

Career Development Funding Opportunities and Transitions for Junior Faculty Interested in Aging

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**With sincere appreciation to Tom Gill for several slides*

Essential Ingredients for a Successful Research Career

- Rigorous research training
 - Essential part of most K awards
 - Has benefits you might not realize
 - Contacts, colleagues, collaborators
- Superb mentorship
 - Irreplaceable
- Fertile research environment
 - Look outside your immediate surroundings
- Research focus
 - Make it relevant to YOU
- Hard work – realize you're giving up something to do this, and you need to be ok with that

Sources of Funding

- National Institutes of Health
 - not limited to NIA
- Veterans Administration
- Private Foundations
 - national and local
- Your institution
 - Again, look outside your “typical” world
- Industry
 - Make sure it fits your career direction; there’s no margin in these studies either so don’t think of this as a “gravy train”

Logical Sequence for NIH Funding

Pre-doctoral Training
T32/F31/other



Post-doc Fellowship Training
T32/F32/K99R00



Early Junior Faculty
K08/K23/Beeson



Late Junior Faculty
R01/R03/R21



Mid Career Faculty
K24/R01s



Senior Faculty
K07/R01s/P30

Sample NIH K award Comparison

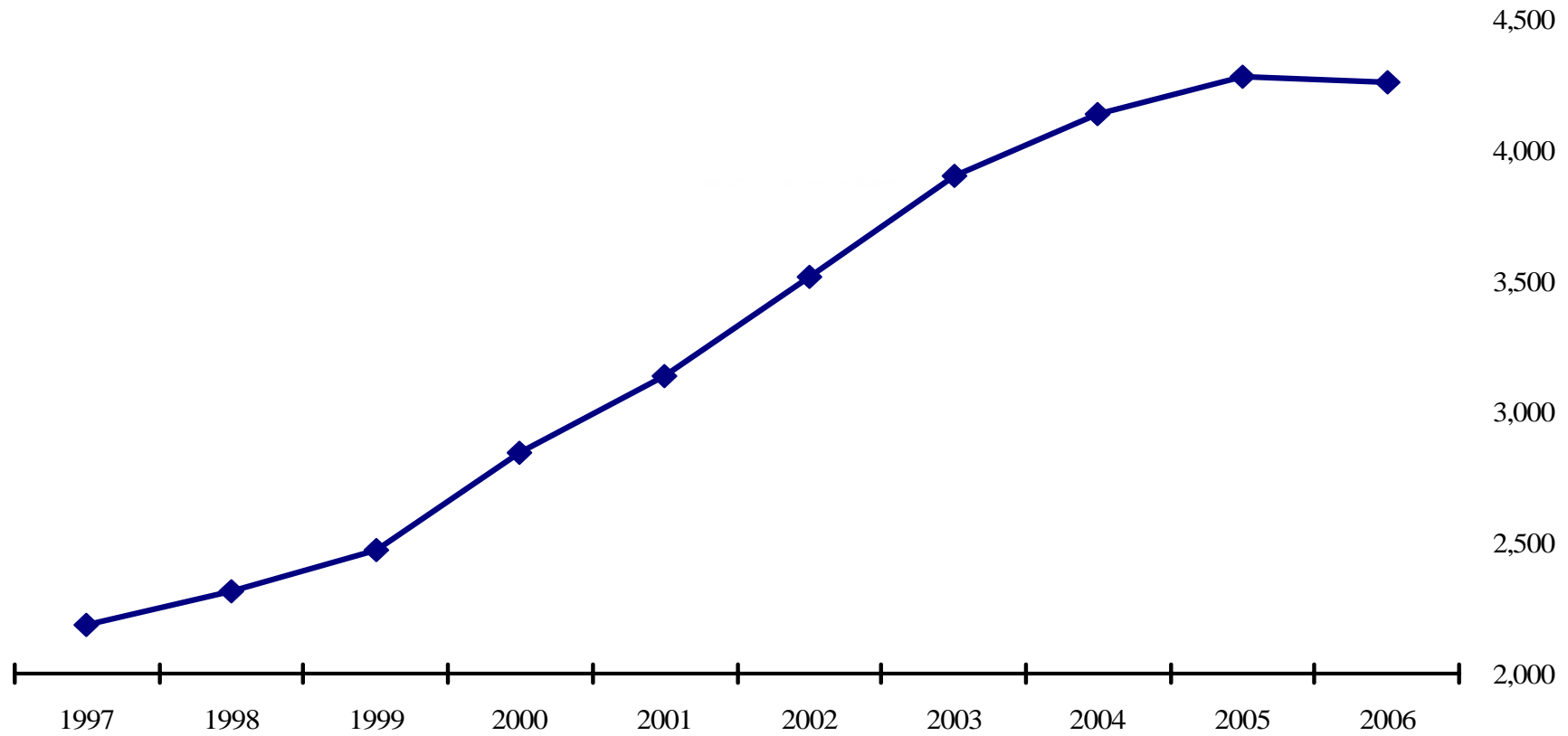
Award	K08	K12 (local, CTSA-driven)	K23
Duration	3-5 yrs	5 yrs	3-5 yrs
\$\$'s/year	\$75,000 salary/fringe \$20,000 research	\$75,000 salary/fringe \$25,000 research	\$75,000 salary/fringe \$25,000 research
% effort supported	75% of time to research and career dev	75% of professional effort to research	75% of time to pt-oriented research and career dev

K Kiosk on NIH website

<http://grants.nih.gov/training/careerdevelopmentawards.htm>



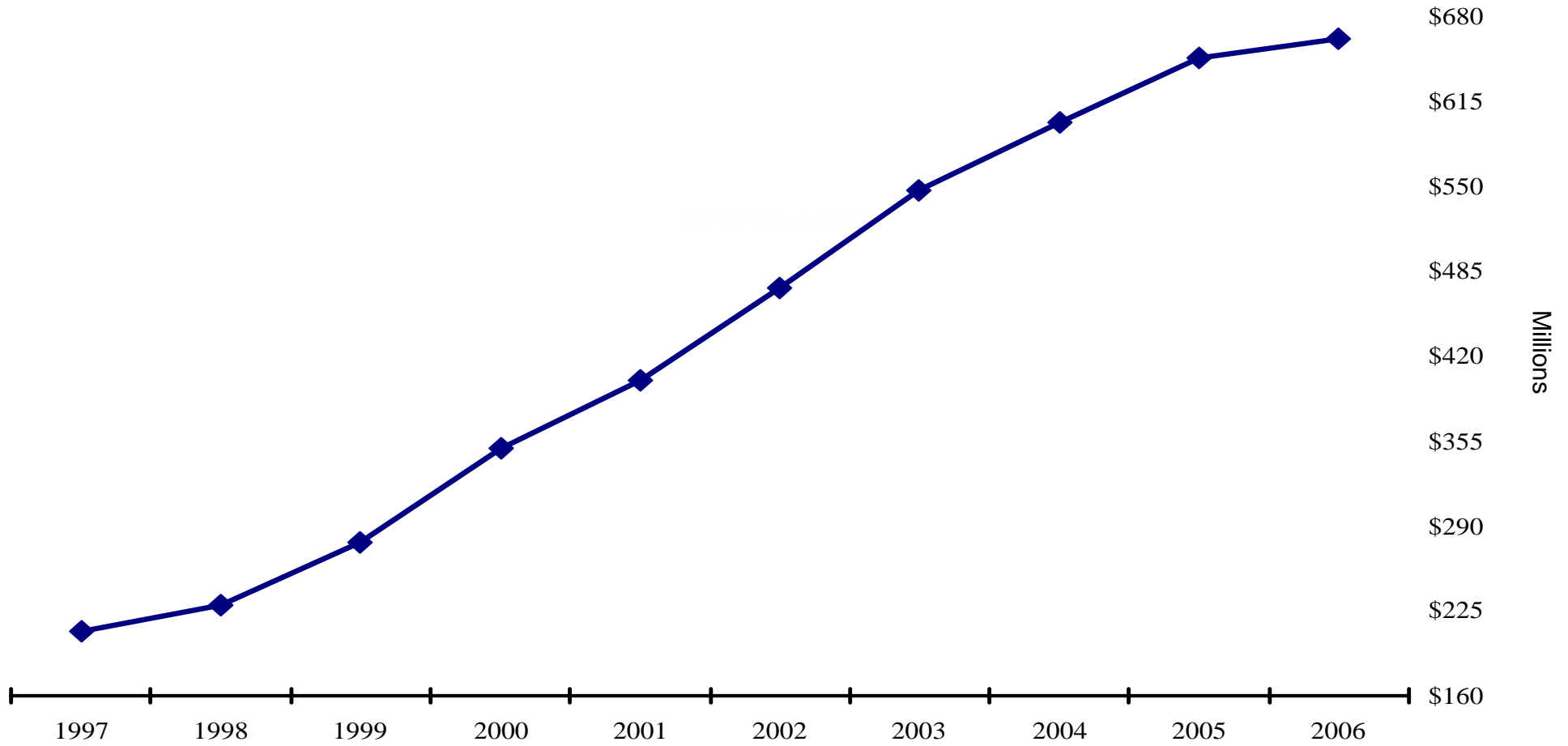
Number of NIH K Awards* Fiscal Years 1997-2006



*Includes both individual and institutional awards. The actual number of individual participants is higher.

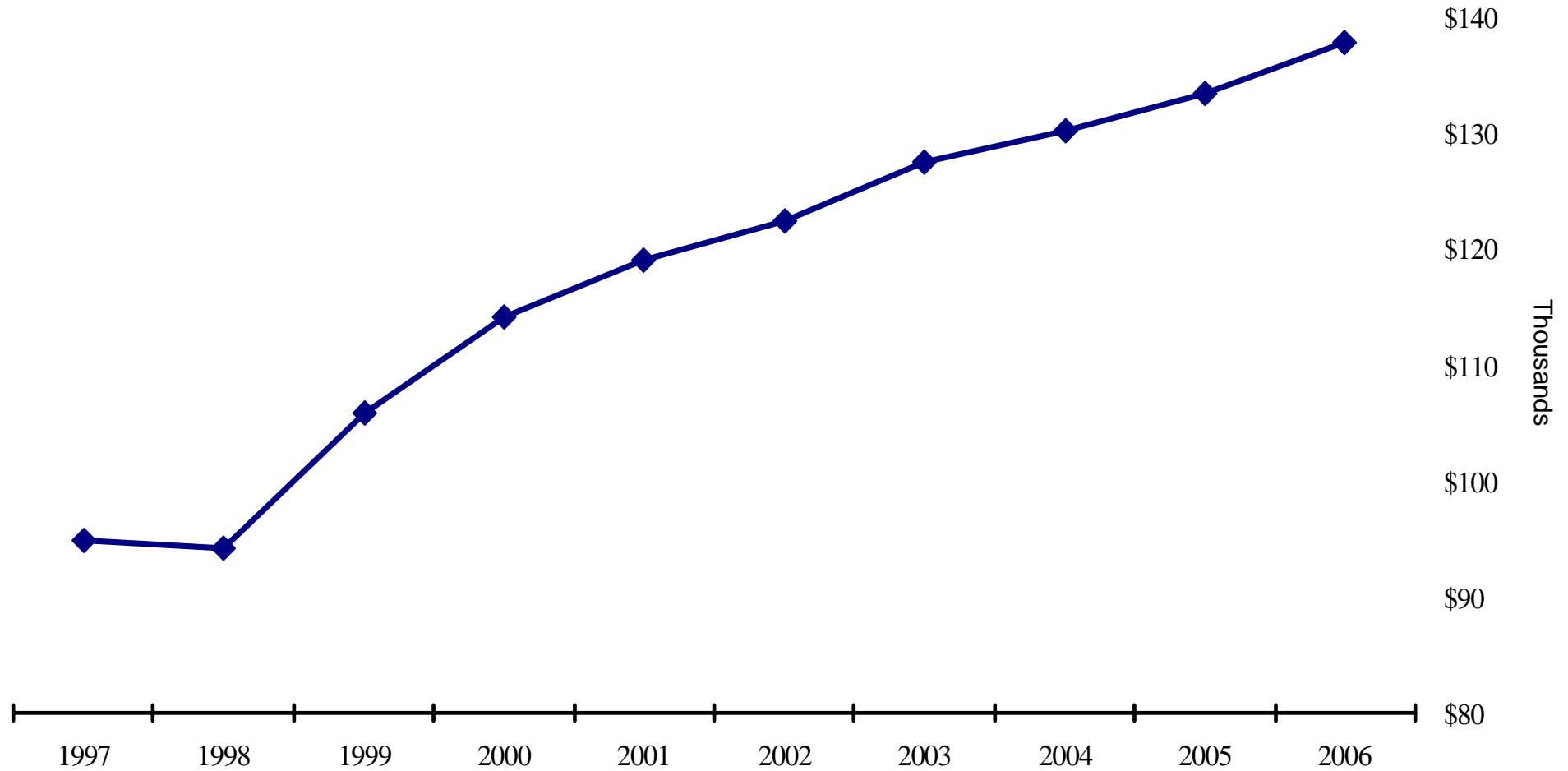


Total Dollars to NIH K Awards, Fiscal Years 1997- 2006



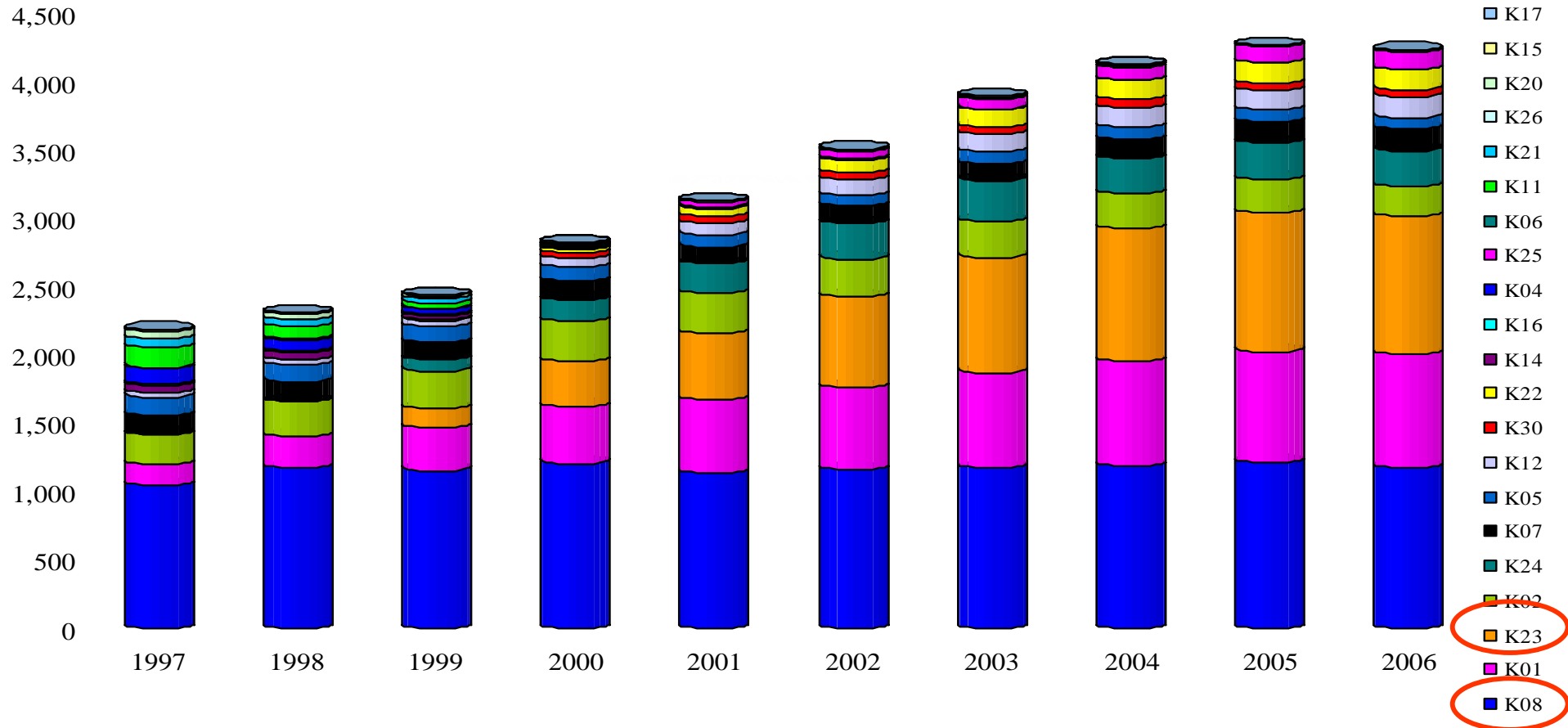


Average NIH Individual K Award Size, Fiscal Years 1997-2006





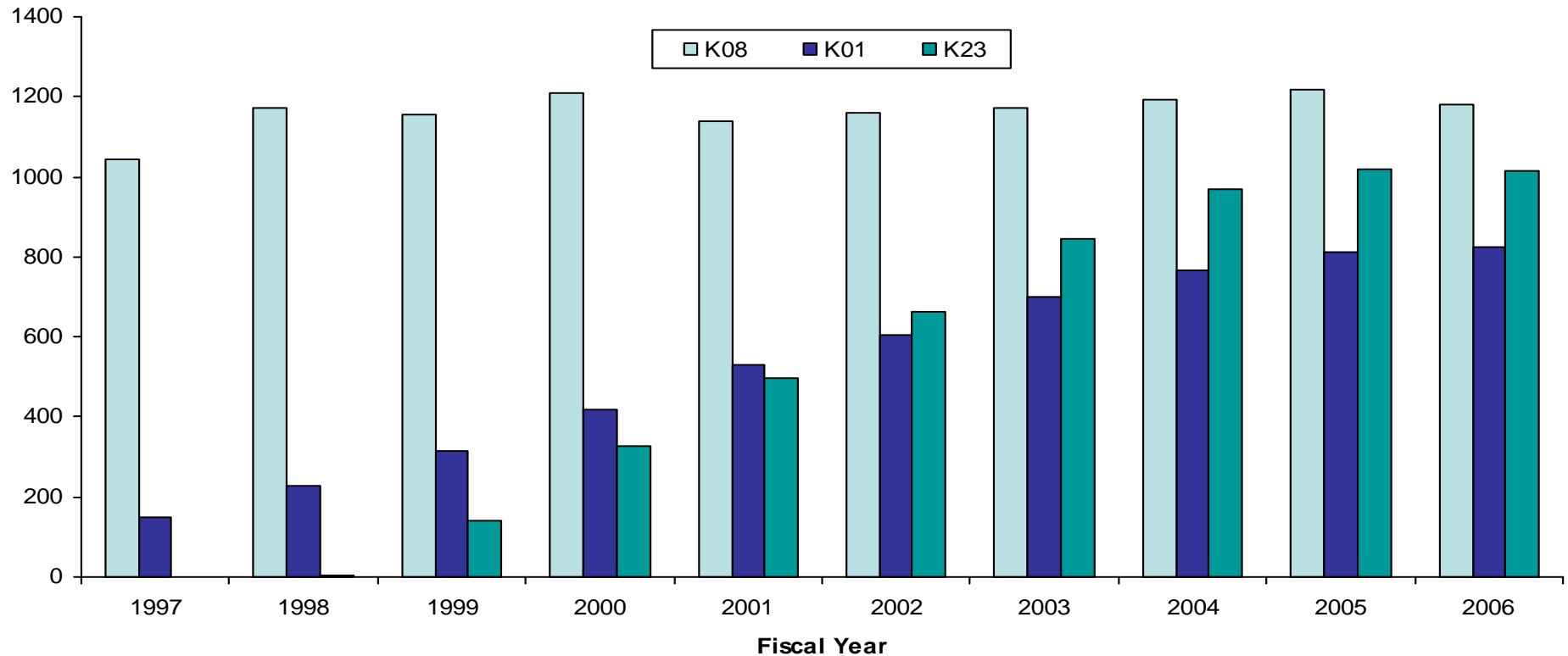
Distribution of Number of NIH K Awards by Activity, Fiscal Years 1997-2006





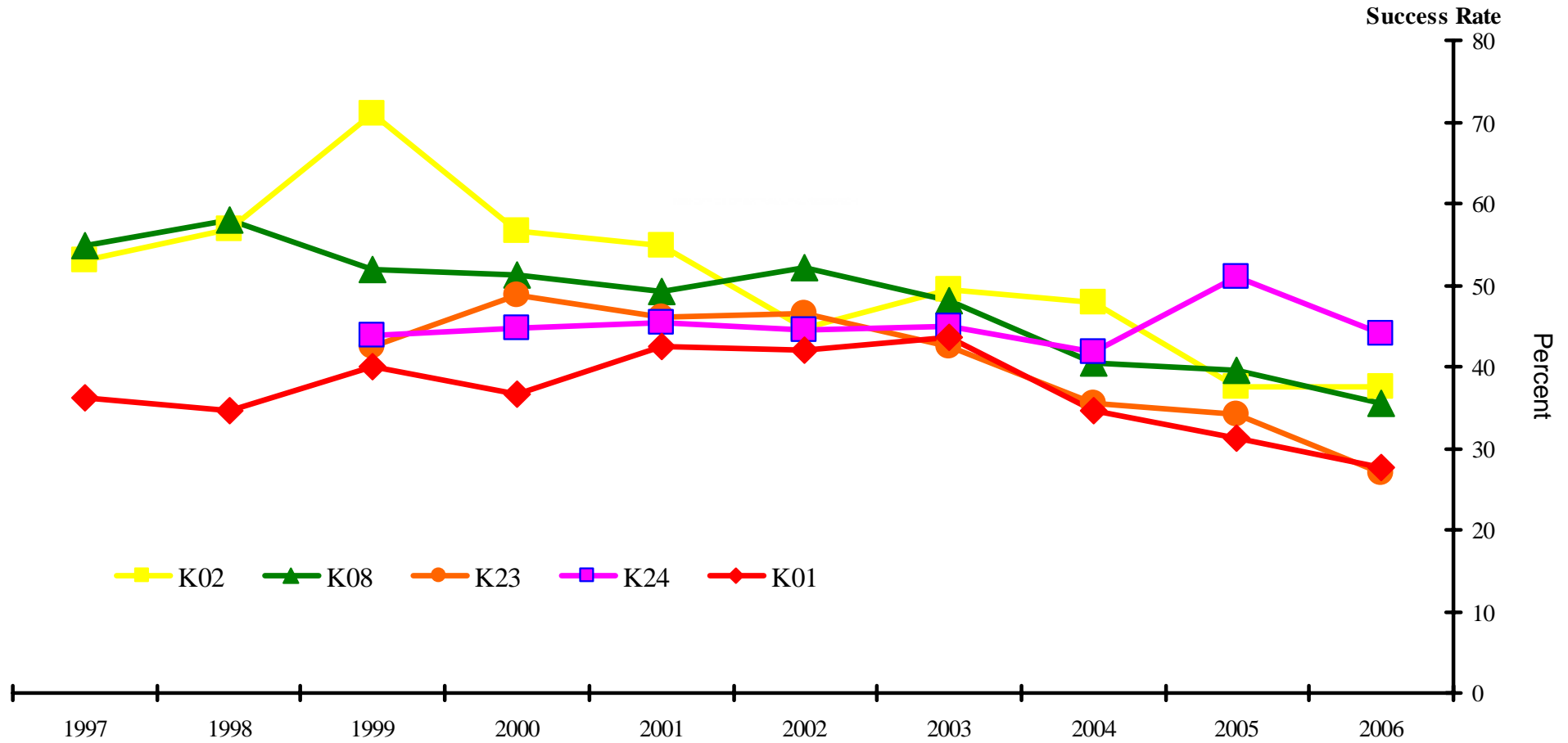
NIH Career Development Programs

Number of NIH Entry Level Career Development Awards (FY 1997 - 2006)



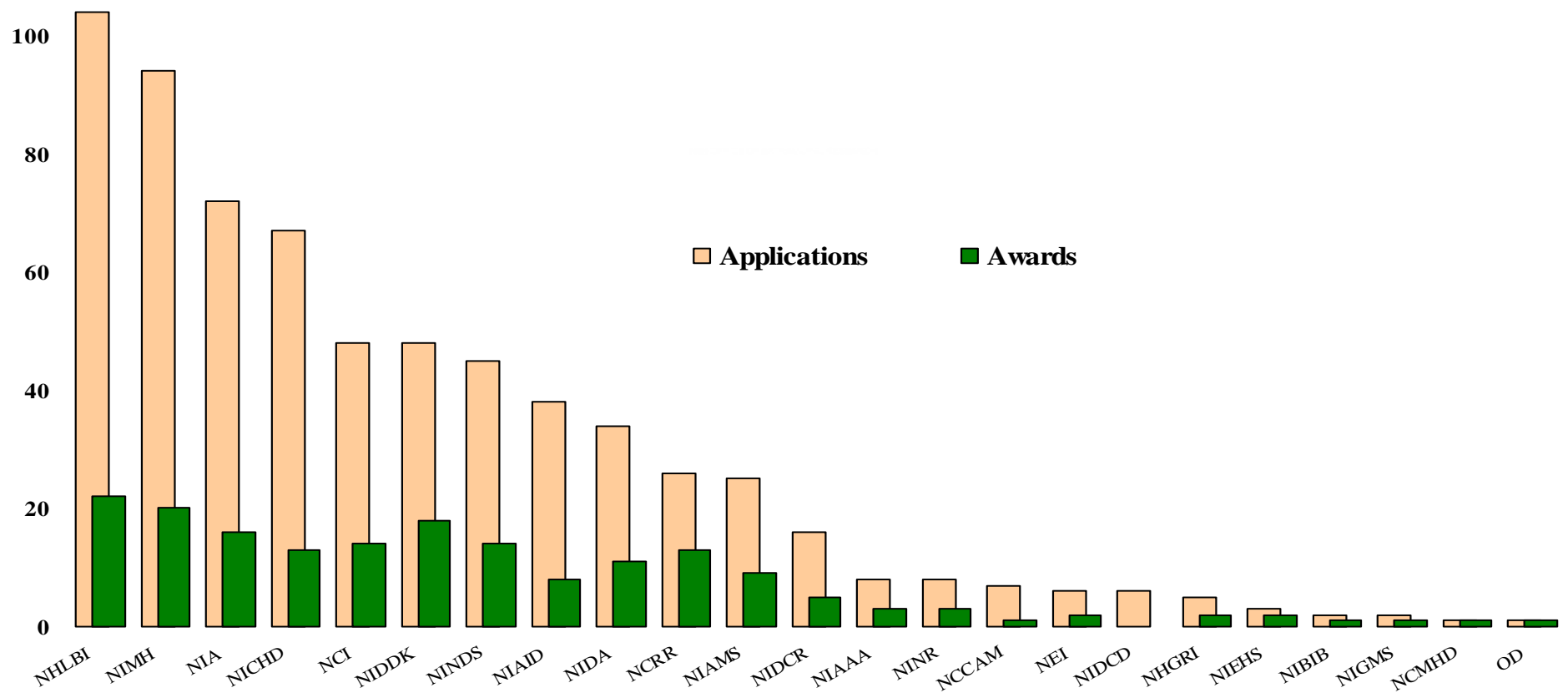


NIH Success Rates for Selected K Activities, Fiscal Years 1997-2006





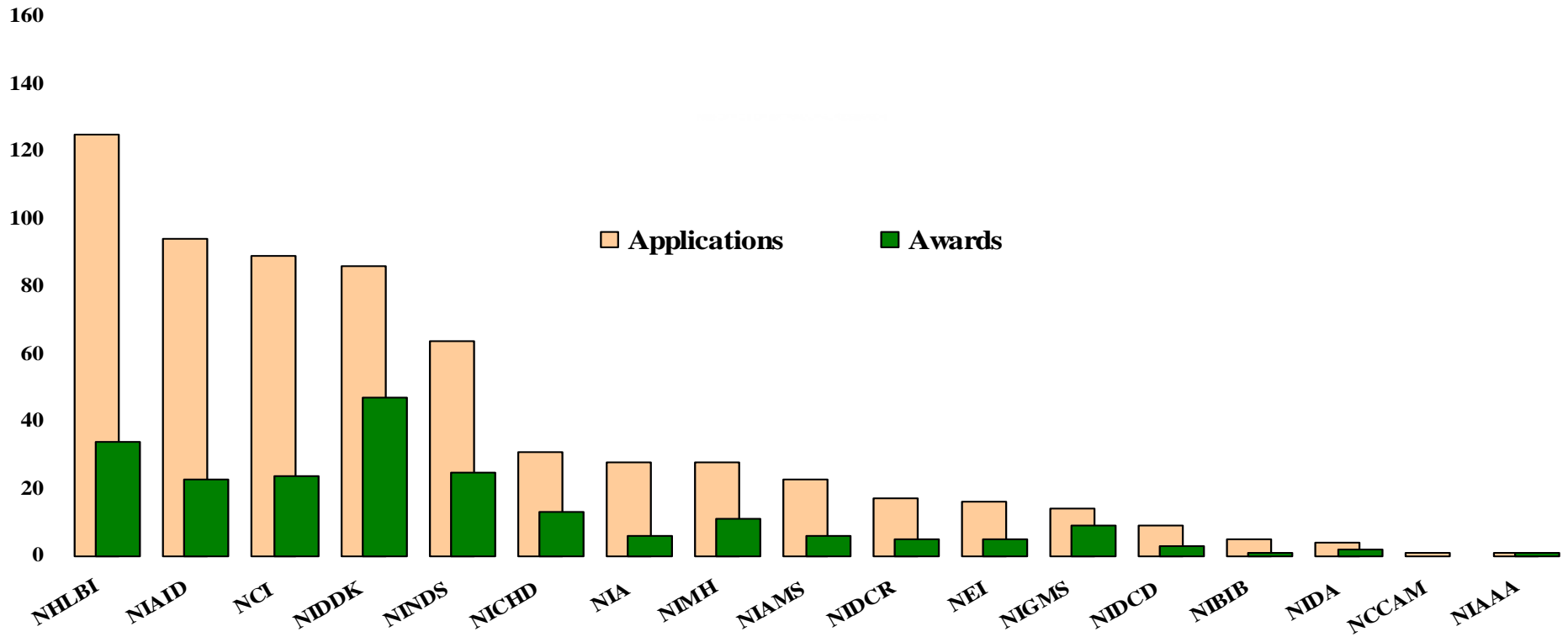
NIH K23 Applications* and Awards by Institute or Center, Fiscal Year 2006



*Success rate base; OD reflects funding from the Office of Dietary Supplements.



NIH K08 Applications* and Awards by Institute or Center, Fiscal Year 2006



Sample Non-NIH Career Development Awards for Researchers in Aging

Award	VA (CDA1, CDA2, CDTA)	Williams Scholars	Jahnigen Scholars
Duration	2-5 years	2-3 years	2 years
\$\$'s/year	Quite variable, depends on the award, 8 th 's, etc	\$50-75K; unrestricted	\$75,000 + \$25K institution match; unrestricted
% effort supported	75% of time to VA research	75% of time to research; 40% of TFWS-related	75% of time to pt-oriented research and career dev
Yrs after clinical training	Up to 5 years	≤ 4 years out from fellowship	Completed res/fellowship 1998 or later

AGS website Summary for Other Career Development Awards

<http://www.americangeriatrics.org/research/>

Beeson Career Development Awards in Aging Research

- Public/Private partnership of NIA with JAHF, Atlantic, Starr Found, Am Fed Aging Res
- Turbocharged K Award
 - No RO1 in past, but can convert a prior KO8 or K23 to a Beeson
 - 3-5 years – up to \$200K/yr, but only \$600K, \$700K or \$800K total for 3, 4, and 5 year awards, respectively
- Restricted to clinicians
- Funds 8-12 new awards annually
- 75% of effort on the Beeson (can go down to 50% if you get an R award during the Beeson)

Some important points in
grants planning transition to
R awards

Plan WELL Ahead

Be Persistent

Example K23

6/96



initial
submission

Score 199

3/97



second
submission

Score 138

1/98



funding
begins

NIH: New Investigators

- Definition
 - never been PI on a grant other than K award, R03, and R21
 - check box on face sheet to identify status
 - highlight in body of proposal
- Reviewers' evaluations and scores
 - should reflect more limited experience, i.e. research accomplishments, preliminary results, and general grantsmanship

NIH: New Investigators

- New NIH policy
 - allow for submission of amended R01 for next cycle, saving 4 months
 - fully implemented by 9/07
 - http://grants.nih.gov/grants/new_investigators/resources.htm
- NIA
 - higher “pay-line”
 - All R01s funded through NIA at 13th %ile
 - New Investigators funded R01 at 18th %ile, i.e. 5 percentile points

Example R01

2/99



initial
submission

Score 203

11/99



second
submission

Score 140

9/00

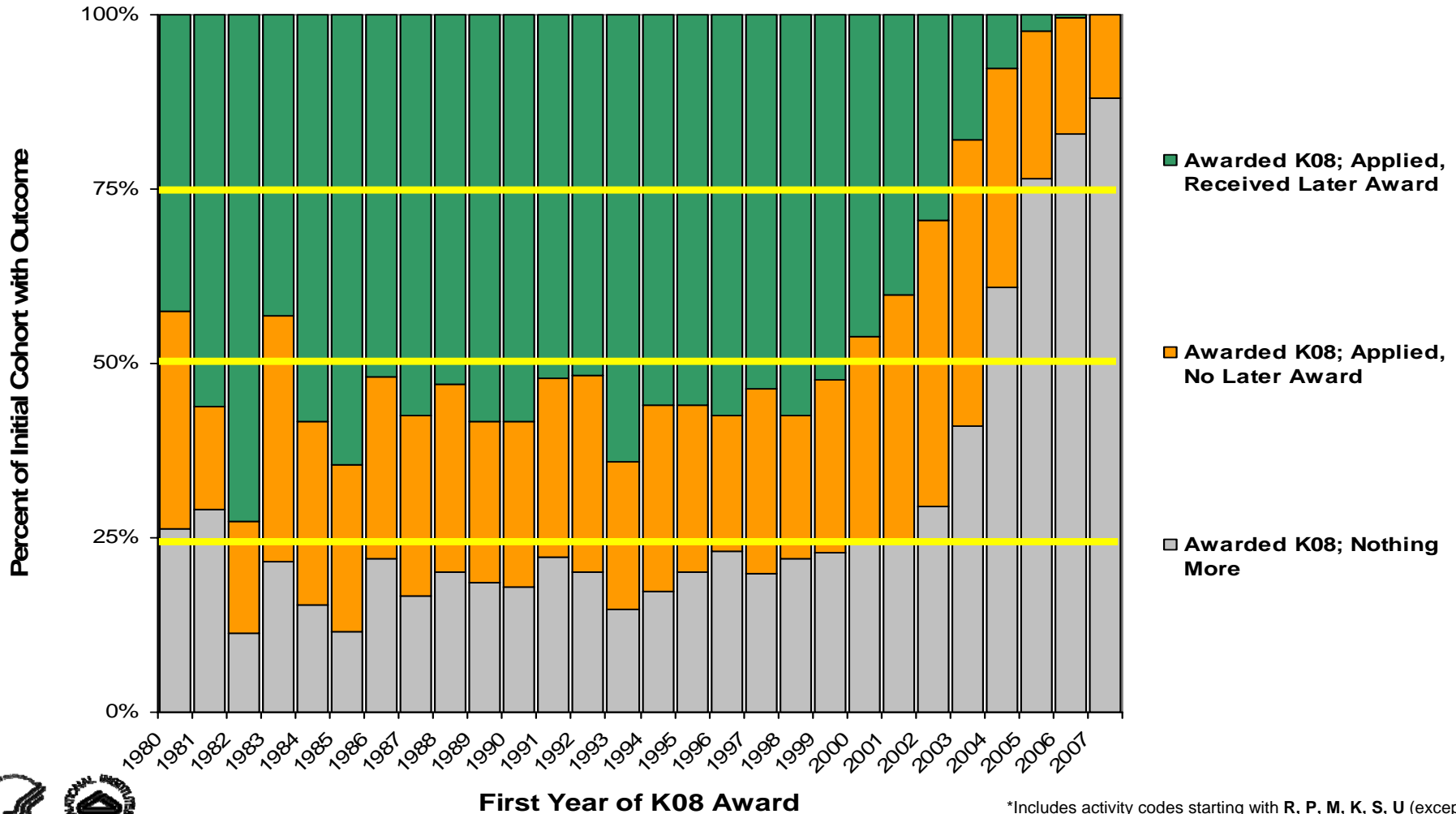


funding
begins



NIH Career Development Programs

K08 Awardees' Eventual Application for, and Funding of NIH Major Research Grants*, FY 1980 - 2006

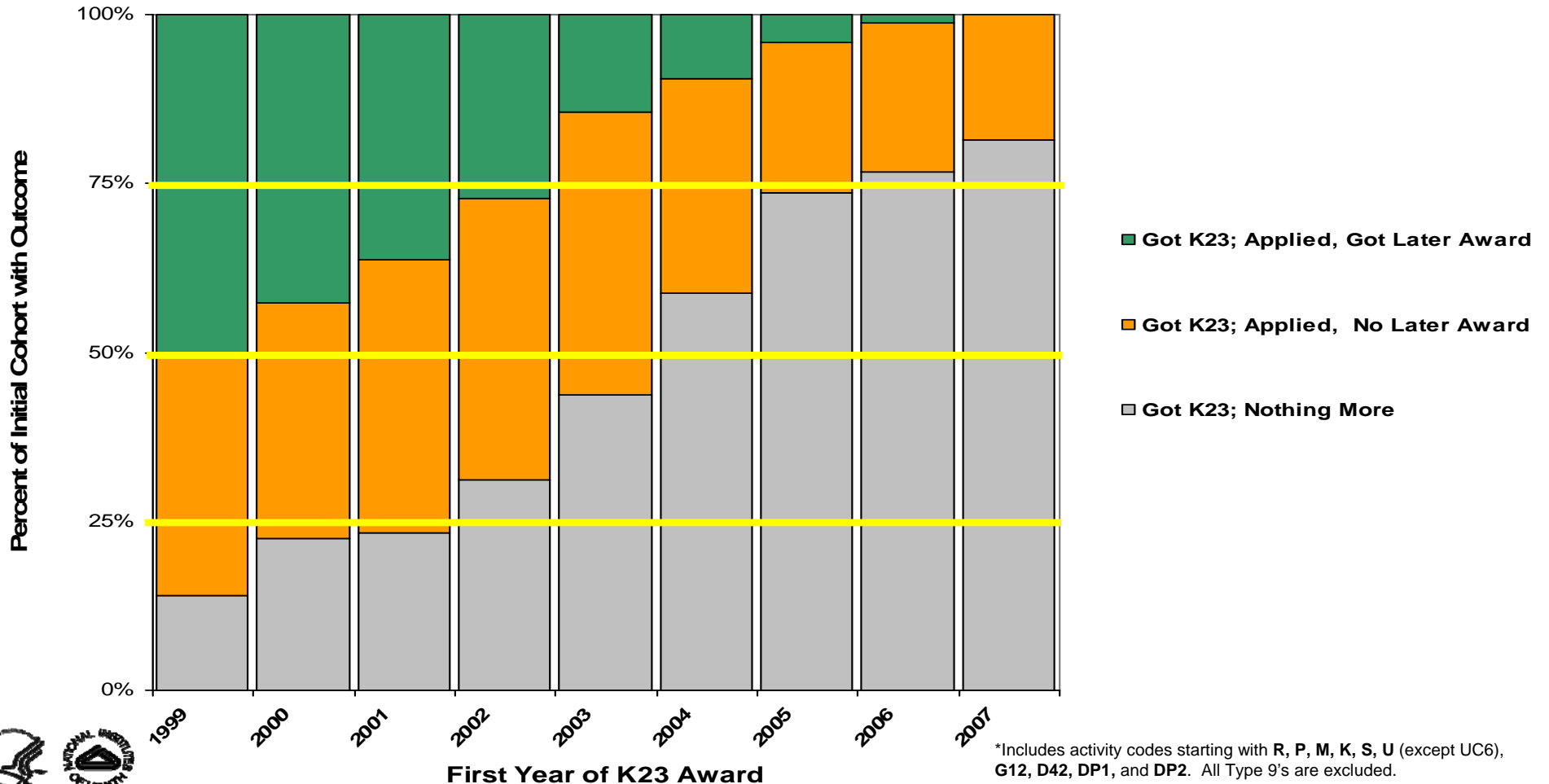


*Includes activity codes starting with R, P, M, K, S, U (except UC6), G12, D42, DP1, and DP2. All Type 9's are excluded.



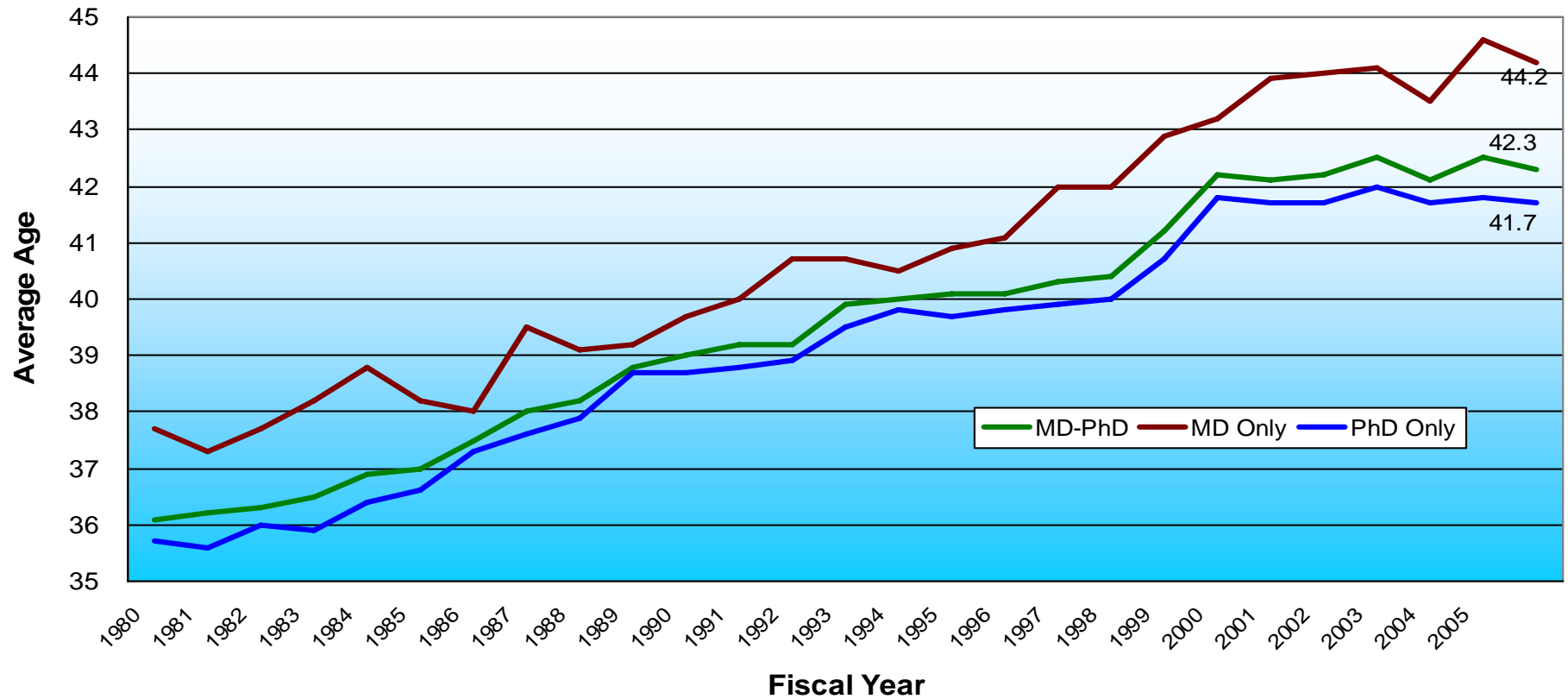
NIH Career Development Programs

K23 Awardees' Eventual Application for, and Funding of NIH Major Research Grants*, FY 1999 - 2007



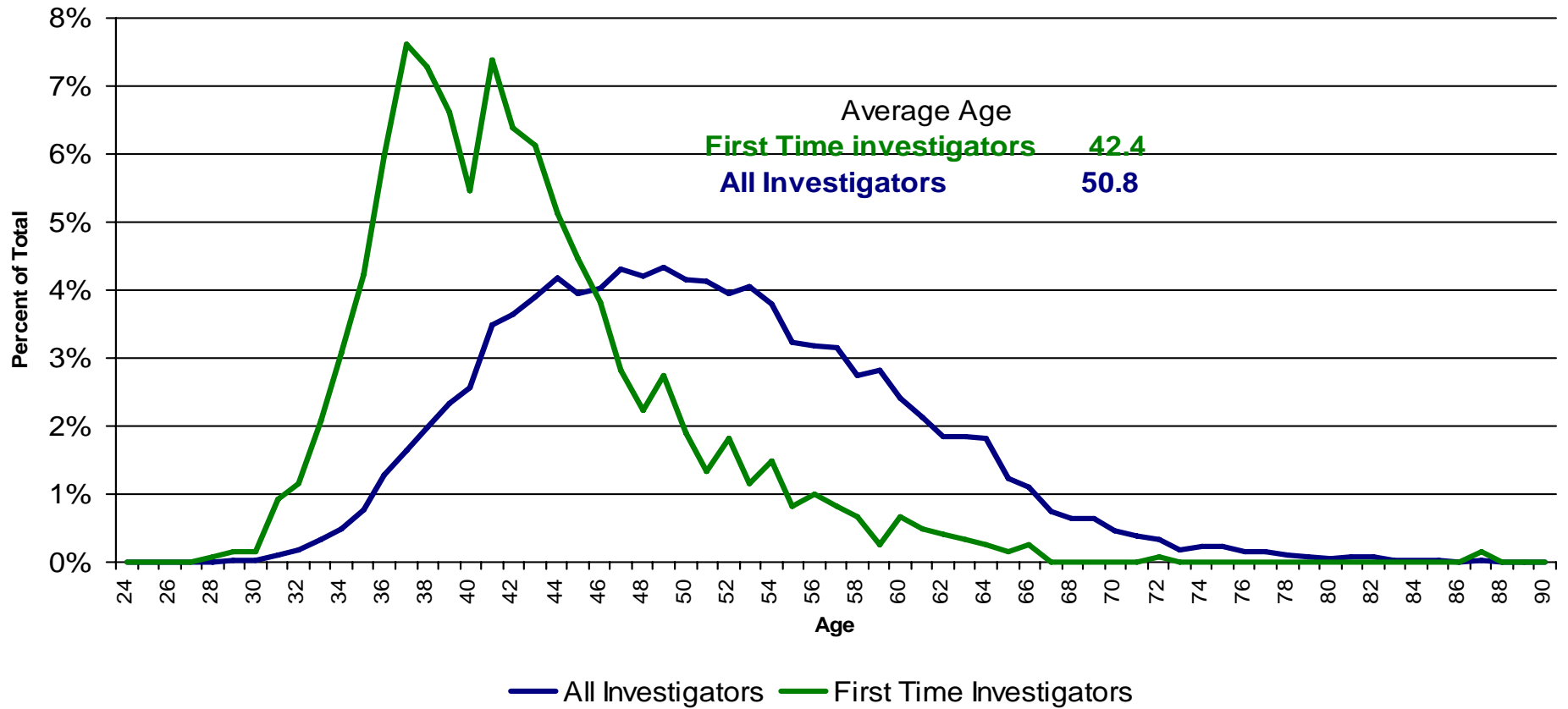


Age of First Time R01 Equivalent Awardees FY 1980 - 2005





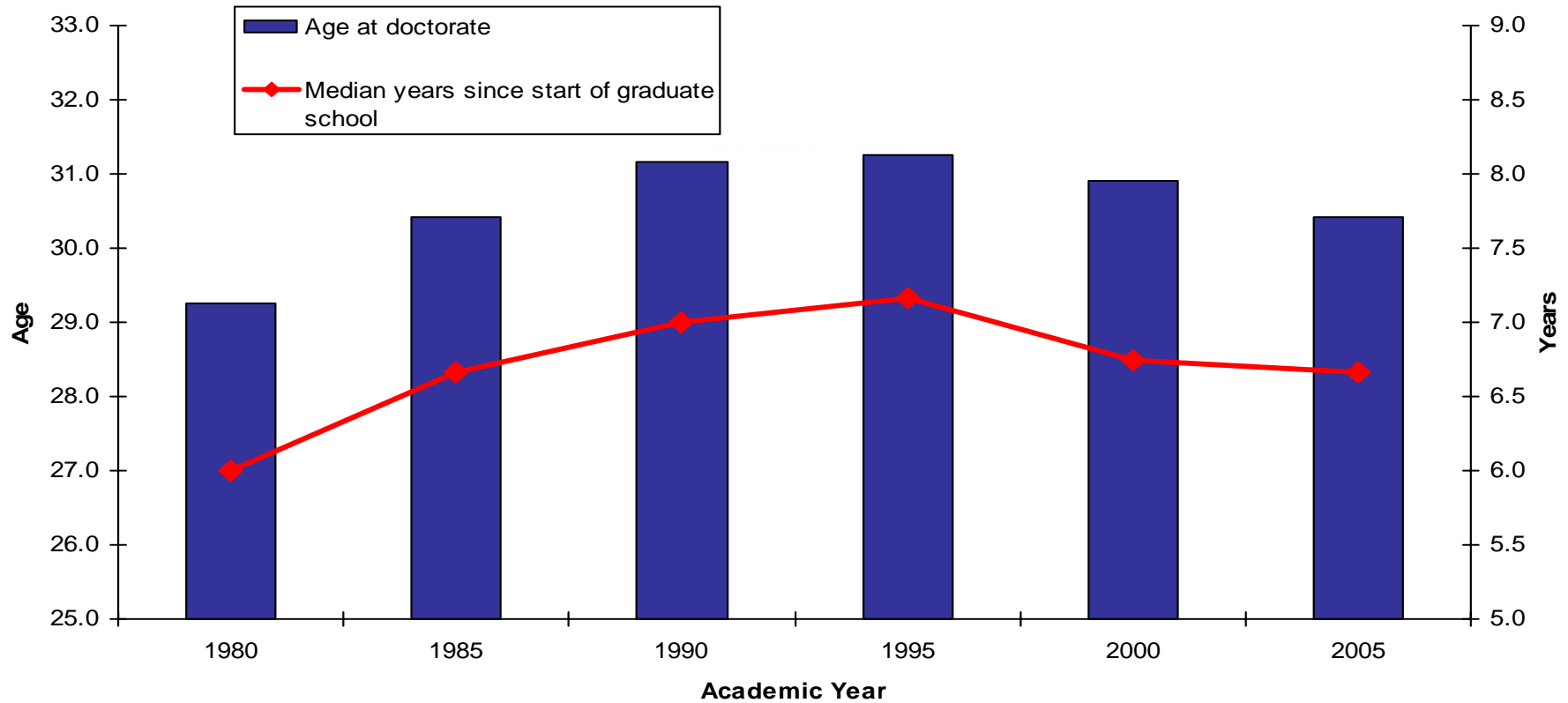
Age of R01 Equivalent Investigators, FY 2006





Biomedical Graduate Students and Postdocs

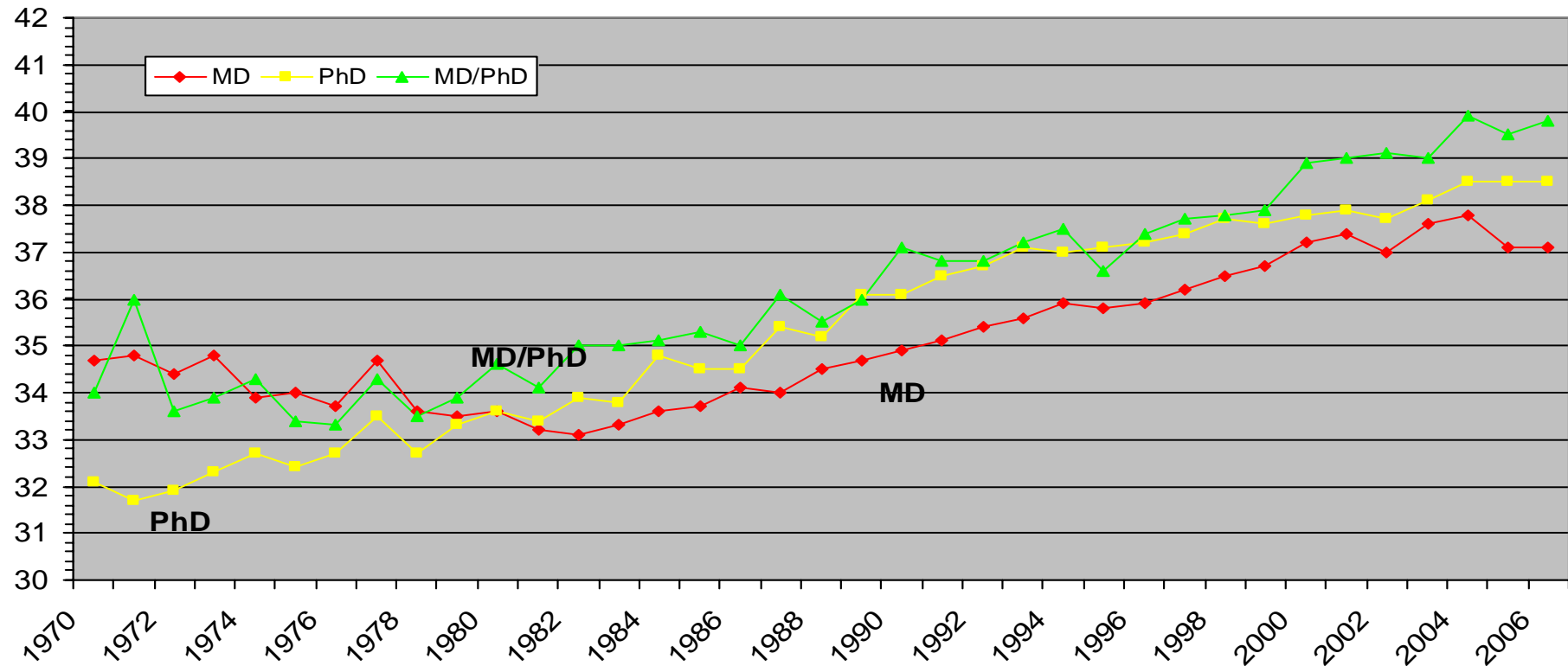
**Age at Doctorate and Total Duration of Graduate Training in Biomedical Sciences
(NSF/NIH Survey of Doctorate Recipients 1980-2005)**





Medical School Faculty

Average Age at Time of First Assistant Professorship at US Medical Schools AAMC Faculty Roster Data as of May 31, 2007



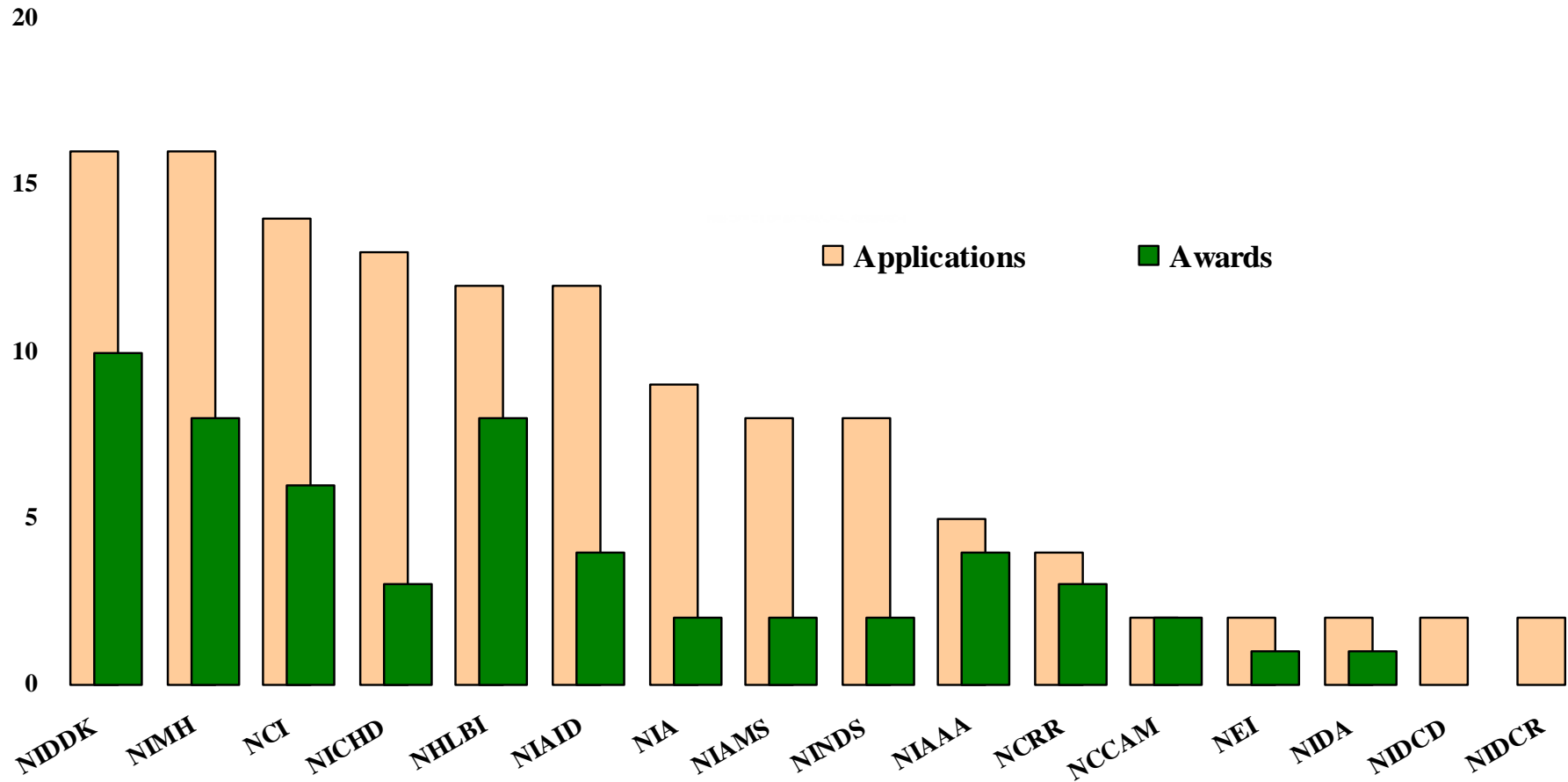
Source: <http://www.aamc.org/data/facultyroster/reports.htm>

Mid-Career Planning: Getting Paid to be a Mentor

- K24 application
 - Midcareer Investigator Award (Associate Professor) in Patient-oriented Research
 - applied 2/02, funded 1/03
 - 5 years, renewable x 1
- Start establishing your credentials
 - take on a medical student, resident, fellow and allow them to be first author



NIH K24 Applications* and Awards by Institute or Center, Fiscal Year 2006



*Success rate base

Focus and Conviction

- 2007 Task Force on Aging Research Funding
 - www.agingresearch.org
 - Summary of priority areas for medical research by Alliance for Aging Research
- Outcomes Research Areas
 - Norris SL, et al. J Am Geriatr Soc 2008;56:149-159
 - Summary of research priorities for older adults with multiple co-morbidities
- Grant Planning – nice step by step description through NIAID
 - <http://www.niaid.nih.gov/ncn/grants/cycle/default.htm>
- Don't kid yourself
 - Better have the fire in your belly; LOVE what you do
 - Don't do it for others; separate what you like from who you like!

Bad Winter or Long Ice Age?

- In the biblical sense, 7 years of plenty (NIH doubling) is likely to be followed by 7 years of famine
- We are probably in year 4 or 5 of the 7-year famine (said in 2007)

Lee Goldman, MD, MPH
Dean, Columbia

Surviving the Famine Years

- The more diversified your sources of funding, the better
- Famines are Darwinian
 - the best people will do fine, but others will not

Lee Goldman, MD, MPH
Dean, Columbia

- High's corollary – the best people will only do fine if they are present, persistent, and don't lose heart