6%
2006	33,119	8,406	25.4%	45,688	9,128	20.0%
2007	33,886	9,233	27.2%	47,455	10,100	21.3%

NIH: Adaptive Strategies for Tough Times



- Our approach in 2007: No inflationary adjustments for non-competing renewal awards in FY2007
- Our Goal:
 - Stabilize number of competing grants
 - Strengthen support for at-risk populations:
 - New Investigators
 - NIH is committed to maintaining historic average
 - First grant renewals
 - Well-established investigators with little or no additional support

2007 Goals—Stabilizing the Number of New Investigators and Bridge Support for More Established Investigators

- Committed to maintaining a baseline number of new R01 investigators
- Average over past five years (FY'02-'06) 1523 new R01 investigators/year
- In FY 2007
 - Funded 1596 new R01 investigators (1353 in 2006)
 - Funding rate of 20.6%, Success rate of 18.5%
 - 265 Director's bridge grants for first renewals and near payline well established Investigators with less than 400k in other funding
- We plan to continue policy in 2008, with a goal of keeping the funding rate for first time R01 applicants ~20% or higher and maintain number of New R01 grantees at average of last five years or higher depending upon quality of applications.

R01 Funding Rates 1998-2007

FY	First Time Applicants			Previously funded applicants					
	Applicants	Awardees	Funding Rate	All types			New (type 1) only		
				Applicants	Awardees	Funding Rate	Applicants	Awardees	Funding Rate
1998	6,171	1,518	24.6%	10,968	4,387	40.0%	7,811	2,234	28.6%
2000	6,752	1,612	23.9%	11,708	4,982	42.6%	8,611	2,657	30.9%
2002	6,868	1,586	23.1%	11,667	4,803	41.2%	8,736	2,494	28.5%
2004	8,155	1,539	18.9%	13,855	4,988	36.0%	10,839	2,564	23.7%
2006	8,183	1,363	16.7%	14,763	4,343	29.4%	10,253	2,180	21.3%
2007	7,758	1,596	20.6%	13,923	4,485	32.2%	9,460	2,254	23.8%
2007 Success Rates:			18.5%	26.1%			19.7%		

New Investigator Awards 2006-2007

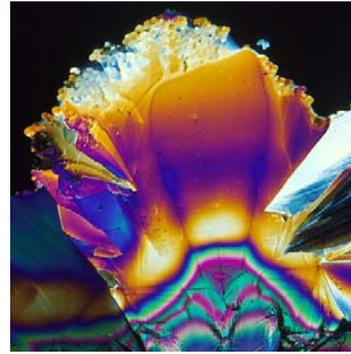
Fiscal year	R01s (R01,R29)	Other Large Awards* (DP1, DP2, R44, U01)	Other Moderate Awards* (R21, R03, R15, R43,R13)
2006	1418	391	1575
2007	1633 (+215)	459 (+68)	1820 (+245)

Pathway to Independence awards K99/R00 not included (171 in 2007)

***Preliminary data**



Given Budgetary and Demographic trends, it is important for NIH to develop proactive policies based on quantitative long-range forecasts and focus on preserving a dynamic and innovative scientific workforce



NIH *Transforming medicine and health through discovery*

