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

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<table>
<thead>
<tr>
<th>NIH Policy</th>
<th>NSF Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>States criteria for:</td>
<td>States no criteria</td>
</tr>
<tr>
<td>Format</td>
<td>Outreach on best practices</td>
</tr>
<tr>
<td>Content</td>
<td>Format</td>
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<td>Duration</td>
<td>Structure</td>
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<td>Frequency</td>
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“the research community... is best placed to determine the content of RCR training without a need for NSF-specified standards” (NSF 2011).
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 implemented
    - 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

91
PLANS SATISFIED BY ONLINE TRAINING

- 82% Online-Only Sufficient
- 18% Online-Only Not Sufficient

n=91
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

- Requirement satisfied by online training: 52%
- Only online training offered: 31%
- Requirement not satisfied by online training: 17%

n=91
1. DIFFERENTIATED VS UNIFORM PLAN

- Uniform Plan: 69%
- Differentiated Plan: 31%
1. DIFFERENTIATED VS UNIFORM PLAN

**IS ONLINE ONLY TRAINING SUFFICIENT?**

<table>
<thead>
<tr>
<th>Percentage of Schools</th>
<th>Uniform Requirements</th>
<th>Differentiated Requirements</th>
</tr>
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<tbody>
<tr>
<td><strong>Undergraduate Students</strong></td>
<td>No: 80%</td>
<td>Yes: 20%</td>
</tr>
<tr>
<td><strong>Masters Students</strong></td>
<td>No: 75%</td>
<td>Yes: 25%</td>
</tr>
<tr>
<td><strong>PhD Students</strong></td>
<td>No: 70%</td>
<td>Yes: 30%</td>
</tr>
<tr>
<td><strong>Postdoctoral Researchers</strong></td>
<td>No: 65%</td>
<td>Yes: 35%</td>
</tr>
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</table>
2. OFFERINGS

- **Percentage of Schools in Category**
  - Undergraduate Students
  - Masters Students
  - PhD Students
  - Postdoctoral Researchers

- **Uniform requirements** (n=63)
  - Face-to-face Only
  - Online and Face-to-face
  - Alternative to Online
  - Online Plus Face-to-face
  - Supplement
  - Online Only
  - Handout

- **Differentiated Requirements** (n=28)
OVERALL PICTURE

- 46% Online sufficient, but offer more options
- 36% Offer online only
- 12% Face-to-face supplement required
- 6% Face-to-face only

n=91
FREQUENCY OF TRAINING

- 86% One Time Only
- 14% Renewal or Refresher Required
DURATION OF TRAINING

Percentage of Schools

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</table>

- Less than 8 hours
- 8 hours or more
- Unknown

Less than 8 hours | 8 hours or more | Unknown

0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100%
2014 recipient of NIH F, K, or T award
TIME FRAME FOR COMPLETION

53%

47%

Stated in Plan
Not Stated in Plan
Online Training

- Online-Only Sufficient: 82%
- Online-Only Not Sufficient: 18%

n=91
NSF Policy (2009)
NASEM REPORT (2017)
America COMPETES at 5 years: An Analysis of Research-Intensive Universities’ RCR Training Plans

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QUESTIONS?