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

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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 (<u>Andrea Ranieri</u>, 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 science 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
- 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)
 - PIs 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

Comparison of FWS Response Rates

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

Period Assessed	FDP Organizations	Pls 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



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

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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

Total Time Taken from Active Research



Percentage of research time associated with obtaining and managing federally-funded research, rather than actively conducting the research.







Proposal Preparation Time (~16%)

% proposal preparation time that contributes to research and scholarship:

Mean = 38.7% (of the 16% = 6.2% of time away)



Administrative Burden: 9.8% Scholarly Value: 6.2%

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



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 is a complete 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.

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

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



Agency: **Post-award** 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.
- <u>Pre-award</u>: Highest priority areas are requirements for animal and human subject protections, budgets/budget justifications, and data management plans.
- <u>Post-award</u>: The #1 highest priority area is clinical trials monitoring, closely followed by animal and human subject protections, interim/final reports, and subcontracts.

Your Institution

Ratings about "Your Institution"

Participants were provided

(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

If I had to do it over again, I would still choose an academic research career. 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 2018 submit federal grant proposals than in 2012 the past. 5 Average Rating (1=strongly disagree, 5=strongly agree)

Institution's Research Administration



Perceived Research Climate



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 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:



Specific Responsibilities: Intensity 2018 and 2012



Specific Responsibilities: Intensity 2018 and 2012



Specific Responsibilities: High Priority Need for Change



Specific Responsibilities: High Priority Need for Change



Specific Responsibilities: High Priority Need for Change



Specific Responsibilities: IACUC **Drilldown**



Specific Responsibilities: IACUC Drilldown



Specific Responsibilities: IRB Drilldowns



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	Ν
Agency	1192
Institution	1175
Proposal	737
Report Writing	533
Admin Personnel	423
IRB	344
Finances	274
IACUC	197
Project Personnel	132

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

Open-ended Feedback (Example): Proposal Suggestion Themes

Theme	Ν
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	Ν
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	Ν
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 Research:

44.3%

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

Time Taken From Research:

33%?

30%?

44.3%

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

- 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



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.

Thank goodness FDP is here to provide a

venue to make that possible.



Thank you.

Basic Research

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Basic Research

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Time Taken Away: Principal Fields of Research



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Time Taken Away: Funding Agencies 2018 vs 2012













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Time Taken Away: Human and Animal Subjects



Time Taken Away: Human and Animal Subjects



Time Taken Away:

Agency Differences for "Simplest" Research



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Time Taken Away:

Number of Grants/Contracts and Amounts



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Time Taken Away: Private vs Public VHR Universities


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Time Taken Away: Institutional Correlates



- Basic Research
- Physics or Math
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Time Taken Away: Professional Role



Time Taken Away: Professional Role



Time Taken Away: Professional Role



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Individualized Institution Reports

- Reports provided to interested institutions summarizing results of their researchers' experience
- General comparisons to (unidentified) similar institutions
- 2018 vs 2012 for those who received w012 report
- Detail depends on number of responses
- ERIs: Attempt to make summary info available if >10 respondents and >20% of possible respondents participated
- Cost: Covers primarily graduate student effort; varies by detail of report (est. \$500-\$5,000)
- Call for interested institutions in the next month

Distribution of Time Away Estimates



2012 Gender Time Away



2012 Race/Ethnicity Time Away

