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FEDERAL RESEARCH GRANTS

Opportunities Remain for Agencies to Streamline Administrative Requirements

Statement of John Neumann, Director, Natural Resources
and Environment

Chairwoman Comstock, Ranking Member Lipinski, and Members of the Subcommittee:

I am pleased to be here today to discuss administrative requirements on federal research grants to universities, as well as federal agency efforts and opportunities to streamline such requirements. According to National Science Foundation (NSF) data, the federal government funds the majority of research performed by colleges and universities, obligating over \$27 billion for such research in fiscal year 2015.¹ To allow for oversight, Congress and federal agencies have established a variety of administrative requirements for the use of these funds.² Some requirements were established or strengthened in response to cases of researchers improperly spending funds or because of concerns about research integrity. Others were established to meet broader policy objectives, such as increasing access to research data and results.

During the last two decades, organizations that have studied these requirements have raised concerns about the administrative workload and costs for researchers and universities to comply with the requirements and their effects on the efficient conduct of research. In addition, several executive orders and a presidential memorandum have called for streamlining regulations and guidance to reduce grantees' administrative workload and costs. For instance, Executive Order 13563 of January 18, 2011 called for greater coordination across agencies to simplify and harmonize rules, and for agencies to consider regulatory approaches that reduce burdens and maintain flexibility. In December 2013, the Office of Management and Budget (OMB) consolidated its grants management circulars into a single document—the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance)—to streamline its guidance and

¹National Science Foundation, National Center for Science and Engineering Statistics, *Higher Education Research and Development Survey, Fiscal Year 2014* (November 2015) and *Survey of Federal Funds for Research and Development, Fiscal Years 2014–16* (April 2016). NSF data include funds for basic research, applied research, and development. For purposes of this testimony, we generally refer to these funds as research funding. NSF's data for fiscal year 2015 are preliminary.

²Some provisions governing these funds appear in statutes or regulations, and others appear in agency guidance documents. For purposes of this testimony, we refer to all of these provisions as "requirements."

reduce the administrative burden on nonfederal entities, as well as to strengthen oversight of federal funds to reduce risk of waste, fraud, and abuse.³ Nevertheless, universities and stakeholder organizations continue to cite increasing administrative workload and costs for complying with requirements.

My statement today summarizes our June 2016 report on administrative requirements on federal research grants,⁴ which examined (1) selected research grant requirements, (2) the factors that contribute to universities' administrative workload and costs for complying with these requirements, and (3) efforts OMB and research funding agencies have made to reduce the administrative workload and costs for complying with these requirements, and the results of these efforts. For our report, we selected and examined administrative requirements in nine categories that multiple universities and university stakeholder organizations had cited as contributing to universities' administrative workload and costs, had been the subject of recent streamlining efforts or other changes, or had been part of the findings of recent reports by agency inspectors general.⁵ We reviewed guidance, regulations, and other documentation of the requirements and interviewed officials at OMB and four research funding agencies—the Department of Energy (DOE), National Aeronautics and Space Administration (NASA), National Institutes of Health (NIH), and NSF—which together provided about 83 percent of federal funding for research at universities and colleges in fiscal year 2015. We reviewed documentation from and interviewed administrative staff and researchers at six public and private universities that vary in the amount of research funding they receive and in other characteristics. We also interviewed representatives of several university stakeholder organizations. The results of our reviews of selected requirements, agencies, universities, and stakeholder organizations cannot be generalized to those not included in our review. More detailed information on our scope and methodology can be found in our June 2016 report. We conducted the

³The Uniform Guidance is implemented through individual federal agency regulations that were to take effect no later than December 26, 2014.

⁴GAO, *Federal Research Grants: Opportunities Remain for Agencies to Streamline Administrative Requirements*, [GAO-16-573](#) (Washington, D.C.: June 22, 2016).

⁵For example, these include requirements related to research project budgets, research personnel, and oversight of subrecipients.

work on which this statement is based in accordance with generally accepted government auditing standards.

Summary

Selected administrative requirements in OMB's government-wide grant guidance generally focus on protecting against waste, fraud, and abuse of funds; in contrast, the requirements in agency-specific guidance generally focus on promoting the quality and effectiveness of federally funded research. Selected universities and stakeholder organizations identified the following common factors that add to their administrative workload and costs for complying with the requirements: (1) variation in funding agencies' implementation of requirements, (2) development of grant proposal documentation at a stage when details of a research project remain uncertain, and (3) recent policy reforms that resulted in certain requirements becoming more prescriptive. OMB and funding agencies' streamlining efforts resulted in some reductions to universities' administrative workload and costs for complying with selected requirements, but these reductions were limited.

Selected Requirements Govern the Proper Use of Grant Funds and Research Quality and Effectiveness

Selected administrative requirements in the Uniform Guidance, OMB's government-wide grant guidance, generally focus on protecting against waste, fraud, and abuse of funds, as we found in our June 2016 report. These include requirements related to competition and documentation of purchases, documentation of personnel expenses, and preparation and management of project budgets. For example, funding agencies implement Uniform Guidance requirements for budget preparation and management by designing agency-specific forms and processes to review applicants' requests for funding and grantees' use of funding. These requirements allow for identification of questionable requests for funding in applications and unallowable post-award charges to grants.

In contrast, selected administrative requirements in agency-specific guidance generally focus on promoting the quality and effectiveness of federally funded research. Specifically, funding agencies have established administrative requirements to promote the selection and development of qualified researchers, protect against bias in the conduct of research, and improve access to research data and results. For example, since 1995, NIH-funded researchers have been subject to Department of Health and Human Services (HHS) financial conflict of interest regulations designed to promote objectivity. NASA and NSF have also implemented financial conflict of interest requirements to help protect

against bias in the conduct of research, and DOE was in the process of establishing such requirements as of June 2016.

Selected Universities Identified Common Factors That Add to Their Workload and Costs for Complying with Selected Administrative Requirements

In our June 2016 report, we found that selected universities and stakeholder organizations identified common factors that add to their administrative workload and costs for complying with selected requirements. First, at all six universities, officials told us that variation in funding agencies' implementation of certain administrative requirements contributes to workload and costs because, for example, universities have to design and implement multiple processes and may need to invest in electronic systems to comply with agencies' requirements. Officials we interviewed cited variation in three categories of requirements in particular: developing and submitting biographical sketches describing researchers' professional accomplishments; identifying, reporting, and managing financial conflicts of interest; and preparing and managing project budgets. For example, agency implementation of budget preparation and management requirements differs in several ways, including the forms and level of detail required in proposed budgets and the systems for grantee financial reporting.

A second factor, according to university officials we interviewed, is the workload and costs of developing grant proposal documentation. To help select proposals for funding, funding agencies require researchers to prepare detailed documentation—including proposed project budgets, data management plans, and in some cases information on conflicts of interest—as part of the application process. Given recent proposal funding rates, the likelihood of an agency selecting a proposal for funding is relatively low. For example, in fiscal year 2015, NIH awarded funding to 18 percent of applicants, and NSF awarded funding to 24 percent of applicants—rates similar to those of other years. As a result, for most proposals, universities' investments of time and resources do not result in research funding. Furthermore, researchers and administrative staff we interviewed said that during the pre-award stage, there can be a relatively high level of uncertainty about specific details of a research project, including budget details about potential vendors or travel costs and details about expected research data and results. They said that complying with requirements to prepare and submit documents at a stage when these details remain uncertain is not an efficient use of time.

Finally, recent OMB and HHS policy reforms resulted in changes to selected requirements that, according to university officials, made them more prescriptive and added to administrative workload and costs.

Specifically, the Uniform Guidance includes revised requirements for competition and documentation of purchases that are more prescriptive than those in OMB's prior circular that applied to universities.⁶ In addition, in 2011, HHS revised regulations governing financial conflicts of interest—which apply to research funded by NIH—to address concerns about the objectivity of the research HHS funds. These revisions included more prescriptive requirements for, among other things, the types of financial interests researchers must disclose. Officials at universities in our review stated that the more prescriptive requirements add to universities' workload and costs in several ways. For example, officials at all six universities told us that they expect the new purchasing competition and documentation requirements—particularly the lower threshold at which price or rate quotations must be obtained from multiple vendors—will result in added costs for updating their electronic purchasing systems.⁷ More specifically, officials at five of the universities in our review told us that, prior to the Uniform Guidance, their thresholds for obtaining multiple quotations had been higher than the threshold in the Uniform Guidance, and that they will now need to obtain multiple quotations for more transactions than before.

⁶Stakeholder organizations raised concerns to OMB about increased administrative workload and costs resulting from its revised purchasing requirements, and OMB delayed implementation of the new requirements for 2 full fiscal years after the effective date of the Uniform Guidance. The revised purchasing requirements will become effective for universities sometime in 2017, depending on universities' fiscal calendars.

⁷The Uniform Guidance establishes five methods for purchasing goods or services. One of these methods, procurement by micropurchases, applies to purchases under \$3,500 and does not require soliciting competitive quotations if the grantee considers the price to be reasonable. The Uniform Guidance defines the micropurchase threshold as the threshold set by the Federal Acquisition Regulation at 48 C.F.R. Subpart 2.1 (Definitions). When the Uniform Guidance was issued, the threshold was \$3,000 except as otherwise discussed in Subpart 2.1 of that regulation, but it is periodically adjusted for inflation. See 2 C.F.R. § 200.67. At the time of our June 2016 report, the threshold was \$3,500. Purchases that exceed this threshold trigger additional requirements for providing full and open competition, such as obtaining price or rate quotations from an adequate number of qualified sources.

OMB and Funding Agencies Have Made Continuing Efforts to Reduce Universities' Administrative Workload and Costs, with Limited Results

OMB and the four research funding agencies in our June 2016 report have made continuing efforts to reduce universities' administrative workload and costs for complying with selected requirements. These efforts include (1) standardizing requirements across agencies, (2) streamlining pre-award requirements, and (3) in some cases allowing universities more flexibility to assess and manage risks for some requirements. In each of these areas, OMB and agency efforts resulted in some reductions to administrative workload and costs, but these reductions were limited. We made recommendations in our June 2016 report that agencies make further improvements in each area. DOE, NASA, and NIH generally concurred, and OMB and NSF did not comment on the recommendations.

Standardizing Administrative Requirements

In accordance with federal goals for standardization, OMB led several efforts to standardize selected requirements, primarily those related to budget preparation and management. For example, OMB's Uniform Guidance established standard requirements for financial management of federal awards and generally requires the use of OMB-approved government-wide standard forms for reporting financial and performance information. Funding agencies made similar efforts to standardize requirements through the Office of Science and Technology Policy's (OSTP) Research Business Models working group (RBM)—an interagency group that consists of officials from DOE, NASA, NIH, NSF, and other federal research funding agencies. RBM's charter calls for it to examine opportunities and develop options to unify agency research grants administration practices and to assess and report periodically on the status, efficiency, and performance of the federal-academic research partnership. However, neither OMB nor funding agency efforts to standardize requirements fully addressed the variations in requirements, thereby limiting the potential reductions in universities' administrative workload and costs. For example, the Uniform Guidance does not prohibit agencies from varying in how they implement aspects of budget preparation and management requirements, such as the forms and level of detail required in proposed budgets, agency systems for financial reporting, or the budget revisions agencies allow grantees to make without obtaining prior approval. Similarly, RBM's efforts to standardize research terms and conditions allow for agency-specific exceptions. Also, RBM's efforts have primarily focused on post-award requirements, and it has not initiated a process to standardize pre-award requirements.

According to OMB staff and funding agency officials, several factors can limit agencies' ability to standardize administrative requirements on

research grants. For example, funding agencies must comply with differing statutory or other requirements, which can result in differences in their requirements for grantees. There are also differences in the types of research or recipients that agencies fund that can limit their ability to standardize requirements. Nevertheless, agencies have opportunities to standardize requirements to a greater extent than they have already done. In particular, they have flexibility in how they implement aspects of selected requirements that are not subject to statutory or other requirements or to agency-specific differences in types of research or recipients. According to some funding agency officials we interviewed, aspects of requirements for which agencies have such flexibility include the format and content of biographical sketches, the budget forms and content of budget justifications that agencies require in applications, and the types of budget revisions agencies allow grantees to make without obtaining prior approval. Officials at NSF, NIH, and OSTP who co-chair RBM told us that the group is well suited to pursue further standardization efforts and to report on them. Such efforts could help agencies reduce universities' administrative workload and costs and improve their oversight of funding and support of research quality. Accordingly, in our June 2016 report, we recommended that DOE, NASA, HHS, and NSF coordinate through RBM to identify additional areas where they can standardize requirements, and to report on these efforts. DOE, NASA, and HHS generally agreed with this recommendation and said they would continue to build on RBM's previous efforts, and NSF did not formally comment on the recommendation.

Streamlining Pre-Award Requirements

DOE, NASA, NIH, and NSF have made efforts to streamline administrative requirements associated with proposal preparation by allowing applicants to postpone their submission of certain documentation until after a preliminary decision about their likelihood of obtaining funding. Under these efforts, applicants are required to provide only a limited set of application materials—often referred to as a preliminary proposal—for initial evaluation before possible submission of a full proposal. Preliminary proposals are intended, in part, to reduce applicants' administrative workload and costs when applicants' chances of success are very small. Such efforts are in line with RBM's charter, which calls for agencies to identify approaches to streamline administration practices for research grants. The funding agencies in our review use a range of preliminary proposal processes, which can allow applicants to postpone submitting documentation related to budget preparation, biographical sketches, and developing plans to manage and share research data and to mentor researchers. According to university

officials, stakeholder organizations, and information from the four funding agencies in our review, efforts to defer certain pre-award requirements generally have led to reductions in universities' administrative workload and costs. For example, one NSF division evaluated its preliminary proposal pilot in 2014 and reported that the pilot led to reduced applicant workload by lessening the number of proposal pages researchers needed to write and simplifying the documents university administrative offices required, since preliminary proposals do not include budgets.

Preliminary proposals may not be effective in reducing administrative workload and costs for certain solicitations or grant programs, such as specialized grants for which a small number of scientists are likely to apply, according to agency officials. Nevertheless, agencies have not extended pre-award streamlining efforts to all grant solicitations for which they could be used to reduce workload and costs. In certain instances, agencies still require documentation they may not need to effectively evaluate initial proposals. For instance, NIH does not generally allow applicants to defer submitting documentation for proposed budgets, biographical sketches, or other requirements that other agencies have determined are not necessary for preliminary proposals. In addition, pre-award streamlining efforts at DOE, NASA, and NSF are limited to certain offices or certain programs within the agencies, in some cases because the efforts are still in pilot phases.

We found in our June 2016 report that NSF had taken steps to expand its use of preliminary proposals and that opportunities remain for other agencies to do so as well. Specifically, in 2015, NSF senior leadership directed officials from NSF's directorates to review and identify options to reduce researchers' administrative workload and costs, including by expanding use of preliminary proposals and focusing application reviews on a minimum set of elements needed to meet NSF's merit review criteria.⁸ As a result of the directive, three NSF directorates expanded

⁸NSF took these steps partly in response to the National Science Board's 2014 recommendations to reduce administrative workload by expanding the use of preliminary proposals or just-in-time submissions. See National Science Board, *Reducing Investigators' Administrative Workload for Federally Funded Research*, NSB-14-18 (Mar. 10, 2014). The National Science Board establishes the policies of NSF within the policy framework set forth by the President and Congress and serves as an independent policy advisory body to the President and Congress on science and engineering research and education issues.

their use of preliminary proposals, for instance, by allowing applicants to postpone submitting detailed budgets until proposals are recommended for award. DOE, NASA, and NIH have not conducted similar agency-wide reviews to identify opportunities for expanded use of preliminary proposals or just-in-time submissions.⁹ As a result, we recommended that these three agencies conduct agency-wide reviews of possible actions, such as further use of preliminary proposals, to postpone pre-award requirements until after a preliminary decision about an applicant's likelihood of funding. Such reviews may help ensure that agencies do not miss opportunities to reduce unnecessary pre-award administrative workload and costs for applicants that do not receive awards. DOE, HHS, and NASA generally concurred with this recommendation.

Allowing Universities More Flexibility

OMB and funding agencies have made efforts, in accordance with federal goals, to reduce administrative workload and costs by allowing universities more flexibility to assess and manage risks related to certain administrative requirements. One of OMB's stated objectives for its reforms in the Uniform Guidance was "focusing on performance over compliance for accountability," for instance, by allowing recipients of federal awards the flexibility to devote more effort to achieving programmatic objectives rather than to complying with complex requirements. Efforts by OMB and the funding agencies in our review to allow universities more flexibility to assess and manage risks related to administrative requirements—particularly requirements for budget preparation and management and documenting personnel expenses—have led to reductions in administrative workload and costs, according to officials from the four funding agencies and six universities in our review. For example, in the Uniform Guidance, OMB modified requirements for documenting personnel expenses to focus on establishing standards for recipients' internal controls over salary and wage expenses, without prescribing procedures grantees must use to meet the standards. Officials from the two universities in our review that piloted streamlined

⁹In commenting on a draft of our June 2016 report, HHS stated that in 2014, NIH commissioned an evaluation to recommend ways to further optimize the process of reviewing, awarding, and managing grants and to maximize the time researchers can devote to research. The resulting report also found that the use of preliminary proposals could be expanded and included a recommendation that NIH pilot test preliminary proposals. NIH, Scientific Management Review Board, *Report on Streamlining the NIH Grant Review, Award, and Management Process* (July 2015).

methods for documenting salary and wage charges to federal awards said these pilots resulted in over an 80-percent reduction in the number of forms that principal investigators needed to review and corresponding reductions in time needed to develop and process these forms, as well as reductions in the time and costs of training staff.

In contrast, several administrative requirements—including OMB requirements related to purchases and NIH requirements related to financial conflicts of interest—limit universities' flexibility and require them to allocate administrative resources toward oversight of lower-risk purchases and financial interests. First, in developing the Uniform Guidance, OMB based the micro-purchase threshold—above which grantees must generally obtain price or rate quotations, competitive bids, or competitive proposals—on the threshold for competition of purchases made under federal contracts. Officials from all six universities in our review said that for relatively small purchases that exceed the threshold, the administrative workload and costs associated with competition may outweigh the savings gained. Second, under the 2011 revised HHS regulations governing NIH's conflict of interest requirements, researchers must disclose to their institution a range of financial interests held by them, their spouses, and their dependent children. University and stakeholder organization officials we interviewed generally agreed that the additional financial interests that must be disclosed and reviewed under the revised requirements—particularly reimbursed or sponsored travel costs, which officials said are common among academic researchers—rarely result in identification of actual conflicts that could bias their research.

Both OMB and HHS plan to evaluate their revised guidance and regulation, respectively. Since issuing these rules, OMB and HHS, as well as stakeholder organizations, have begun collecting information on the effects of the rules that the agencies can use in their evaluations. For example, OMB directed agencies to report, beginning in January 2015, information on their implementation of the Uniform Guidance, including metrics on the overall impact on burden and waste, fraud, and abuse.¹⁰ The additional information could allow OMB and HHS to more fully

¹⁰Office of Management and Budget, *Metrics for Uniform Guidance (2 C.F.R. 200)*, OMB Memorandum M-14-17 (Washington, D.C.: Sept. 30, 2014).

consider the requirements' effects on universities' administrative workload and costs and balance such considerations against the requirements' added protections for accountability and research integrity. Accordingly, we recommended that HHS, as part of the planned evaluation of its regulation governing financial conflicts of interest in NIH-funded research, evaluate options for targeting requirements on areas of greatest risk for researcher conflicts, including adjusting the threshold and types of financial interests that need to be disclosed. HHS concurred and stated in its comments on our draft report that it plans to measure the effectiveness of the financial conflict of interest requirements and identify areas that may create administrative burden. Similarly, we recommended that OMB, as part of its planned evaluation of the Uniform Guidance, evaluate options for targeting requirements for research grants to universities. OMB did not formally state whether it concurred with this recommendation, but OMB staff told us that they agree that opportunities remain for streamlining administrative requirements.

Chairwoman Comstock, Ranking Member Lipinski, and Members of the Subcommittee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

GAO Contact and Staff Acknowledgments

If you or your staff members have any questions concerning this testimony, please contact me at (202) 512-3841 or neumannj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Other individuals who made key contributions to this testimony include Joseph Cook, Assistant Director, and Miles Ingram.

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