

# Physician-Scientist Working Group Update

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National Institutes of Health

114<sup>th</sup> Meeting of the Advisory Committee to the Director (ACD)  
National Institutes of Health

Porter Neuroscience Building, Building 35 A, Rooms 620/630,  
Bethesda, Maryland

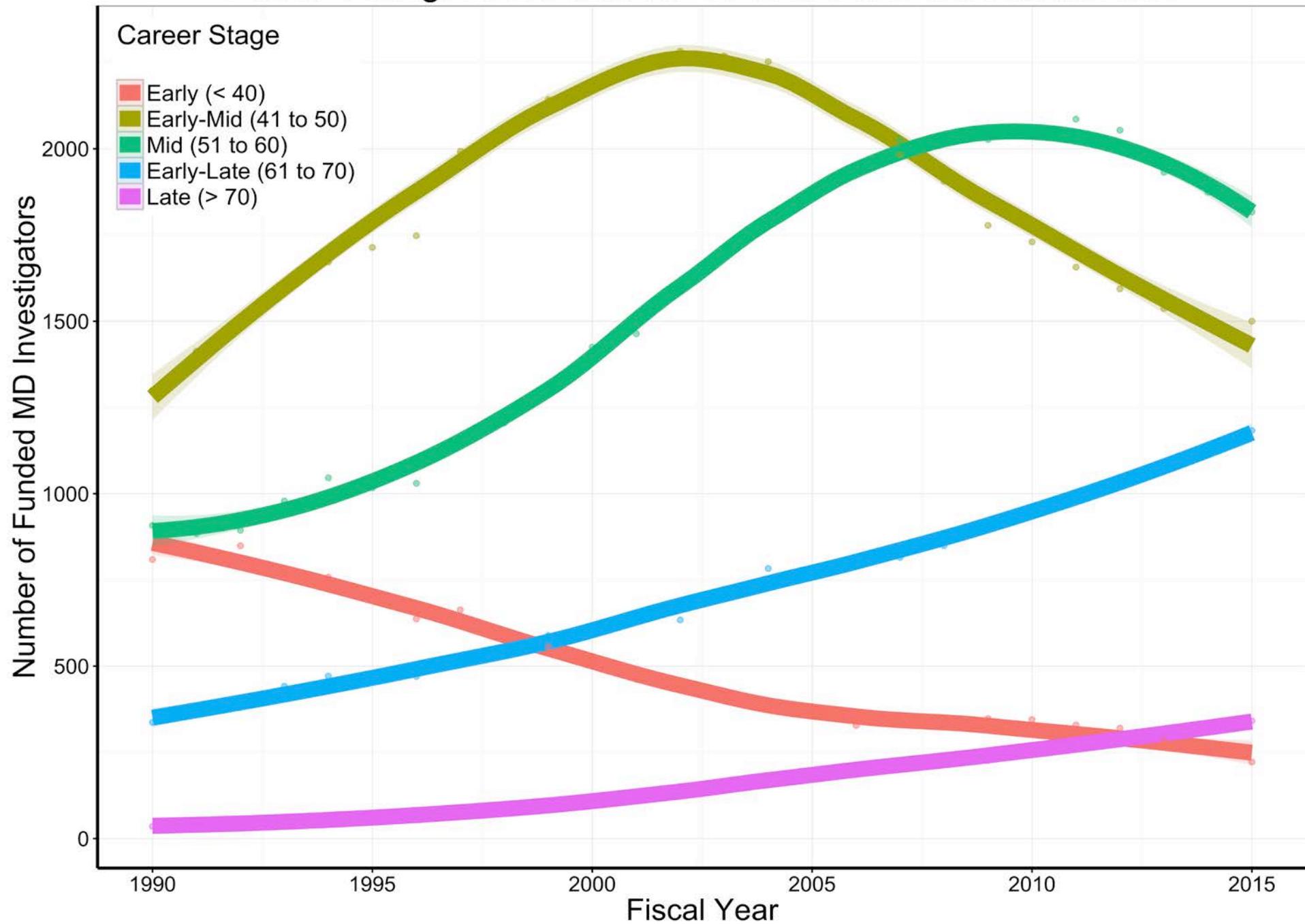
June 9, 2017

Disclosures: None

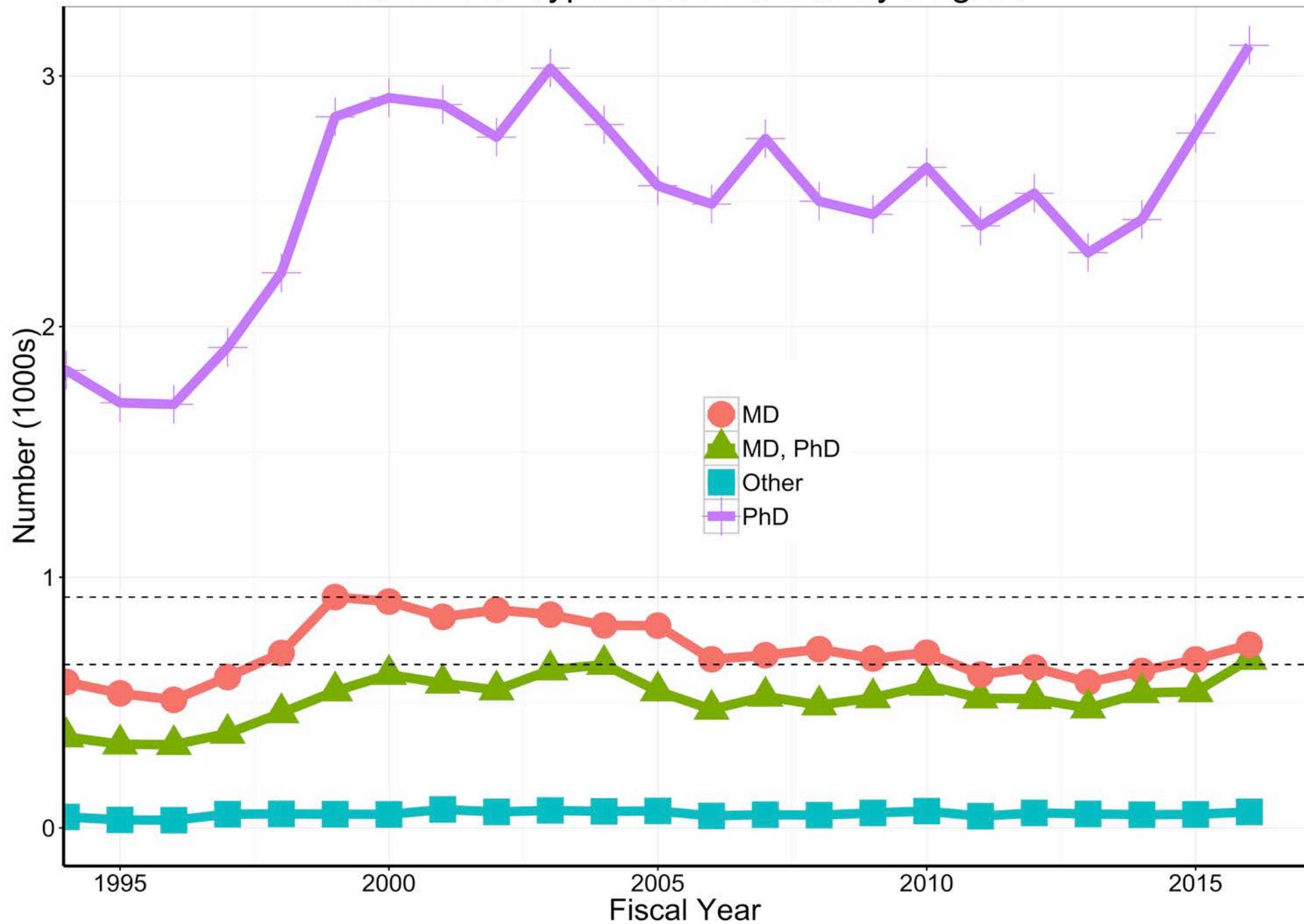
- June 2014: ACD PSW WG Report
  - 9 Recommendations: MSTP, novel approaches
- 2015-2016: Implementation WG
- Three workshops in 2016: Pilots, GME
- Throughout: Not only MDs – also dentists, veterinarians, RN-PhDs, others

- **Within NIH control**
  - Fewer younger physicians receive RPGs
  - Fewer applications/awards
  - Timing of research training
- **External challenges**
  - Shifting business models
  - Dramatic increases in tuition costs

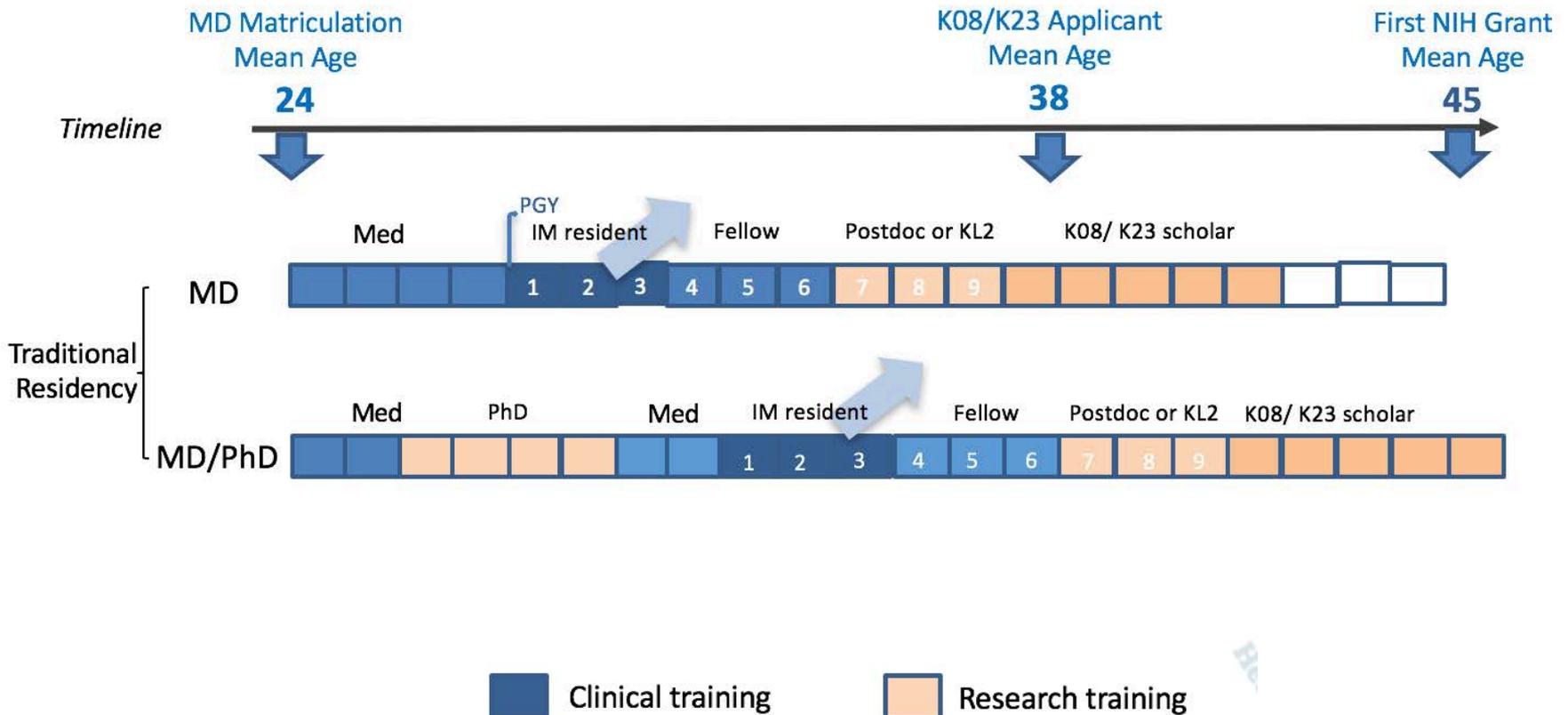
# Fewer Younger MDs with RPGs and Other Select Activities



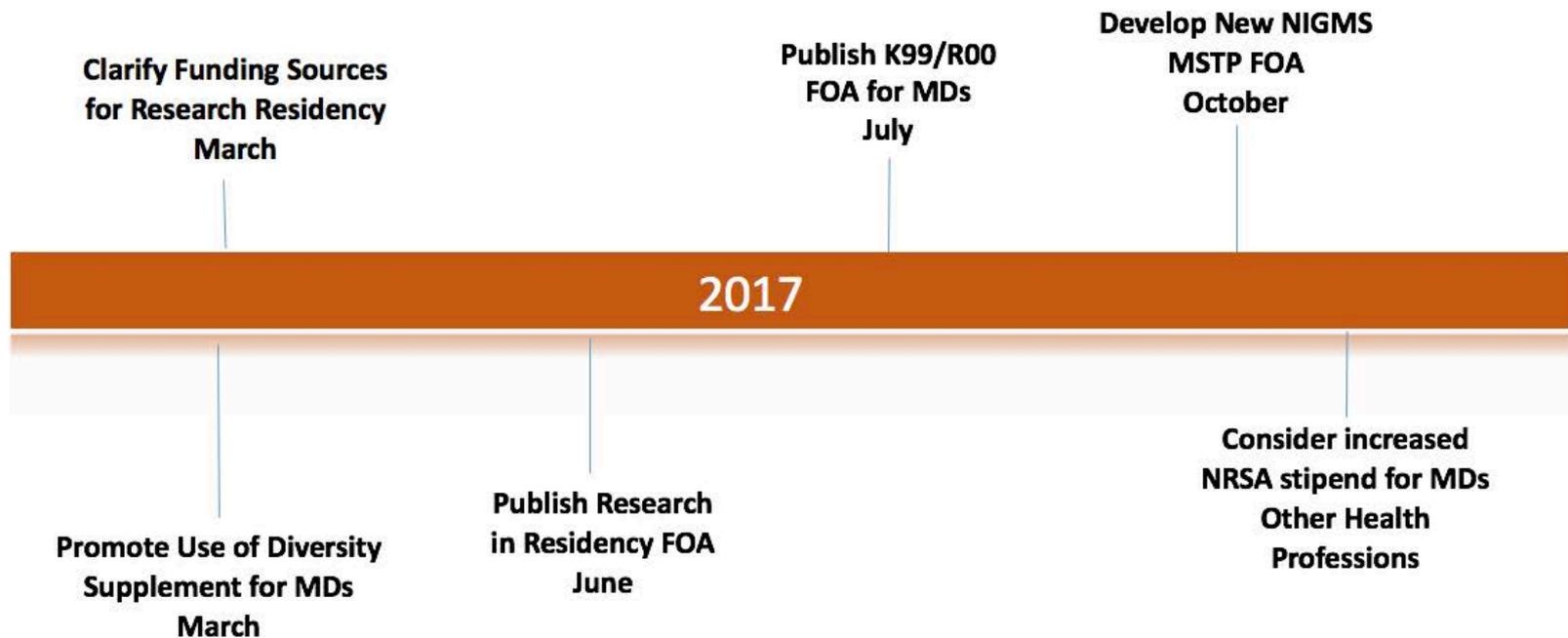
# Number of Type 1 R01 Awards by Degree



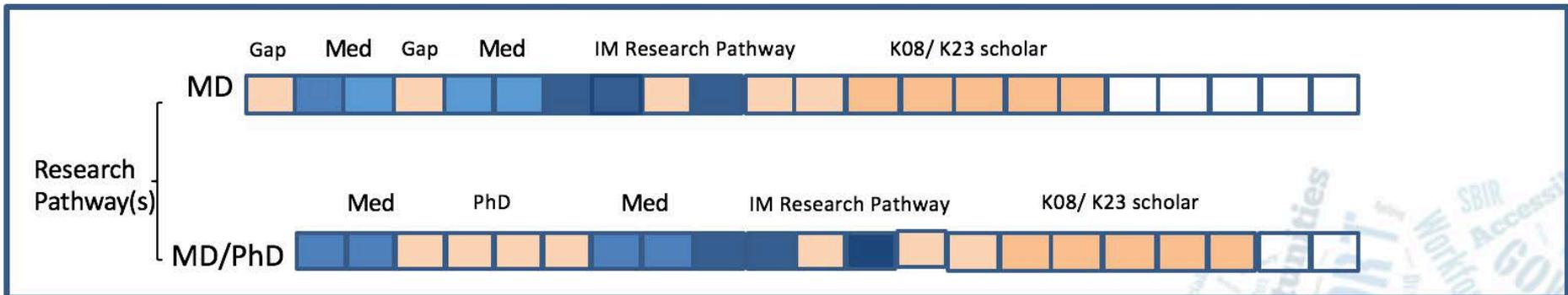
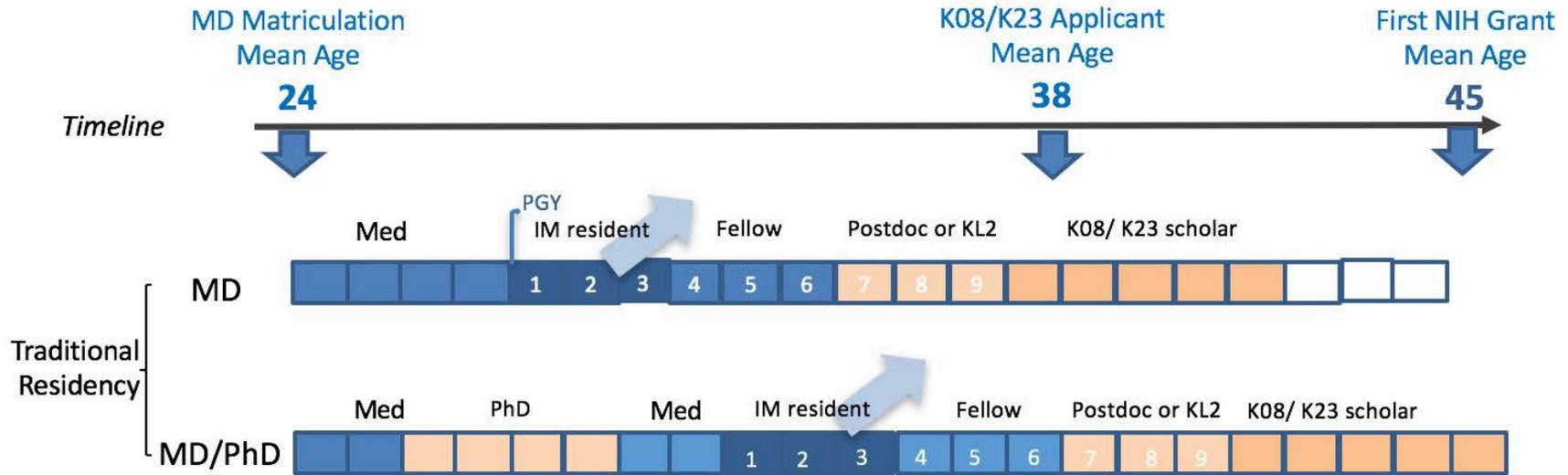
# Long Hauls, Long Breaks



# Update Since Last December



# Research Residency



 Clinical training

 Research training

## Performance of Physicians Trained Through the Research Pathway in Internal Medicine

Rebecca S. Lipner, PhD, Carola Lelieveld, and Eric S. Holmboe, MD

	Research Pathway (N=1009)	Non-Research Pathway (N=100,022 all)
Board certified	98%	96%
MOC enrollment*	77%	89%
Academic faculty*	63%	14%
Time patient care*	38%	71%
Time research*	37%	3%

\*Survey subsets

“These findings validate ... this alternative ‘short-track’ pathway: to enable academically oriented physician–scientists to pursue their career goals without compromising their medical knowledge and clinical skills.”

# Research in Residency/Transition Scholar

## **Institutional Research In Residency Program**

- Hypothesis-based research (at least 1 year)
- Research competencies, career development skills
- National networking (NIH workshop, National meetings)
- Board approval

## **Individual ‘Transition Scholar’ Phase**

- Must meet research residency ‘milestones’
- Planned research project and mentor (2 years support)
- *Transferable* to facilitate retention in research

- Modified MSTP (NIGMS)
  - Dedicated T32
  - RFI June 2017
  - Ability to enroll medical school year 1 or 2
- NIAID K99 / R00 for physician scientists
- LRP expansion per 21<sup>st</sup> Century Cures

# Appendix Slides

# PSW-WG Implementation (1)

Recommendation	Actions
<p>NIH should sustain strong support for the training of MD/PhDs</p>	<ul style="list-style-type: none"> <li>• NIH supports &gt;900 positions in 47 programs</li> <li>• Positions reduced during sequestration were restored</li> <li>• MSTP working group and RFI assessing potential MSTP modifications and enhancements</li> <li>• MSTP specific training grant funding opportunity planned (2018)</li> </ul>
<p>NIH should shift support to more individual fellowships</p>	<ul style="list-style-type: none"> <li>• Funding opportunities issued for individual F30 fellowships at institutions with/without NIH funded MSTP (2016)</li> <li>• Pilot programs to effectively support postdoctoral training of physician scientists through fellowships under consideration.</li> </ul>
<p>NIH should continue to address the gap in RPG award rates</p>	<ul style="list-style-type: none"> <li>• Continue policy ensuring similar award rates for early stage/new investigators and established investigators</li> <li>• Regular review of NIH data to ensure similar award rates of ESI</li> <li>• Regular analyses of RPG award rates by degree</li> </ul>

# PSW-WG Implementation (2)

Recommendation	Actions
<p>NIH should adopt rigorous and effective tools for assessing the strength of the biomedical workforce</p>	<ul style="list-style-type: none"> <li>• Establish division of biomedical research workforce (2015)</li> <li>• Biomedical workforce data dashboard with data from NIH, and AAMC (2017)</li> </ul>
<p>NIH should establish a new physician-scientist-specific granting mechanism to facilitate the transition from training to independence</p>	<ul style="list-style-type: none"> <li>• Some IC modified K08, K23 to increase salary contribution and research resources</li> <li>• K99/R00 FOA re-issued with modifications to emphasize eligibility of Physician Scientists.</li> <li>• NIAID plans to issue K99-R00 specific FOA for Physician Scientists (50% effort requirement)</li> <li>• Allow awardees to received funding for effort not devoted to the K from other research funding (federal/non-federal)</li> </ul>
<p>NIH should expand Loan Repayment Programs and the amount of loans forgiven</p>	<ul style="list-style-type: none"> <li>• Congressional request HR6 approved, modeled impact of increased loan repayment amounts</li> <li>• Division of Loan Repayment website enhanced</li> <li>• Complete strategic plan and initiate evaluation</li> </ul>

# PSW-WG Implementation (3)

Recommendation	Actions
<p>NIH should support pilot grant programs to rigorously test existing and novel approaches to improve and/or shorten research training</p>	<ul style="list-style-type: none"> <li>• Three workshops of physician scientists, residents, professional societies, leaders of board certification organizations, NIH leadership and NIH representatives</li> <li>• Scholarly review on promising programs (Acad Med 2017)</li> <li>• FOA for pilot research in residency program (June 2017)</li> </ul>
<p>NIH should intensify its efforts to increase diversity in the physician-scientist workforce</p>	<ul style="list-style-type: none"> <li>• Request for information on strategies to enhance diversity</li> <li>• Extramural diversity website launched (2016)</li> </ul>
<p>NIH should leverage the existing resources of the Clinical and Translational Science Awards (CTSA) program to obtain maximum benefit</p>	<ul style="list-style-type: none"> <li>• CTSA administrative supplements support dentists on KL2</li> <li>• Collaborations between CTSA and NIBIB to support biomedical engineers</li> <li>• CTSA collaboration with One health alliance to support veterinarians</li> </ul>