Results of the 2018 FDP FACULTY WORKLOAD SURVEY: Input for Optimizing Time on Active Research

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Thursday, Jan 24, 2019 Plenary Session



Overview

- Brief Summary of Survey Development and Implementation
- Overview of Key Findings from Survey Sections
- The Meaning of 44.3%.

2018 Faculty Workload Survey (FWS)

Thanks to:

- FWS Faculty Working Group
- David Wright
- Claudette Baylor-Fleming
- SoundRocket (Scott Crawford, Julie Smith, Jillian Hunsanger, Robert Young)
- FDP Administrative, Faculty, and Tech Representatives
- USF Graduate Student Team (Andrea Ranieri, Elizabeth Fuller, Sandra Kauffman, Alaina Talboy, Jessica Jordan, Joanna Lawler)
- FDP Executive Committee and FDP Foundation

2018 FWS Purpose

Re-assess and update estimates of federally-funded researchers' administrative workload, following 2012 and 2005 surveys.

Provide empirical input toward a better understanding of focus areas for

- streamlining research administrative workload,
- making federally-funded research processes more efficient, and
- allowing greater focus on the topic of the research.

Changes to the 2018 FWS

- Compares time required for administrative workload type to priorities for change,
- Increases focus on institution and funding agency variables,
- Elaborates information on writing proposals,
- Increases attention to perceived research climate and support within the institution,
- Provides pilot data to compare % time estimates with hour-based estimates.

Survey Content Overview

| Background | | | |
|---|------------|---|--|
| Your Work & Research | | | |
| Your Institution | Elaborated | | |
| Federal Agency Requirements | New | | |
| Research Responsibilities | Improved | | |
| General Research Administration | | | |
| Compliance | | | |
| Safety and Security | | , | |
| Open-Ended Items (Suggestions; +/- Helpful) | | | |

2018 FWS Timeline and Process

- Throughout 2017: Survey developed and finalized;
- Oct/Nov 2017: Institution Commitments with Lists
- Nov 2017: University of South Florida IRB approved study protocol (Pro00032832)
 - 111 of 154 (72%) FDP non-federal member organizations participated (with a total of 149 individual institutions)
 - Pls on U.S. Federally Funded Research Projects (including both Contracts and Grants) that were active at any point during the 2016-2017 Academic Year
- Feb 12, 2018: Survey launched
- Apr 2, 2018: Survey closed
- Sep, 2018: Preliminary results were presented

Comparison of FWS Response Rates

A series of 3 surveys of Principal Investigators (PIs) on federally-funded projects asked about time taken away from research by administrative and related requirements.

| Period Assessed | FDP Organizations | PIs Invited | Participants | Response Rate |
|--------------------|----------------------|----------------|--------------|------------------|
| AY2004-2005 | 74% (73 of 99) | 23,325 | 6,081 | 26% |
| AY2010-2011 | 83% (99 of 119) | 53,428 | 12,816 | 24% |
| AY2016-2017 | 72% (111 of 154) | 56,869 | 11,167 | 20% |

Background

Demographics: 2018 Modal Participant

Institution

- Public University (70%)
- Very High Research (VHR) Institution (84%)
- >\$500M Research Expenditures, w/ Medical School (31%)

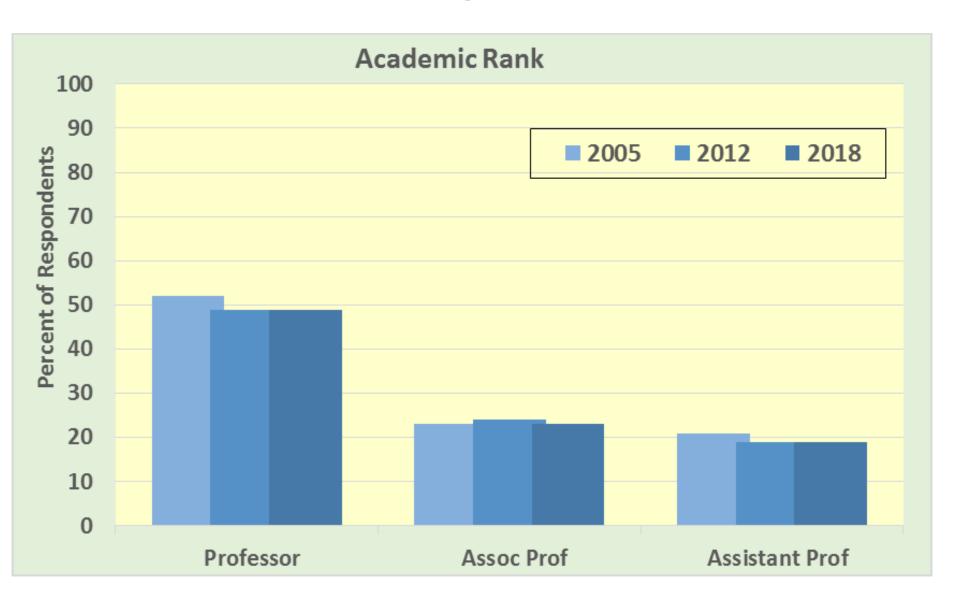
Participant

- White, Male, Full Professor, average = 52 years old
- 1-3 federal grants with <\$500K in annual direct costs
- Funding from NIH (47%) and/or NSF (33%)
- In Bio/Biomed/Clin Sciences (40%) [or Phys/Math/Engin (28%)]

Professional Characteristics



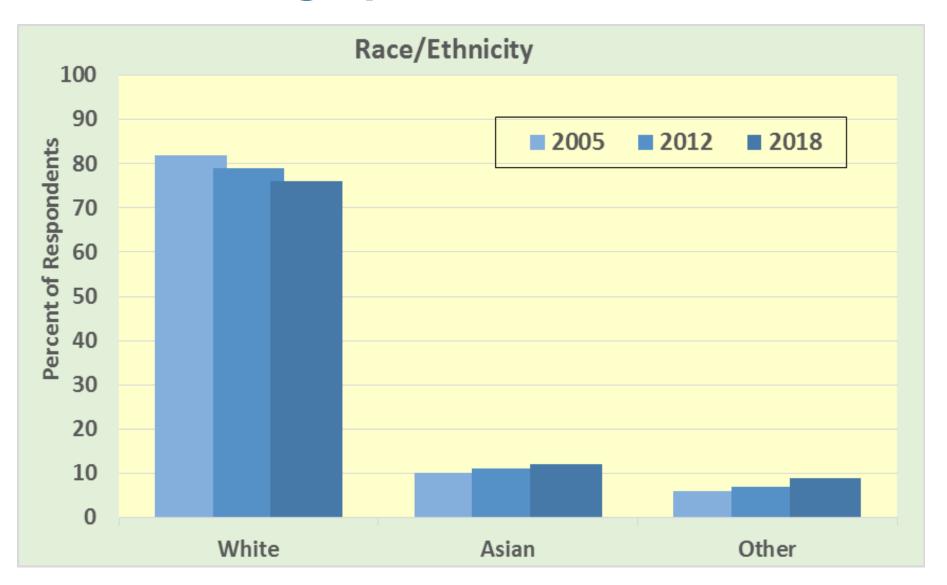
Professional Characteristics

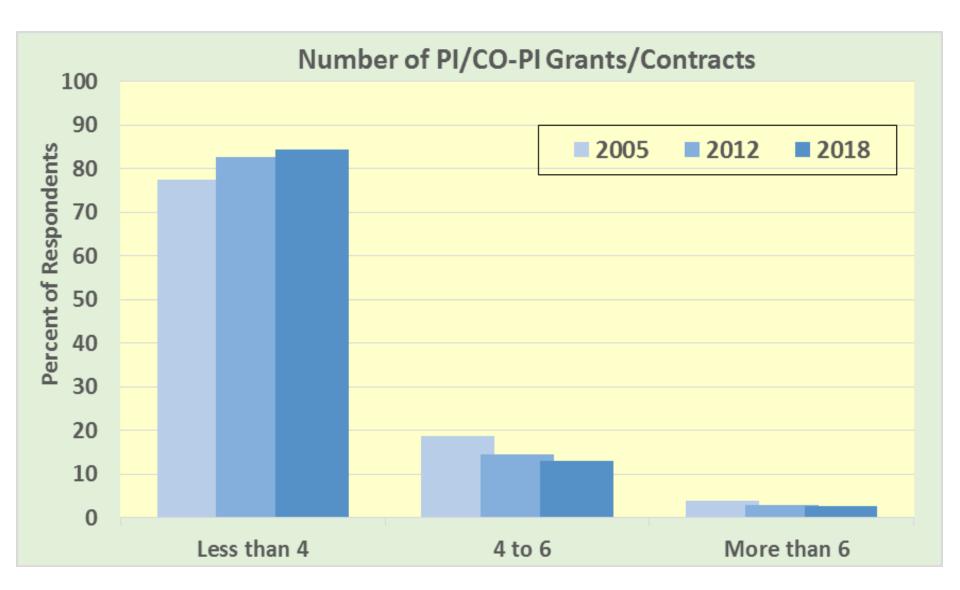


Demographic Characteristics

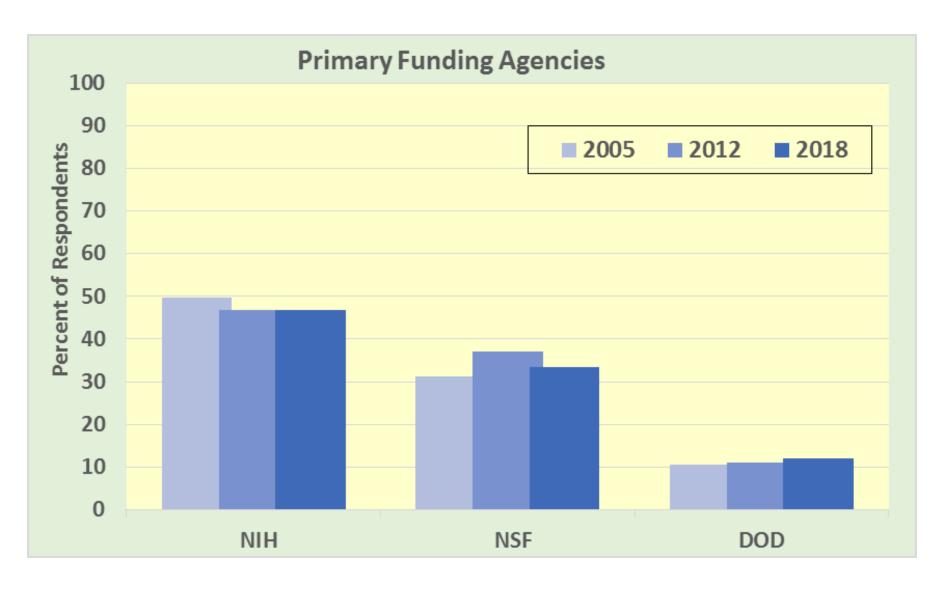


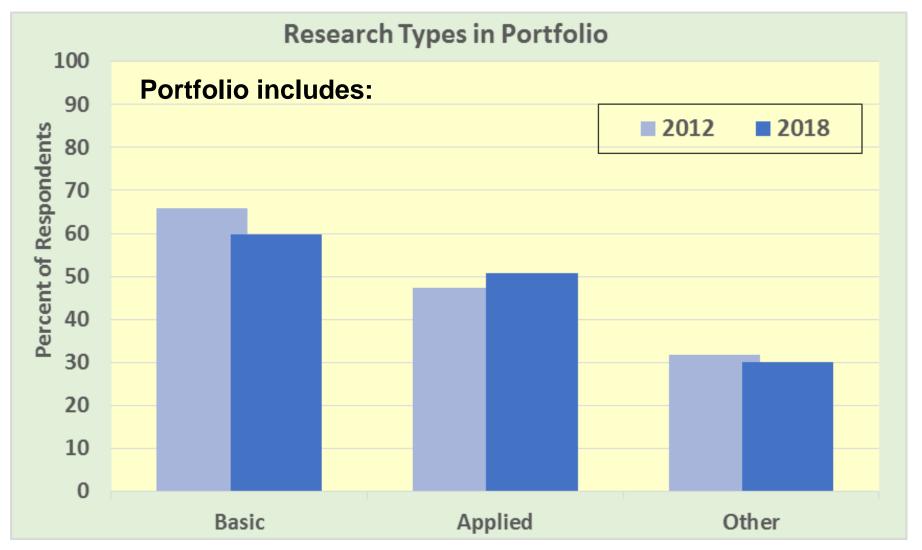
Demographic Characteristics





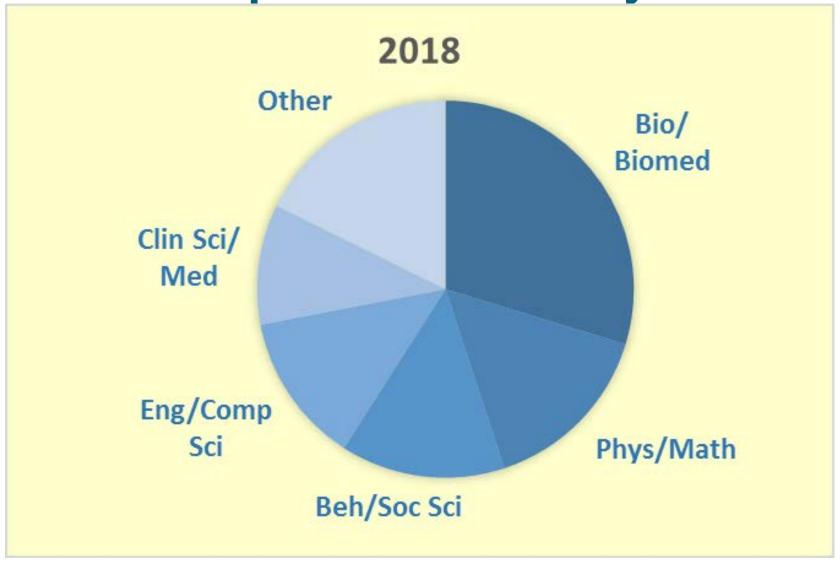




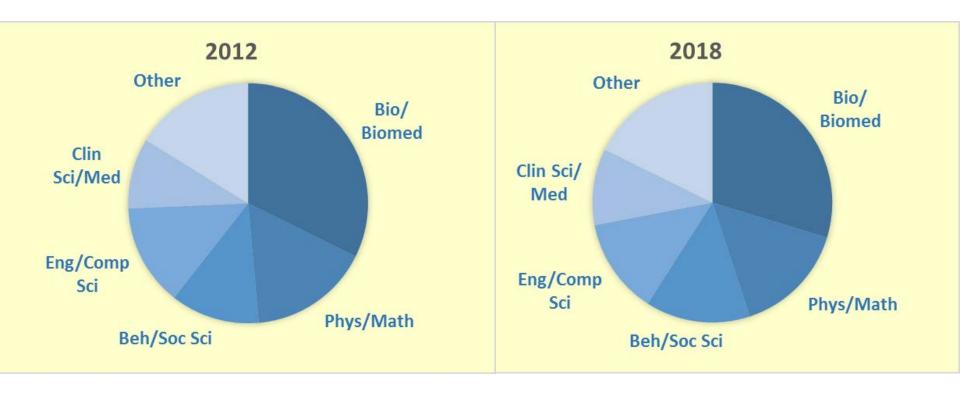


Other = Training, Curriculum Development, Service, and/or "Other"

Principal Fields of Study



Principal Fields of Study



Background: Summary

- The large number of respondents provides a rich set of data, though the 20% response rate suggests some views may not be represented.
- Participant profiles are largely similar across surveys from 6 and 12 years ago.
- The diversity of the sample has been increasing with each cohort (though only minimally).

Your Work and Research

2018 FWS Primary Results

"Of the total time you spent on work related to **federally funded research** during AY2016-2017, what **percentage of that time** did you devote to each of the following **activities**?

- ACTIVE RESEARCH
- PRE-AWARD PROPOSAL PREPARATION ACTIVITIES
- PRE-AWARD ADMINISTRATIVE ACTIVITIES
- POST-AWARD ADMINISTRATIVE ACTIVITIES
- POST-AWARD REPORT PREPARATION ACTIVITIES

<u>Caution</u>: Responses are rough estimates only—but hold internally consistent, good measurement properties, and reliable information about general perceptions.

2018 FWS Primary Results

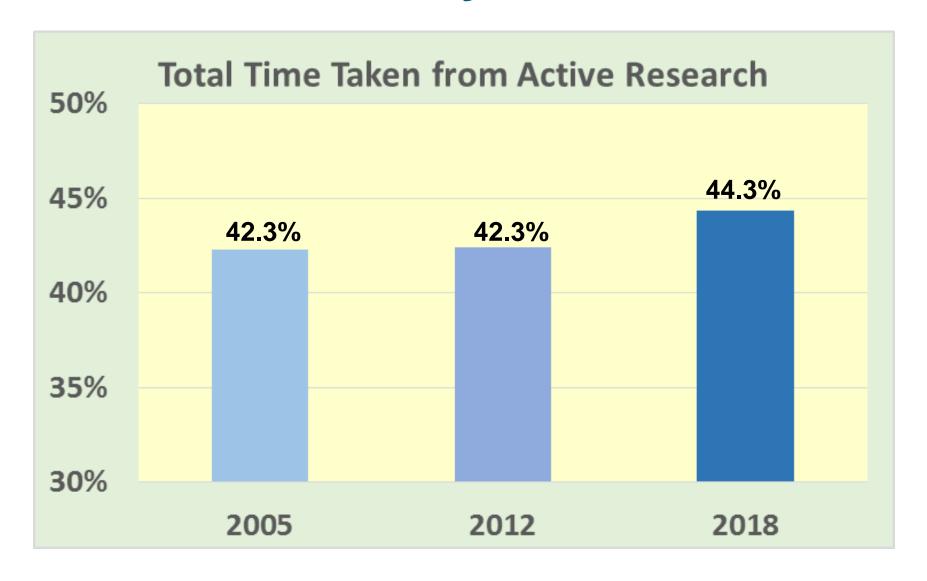
"Of the total time you spent on work related to **federally funded research** during AY2016-2017, what **percentage of that time** did you devote to each of the following **activities**?

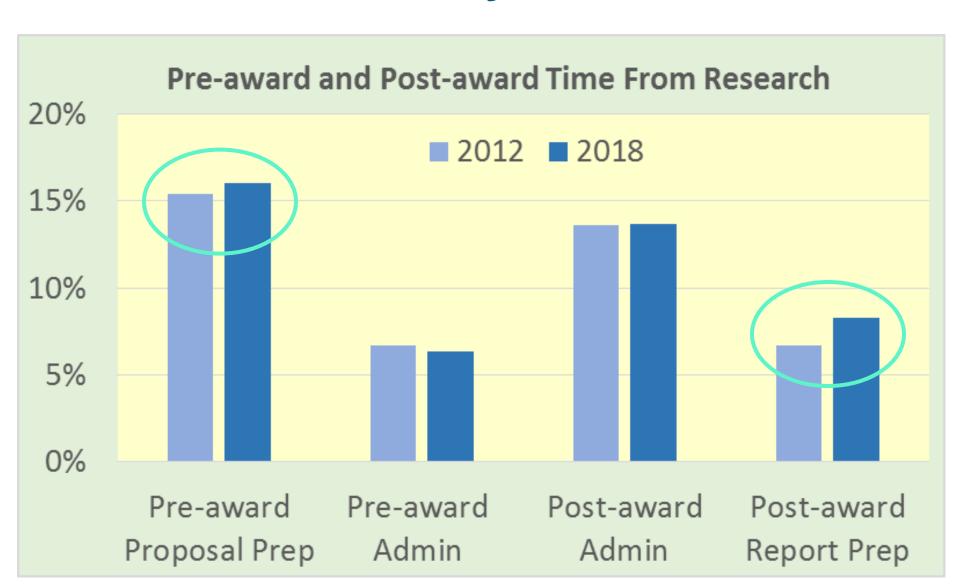
- ACTIVE RESEARCH
- PRE-AWARD PROPOSAL PREPARATION ACTIVITIES
- PRE-AWARD ADMINISTRATIVE ACTIVITIES
- POST-AWARD ADMINISTRATIVE ACTIVITIES
- POST-AWARD REPORT PREPARATION ACTIVITIES:

Time Away from Active Research







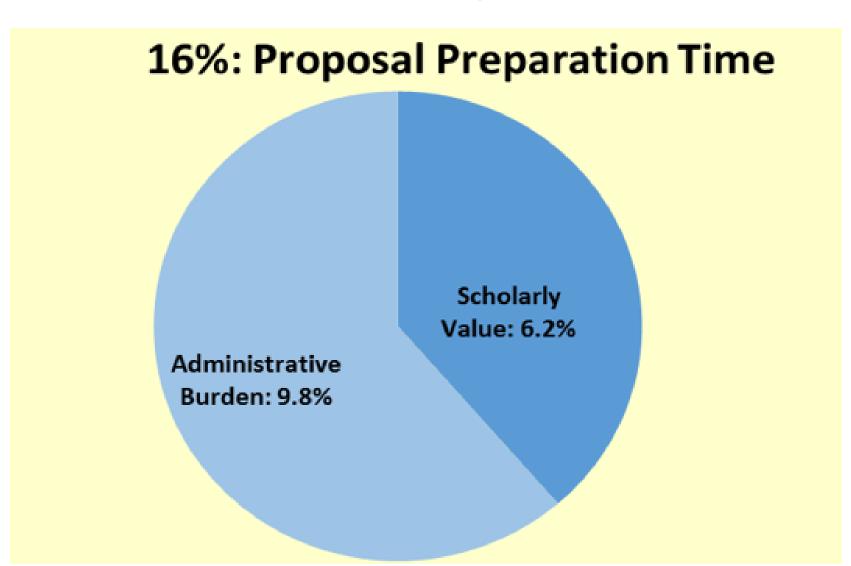


Proposal Preparation Time (~16%)

% proposal preparation time that contributes to research and scholarship:

Mean = 38.7%

(of the 16% = 6.2% of total time away value)



Proposal Preparation Time (~16%)

Number of proposals submitted in last 3 years:

Median = 4 (Mean = 6.0)

Funded = 1 (prereq. for being in study)
Not funded = 2
Pending = 1

Note. Given participant inclusion criteria requiring at least 1 funded project, these values do not reflect outcomes for those who were not successful in obtaining federal funding (who would have more unfunded). Thus, the values should not be used to infer funding rates.

16% Proposal Preparation Time

Given the sample was selected for being successful on at least one proposal.

Unfunded (minimum): Mostly

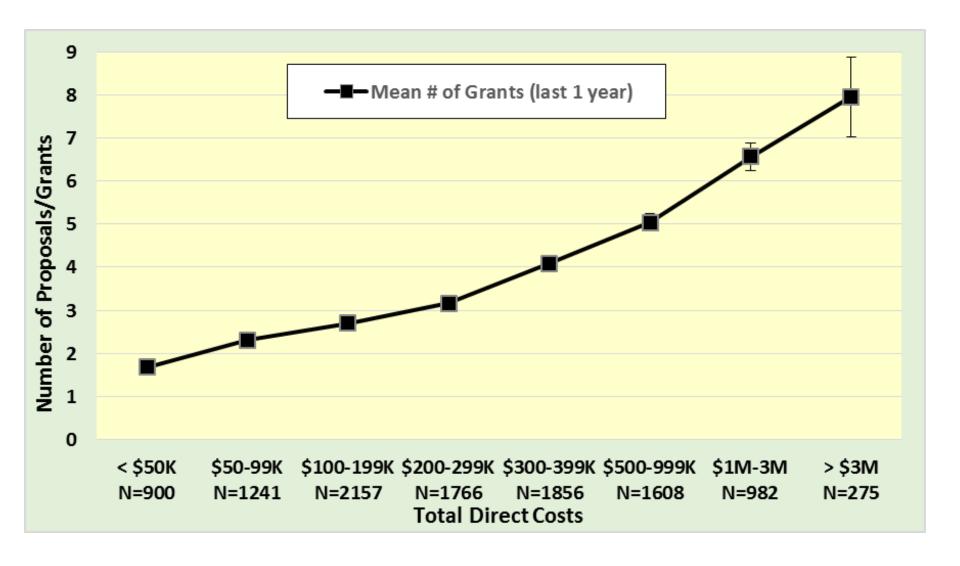
Time?

Wasted

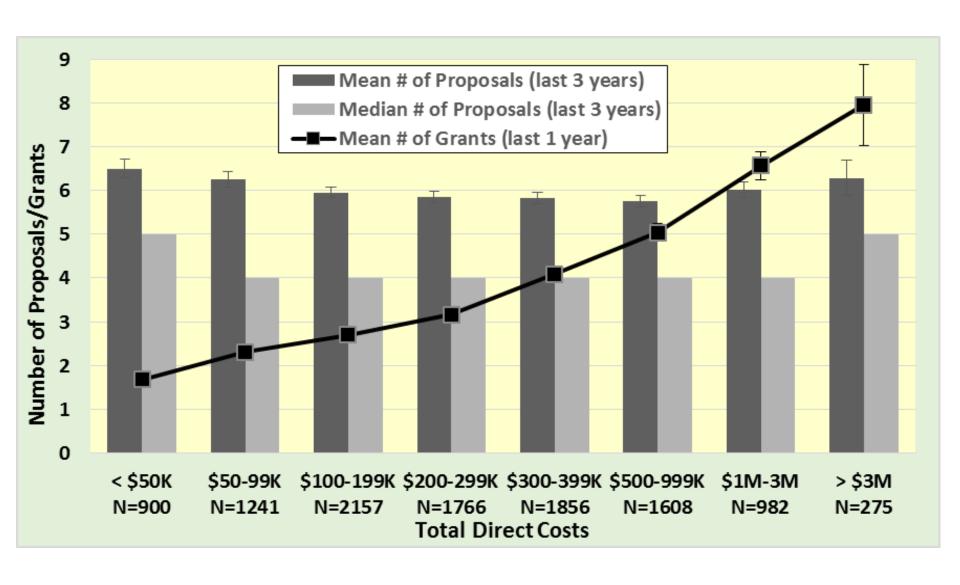
Scholarly Value

Admin. Burden

Grants versus Funding



Proposals versus Funding



Your Work and Research: Summary

- Since 2012, the average estimated time taken away from research by pre-award and post-award requirements related to federally-funded research has increased from 42.3% to 44.3%.
- The increase appears to predominantly affect the amount of time spent preparing proposals and interim/final research reports.
- Although an estimated 39% of the time spent on proposal preparation may contribute to a Pl's scholarship, 50% or more of proposal preparation time may be largely a waste due to rejections.

Federal Agency Requirements

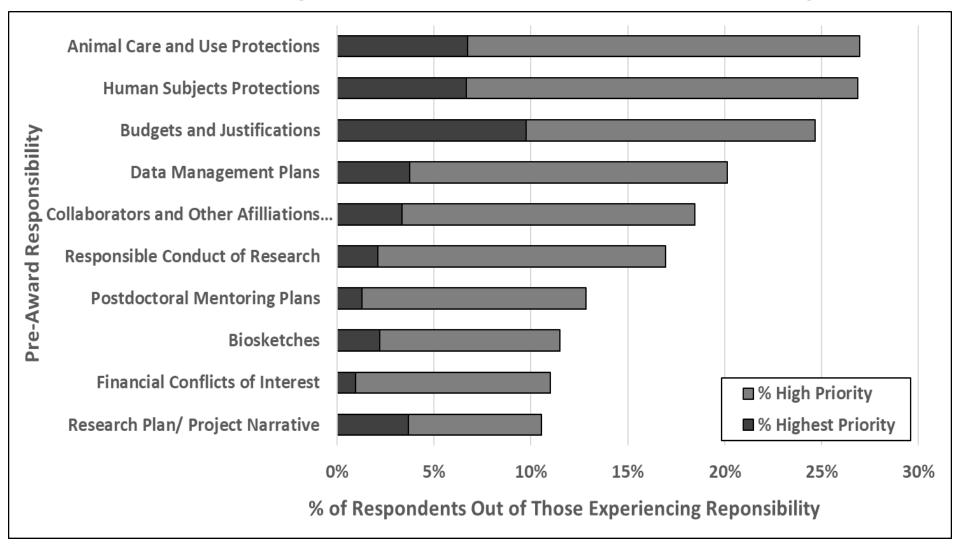
Questions about Agency Requirements

Participants indicated which of their funding agencies had most burdensome administrative requirements (if >1 funding agency).

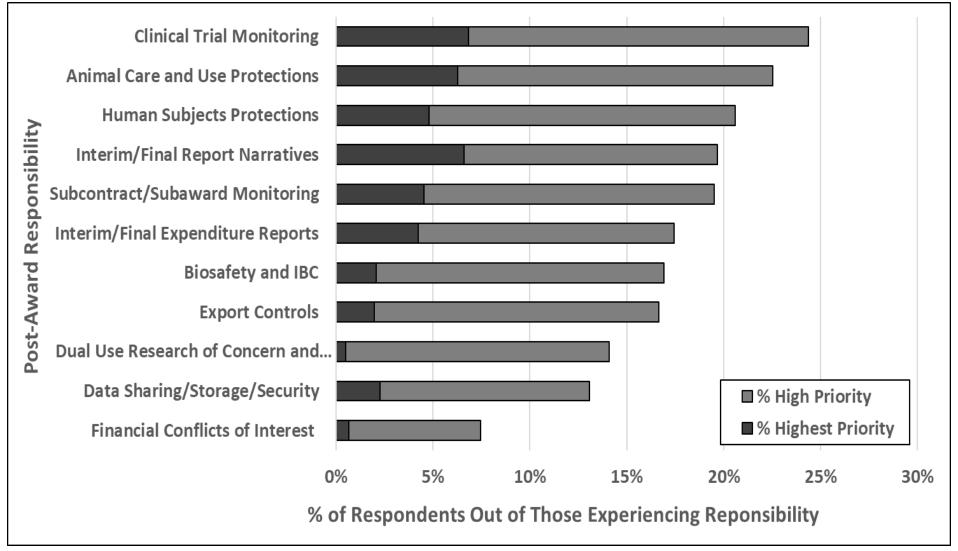
Then they were asked which Preaward and Post-award requirements they experienced at that agency.

Of those, participants were asked the priority for reducing administrative burden of each requirement at that agency.

Agency: **Pre-award**Rated High Priority Need for Change



Agency: **Post-award**Reported High Priority Need for Change



Federal Agency Requirements: Summary

- Generally, fewer than 30% of respondents rated any agency requirement as a high priority need for change.
- Pre-award: Highest priority areas are requirements for animal and human subject protections (beyond institution IRB and IACUC), budgets/budget justifications, and data management plans.
- Post-award: The #1 highest priority area is clinical trials monitoring, closely followed by animal and human subject protections (beyond IRB and IACUC), interim/final reports, and subcontracts.

Your Institution

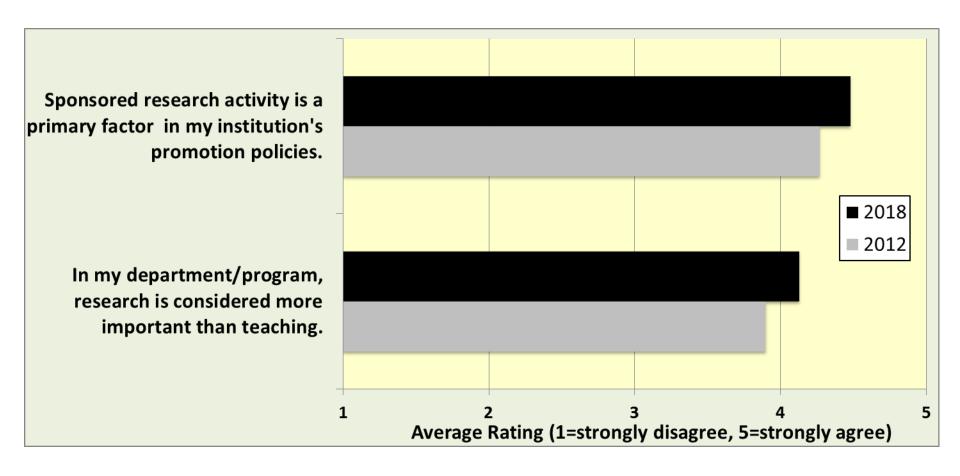
Ratings about "Your Institution"

Participants viewed

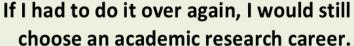
- (1) a series of statements about the research climate at their institution (repeated from 2012), and
- (2) a series of statements about their institution's research administration.
- They rated each statement on a 5-point scale from

Strongly Disagree to Strongly Agree.

Perceived Research Climate



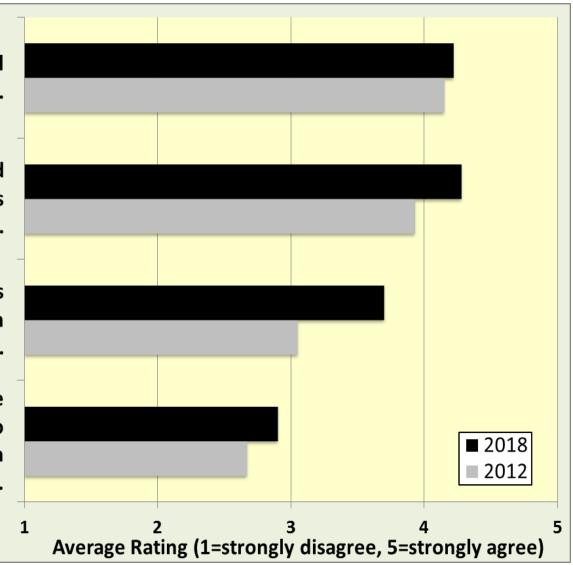
Perceived Research Climate



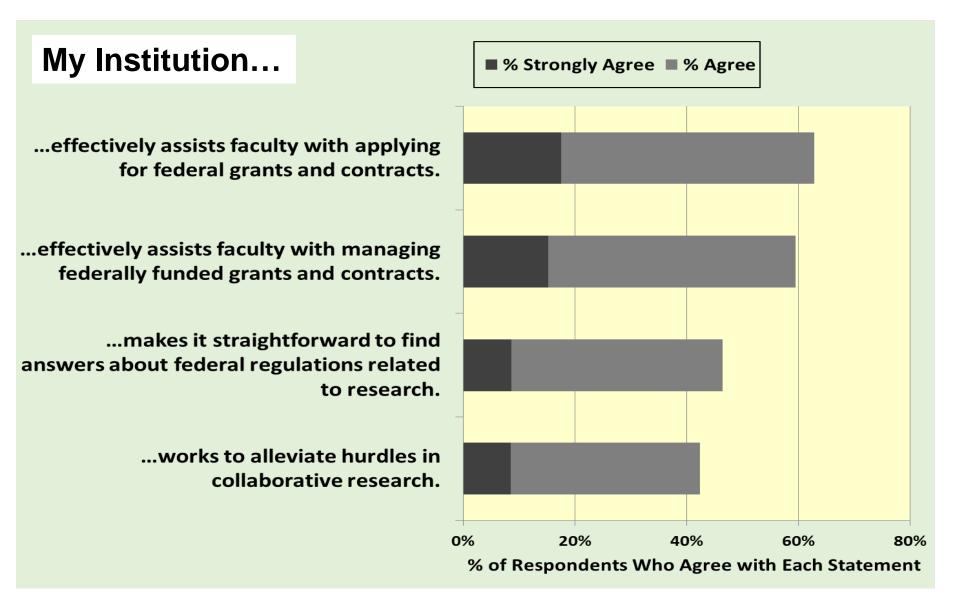
Administrative workload associated with federally-funded research grants has increased in the last 5 or 6 years.

Research administrative workload is discouraging my graduate students from pursuing academic research careers.

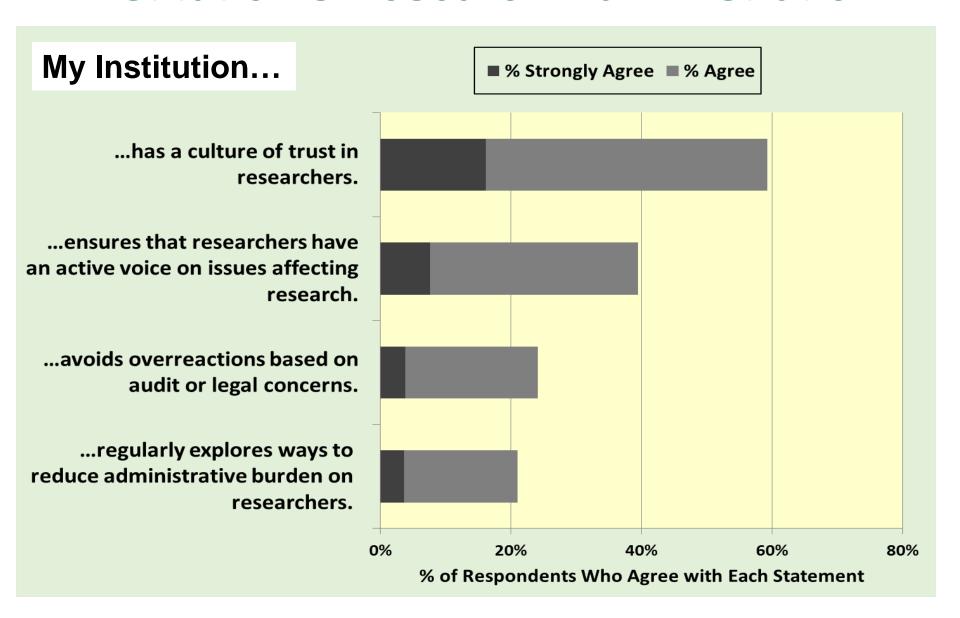
Because of research administrative workload, I am generally less willing to submit federal grant proposals than in the past.



Institution's Research Administration



Institution's Research Administration



Your Institution: Summary

- Although optimism remains, researchers increasingly agree that administrative workload is increasing and concern continues to grow that this workload threatens academic career paths for graduate students.
- While there is perceived room for improvement, most respondents agree that their institution's research management is generally effective.
- Most respondents do not feel that reducing administrative burden on researchers is a priority at their institution.

Research Responsibilities

Ratings of Specific Responsibilities

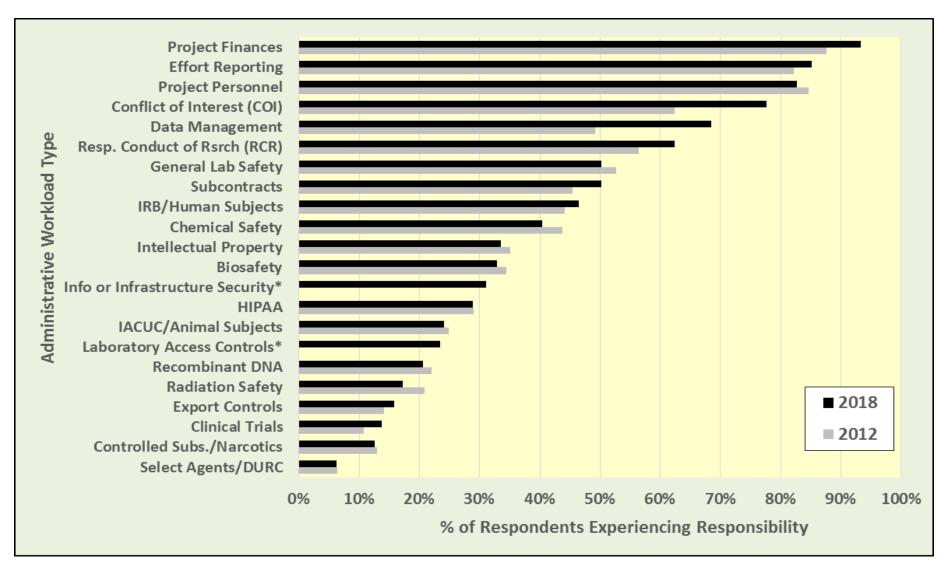
Participants indicated which of several administrative responsibilities they experienced.

For those experienced, respondents then rated how much each responsibility took time away from their active research from None at all to Very Much.

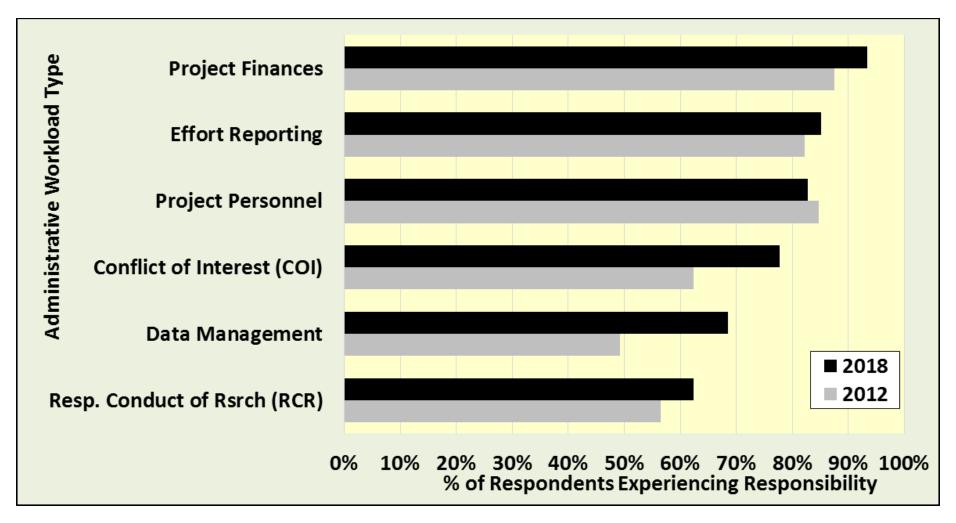
They then rated priority for reducing administrative burden from No need to change to High priority.

For those rated high, "drilldown" components were then rated on the same priority scale.

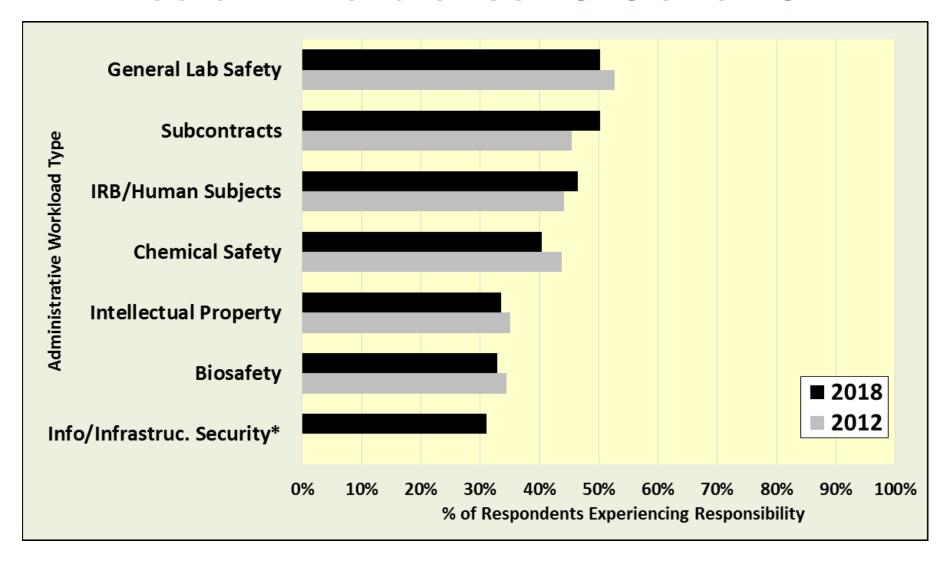
Specific Responsibilities: Prevalence 2018 and 2012



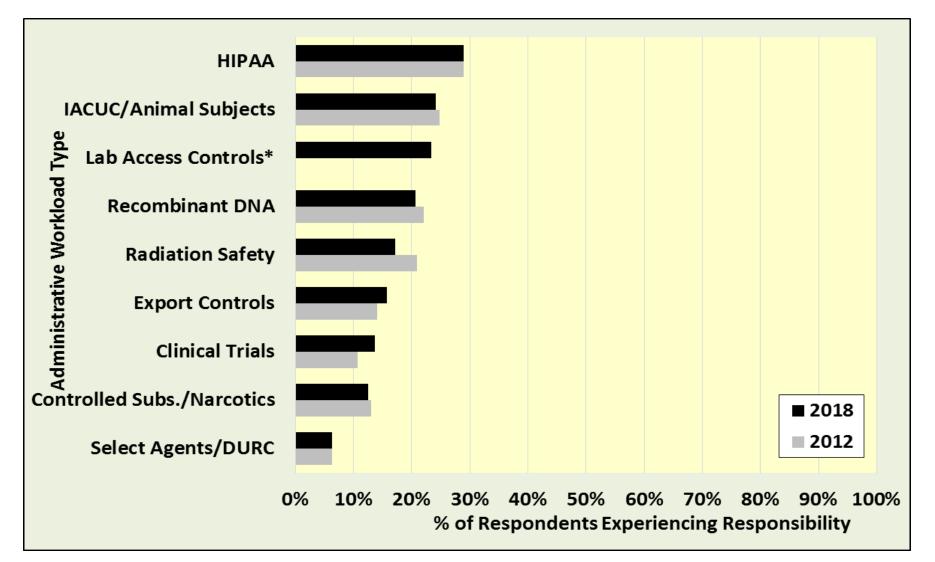
Specific Responsibilities: Highest Prevalence 2018 and 2012



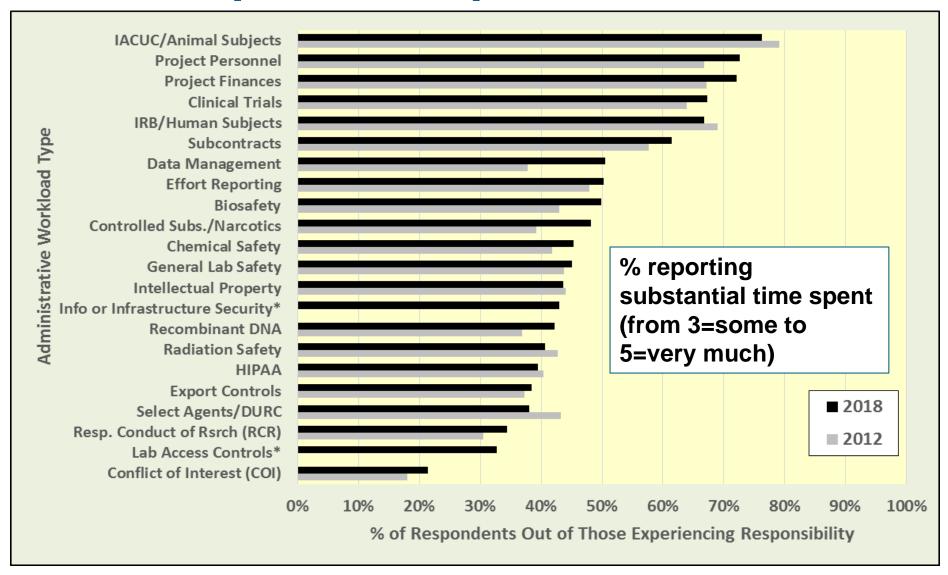
Specific Responsibilities: Medium Prevalence 2018 and 2012



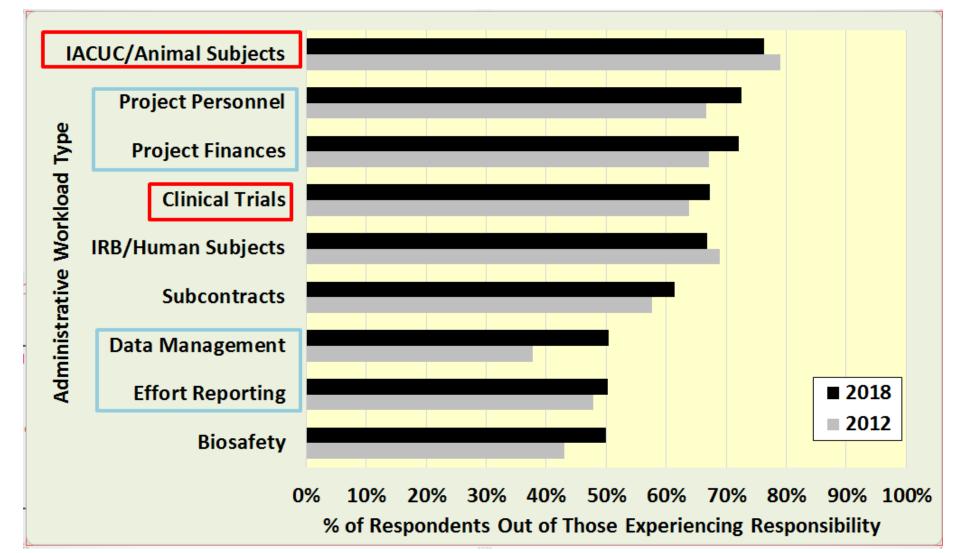
Specific Responsibilities: Low Prevalence 2018 and 2012



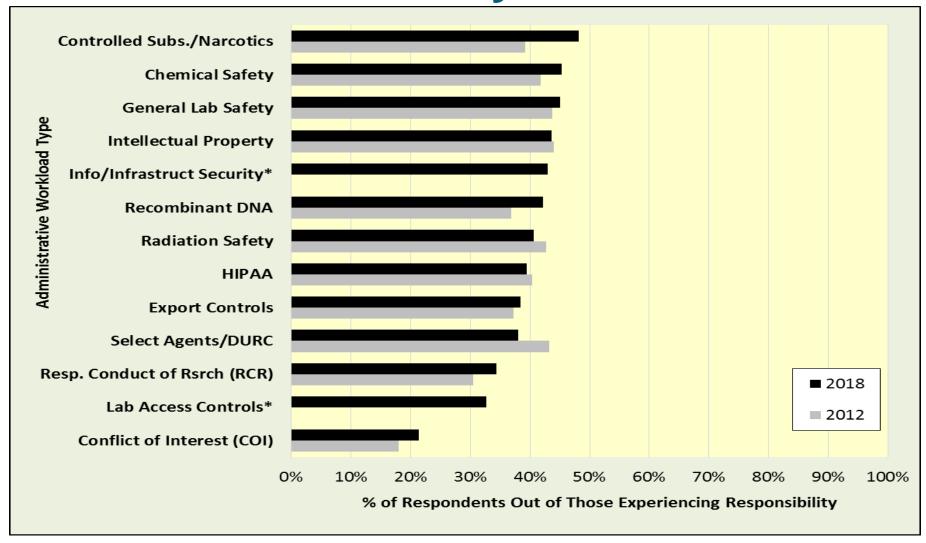
Specific Responsibilities:



Specific Responsibilities: Higher Intensity 2018 and 2012



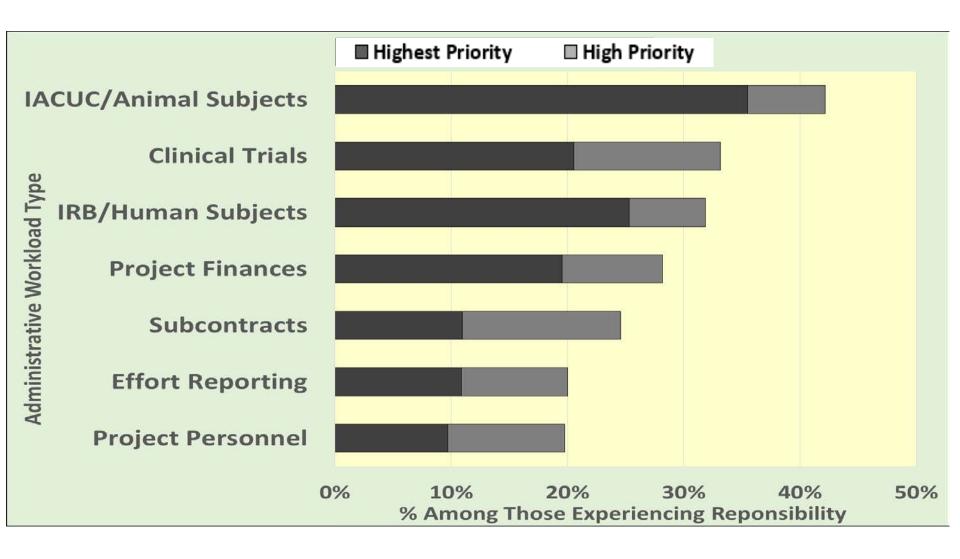
Specific Responsibilities: Mid/Lower Intensity 2018 and 2012



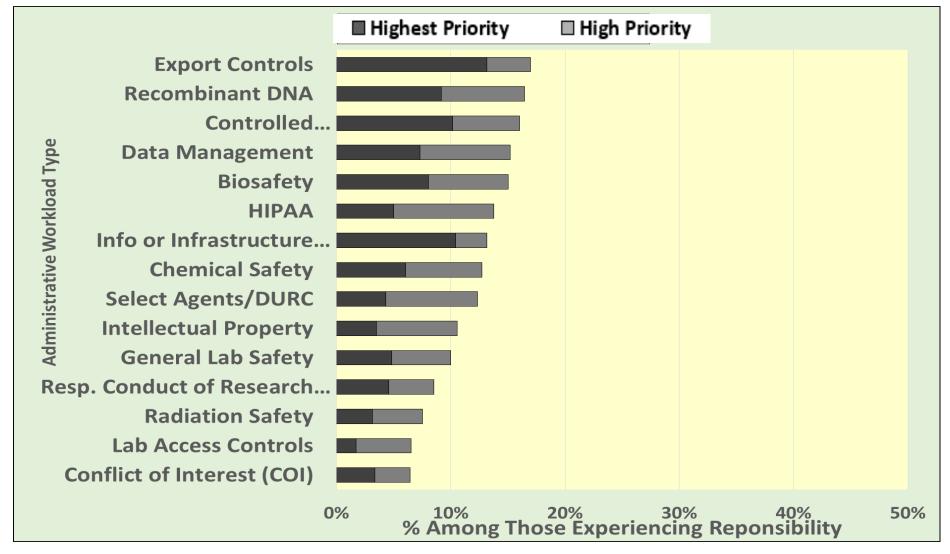
Specific Responsibilities: High Priority Need for Change



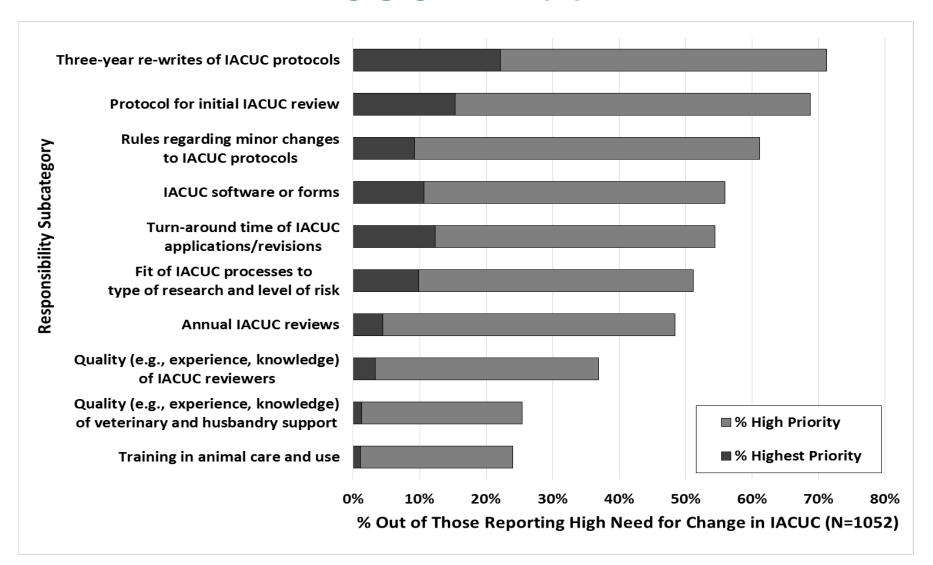
Specific Responsibilities: Top in High Priority Need for Change



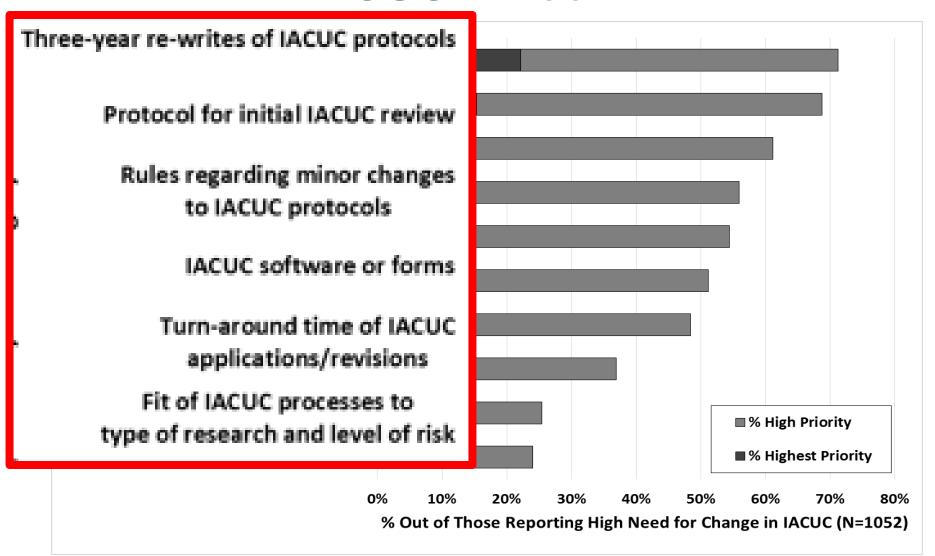
Specific Responsibilities: Other High Priority Need for Change



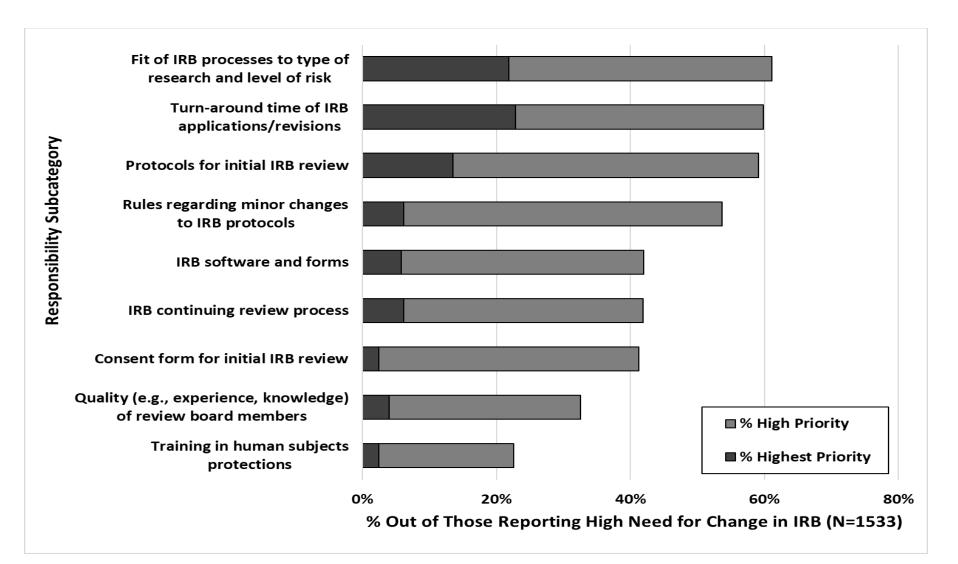
Specific Responsibilities: IACUC **Drilldown**



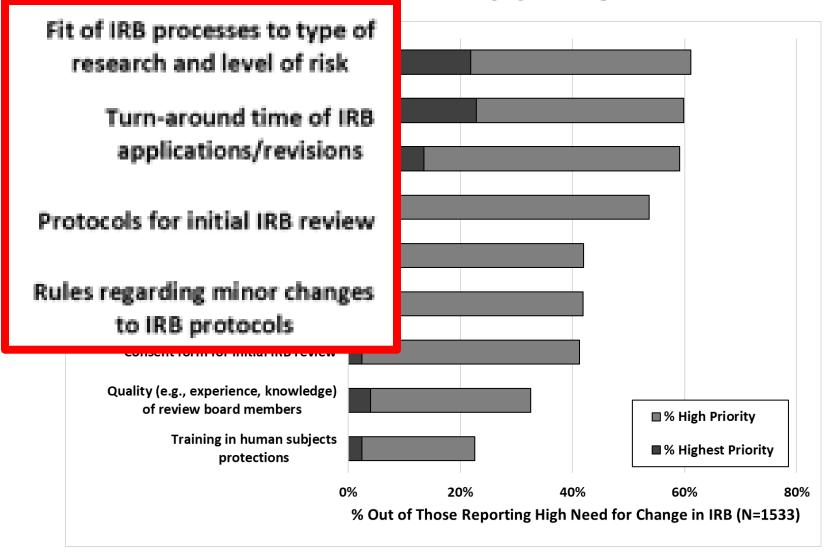
Specific Responsibilities: IACUC Drilldown



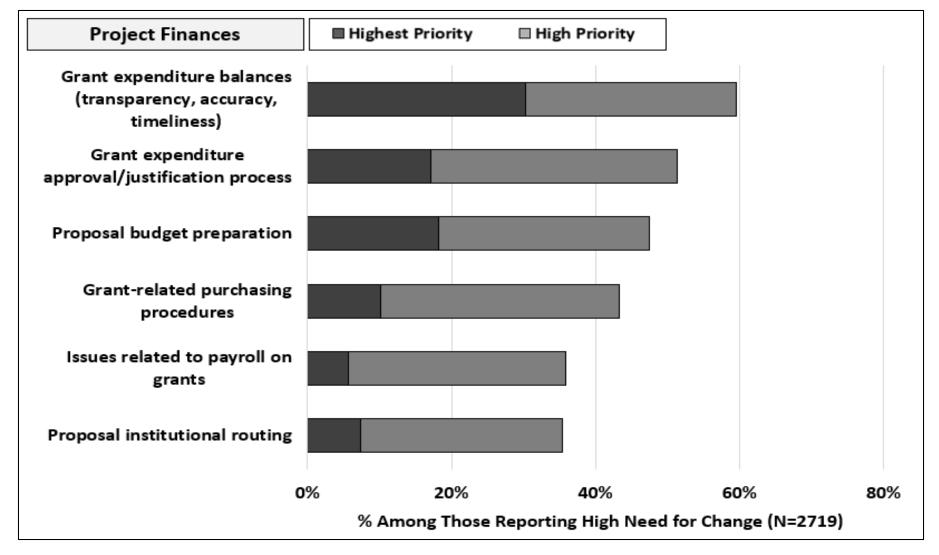
Specific Responsibilities: IRB Drilldowns



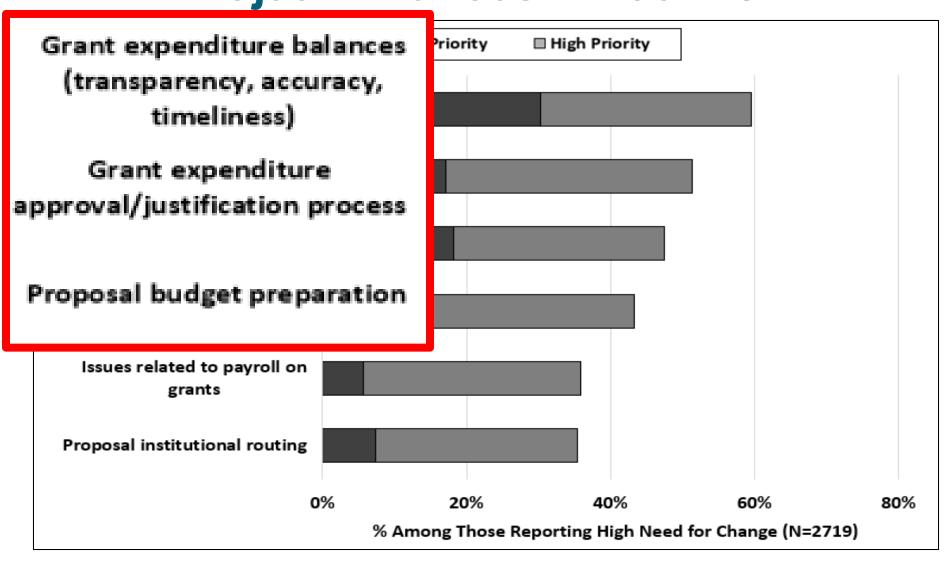




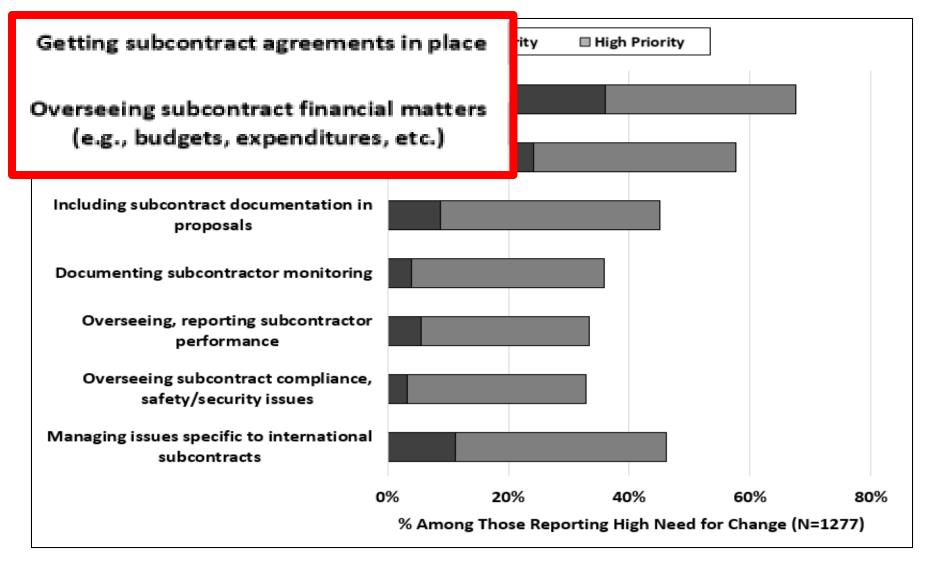
Specific Responsibilities: **Project Finances** Drilldowns



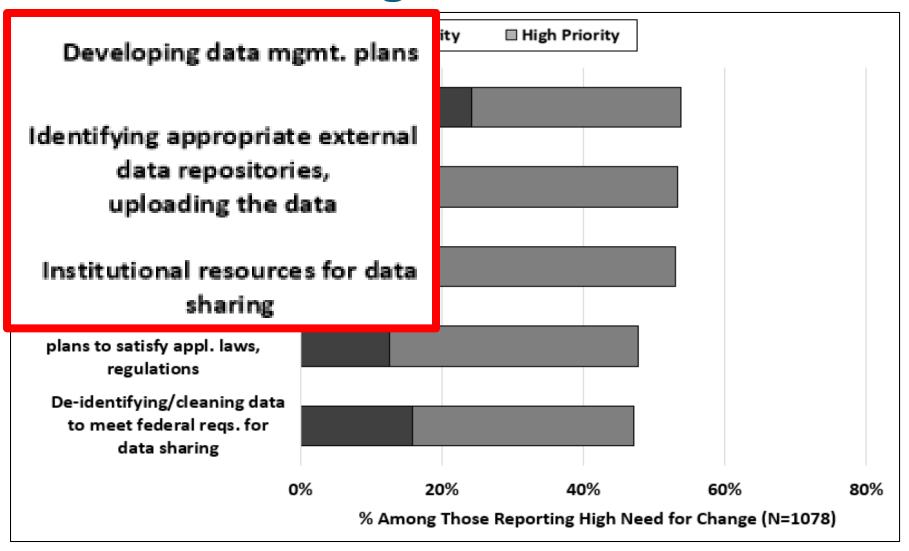
Specific Responsibilities: Project Finances Drilldowns



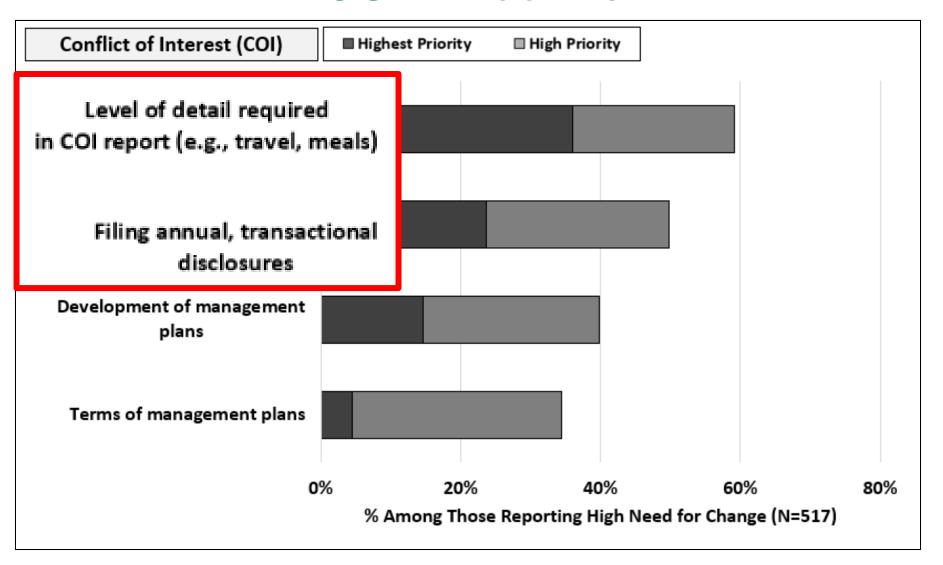
Specific Responsibilities: **Subcontracts** Drilldowns



Specific Responsibilities: Data Management Drilldowns



Specific Responsibilities: COI Drilldowns



Specific Responsibilities: Summary

- The patterns of prevalence of responsibilities is similar to 2012, although data management and COI responsibilities were experienced more often in 2018.
- Intensity patterns were also similar to 2012 with exceptions. Intensity values were higher in 2018 for data management, controlled substances, and biosafety, and lower in 2018 for select agents.
- High priority for change generally mirrored intensity patterns.
- Specific drilldown patterns were similar to 2012.

Open-ended Items

Open-ended Feedback: Suggestion Themes

| Major Categories: Suggestions | N |
|-------------------------------|------|
| Agency | 1192 |
| Institution | 1175 |
| Proposal Proposal | 737 |
| Report Writing | 533 |
| Admin Personnel | 423 |
| IRB | 344 |
| Finances | 274 |
| IACUC | 197 |
| Project Personnel | 132 |

| Minor Categories: Suggestions | N |
|-------------------------------|----|
| Data Management | 79 |
| Conflict of Interest (COI) | 70 |
| Safety | 56 |
| Effort Reporting | 54 |
| Export Control | 22 |

Open-ended Feedback (Example): Proposal Suggestion Themes

| Theme | N |
|---|-----|
| Reduce or Improve Required Proposal Components | 219 |
| Agency Guidelines, Instructions, and Requirements | 194 |
| Complaints about Proposals | 173 |
| General Burden Associated with Proposals | 145 |
| Administrative Support | 105 |
| Electronic System | 68 |
| Improved Process | 46 |
| Training/Resources | 39 |
| RFP | 19 |
| Total | 737 |

Open-ended Feedback (Example): Proposal Most Helpful Themes

| Theme | N |
|--|-----|
| Administrative Support | 665 |
| Reduced Burden Associated with Proposals | 102 |
| Complaints | 98 |
| Electronic System | 42 |
| Training/Resources | 18 |
| Total | 825 |

Open-ended Feedback (Example): Proposal Least Helpful Themes

| Theme | N |
|--|-----|
| Administrative Support | 256 |
| Internal Barriers | 90 |
| Internal Lead Time | 45 |
| General Burden Associated with Proposals | 40 |
| Routing of Proposals | 35 |
| Agency/Federal Submission Issues | 32 |
| Total | 441 |

Open-ended Feedback: Summary

- Respondents offered thousands of open-ended comments aimed at both agencies and institutions.
- Proposals and Report Writing were the topics of more open-ended suggestions than any of the individual administrative responsibilities.
- The availability and quality of administrative support is one of the most prevalent themes in all three sets of open-ended feedback.
- Open-ended feedback on most and least helpful institutional practices can be summarized on an individualized institution basis.

What's in a Number?

How Much Requirement-related Workload on Federally-Funded Research Is Reasonable?

Time Taken From Active Research:

44.3%

How Much Requirement-related Workload on Federally-Funded Research Is Reasonable?

Time Taken From Active Research:

33%?

30%?

44.30/

25%?

Maybe a different percentage for different cases?

How Much Requirement-Related Workload on Federally-Funded Research Is Reasonable?

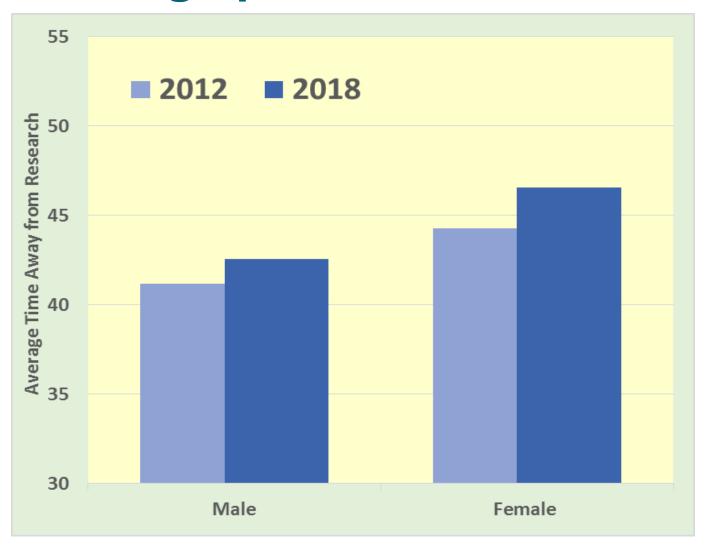
The lowest based on what can be gleaned from the survey:

~30% time away from active research

How to Have the Lowest Workload:

- Basic Research
- Physics or Math
- DOE, NASA or NSF (w/ only 1 funding agency)
- Neither IRB nor IACUC
- One project with <\$100K Annual Expenditures
- Private University or Health Research Institute
- VHR University \$900M Annual Expenditures
- White and Male
- Full Professor with no administrative role

Time Taken Away: Demographic Characteristics



How to Have the Lowest Workload?

Chasing an administrative workload number can be troublesome.

The primary value of these data may be in the details...thoughtfully evaluating where and how we can reduce the workload pushing the numbers.

Federa

Thank goodness FDP is here to provide a venue to make that possible.



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