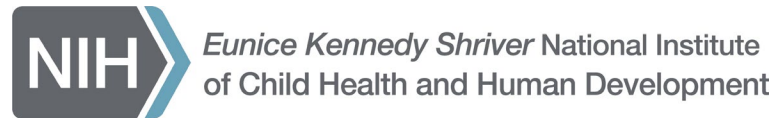


NCMRR Support of Career-Development

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Contents

- NCMRR's Commitment to Training and Career Development
- NICHD Career Development: Shifting Balance between K12 Networks and Individual K Awards
- NCMRR Support of K12 Career-Development Networks
- Discussion





NCMRR's Commitment to Training and Career Development

NCMRR's Training Mandate

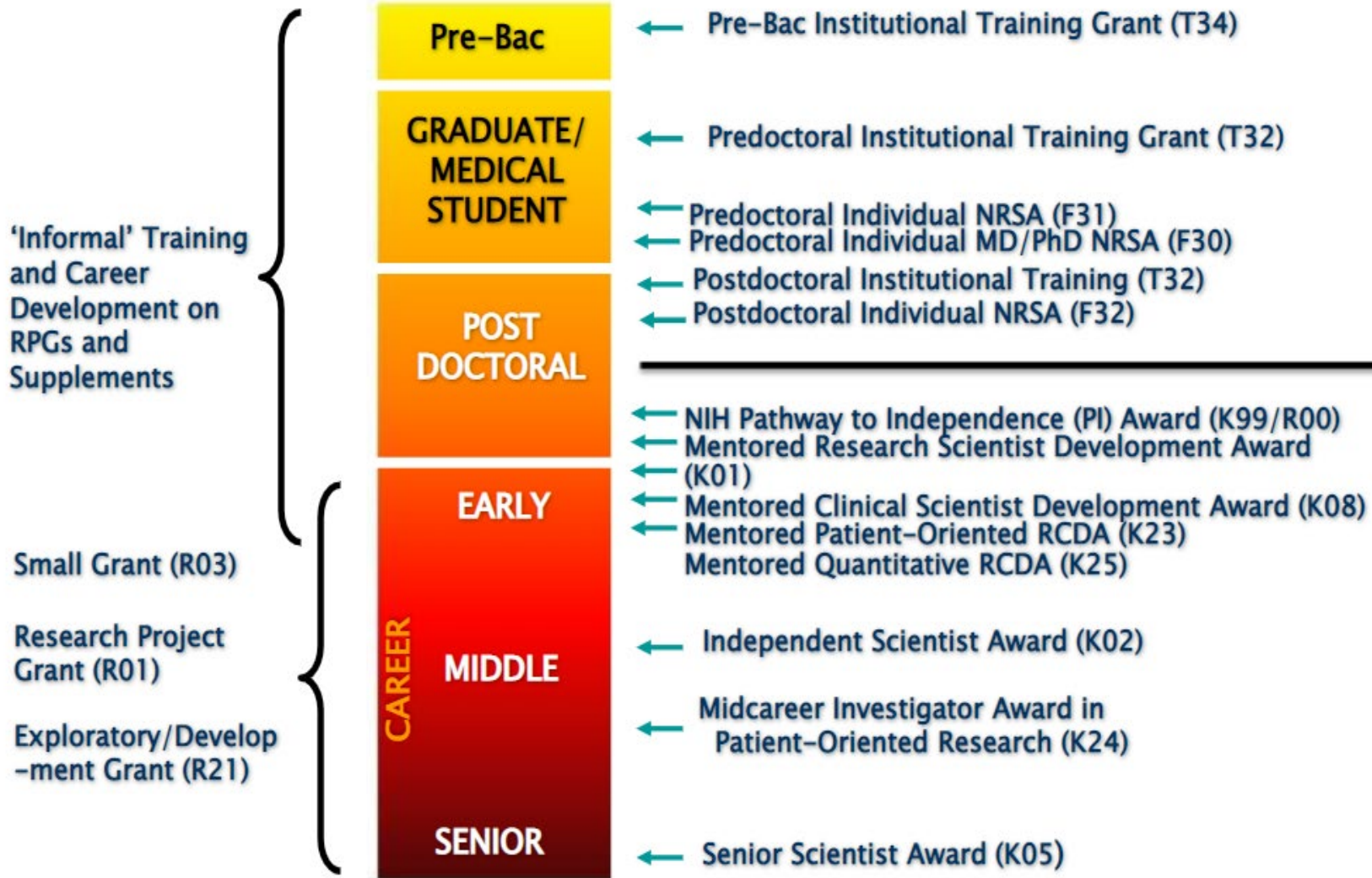
- 1990 Legislature (PL 101-613) – “The general purpose of the Center is the conduct and support of research and research training”
- 1993 Research Plan – “Training of Medical Rehabilitation Scientists”
- 2016 NIH Rehabilitation Research Plan – Theme: Building Research Capacity and Infrastructure
- Goal – Train independent (future R01) researchers
 - How can we make rehabilitation researchers competitive at NIH?
 - How is NCMRR fulfilling this mission?



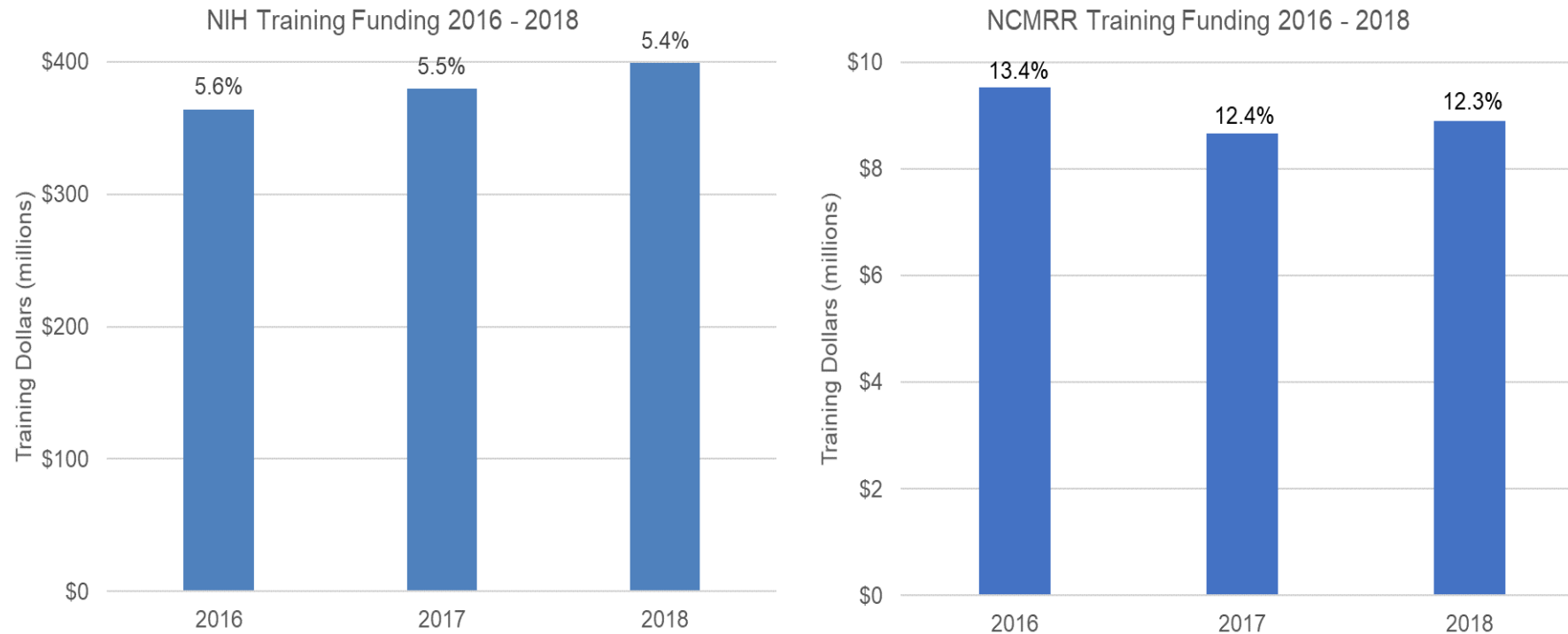
Research Awards

Career Stage

'Formal' Training/Career Awards



Training Funding – NIH vs. NCMRR

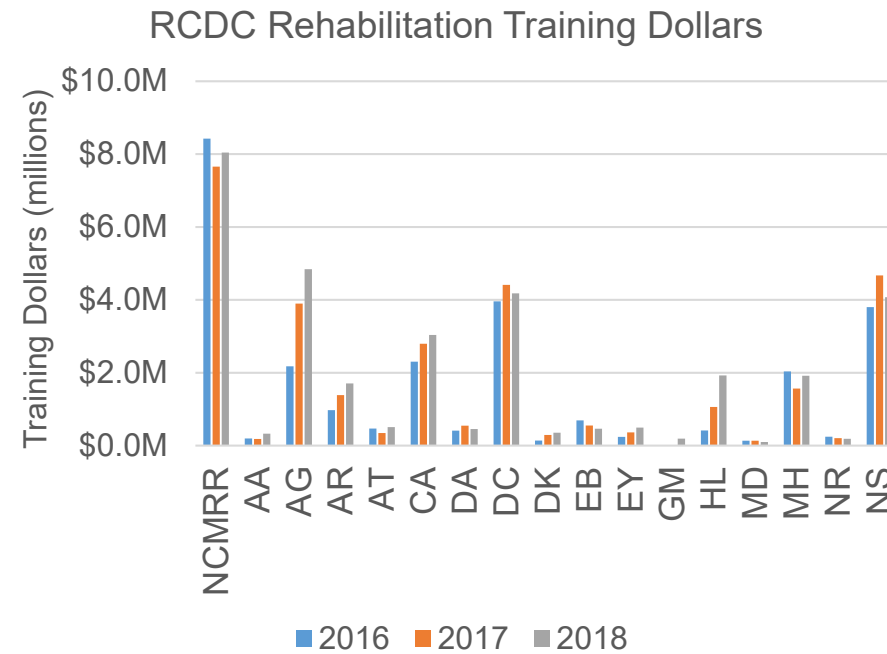
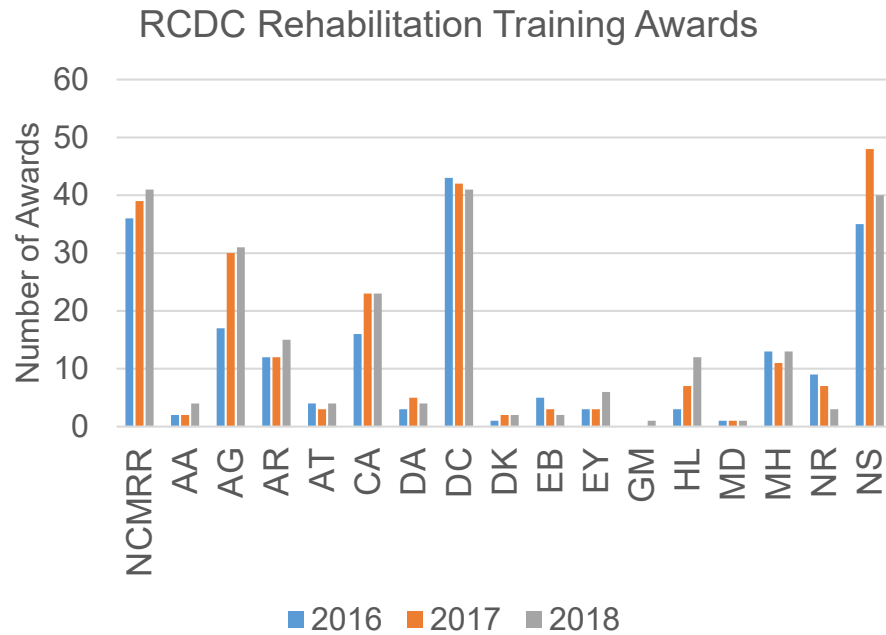


Data from NIH Data Book (NIH) and OSPRA (NCMRR)

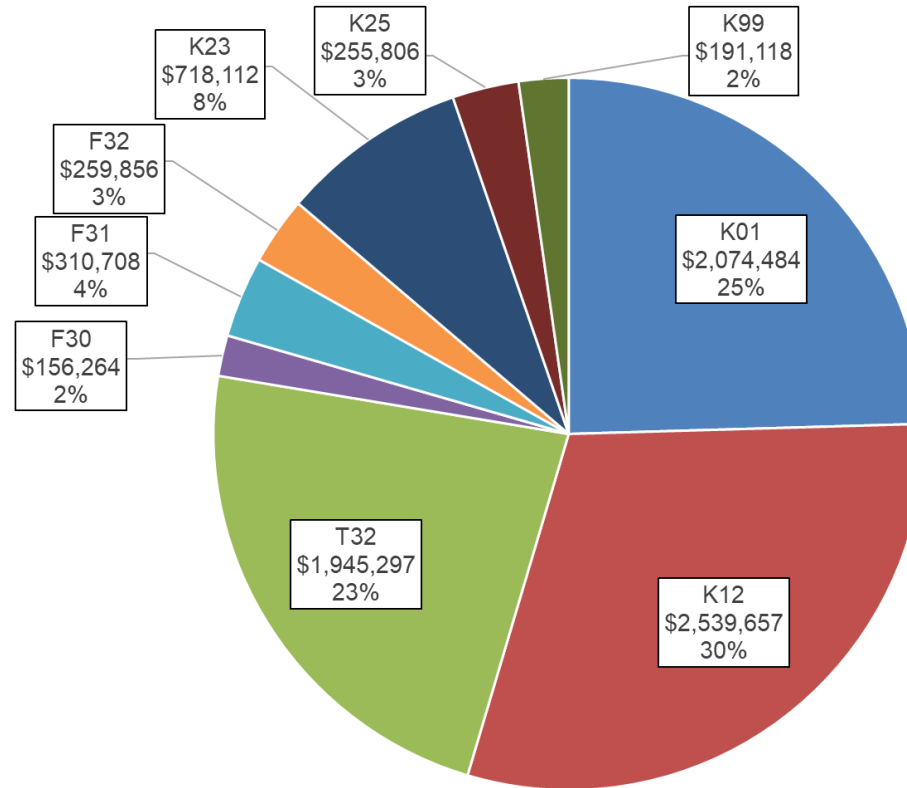
NCMRR devotes more than twice the average % of budget on training compared to NIH overall



How Does NCMRR Funding for Rehabilitation Training Compare to That of Other NIH Institutes?



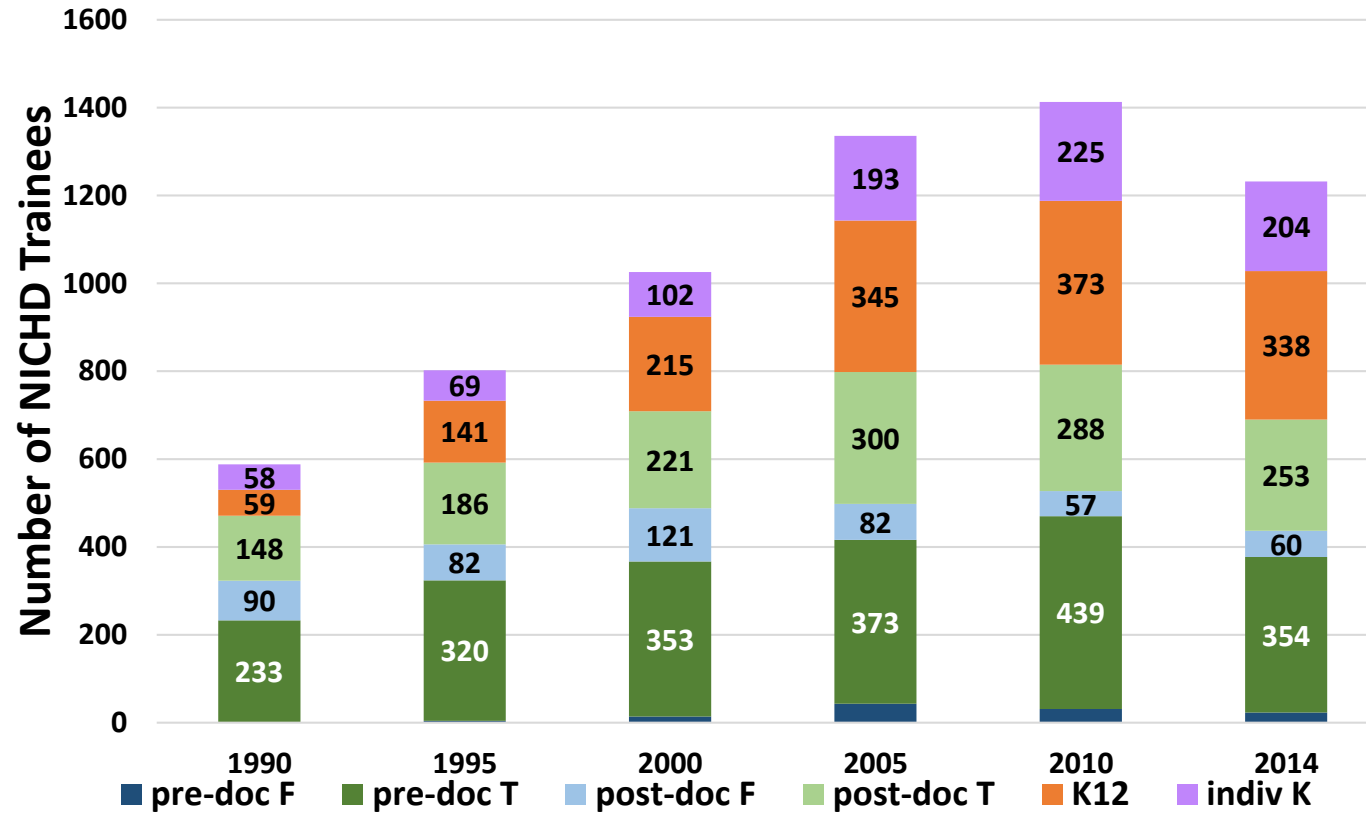
NCMRR Distribution Across Training and Career-Development Mechanisms (FY19):





NICHD Career Development: Shifting Balance Between K12 Networks and Individual K Awards

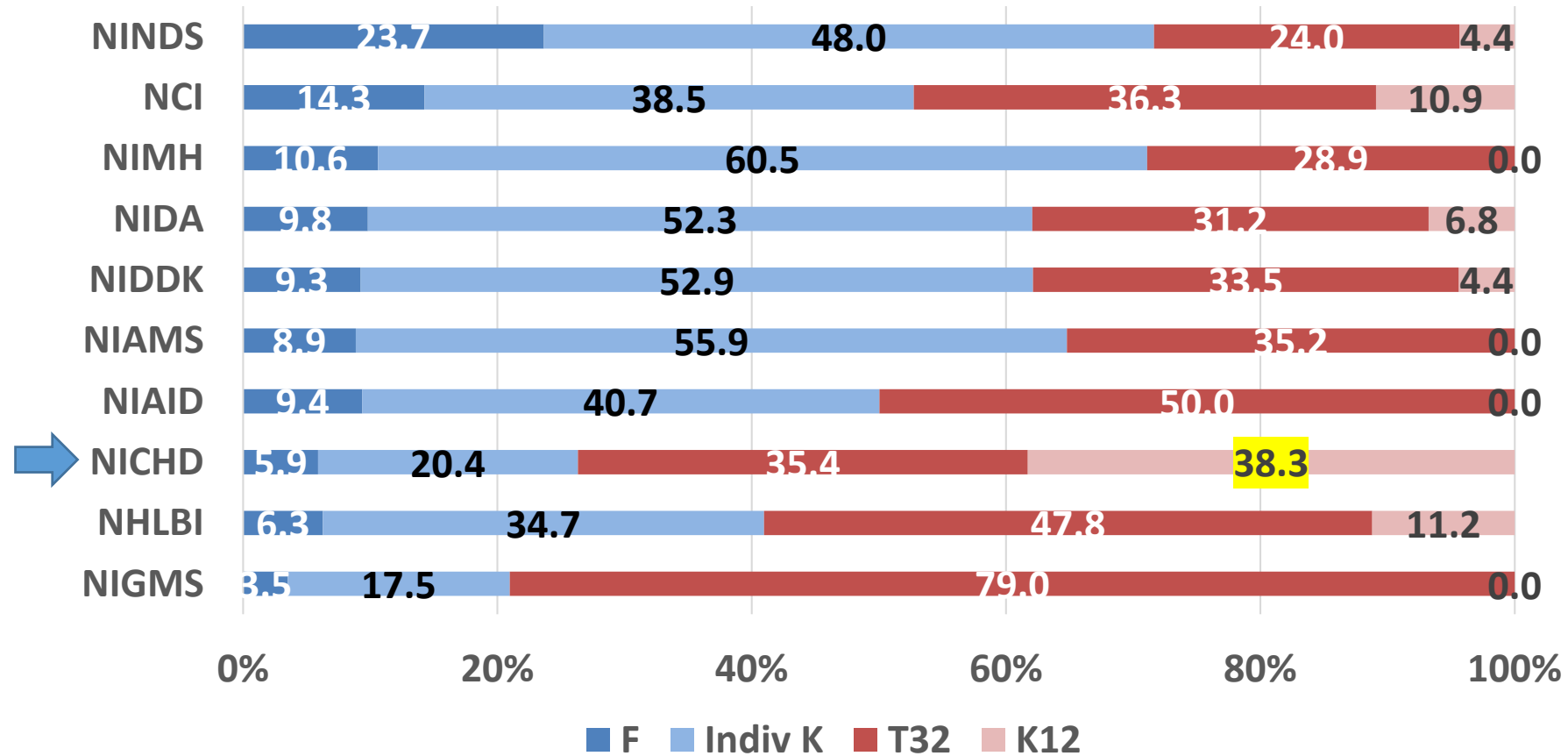
Individuals** Supported by Career Stage and Mechanism across the NICHD (1990-2014)



** Note: Data are numbers of individuals who have been supported by these training programs. For T32 or K12 programs, this number may be higher or lower than the number of “slots” actually awarded.



NICHD Commits Far Greater Proportion of Funds to Institutional Programs vs. Individual F and K Awards



NICHD Training Review Implementation Plan

- Maintain overall training commitments (approx. 6%)
- Realign NICHD's training programs consistent with:
 - NICHD Training Review (2015)
 - NIH Biomedical Workforce (BMW) recommendations
 - NIH Physician-scientist Workforce (PSW) recommendations



Training Review Recommendations

NRSA Programs

- ICs must support all Fellowship mechanisms: F30, F31-Parent, F31-Diversity, F32 Postdoc
- Increase success rates for individual fellowships (had fallen to 10% for F31 and F32)
- Increase relative proportion of individual fellowships vs institutional training grants (T32)

Career Development Awards

- Increase K08 / K23 salary contribution from \$75,000 to \$100,000 (+FY2017)
- Increase success rates for individual career development awards
- Increase success rates for K99-R00 program as bridge to independence
- Increase relative proportion of individual K awards vs institutional K12s



NICHD Analysis, Published 2018

JAMA Pediatrics | [Original Investigation](#)

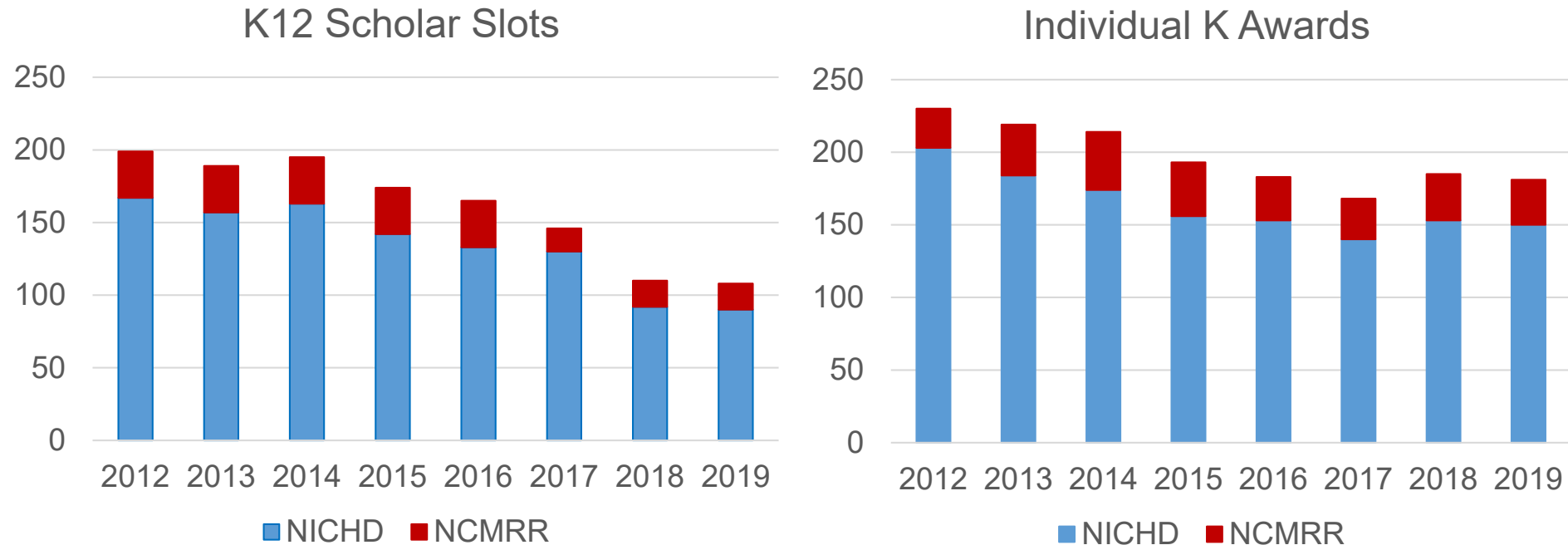
Association of National Institute of Child Health and Human Development Career Development Awards With Subsequent Research Project Grant Funding

Dennis A. Twombly, PhD; Sarah L. Glavin, PhD; Jennifer Guimond, PhD; Susan Taymans, PhD; Catherine Y. Spong, MD; Diana W. Bianchi, MD

CONCLUSIONS AND RELEVANCE Physician-scholars are more likely to apply for and receive a National Institutes of Health research grant if they are trained on an individual career development award, with or without an institutional training award. Based on the data, the NICHD intends to provide a greater proportion of its career development fund allocation to individual awards. The NICHD recognizes the importance of institutional awards and will continue to support them. The NICHD remains committed to training and intends to maintain its investment in training and career development awards going forward.



NICHD K12 Slots vs. Individual K awards



- ***NCMRR is ~6.7% of the extramural budget but about 17% of the K12 slots and individual Ks***
- ***In 2017, the salary per K award increased 25% so there is not a one-to-one transition from K12 slots to individual Ks***





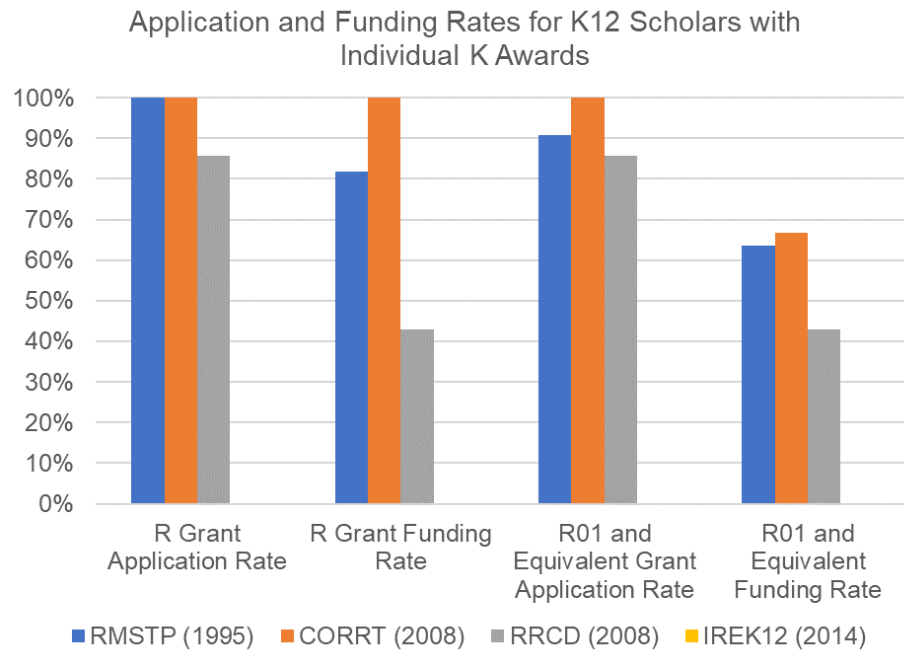
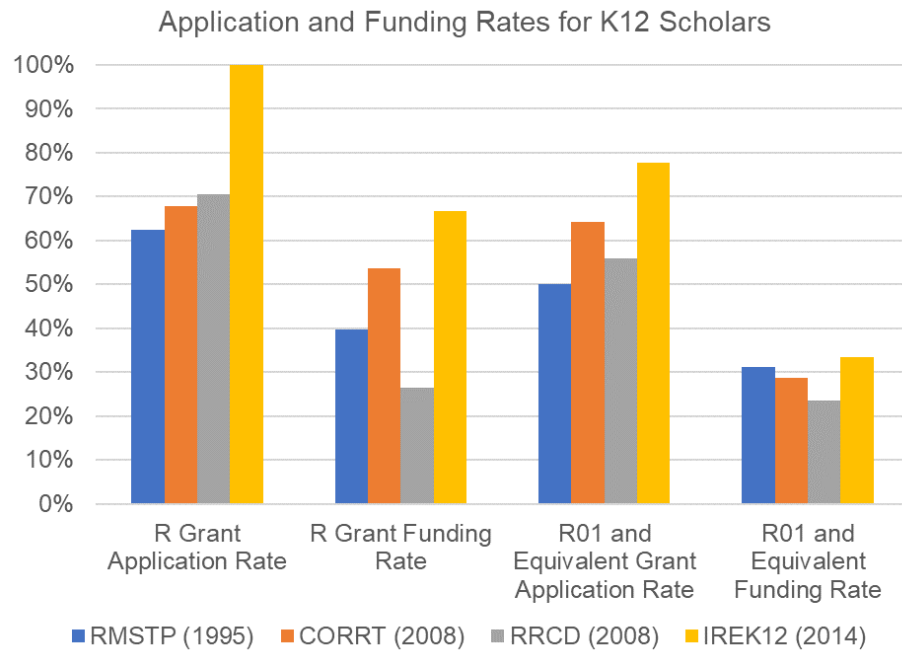
NCMRR Support of K12 Career-Development Networks

NCMRR National Networks for Career Development (K12)

- Physiatrists (Doctors of PM&R): 1995-2018
- Physical/Occupational Therapist Doctorates (two programs): 2007-present
- Rehab Bioengineers: 2012-present
- NeuroRehab Clinicians: 2017-present
- NCMRR model:
 - Competitive selection process for scholars
 - Provide 2-3 yrs salary – but encourage fiscal independence
 - Broader career support through year 5 and beyond



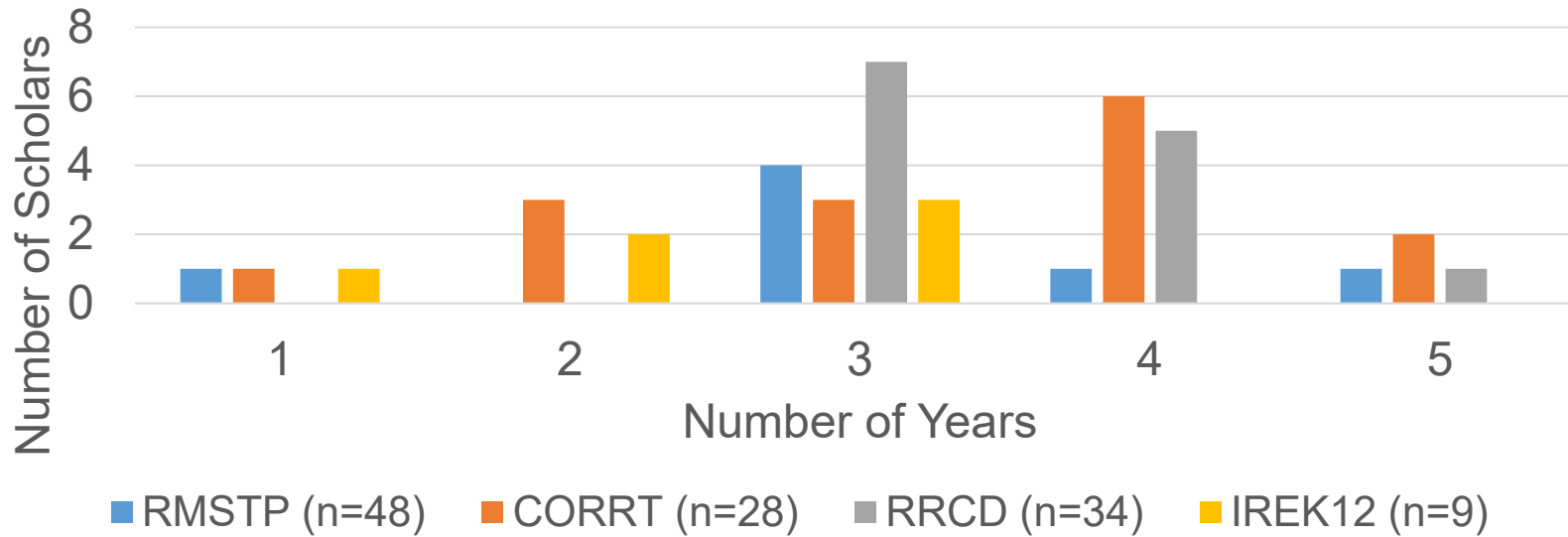
NCMRR Analysis – K12 Scholar Application and Funding Rates



Time to Submit Application per K12 Program

	Total Scholars	% First 5-year Applicants	Total Never Applicants	% Never Applicants
RMSTP	48	15%	24	50%
CORRT	28	54%	10	36%
RRCD	34	38%	15	44%
IREK12	9	67%	2	22%
Total	119	34%	51	43%

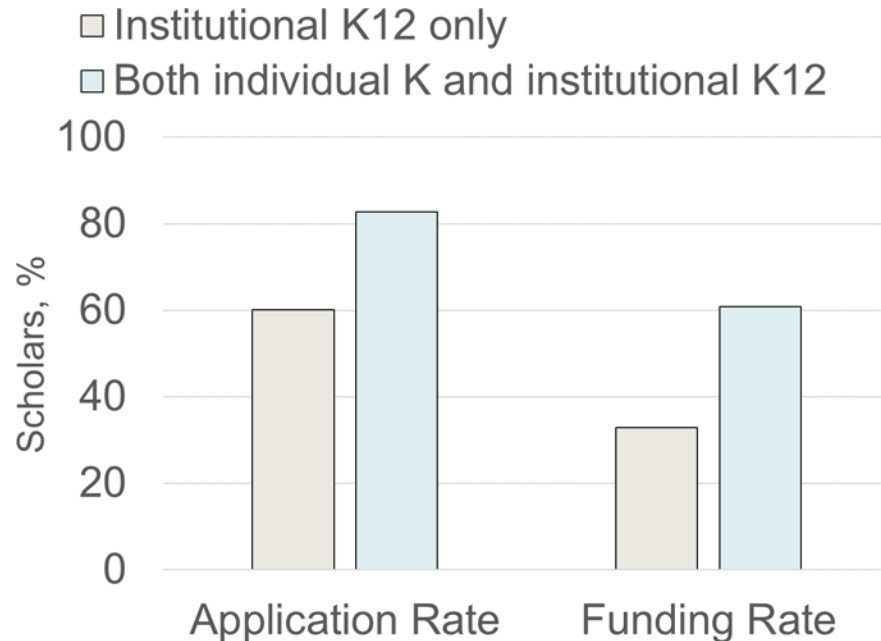
Years to R01 or Equivalent Application



K12 Scholars: Impact of Going on to Additional Individual K Awards

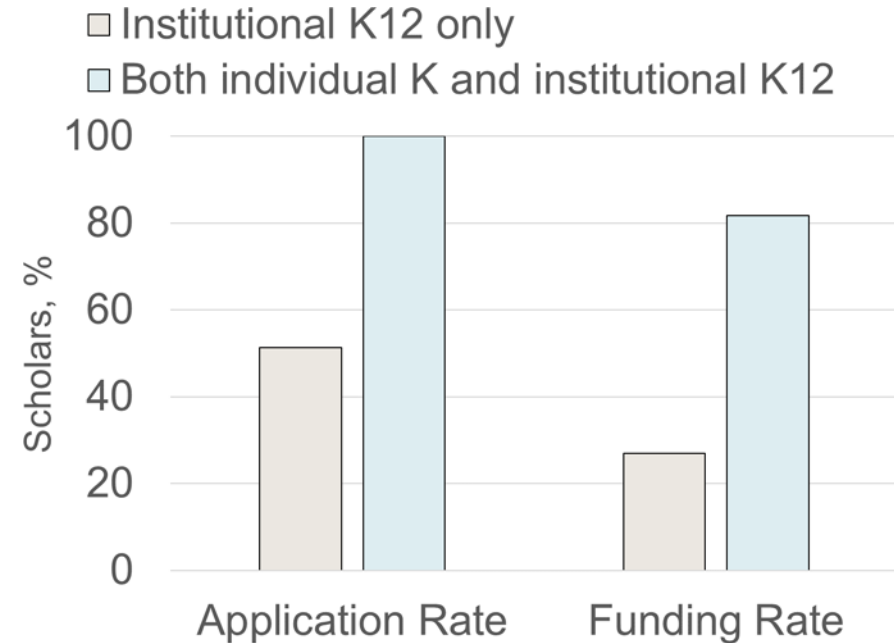
- Worked in conjunction with OSPRA – Appropriate comparators are very difficult to find.

NICHD Physician-Scientists on K12 Programs (N=257)



JAMA Pediatr. 2018;172(3):226-231. doi:10.1001/jamapediatrics.2017.4305

NCMRR RMSTP K12 Program (N=48)



Data for any R mechanism at NIH, excluding R13 and R25



In Anticipation of Ending the K12 Programs, Other Opportunities for Career Development were Developed

- NCMRR Early Career Researcher Program (R03) (PAR 20-042)
- Research Education Programs (R25)
 - Training in Grantsmanship for Rehabilitation Research (TIGRR) with active participation from NIH and other funding agencies
 - Rehabilitation Medicine Scientist Training Program (for physiatrists)
 - Short Course training for team-based bioengineers
- NCMRR staff participation in Early Career Workshops at national meetings (e.g., AAP, ACRM, APTA, AOTA)
- Highlighting opportunities through the NCMRR Newsletter
- In addition to K01, K08, and K23 career development mechanisms currently available to many (not all) rehabilitation researchers





Discussion

