



AMERICA COMPETES AT 5 YEARS: AN ANALYSIS OF RCR TRAINING PLANS

Trisha Phillips¹, Franchesca Nestor¹, Gillian Beach¹
& Elizabeth Heitman²

¹Department of Political Science, West Virginia University;

²University of Texas Southwestern Medical Center

BACKGROUND

NIH Policy

- States criteria for:
 - Format
 - Content
 - Duration
 - Frequency

NSF Policy

- States no criteria
- Outreach on best practices
 - Format
 - Structure
 - Frequency

BACKGROUND

“the research community... is best placed to determine the content of RCR training without a need for NSF-specified standards” (NSF 2011).

RESEARCH QUESTION

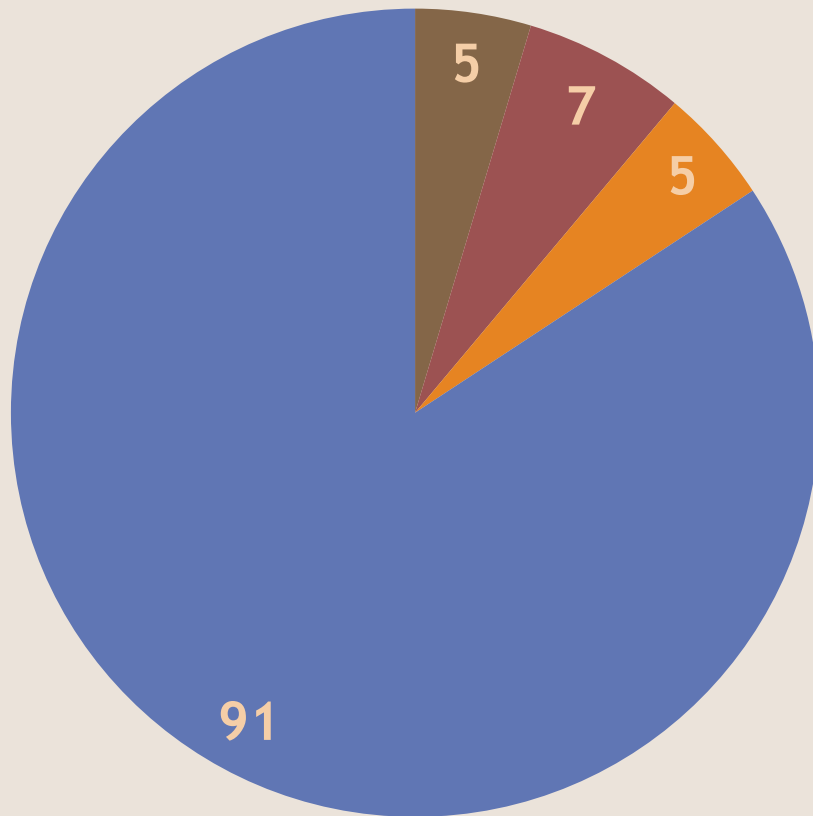
When a governmental agency issues a policy requiring RCR training plans, but leaves the details of the plan up to the discretion of the research community, how does the research community respond?

METHOD

- **Sample:**
 - Carnegie Research University: Very High Research Activity
- **Data collection:**
 - Internet searches for NSF RCR training plans
- **Coded:**
 - Best practices known at time policy was implement
 - Format: online vs. face-to-face
 - Structure: variations based on discipline and career stage
 - Duration: hours of instruction
 - Frequency: vertical integration

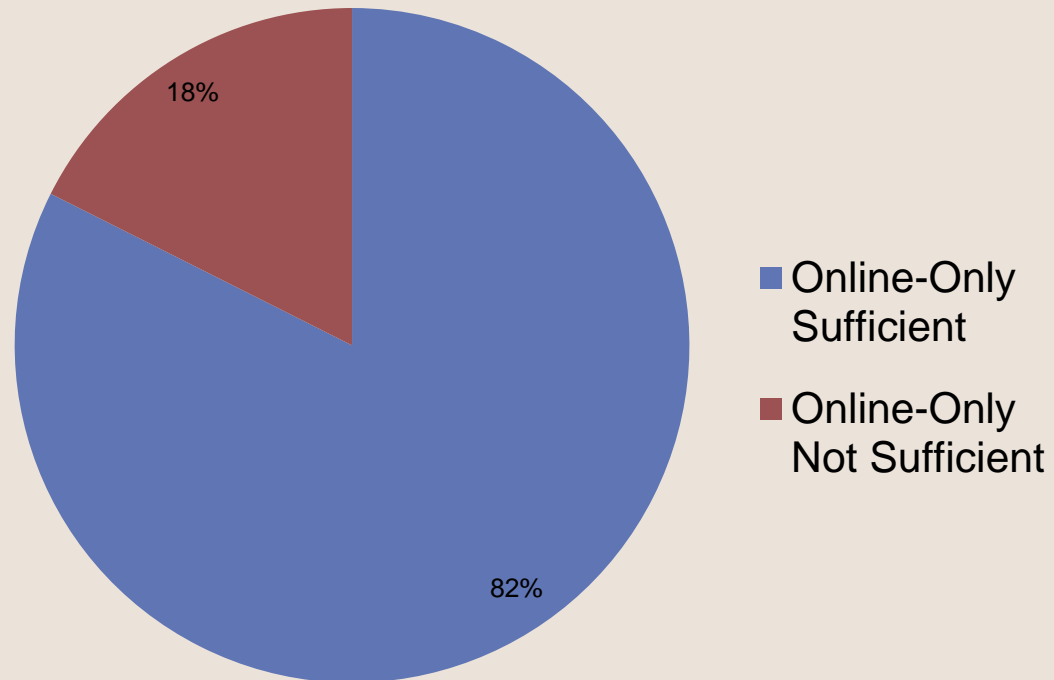
CODING SAMPLE

FROM 108 UNIVERSITIES WITH "VERY HIGH RESEARCH ACTIVITY"



- Plan is not Publicly Accessible
- Plan is Unclear
- No University-wide Requirements
- Total Plans Analyzed

PLANS SATISFIED BY ONLINE TRAINING



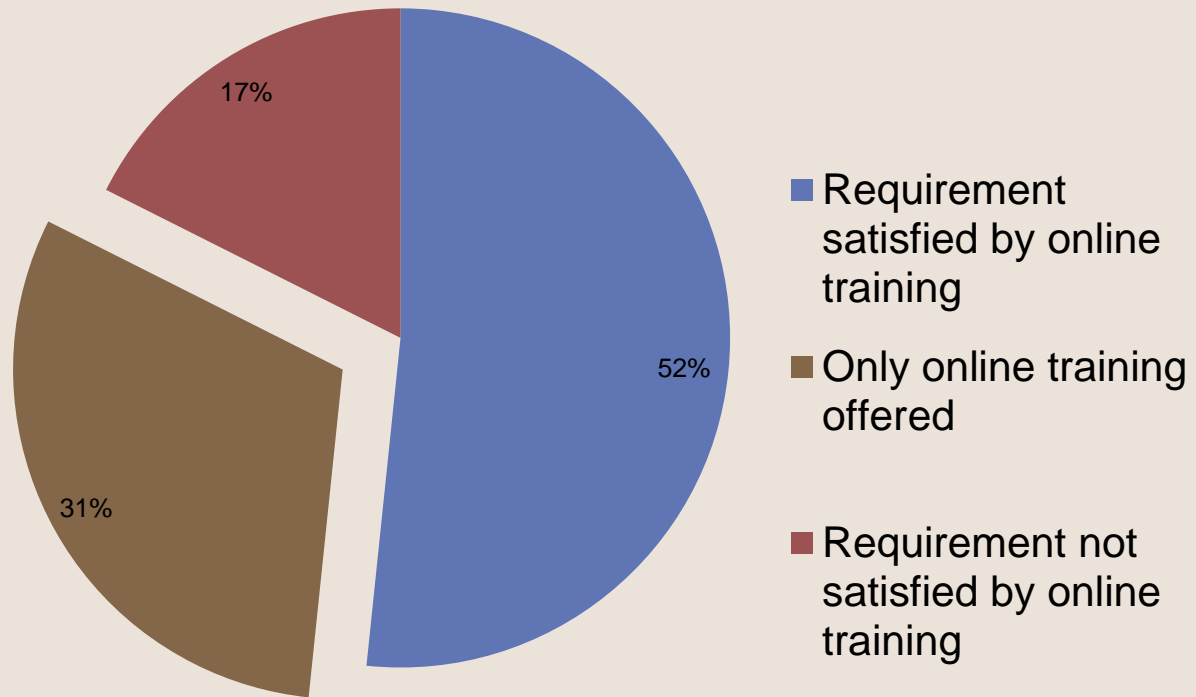
n=91

SAMPLE PLAN

All Emory University undergraduate, graduate students and postdoctoral researchers receiving NSF funds (salary/stipends) or NSF scholarship/stipend support to engage in research or if conducting research is included in their academic program that is receiving NSF support, are required to take the RCR training if the NSF grant proposal was submitted on or after January 4, 2010 are required to take the RCR training module available below.

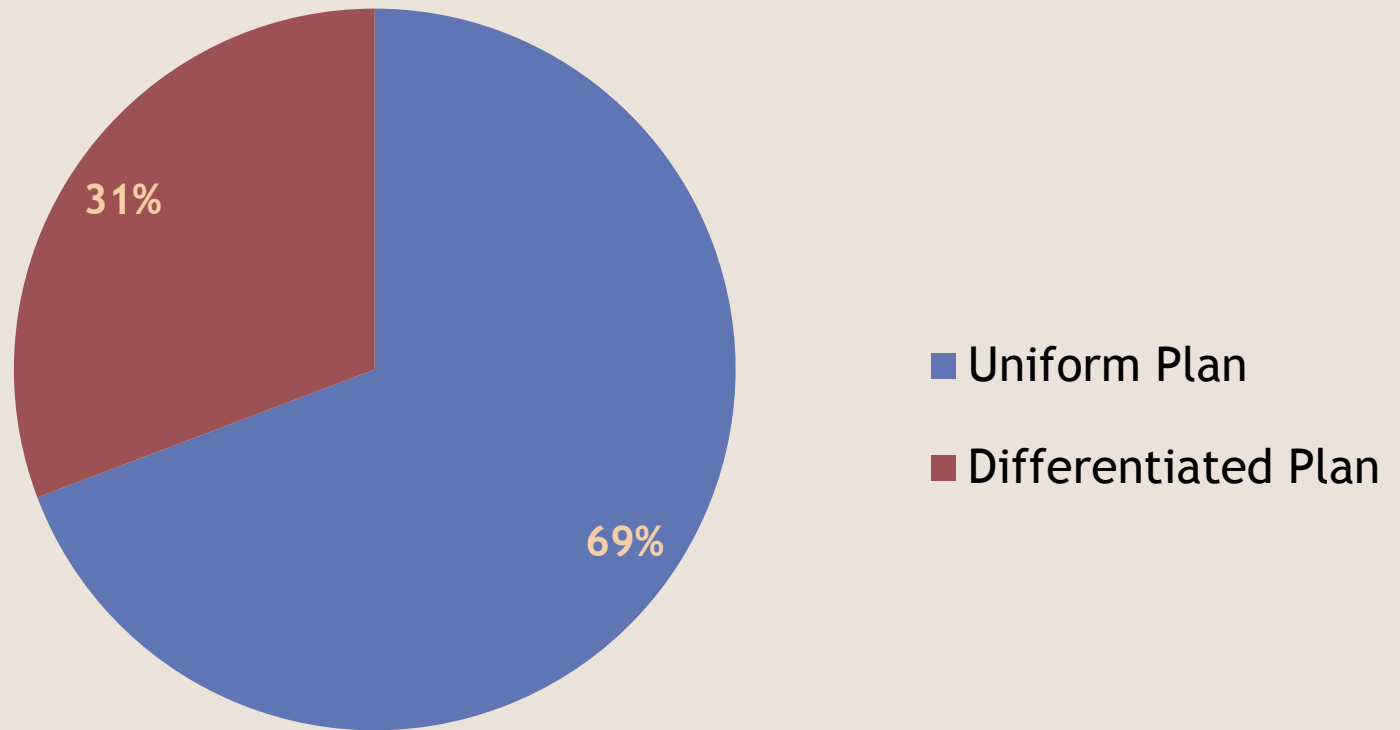
Those interested in fulfilling the NSF RCR training requirements can do so by completing the appropriate CITI RCR training course. Click [here](#) for instructions on how to take the CITI RCR course.

PLANS SATISFIED BY ONLINE TRAINING



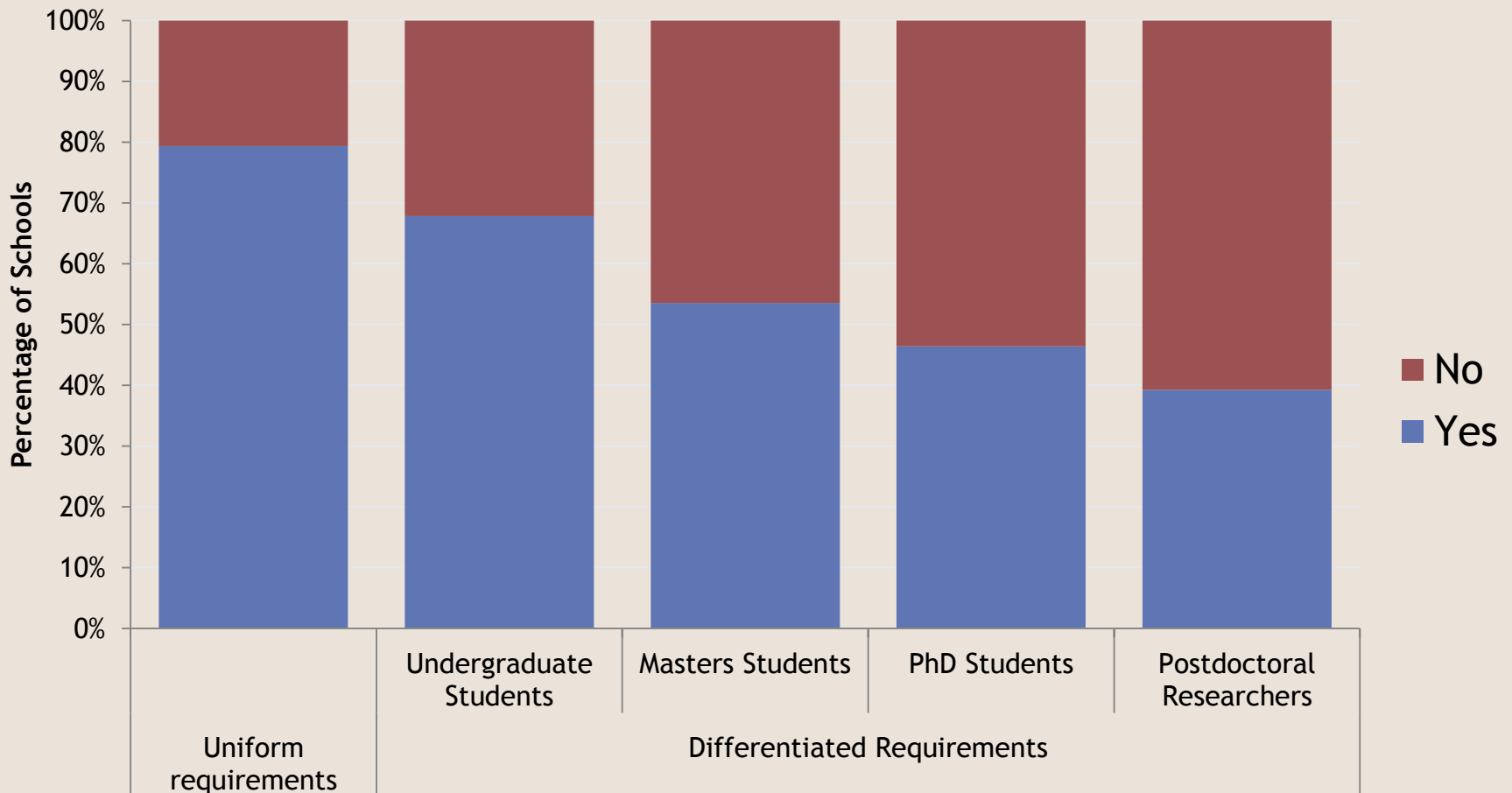
n=91

1. DIFFERENTIATED VS UNIFORM PLAN

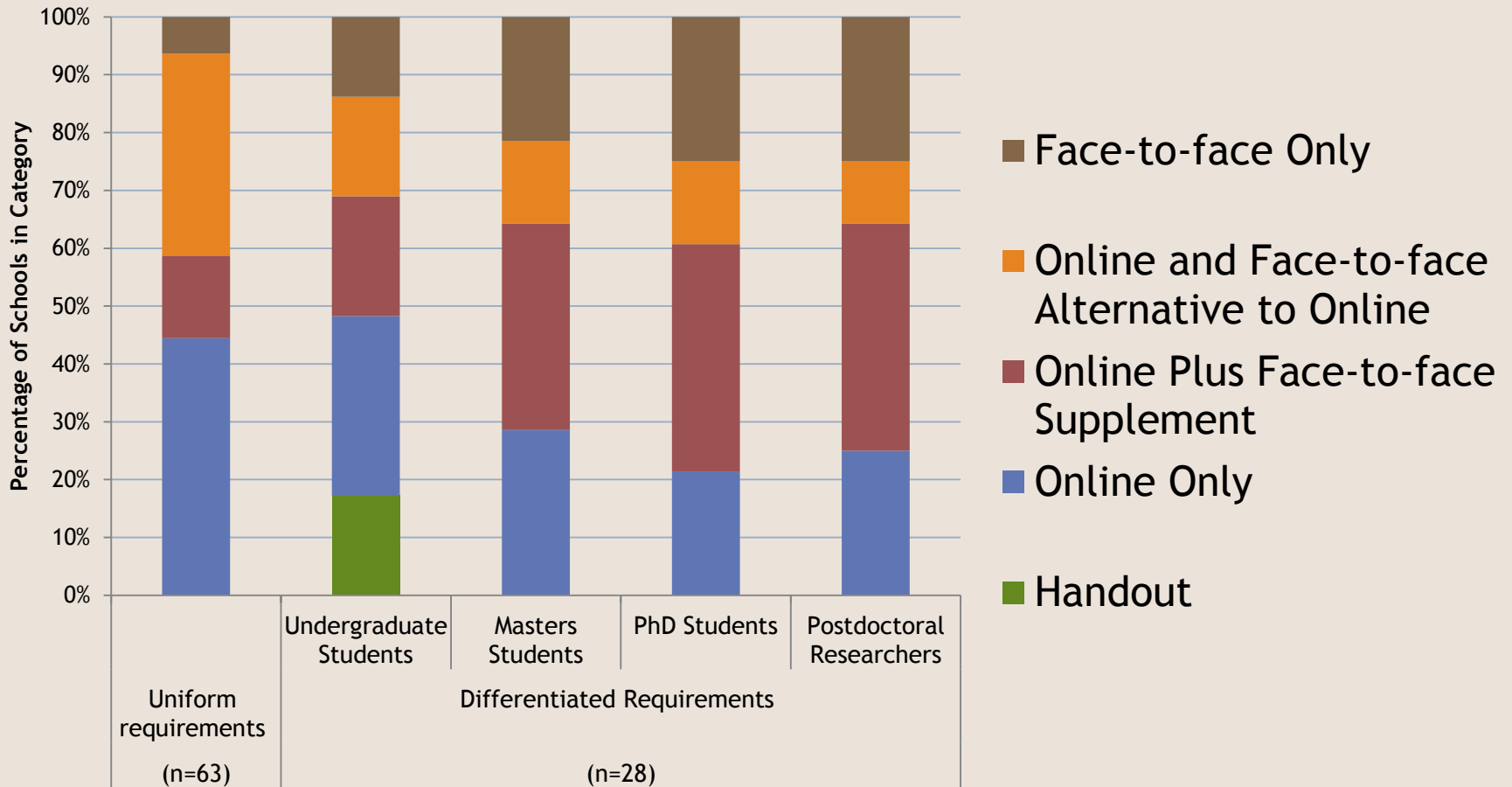


1. DIFFERENTIATED VS UNIFORM PLAN

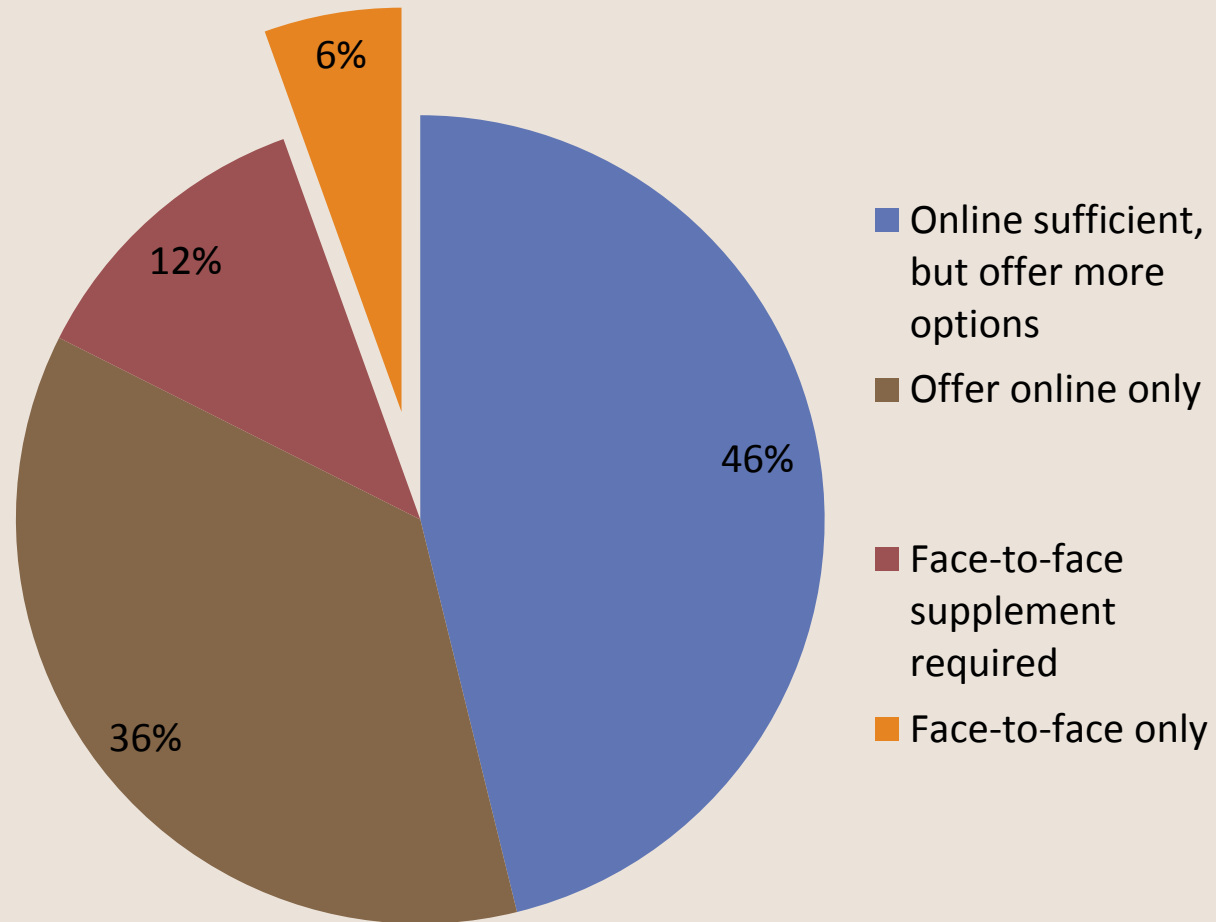
IS ONLINE ONLY TRAINING SUFFICIENT?



2. OFFERINGS

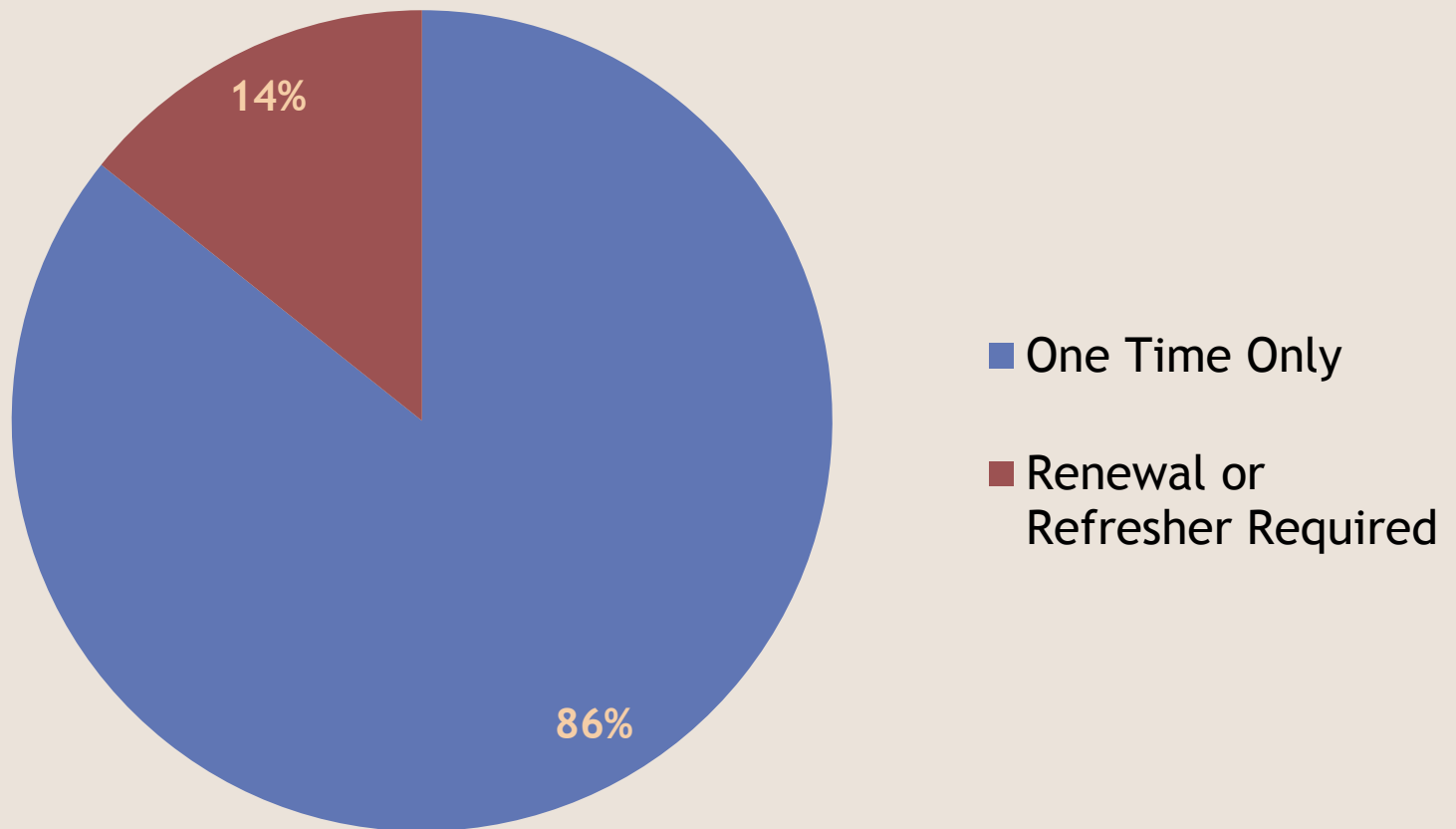


OVERALL PICTURE

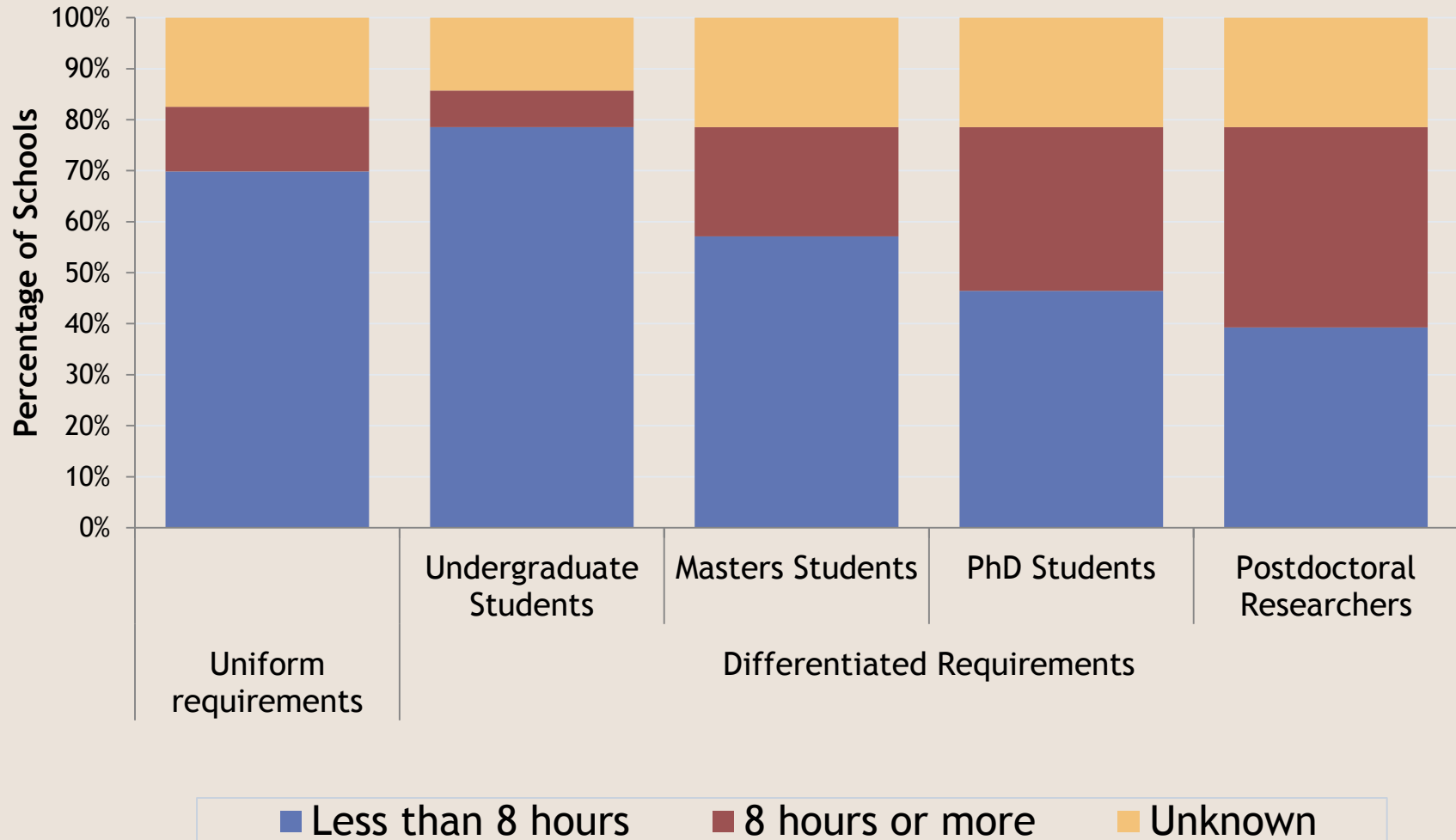


n=91

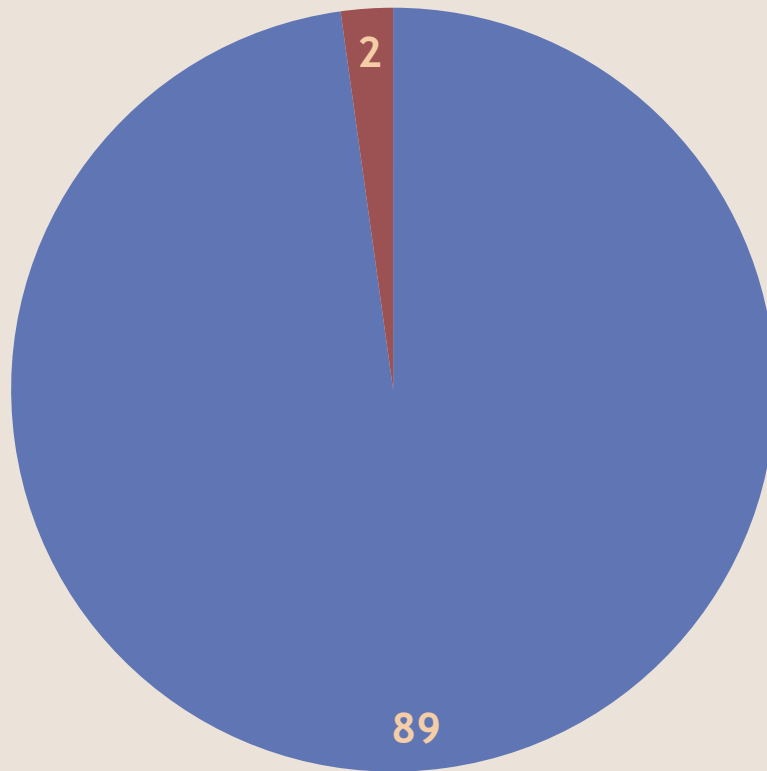
FREQUENCY OF TRAINING



DURATION OF TRAINING

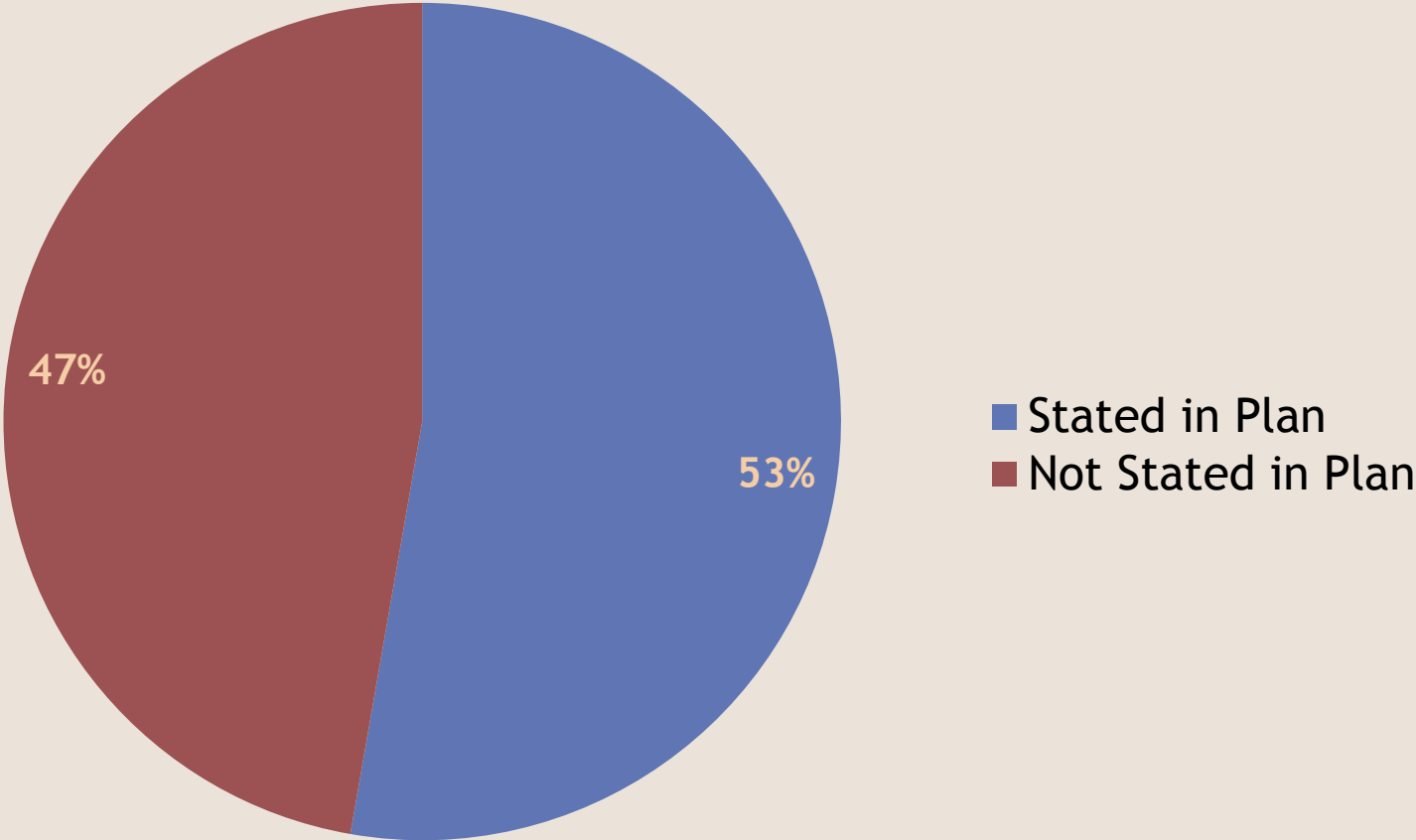


NSF AND NIH TRAINING GRANTS

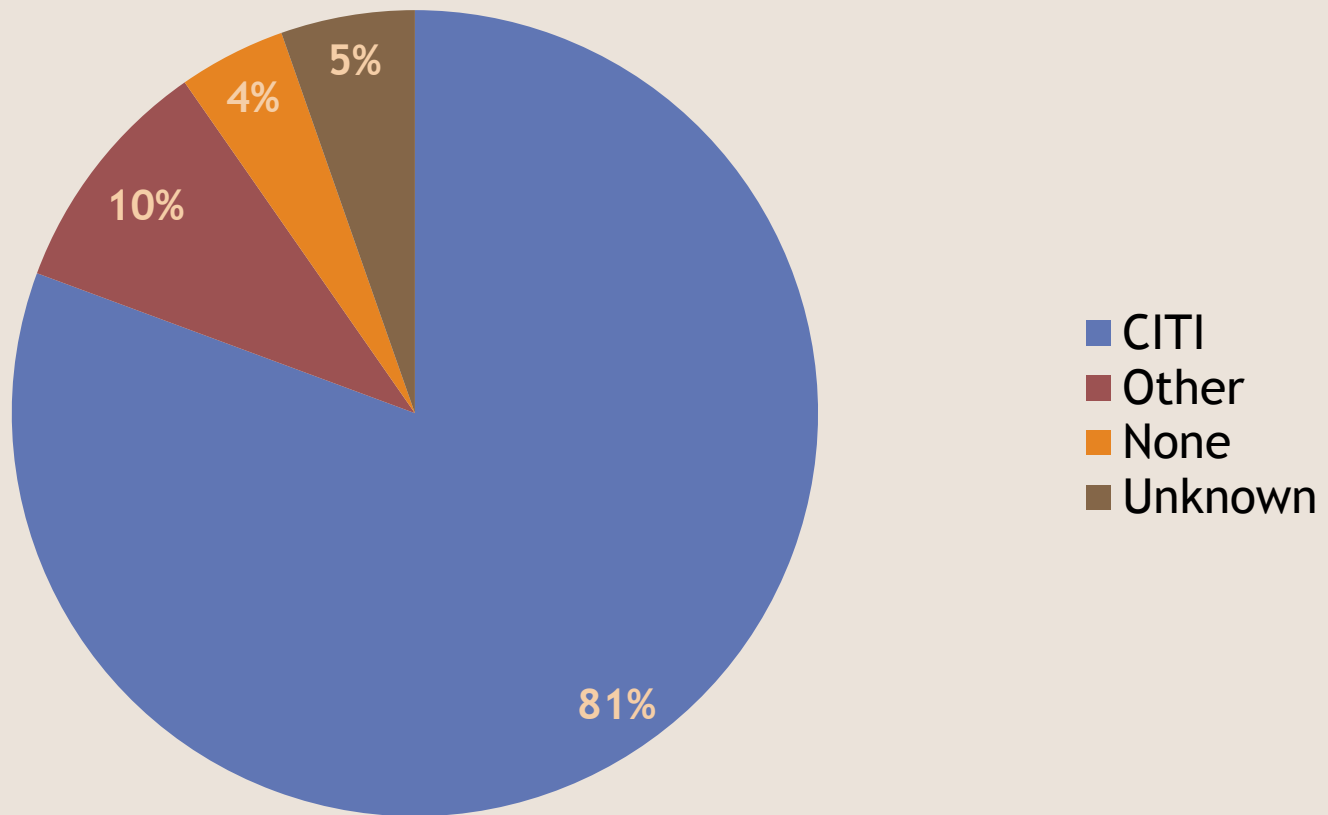


■ 2014 recipient of NIH F, K, or T award

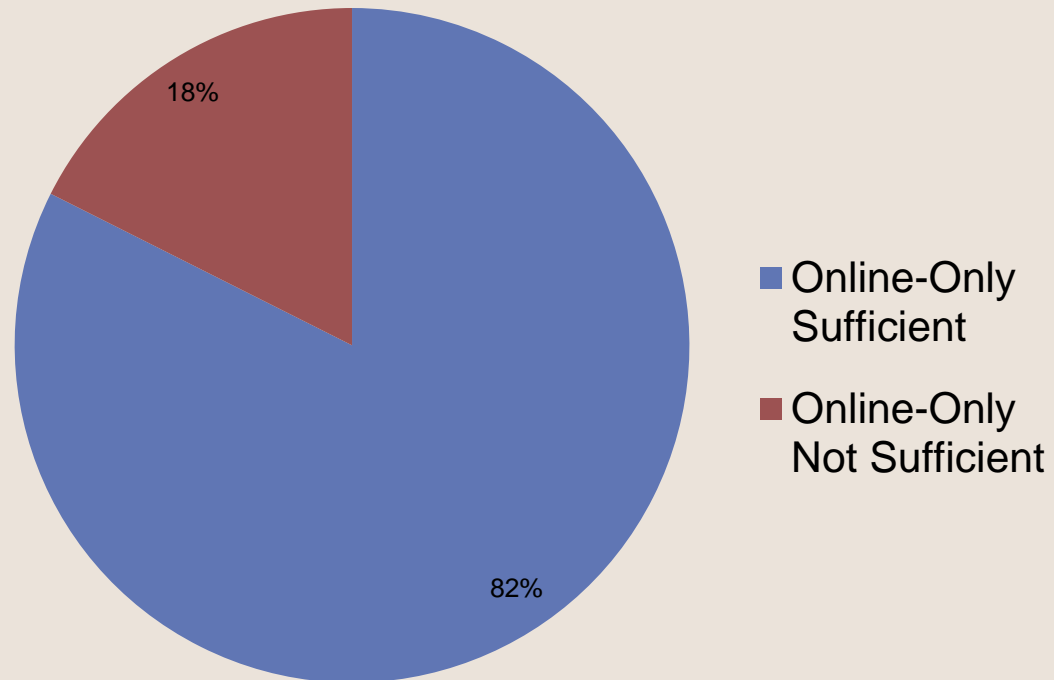
TIME FRAME FOR COMPLETION



SOURCE OF ONLINE INSTRUCTION



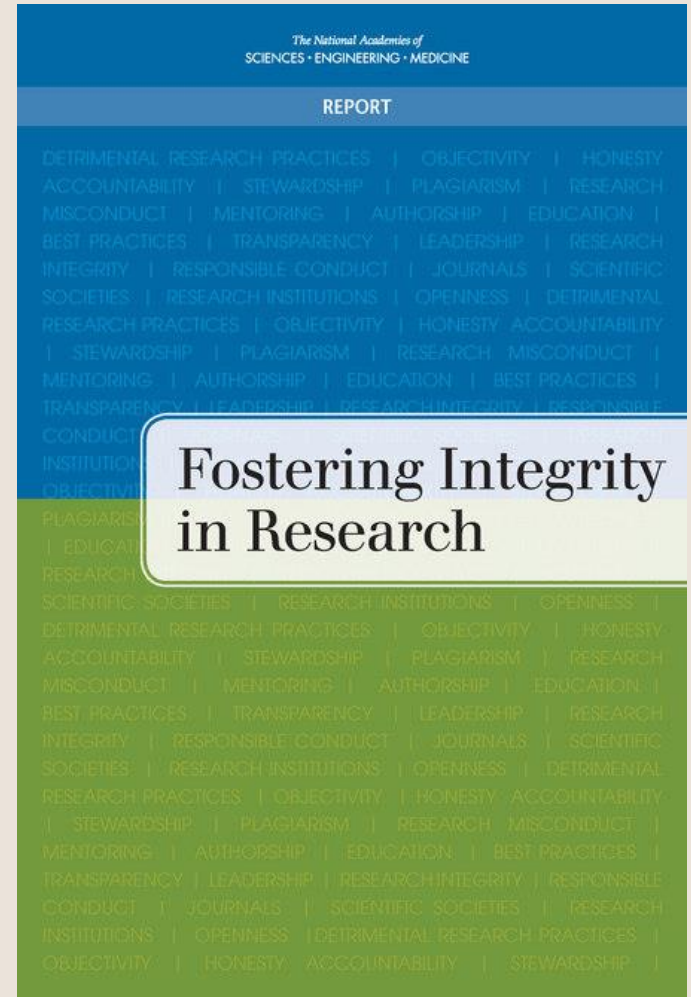
ONLINE TRAINING



n=91

CONTEXT

- IOM Report (1989)
- NIH Policies (1989, 1994, 2009)
- NSF Policy (2009)
- NASEM REPORT (2017)



FULL RESULTS




[Science and Engineering Ethics](#)

pp 1–23

America COMPETES at 5 years: An Analysis of Research-Intensive Universities' RCR Training Plans

Authors

[Authors and affiliations](#)

Trisha Phillips , Franchesca Nestor, Gillian Beach, Elizabeth Heitman

[Open Access](#) | Original Paper

First Online: 15 March 2017

DOI: 10.1007/s11948-017-9883-5

Cite this article as:

Phillips, T., Nestor, F., Beach, G. et al.

Sci Eng Ethics (2017).

doi:10.1007/s11948-017-9883-5

9

Shares

814

Downloads

QUESTIONS?