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Katherine E. Kelly, PhD: Editing in the Humanities

Research Development & Grant Writing News ©

Published monthly since 2010 for faculty and research professionals by

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©Please do not post to open websites© About the co-publishers

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Topics of Interest URLs

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Dear Colleague Letter from NSF: Research Protection Universities Under Pressure as Lawmakers Push Research Security USDA Research is Driving Technological Innovation NIH should ask both institutions and investigators to report sexual harassment findings, advisory group says How to Notify NIH Concerning Sexual Harassment is Affecting an NIH-Funded Activity at a Grantee Institution NIH's Anti-Sexual Harassment website New "All About Grants" Podcast on Writing a Fellowship Application Clarifying Long-Standing NIH Policies on Disclosing Other Support House panel clarifies how universities would report sexual harassment cases to U.S. funders National Survey of Internet- and Technology-Facilitated Child Exploitation, DOJ Solicitation NSF joins federal partners in announcing update to national AI research and development strategic plan Al science and engineering at NSF Where Are All the Working Mothers in STEM? Full NIFA 2018 Annual Report Specialty Crop Multi-State Program Capacity Building Grants for Non-Land-Grant Colleges of Agriculture Program (NLGCA) Critical Aspects of Sustainability (CAS) **Critical-Zone Collaborative Network** Dear Colleague Letter: Revised Deadline for the Advanced Computing Systems & Services (ACSS): Adapting to the Rapid Evolution of Science and Engineering Research Program SciENcv: Science Experts Network Curriculum Vitae Make Your Own Match by Submitting an Investigator-Initiated NIH Application Know Which NIH Unsolicited Applications Require Prior Approval as Big Grants Unsolicited, Investigator-Initiated NIH Research Step One to an R15 Award: Verify Your Institution's Eligibility Using xTRACT: What Was an Option Is Now a Requirement NIH Dissemination Plan Covers ClinicalTrials.gov Compliance, Not Publishing **Noticing More NIH Notices of Special Interest? Breaches of NIH Peer Review Integrity** Integrity and Confidentiality in NIH Peer Review NIH probe of foreign ties has led to undisclosed firings—and refunds from institutions Federal Register announcing the availability of a "For comment" draft of the NSF Proposal & Award Policies & **Procedures Guide (PAPPG)** Office of Postsecondary Education (OPE): Gaining Early Awareness and Readiness for Undergraduate Programs (State Grants) CFDA Number 84.334S; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2019 The hunt for the lesser-known funding source War and Sacrifice in the Post-9/11 Era Institute of Education Sciences (IES): Education Research CFDA Number 84.305A; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2020 Some Thoughts on the New IES RFAs Spend 12 weeks in DC as a Christine Mirzayan Science & Technology Policy Graduate Fellow **Navy Biosensors Trump Order Requires Science Agencies to Cull Advisory Panels** FY2020 Vannevar Bush Faculty Fellowship Fostering the Culture of Convergence in Research, Proceedings of a Workshop (2019) As countries battle for control of North Pole, science is the ultimate winner Two FOAs. One Topic: Dissemination and Implementation Research in Health URLs continue next page

NIAID New Innovators Awards Are Tailored for Postdocs What big ideas will shape U.S. science over the next decade? Here are some contenders Over Half of U.S. Business R&D Performed in 10 Metropolitan Areas in 2015 Federal R&D Obligations Increase an Estimated 2.7% in FY 2018 Federal Funds for Research and Development: Fiscal Years 2017-18 Established Program to Stimulate Competitive Research: Workshop Opportunities (EPS-WO) Applications for New Awards; Education Research and Special Education Research Grant Programs Applications for New Awards; Strengthening Institutions Program Beckman Postdoctoral Fellowship Program in Chemical Sciences or Chemical Instrumentation FY2020 Office of Naval Research (ONR) Young Investigator **Council on Governmental Relations Helpful Links** YouTube Video: SciENcv Tutorial Gamma Ray Inspection Technology (GRIT) Solicitation Number: HR001119S0073 **Stupid Humans** Humanities Indicators by AAAs Computer and Information Science and Engineering (CISE): Core Programs Cicadas high on fungus drugs won't stop mating Sorry gardeners, plants aren't conscious American History and Civics Education: National Convenings New to NIH Grants? Would an Workshop on Intellectual Property, Human Subjects, NIH Policy-Making, eRA, or an NIH Administrator's Boot Camp Help? **Greenwall Faculty Scholars Program** Total Price of College Attendance Covered by Pell Grants Reminders of NIH Policies on Other Support and on Policies related to Financial Conflicts of Interest and Foreign Components (NOT-OD-19-114 US government watchdog gets new director

Finding Funding in the Humanities & Social Sciences

Copyright 2019 Academic Research Funding Strategies. All rights reserved. A Review by Katherine E. Kelly, PhD

<u>Katherine E. Kelly</u> is a retired English professor from Texas A&M University. She is the author of several books and numerous articles supported by research grants and served as a contributing editor for an academic journal for five years. She provides editorial services to ARFS clients on proposals, journal articles, and manuscripts. (Back to Page 1)

Funding Your Research in the Humanities and Social Sciences

by Barbara Walker and Holly Unruh. Routledge, 2019: A Review

2019 has seen the publication of not one but two fine books devoted to seeking funding for the humanities and the social sciences. In this month's review, we'll describe the scope, style, and strengths of Barbara L. E. Walker and Holly E. Unruh's *Funding Your Research in the Humanities and Social Sciences*, published by Routledge. Next month, we'll review Ralph B. Folsom's, *How to Get Grant Money in the Humanities and Social Sciences*, Yale University Press.

The Walker-Unruh book, subtitled, "A Practical Guide to Grant and Fellowship Proposals," intends to de-mystify the process of searching for support in disciplines for which, in the case of the humanities at any rate, only modest support exists. Starting with fundamental distinctions, such as differentiating between federal agencies and foundations, they address head-on the critical question of not only locating appropriate funding sources but also assessing their fit for the researcher's project. They guide the reader through the various kinds of support earmarked for humanists and social scientists, give advice on matching a research project with available funds, and systematically explain how to go about requesting that support successfully. In addition to chapters written by Walker and Unruh, they include a series of text boxes treating specific topics ("Flash Topics"), such as "Crowdfunding," "Federal Funding Agencies in a Nutshell," and Proposal Excerpts. Many of these are contributed by other experienced grant recipients and/or reviewers, so the book contains advice from multiple players in this field. The authors' more innovative sections focus on funding opportunities for "Public Scholarship and Community-Engaged Research" and "Working with Others," which covers the special requirements of interdisciplinary and collaborative research.

The conceptual heart of this and probably any book on this topic is Part I, "Prelude to a Proposal." The five chapters in this section include "Finding Funding," "Assessing Funding Fit and Feasibility," "Getting Ready to Write," and "Focusing the Research Idea as Grant or Fellowship Proposal." These chapters underscore the extensive thought and research that must precede the writing of a strategically planned proposal. Noting that "(F)unding for Humanities and Social Science has been stagnant for the last decade," the authors aren't discouraging the grant seeker, but showing just how competitive funding has become since the heyday of the late 1960s-70s. The takeaway here is the need to plan for funding early and strategically several years out into the academic future.

Other advice is more specific. Is it acceptable to submit the same proposal to multiple agencies? The answer is no, but on the off chance that a proposal is accepted by more than one funder, they may ask the applicant to choose one over another, or to take partial amounts from each. This is a delicious problem to contemplate! Above all, the authors instruct applicants to

consult with department heads, colleagues, the campus Research Development Office, and the agency's Program Officer to avoid making a mistake that could have a lasting effect.

One of my favorite sections in this early part of the book is entitled, "Following Your Passion or Following the Money?" What happens when the well-written proposal is repeatedly rejected? How should the applicant respond? Has your proposal adequately answered the "Who cares?" or the "So what?" question about the idea that has been living in your brain for years on end? The authors advise the applicant not to become paralyzed by the fear of "selling out," but to try to connect their idea to current funding trends. Research these trends by looking up the titles and abstracts of recent successful proposals. Check out the titles and abstracts of major articles in major journals. Then ask yourself: can your idea be brought into contact with some aspect of the successful funding trends? Examples of such trends include digital humanities, interdisciplinary team science, and the question of how new technologies have influenced society and culture. Realism is the applicant's friend.

Part II offers the practical backbone of the book, "Parts of the Proposal," with sections on "Writing the Introduction/Statement of Problem/Statement of Purpose," "Writing the Theoretical Orientation and Significance Section," "Writing the Methodology/Procedures/Plan of Work Section," and "Writing the Budget and Budget Justification." Of course the template for writing a particular proposal is best extracted from the RFP itself. But the authors give helpful reminders of the approach an applicant might take to the entire process: "You do not want the program officer or reviewer to have to think very hard to figure out your proposal." This has the ring of truth for more than just proposal writing—i.e., remember that your reviewers may have an entire stack of proposals to read through. They need a reason to respond favorably to your particular proposal, so give them as many reasons as you can. A second reminder of a helpful approach to the process is to recall that each agency or foundation offering support is also asking for something in return: help us complete our mission. Funding is never a one-way street. The successful proposal will make it effortless for a reviewer to see a direct connection between the project being proposed and a fulfilling of the agency's mission.

Thinking about the reviewer's needs as well as those of the applicant can clarify a great deal, such as the inappropriateness of using complex theoretical language in a proposal or indulging in disciplinary jargon. Stepping back from buzz words or fashionable references can clarify both the thought and the writing of the proposal. Make it easy for reviewers to say "yes" to your idea by leading them into it step by step with clear language and simple logic. The book contains multiple, annotated examples of proposals that successfully navigate some of the most challenging proposal requirements, such as "Writing the Theoretical Orientation and Significance Section." Here the challenge is to demonstrate that the applicant understands the current state of scholarship on a particular question or problem, and will advance knowledge beyond that current state. Samples of language achieving that understanding are offered and even annotated for the reader. Proposal excerpts are also used to illustrate the section entitled, "Writing the Methodology." Examples from fields such as Ethnography and History offer excerpts from successful descriptions of a work plan, archives to be visited, scholarly networks established, and interview participants. A text box entitled "Methods/Procedures Exercise" guides the reader using questions that will help in recognizing and evaluating these sections in a scholarly proposal, book, or article.

Near the book's conclusion, a chapter entitled "Failure or Success: What Next?" contains what may be one of the most valuable lessons offered by this book: how to respond to a proposal's rejection without letting that rejection define future efforts. After all, rejection is built in to the proposal enterprise. Therefore, learning how to make use of it early in one's career can save a graduate student or junior scholar the wasted time and anguish of self-doubt. Revise and resubmit rejected proposals, the authors recommend, but include language in the revised proposal alluding to improvements made following an earlier review. Practical, lavishly illustrated, and clearly written, this book is a readable, comprehensive, and valuable resource for scholars and development officers at all levels. Use it to your advantage.

How to Convince Reviewers to Fund Your Proposal

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The recent 65-page <u>Report to the National Science Board on the National Science</u> <u>Foundation's Merit Review Process FY 2017</u> is a goldmine of information about how to convince NSF reviewers and program officers to fund your proposal. This report clearly validates the iconic advice given to anyone who is writing proposals to federal research agencies: **always write to the reviewers**.

Of course, this sounds simple enough, but in actuality it presupposes several initial conditions that are too often not fully understood about the review process. Some of these include understanding the agency's review configuration (ad hoc, panel, combination, internal, etc.); the specific characteristics of those chosen as reviewers; the background and role of the program officer in the review process; and related information needed by those writing proposals to make sure they are writing to the reviewers.

Overall, NSF aims to inform at least 75 percent of PIs of funding decisions within six months of receiving their proposals. However, this is not a trivial number when it comes to planning, developing, and writing proposals, particularly as that six-month period significantly influences, or should influence, the care taken to <u>ensure that the proposal you submit is as</u> *near perfect as you can possibly make it*.

Because once you submit a proposal, it resides in something akin to a "proposal limbo" (like Jimmy Cliff singing - <u>Sitting In Limbo</u>) or an otherwise indeterminate quantum state for six months or more wherein it may be considered both funded and unfunded, much as Schrödinger's Cat is considered both dead and alive in the famous thought experiment. This means that when you do open the "reviewer's box" and discover the proposal is dead, i.e., not recommended for funding, it may well be another year before a second funding decision will be made on a proposal revised and resubmitted.

About 96 percent of NSF's proposals are evaluated by external reviewers as well as by NSF staff using the two NSB-approved criteria: *Intellectual Merit* and *Broader Impacts*. On average, NSF reports, proposals are reviewed by 3-5 reviewers, depending on the type of review mechanism used and the nature of the proposals. Each reviewer is chosen for specific types of expertise and adds different points of view to the decision-making process.

NSF program officers make funding recommendations to award or decline proposals after scientific, technical, and programmatic review and consideration of appropriate factors, such as portfolio balance and the amount of funding available. Reviewers' recommendations are <u>advisory and not mandatory</u> to NSF program officers, which gives NSF program officers significant input into the final funding decisions.

The foregoing points are key to writing a proposal to NSF that follows the iconic advice of "*writing to reviewers*." Moreover, the following points made in the report are among the most important to those writing proposals and using this 65-page report to assist them in that effort. Specifically, NSF notes in the report (emphasis added), "The narrative comments and summary ratings provided by external reviewers are **essential inputs** to program officers who **use their professional judgment to make awards and to decline recommendations** to NSF

senior management. . . .NSF program officers are experts themselves in the scientific areas they manage. They have advanced educational or professional training in science or engineering (e.g., a Ph.D., P.E., or equivalent credentials) and relevant experience in research, education, and/or administration. . . .They are expected to produce and manage a portfolio of awards that *addresses a variety of considerations and objectives*."

And, most importantly, "When making funding recommendations, <u>in addition</u> to information contained in the external proposal reviews, **NSF program officers** <u>evaluate</u> **proposals in the larger context of their overall portfolio and consider issues such as**:

- Support for high-risk proposals with potential for transformative advances in a field;
- **<u>Different approaches</u>** to significant research and education questions;
- Capacity building in a new and promising research area;
- Potential impact on human resources and infrastructure;
- NSF <u>core strategies</u>, such as: (1) integrating research and education, and (2) broadening participation;
- Achieving special program objectives and initiatives;
- Other available funding resources;
- **Geographic distribution**; and, in addition
- Decisions on a given proposal are made in the context of both other current proposals and previously funded projects.

Faculty and research offices would be wise to reflect carefully on the above key points made in the report when writing proposals or assisting in proposal writing. These points should also be considered when deciding how best to represent the proposed research in the overall context of how NSF will make a funding decision. Specifically, it is clear that, in addition to "writing to reviewers" at NSF, it is important to include in that advice "writing to program officers" in a way that places your proposal favorably <u>in the larger context of the program officer(s') overall</u> <u>portfolio</u>.

Clearly, the above bulleted list from the report is more than just a listing of ancillary considerations used by program officers in making their funding recommendations. It has a status equivalent to the review criteria addressed in the solicitation. Certainly, a proposal to NSF can be made more competitive by using these "larger context" review issues in describing your proposed research by explaining, for example, why it is transformative in the field and in the context of the agency portfolio; what different and novel approaches were used to address research and educational questions; how your proposed research builds capacity in promising research areas; how your proposed research advances NSF core strategies and program objectives, and so on.

While much of the information in the report is known to those with extensive experience at NSF, the listing of these key issues and how they empower NSF program officers is invaluable to achieving funding success at that agency.

Last-Minute CAREER Checklist (updated)

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<u>NSF CAREER</u> proposals are due this week. Many of you have been working on your proposals for months and are now heading down to the final stretch. Below are some things you should check before you send in your proposal. Be particularly careful to follow the PAPPG requirements described below. If you don't, NSF can return your proposal without review!

- Does your Project Summary follow the PAPPG guidelines? Follow NSF's most recent <u>Proposal and Award Policies and Procedures Guide</u>, effective January of this year. Your <u>Summary</u> must be divided into three sections: Overview, Intellectual Merit, and Broader Impacts.
 - Be especially careful to follow the requirements for the Overview section, which state that it should include "a description of the activity that would result if the proposal were funded and a statement of objectives and methods to be employed." Did you give a true overview of your project, or did you make the common mistake of turning this section into an introduction where you just discuss the problem or need you're addressing?
 - For the Intellectual Merit section, did you describe the fundamental knowledge gaps you will address (e.g., in terms of your research questions/hypotheses), how your project is novel or innovative, and how your research will advance the *areas of interest to the NSF program to which you're applying*?
 - Also, the length allowed by Fastlane for the Project Summary is now a total of about 4600 characters including spaces (divided among the three sections as you like). After uploading the Project Summary to Fastlane, be sure to check it (e.g., using the "print" function) because if it was copied and pasted into the windows, characters such as apostrophes often end up as "?"s. You can fix those by manually entering the correct character into the window. It should also fit into one page when displayed in this way. The summary should also be written in 3rd person (this doesn't apply to the Project Description).
- Did you include separate, titled "Broader Impacts" and "Intellectual Merit" sections in your Project Description? This is required and is a reason for returning proposals without review. Be sure to use the titles as specified – don't add additional wording, such as "Intellectual Merit and Significance." Remember, also, that if you do a good job of summarizing your best arguments in these sections, reviewers will likely use that wording in their reviews.
- Are your goals, objectives, and tasks consistent throughout your Project Description? If you state your goals and objectives in your introduction, are they the same goals and objectives you describe in your Research Plan? Do you change or add new goals and objectives as you progress through your narrative? This will just confuse the reviewer. When you describe your research tasks, are these tasks clearly tied to your objectives, and are those the same tasks that you list in your project schedule or milestone chart?

- ✓ Are your project goals accurately stated? If your project goals were described too broadly or vaguely—for example, stating that you will solve a general problem in your field, understand a basic phenomenon, or "prove" a hypothesis—will you actually achieve that goal in the five years of your project? A common complaint of reviewers is that the research plan will not achieve the goals stated. If this is the case for your proposal, rewrite your goals so that they are specific and consistent with what you'll achieve if your research plan is successful.
- ✓ Did you put your project in the context of your long-term career goals? Remember that the purpose of the CAREER grant is to help promising researchers "build a firm foundation for a lifetime of leadership in integrating education and research." In order to assess how well your project will do that, reviewers need to understand what your long-term research and education goals are.
- Are all your figures and tables consistently numbered, and do you refer to each of them in your text? Last-minute edits to meet the page limit can result in misnumbered figures and tables. If you don't refer to your figures and tables in your text, it can be difficult for the reviewer to understand their context and relevance.
- ✓ Did you avoid including URLs in your Project Description? It states in the PAPPG that "PIs are cautioned that the Project Description must be self-contained and that URLs that provide information related to the proposal should not be used because 1) the information could circumvent page limitations, 2) the reviewers are under no obligation to view the sites, and 3) the sites could be altered or abolished between the time of submission and the time of review." However, you can cite them as you would a publication and include the URL in your References Cited section.
- ✓ If you had any NSF funding with a start date within the last 5 years, did you follow the new requirements for your Results of Prior NSF Funding section? You are required to include a Results of Prior NSF Funding section in your Project Description if you received any NSF funding in the last 5 years, no matter what your role on the project (you did not need to be a PI or co-PI, although graduate fellowships are not included). In this section, you are now required to separately describe (and label) the Intellectual Merit and Broader Impacts of the project, and to state the number of products (e.g., journal articles, etc.) that were produced by the project. There are a number of other instructions. Go here (Section C.2.d.iii) for a full description of the requirements. *Be sure to follow these instructions* exactly! NSF has become very picky about this and will return your proposal without review if you don't follow these instruction. If your previous project is not highly relevant to your proposed CAREER project, you don't have to spend a lot of space on this section, but be sure to fully describe your accomplishments on the previous project. Remember, this is your track record, and clearly describing strong results (including your broader impacts) will give you a competitive advantage with reviewers. If you have more than one prior NSF grant, you are only required to report on one (choose the project that's most relevant to your proposed CAREER project).
- ✓ Does your Education Plan include clear goals and a plan to assess your success in meeting those goals? If you'll be developing a new course or trying out a new teaching method, did

you explain what you hope to accomplish by doing that? Did you describe how you'll determine if you actually accomplished your goals and objectives?

- ✓ Did you run spell check? Reviewers are highly irritated by typos, misspellings and grammar mistakes. They see it as a reflection of the quality of the work you would do if funded.
- ✓ Did you recruit others to read your proposal and give you feedback? There may still be time to ask your colleagues and friends to give your proposal a quick read. Recruit both experts in your field (who can identify technical issues that may concern reviewers) and readers from outside your field (who can tell you if the main points of your proposal are clear to a technically literate non-expert). If your non-expert reviewers can't understand generally what you're going to do, why you're doing it, and why your approach is innovative, consider rewriting the first two or three pages to more clearly give an accessible overview of your project. This is particularly important if you're applying to a program that conducts only a panel review (which is particularly common in the Engineering Directorate) because you are more likely to have reviewers from outside your subfield.
- ✓ If you include collaborations in your project, did you get letters from those people, and did you follow the form letter wording specified in the <u>CAREER solicitation</u>? Reviewers usually look for letters confirming that you actually have in place the collaborations you describe in your proposal. This also applies to assistance you'll be getting for your education and outreach activities, even if you'll be working with others at your institution. For example, if you'll be participating in a STEM summer camp that takes place every summer at your university, be sure to get a letter from the director of the program stating that they have agreed to your participation and describing your role. NSF allows only a form letter (with the wording as specified in the solicitation) in order to prevent PIs from trying to use the letters as a way to include additional information that wouldn't fit into the 15-page Project Description. That means you need to describe what your collaborators will do in your Project Description or in the Equipment, Facilities and Other Resources document.
- If you included one or more Senior Personnel, did you get their biosketch, Current & Pending, and Collaborations and Other Affiliations forms? While the CAREER doesn't allow co-PIs, NSF is now allowing Senior Personnel to be put on the budget. If you have done this, Fastlane will require the usual forms.
- ✓ Did you follow the new directions for Collaboration and Other Affiliations? NSF now requires that you fill out an <u>Excel template</u>.
- ✓ Did you include in the budget the resources you need to conduct your education and outreach activities? A common mistake is to describe ambitious education and outreach activities that clearly require funding, and then forget to include those funds in your budget. Reviewers will assume you're not really serious. Even worse, if the reviewers don't notice, you'll could be awarded the grant and then won't have the funds to do what you promised.
- ✓ If you have a postdoc on your budget, did you include a Postdoc Mentoring Plan? Even if your postdoc is not full-time on this project, if they are a line item on your budget Fastlane won't let you submit without a postdoc mentoring plan. For more info, go <u>here</u> (section II.C.2.j)

- ✓ Do you have all your other supplementary documentation ready? This includes your 2-page biosketch (be absolutely sure you follow <u>the required format</u> [section C.2.f] exactly!), your <u>Current & Pending</u> form (section C.2.h), <u>Data Management Plan, Facilities, Equipment</u> and other <u>Resources</u> form (section C.2.i) remember to include any data from assessments of your education and outreach activity, the <u>Collaborations & Other Affiliations Template</u>, your departmental letter, and any letters of collaboration.
- ✓ Did you suggest reviewers? On Fastlane, they include a place where you can suggest reviewers. It's a good idea to take advantage of this. Program Officers are usually desperate to find good reviewers, so they're grateful to get suggestions. Obviously, you don't want to suggest someone who has a conflict of interest (former co-authors, advisors, etc.), but you can suggest people in your field (e.g., people who attend the same conference sessions as you do) who are likely to understand and be excited by your research. It's best to provide 3 to 5 names. (Don't include 20 names, because that limits the flexibility of the NSF Program Officer since they can't include too many reviewers from one list.)
- ✓ Do you have a plan to submit at least a day early? Due dates are staggered by Directorate: Wednesday, July 17th for BIO, CISE, and EHR; Thursday, July 18th for ENG; and Friday, July 19th for GEO, MPS, and SBE. Expect Fastlane to slow down, particularly in the afternoon of each due date. If you don't submit by 5 pm (in your time zone) on your due date, even if the reason was that Fastlane was slow, NSF will not accept your proposal and you'll have to wait until next year to try again if you're still eligible. Add to that the fact that your preaward office will likely be submitting multiple CAREER proposals, and it should be clear that it's a good idea to submit at least a day before the deadline.
- ✓ Do you have plans to celebrate after your proposal has been submitted? After your proposal has successfully been submitted, go somewhere fun for the weekend, take your long-suffering spouse out to dinner, or get a massage. The pile of work that collected on your desk while you were working on your proposal will still be there when you get back!
- * The PAPPG links in this article should take you directly to the section of the PAPPG to which we are referring (this can take a little time the link takes you first to the index and then redirects you to the correct section). In case this doesn't work for you, we have included the Section numbers. It may be easier to go to the <u>PAPPG Table of Contents</u> and find the link to the section there.

More on Success in Funding Convergence Research

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In the spirit of transparency, it must be noted that <u>Fostering the Culture of Convergence</u> <u>in Research</u>: Proceedings of a Workshop (2019), an 81-page report (June 2019) downloadable as a free pdf from the National Academies of Sciences, Engineering, and Medicine, requires a very focused read. In return, however, you will be rewarded with a rich discussion on the characteristics of convergence research and its relationship to such complementary predecessors as **transdisciplinary research and team science** as advanced by federal funding agencies over the past decade and longer.

Moreover, as we have noted in prior articles on this topic, making a compelling case for funding your proposed research on account of its convergence requires you to explain that distinction in the research narrative. To make that case in your proposal, it will help to inform your arguments with the discussions in this report that seek to, as the report notes, "build clarity and common understanding of what each term—convergence, transdisciplinary research, team science--represents and the nuances that distinguish them."

Bottom line, this report offers another key source of information to help faculty and research offices become more fluent in using the language of federal agencies in describing these new research directions. In the world of research grant writing, those with the greatest fluency in the language of the funding agency will be the most successful in obtaining funding long term.

For example, in one of the workshops addressed in this report, NSF Director Dr. France Córdova noteds that NSF has made <u>convergence</u> one of its 10 Big Ideas. Dr. Córdova states (emphasis added) "that convergence will be a catalytic approach to address numerous challenges <u>recently identified by NSF as scientific priorities</u>, such as predicting phenotype, advancing synthetic biology, and understanding the arctic system." She also describes "steps that NSF has taken to focus on convergence through its latest generation of Engineering Research Centers (ERCs), by soliciting proposals through a Dear Colleague Letter, and via a set of proposed 'convergence accelerators' that will tackle selected scientific questions.

The workshop report quotes Dr. Cordova explaining that "several challenges remain related to convergence in research, including how to interlink fundamental and translational research approaches, how to most effectively collect and mine data and *use data analytics to assist in merit review* and post-award assessments, how the interplay between the structures of federal agencies and universities influences which *changes will be required to facilitate convergence*, and the need for risk taking and prioritization."

One workshop panel described in the report focused on what convergence can achieve when applied to example areas of science, in this case, *advances with implications for sustainable agriculture* and reduced carbon dioxide emissions. The report continues, "agriculture and forestry are a significant source of carbon dioxide emissions into the atmosphere, representing about twice the emissions from energy production. Developments in areas such as genetics and crop management have increased food production yields while development of substitute products, such as burgers derived from nonanimal sources rather than livestock, can contribute to an order of magnitude reduction in land use and carbon dioxide release."

Examples of *convergence research in precision agriculture* also include "research on harnessing microorganisms to improve agriculture and replace synthetic chemical fertilizers, all relying on microbiome discovery, rational design, and synthetic biology to create microorganisms that provide improved and accessible sources of nitrogen to plant roots."

Importantly, *the report notes that a convergence of disciplines also requires* <u>engagement with stakeholders</u> such as farmers. These and similar examples in the report are very helpful in clarifying and deepening the reader's understanding of what convergence in research is and what it means to various federal agencies promoting its funding. In this regard, the report observed that, from the perspective of the funding agency, the more convergent a proposal is, the more challenging it can be to review. This point is worth taking seriously by ensuring that a proposal adopting this method be written with reviewers in mind, including expressing clearly how the proposal represents convergence in research in the context of the funding agency objectives.

Moreover, workshop panelists commented on the "tensions associated with pushing convergence through 'top down' actions by leadership and federal programs versus those arising 'bottom up' by a demand from researchers... Although agencies such as DARPA, NIH, and NSF differ in their missions and operations, they have a number of levers with which to drive culture change among their research communities. DARPA focuses on taking informed risks through programs that aim to track and drive the leading edge of science and technology, and success requires program managers within the agency to innovate, think creatively, and bridge across multiple areas."

By contrast, NIH plays a "central role in funding biomedical research through its autonomous institutes and centers. **Convergence represents one means to solve missionrelevant scientific questions at NIH**.... NSF supports a significant amount of fundamental, investigator-driven research, although it has also *become more intentional in incorporating a focus area on convergence as part of its portfolio*."

The report also noted that one of the most common approaches "for enabling convergence within academic research settings continues to be the establishment of thematic or cross-cutting institutes and centers that overlay the discipline-based (usually department-based) core. . . . These centers and institutes become homes for convergence within larger university structures. Such smaller structures within a larger university can be nimble, flexible, and serve as a 'skunkworks' for innovation.

One implicit takeaway from this report is the *important role research and proposal development offices will play in faculty and institutions transitioning to the convergence research culture*, particularly at NSF and NIH. As the report observes, institutions will have to define the key institutional contributors and their roles in achieving funding success at those federal agencies where convergence research is being given an increasing priority. Moreover, a basic determinate of that funding success will be the *submission of competitive proposals* containing a convincing research narrative that explains how the proposed research best fits the funder's goals for convergence. Research offices can take a first step in that process by *being informed about the state of the field in the area of research convergence* as defined in this report and other similar reports, particularly over the past year.

Are You New to the Office of Naval Research?

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The Office of Naval Research (<u>ONR</u>) sponsored research covers a broad spectrum of science and engineering disciplines. For examples, see <u>here</u>. ONR announces current areas of research interest through several mechanisms, including Broad Agency Announcements (**BAA**), Funding Opportunity Announcements (**FOA**), and Requests for Information (**RFI**).

Most of ONR's solicitations are for research and development and are accomplished through BAAs announcing research interests. BAAs advertise and solicit proposals for ONR's research areas. A BAA or FOA defines the requirements for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution. FOAs result only in the award of an assistance instrument and BAAs may result in the award of both acquisition and assistance instruments. Special Program Announcements are often released to focus attention on a specific topic and funding availability. ONR announcements are posted at <u>www.fbo.gov</u> or <u>www.grants.gov</u>. For convenience, these funding opportunities are also listed on the <u>announcements section</u> of the ONR website.

ONR seeks to do business with educational institutions, nonprofit and for-profit organizations with ground-breaking ideas, pioneering scientific research, and novel technology developments. The following list (<u>here</u>) includes currently active broad agency announcements (BAAs) and funding opportunity announcements (FOAs). Each announcement provides technical and contracting points of reference. All BAAs incorporate a standardized template for the submission of technical and cost proposals for all contract awards. Guidance and assistance in completing the form and spreadsheet can be obtained **from points of contact provided in the BAA**.

It is worth noting that *many of the currently listed ONR BAAs will expire at various times this coming fall.* Therefore, between now and then, check Grants.gov for newly issued 2020 BAAs with open periods lasting a year or longer. At the start of each new fiscal year, many federal research agencies close out an existing BAA and issue a new (superseding) one for the coming fiscal year. While BAAs may stay open for a number of years, others are annual, which makes this a good time to check whether your FY2019 BAA has recently been or will be superseded by one for FY2020. Specifically, ONR Grant applications are submitted in accordance with individual BAAs or FOAs. Refer to the individual announcement for specific submission requirements.

In fact, *now is a good time of year to <u>review the status of all currently open BAAs</u> across the various federal agencies and update as needed. Keep in mind that an agency's research priorities, particularly a mission agency such as ONR, may change over the year, and when they do, modifications are posted to Grants.gov. You can keep on top of changes in research priorities under BAAs (ONR and elsewhere) by signing up for one or both of these RSS feeds: <u>Modified Opportunities by Agency</u> (receive a listing of recently modified opportunities by agency name) and <u>Modified Opportunities by Category</u> (receive a listing of recently modified*

opportunities by category). Moreover, a simple Grants.gov (<u>Search Grants</u>) search on keyword "**BAA**" will give a listing of currently open federal agency BAAs, including those from ORN.

Importantly for research offices, late summer is a time when new faculty will start to arrive on campus and when *many federal agency BAAs will be updated with new and revised research priorities for the coming fiscal year or longer*. For example, one advantage of research offices introducing new and junior faculty to BAAs is that they represent a suite of informational requirements that serve as a *rich learning tool related to writing successful proposals across a broad spectrum of research funding opportunities at ONR, DARPA, etc*. Responding to BAAs can, therefore, help faculty who may be new to grant writing build a more comprehensive understanding of what constitutes a competitive proposal and the factors that impact competitiveness in their field, as in this URL linking to <u>ONRs current research interests</u>. Moreover, BAAs represent an often overlooked funding source for new faculty, particularly given that the application process defines a general area of research interest by agency but allows applicants to more narrowly define their research interests and expertise that might fit the agency mission. In practice, BAAs, such as those at ONR linked above, present a "learning tool" for new or junior faculty by requiring them to <u>understand some key areas needed for</u> *success in grant writing*, for example:

- the importance of *talking about your proposed research to a program officer* or BAA POC (point of contact) prior to writing a proposal, preliminary proposal, or white paper;
- the importance of *linking the proposed research to the agency mission priorities* detailed or referenced in the BAA;
- the nature of basic or fundamental research as opposed to applied research;
- the importance of having a thorough *knowledge of an agency's mission priorities* to ensure that proposed research brings value-added benefits to the agency mission;
- the importance of following submission and format requirements;
- the importance of reading carefully through a complex set of instructions and being able to resolve ambiguities that may be inherent to a general BAA to make sure an applicant can fit the agency's research priorities;
- learning how to *write a white paper* as a first step towards writing a full proposal—*this is a critical skill that all grant applicants must learn*;
- how to track an agency's research priorities as they change over time; and
- how an agency will review and evaluate a proposal.

Perhaps most importantly, **BAAs typically list the evaluation factors the merit reviewers will be asked to consider in making a determination**, as the below factors listed in this recent DOE BAA suggest. Keep in mind that all faculty, particularly new and junior faculty, would do well to commit the following to memory for writing any grant to any federal agency :

Scientific and/or Technical Merit of the Proposed Research

- What is the scientific innovation of proposed research?
- What is the likelihood of achieving valuable results?
- How might the results of the proposed work impact the direction, progress, and thinking in relevant scientific fields of research?

- How does the proposed work compare with other efforts in its field, both in terms of scientific and/or technical merit and originality?
- Is the Data Management Plan suitable for the proposed research and to what extent does it support the validation of research results?

Appropriateness of the Proposed Method or Approach

- How logical and feasible are the research approaches?
- Does the proposed research employ innovative concepts or methods?
- Are the conceptual framework, methods, and analyses well justified, adequately developed, and likely to lead to scientifically valid conclusions?
- Does the applicant recognize significant potential problems and consider alternative strategies?

Competency of Applicant's Personnel and Adequacy of Proposed Resources

- What is the past performance and potential of the Principal Investigator (PI)?
- How well qualified is the research team to carry out the proposed research?
- Are the research environment and facilities adequate for performing the research?
- Does the proposed work take advantage of unique facilities and capabilities?

Reasonableness and Appropriateness of the Proposed Budget

- Are the proposed budget and staffing levels adequate to carry out the proposed research?
- Is the budget reasonable and appropriate for the scope?

In conclusion, the close out of numerous ONR BAAs at the end of the fiscal year offers a good opportunity to do an inventory of which ONR research priories will be continued, superceded, revised or introduced in FY2020 and beyond. Moreover, this is a practice that can be applied to many other federal research agencies that issue BAAs of interest to both faculty and research offices.

Understanding the Role of Your PO

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We often emphasize that when a PI is pursuing funding, it's critically important to understand the funder's mission, culture, organization, procedures, and the role of the Program Officer (PO). In this article, we'll delve a bit deeper into this last item on that list. Often, if a researcher has pursued funding from one agency such as NIH or NSF, they may not realize how widely the roles and responsibilities of POs vary across different funders, shaping the relationship between the PO and grant applicants. Below are some aspects to keep in mind, with examples from different funders. (Note that various funders use different terms: Program Officer, Program Director, Program Staff, etc. For simplicity, we will use "Program Officer" or "PO" here.)

The PO's Role in the Review Process

The PO's role in the review process can vary from total autonomy at one extreme, to having no role at all at the other. Most funders seek input from external reviewers (for research grants, these are usually peer reviewers with research backgrounds in the field), but these peer reviews are often only advisory. The relative influence of the PO versus external reviews on the funding decision varies by funder and by program.

Small private foundations are most likely to give POs a high level of influence on funding decisions. The PO typically works very closely with the foundation leaders and is expected to ensure that the program supports the foundation's mission and current focus areas. Also, small private foundations don't need to answer to Congress, and questions of fairness or concerns about conflicts of interest are typically not big issues.

The <u>Department of Defense (DoD)</u> also gives its POs a lot of discretion in determining what projects to fund. POs are usually experts in the program research area and are charged with funding projects that will produce results that address DoD's specific needs in support of its mission.

Among DoD agencies, POs for the <u>Defense Advanced Research Projects Agency (DARPA)</u> are typically the most autonomous. DARPA POs are often leading experts in the topic of their program and are expected to work with the research community to drive breakthroughs. DARPA prioritizes fast "out-of-the-box" results, and DARPA POs have the discretion to select the most promising ideas, encourage teaming of specific researchers, and pull funding if results aren't coming as quickly as expected or if a more promising idea comes along. While proposals do undergo review by external experts, it is often the case that much of the decision has already been made by the DARPA PO during discussions with the proposing team about their proposed technology. However, the PO may have to compete within DARPA for funding. As a result, if your DARPA PO likes your idea, your relationship may be collaborative, as you help the PO to secure funds to support your project.

POs at the <u>Air Force</u>, <u>Army</u> and <u>Navy</u> Research Offices don't have quite as much autonomy as DARPA POs but are similarly tasked with helping to find the research projects that help solve issues that are important to the missions and priorities of their services. In order to be competitive, you need to talk to your prospective PO about the specific needs of interest to their program and convince them that you can deliver.

POs at <u>NSF</u> are more in the middle of the autonomy spectrum. They choose reviewers and run review panels. They are experts in the field of their program and are expected to act like portfolio managers, investing in a range of projects that address various important topics within their program area. However, they will typically choose only from well-reviewed proposals. As a result, while proposals are not funded strictly in accordance with how they are ranked, it is rare for a poorly reviewed proposal to be funded.

At <u>NIH</u>, the review process for most proposals (except for responses to PARs and most RFAs) is conducted by the <u>Center for Scientific Review</u>, which is separate from the Institute or Center (IC) that funds the grants. The PO may not even be in the room when the proposal is reviewed, although they typically try to be. NIH funding decisions are typically tightly tied to the impact score and ranking assigned to them by the peer review panel. However, a proposal that gets a fundable score but does not address a topic of interest to the funding IC will not be funded. It also sometimes happens that a proposal that doesn't get a fundable score but addresses an area of high priority for the IC may still be funded. The PO provides internal input on how relevant your proposal is to the IC's priorities.

Similarly, at the <u>National Endowment for the Humanities (NEH)</u>, POs provide recommendations on the well-reviewed applications. At the Department of Education <u>Institute</u> <u>of Education Sciences (IES)</u>, POs have no role in evaluating proposals or making funding decisions.

Interacting with the PO

It's probably obvious that in cases where the PO has a lot of say in the review process and funding decision, it's a good idea to try to talk to the PO before writing your proposal. However, POs' responsiveness and receptivity to such discussions also vary among funders. Some foundation POs are overwhelmed with requests, and they may be unwilling to schedule individual discussions (although it's always a good idea to try). In contrast, some foundations, particularly those that have programs aimed at helping early career scholars such as the Ford Foundation, are typically very responsive.

While it's critical to get to know your DoD PO, if you're responding to a targeted RFP or BAA (as opposed to submitting an unsolicited proposal to a long-range BAA), DoD rules typically don't allow POs to talk to applicants in order to prevent unfair transmission of information. For that reason, it's a good idea to have developed a relationship with the PO well before the RFP or targeted BAA is issued.

DARPA POs often achieve a "celebrity" status and are so well known and busy that it can be very difficult to connect with them. However, similar to getting a meeting with Taylor Swift, you may be able to make connections through their assistants or through others (such as potential collaborators) who already have relationships with them.

NSF strongly encourages PIs to contact POs to discuss their projects and the fit with the program. However, the level of engagement can vary significantly depending on the program as well as the personality of the PO. While most POs are happy to meet with you in person or schedule a phone conversation, POs in the Social and Economic Sciences division are so

overwhelmed with requests that they resist in-person meetings and may even request that you send a white paper describing your idea instead of scheduling a phone conversation. It's important to be sensitive to the PO's constraints and the different cultures within NSF.

Even in cases where the POs have little or no involvement in the proposal review process, they can be of tremendous help. In fact, in some cases that lack of involvement frees them up to provide much more specific advice and mentoring. POs at NEH and IES often consent to read and critique entire proposal drafts. (If you'd like to get this kind of feedback, be sure to talk to the PO about this well in advance of the deadline.) NIH POs will often review and critique drafts of your Specific Aims page. Even though these POs will not be the involved in reviewing your proposal, they know their program's priorities and can help you to avoid common mistakes, so this advice can be invaluable.

Conclusion

From the examples above, it should be apparent how a PI can put himself at a disadvantage if he doesn't understand the role of the PO and the expectations for engagement. When getting to know a funder, do some research to make sure you understand these aspects of the agency. Potential sources of information include colleagues familiar with the funder, your research office, information provided by the funder on its website, in webinars, or in other outreach materials, and the PO herself.

Research Grant Writing Web Resources

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The hunt for the lesser-known funding source

Scientists can use search skills and solid connections to find grants from foreign governments, foundations and crowdfunding.

Health High-Risk, High-Reward program

High-Risk, High-Reward Research of the Behavioral and Social Sciences. The National Institutes of Health <u>Health High-Risk</u>, <u>High-Reward program</u> (HRHR) is a Common Fund effort created to accelerate the pace of biomedical, behavioral, and social science discoveries by supporting exceptionally creative scientists conducting highly innovative research. The program seeks to identify scientists with high-impact ideas that may be risky or at a stage too early to fare well in the traditional peer review process. The program encourages creative, outside-the-box thinkers to pursue exciting and innovative ideas in any area of biomedical, behavioral, or social sciences research within the NIH mission. *This blog was co-authored by Dr. Elizabeth (Betsy) Wilder, Director of the NIH Office of Strategic Coordination (OSC). More information about OSC and The Common Fund can be found <u>here</u>.*

Make Your Own Match by Submitting an Investigator-Initiated Application

Are you a new investigator looking for funding opportunity announcements (FOAs) that fit your research area but haven't found one? Luckily, a large percentage of the research NIAID funds is investigator-initiated (unsolicited), so if you come up empty searching for solicited request for applications (RFA) announcements in your area of expertise, the next step is to find the right investigator-initiated FOA. **How Investigator-Initiated Applications Work:** Each activity code (e.g., R01, R21) has a <u>Parent Program Announcement (PA) (link is external)</u>. If your area of research is within NIAID's mission, you can apply to the parent PA that best fits the scope of your research and your timetable. If your application scores within <u>NIAID Paylines</u>, it has a very good chance of being funded if money is available and you've addressed any concerns following peer review, as explained in our April 3, 2019 article "<u>Act Immediately To Resolve Bars to Award and Prepare Just-in-Time Information.</u>" MORE HERE.

Webinar Recording: The Eureka Research Platform - A Resource for Mobilizing Research

The OBSSR Director's Webinar recording, featuring guest presenter Jeffrey Olgin, M.D., Gallo-Chatterjee Distinguished Professor of Medicine and Chief of the Division of Cardiology at the University of California, San Francisco, is now available. Dr. Olgin's presentation provided an overview of the Eureka Research Platform, an NIH-funded resource for conducting research using mobile technology. He also described the resource (including its capabilities), provided a description of ongoing studies using the platform, and shared lessons learned and the mechanisms by which the resource can be used for NIH-funded studies. Go There Now

NSF/Dear Colleagues:

Please be advised that the National Science Foundation (NSF) has designated the National Institutes of Health's <u>SciENcv</u> (Science Experts Network Curriculum Vitae) as an NSF-approved format for submission of biographical sketch(es) and is encouraging its use to prepare a biographical sketch for inclusion in proposals to NSF.

In accordance with the current <u>Proposal & Award Policies & Procedures Guide</u> (PAPPG) (NSF 19-1), a biographical sketch (limited to two pages) is required for each individual identified as senior personnel on a proposal, and a separate biographical sketch PDF file, or other NSF-approved format, must be uploaded in FastLane for each designated individual (see <u>PAPPG</u> <u>Chapter II.C.2.f.</u>). The biographical sketch and file format requirements also apply to NSF proposals submitted through Research.gov and Grants.gov.

Use of an NSF-approved format aims to reduce administrative burden and improve efficiencies by providing proposers with a compliant and reusable way to maintain this information for subsequent proposal submissions to NSF, while also ensuring that the information is submitted in a searchable composition.

Beginning with the next iteration of the PAPPG (anticipated effective date, January 2020), NSF will only accept PDFs for biographical sketches that are generated through use of an NSF-approved format. A description of NSF-approved format(s) will be posted on the NSF website when the PAPPG is issued. A draft version of the PAPPG was published in the <u>Federal</u> <u>Register</u> for public comment. The deadline for submission of comments is COB July 29, 2019.

Multiple training resources are available on the <u>SviENcv</u> website. The following website resources may be of assistance to proposers preparing a biographical sketch using the SciENcv format:

- <u>SciENcv Background</u>
- YouTube Video: SciENcv Tutorial
- YouTube Video: Integrating with ORCID
- SciENcv Help

We encourage you to share this information with your colleagues. If you have IT systemrelated questions, please contact the NSF Help Desk at 1-800-381-1532 or <u>rgov@nsf.gov</u>. Policyrelated questions should be directed to <u>policy@nsf.gov</u>.

Regards,

The National Science Foundation

Protocol Template for Behavioral and Social Sciences Research

The <u>Protocol Template for Behavioral and Social Sciences Research</u> is a resource for communicating the science, methods, and operations of a clinical trial. This template is a suggested format for clinical trials that are testing a behavioral or social intervention or experimental manipulation. Use of the protocol template is encouraged but not required. The Behavioral and Social Clinical Trials Template was derived from the successful <u>NIH-FDA</u> <u>Phase 2/3 IND-IDE Clinical Trial Template</u> but was adapted to include terminology and approaches used by behavioral and social scientists. While the template is a suggested format

for clinical trials that are testing a behavioral or social intervention or manipulation for which a stand-alone clinical protocol is required, the template can also be a useful tool for those trials funded by NIH Institutes or Centers that do not require stand-alone clinical protocols. Using the template to anticipate decision points and potential challenges before a study launches can help avoid delays down the road.

Educational Grant Writing Web Resources

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Institute of Education Sciences (IES): Education Research CFDA Number 84.305A; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2020

In awarding these grants, the Institute of Education Sciences (Institute) intends to provide national leadership in expanding knowledge and understanding of (1) developmental and school readiness outcomes for infants and toddlers with or at risk for a disability, (2) education outcomes for all learners from early childhood education through postsecondary and adult education, and (3) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education).

Office of Postsecondary Education (OPE): Gaining Early Awareness and Readiness for Undergraduate Programs (State Grants) CFDA Number 84.334S; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2019

The GEAR UP program is a discretionary grant program **due August 7** that encourages eligible entities to provide support, and maintain a commitment to eligible low-income students, including students with disabilities, to assist the students in obtaining a secondary school diploma (or its recognized equivalent) and to prepare for and succeed in postsecondary education.

IES Posts FY 2020 Research Funding Webinars

The <u>Institute of Education Sciences</u> (IES) will be posting a series of on-demand webinars for those who are interested in Fiscal Year 2020 funding opportunities and learning more about IES. These prerecorded webinars are hosted by the <u>National Center for Education Research</u> and the <u>National Center</u> <u>for Special Education Research</u> and you can access them on the <u>IES Webinar Series website</u>. Two on-demand webinars are now available.

- IES Basic Overview of Research Grants and Information for New Applicants to IES
- IES Grant Writing Workshop

Additional on-demand webinars will be available soon.

Visit the <u>IES Funding Opportunities website</u> for more information about these and other research programs. Follow IES on <u>Twitter</u> and <u>Facebook</u> to learn about other on-demand webinars, videos, and training opportunities.

Agency Research News

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NIH Behavioral and Social Sciences Research Festival

The Office of Behavioral and Social Sciences Research (OBSSR), in collaboration with the NIH Behavioral and Social Sciences Research Coordinating Committee (BSSR-CC), holds the annual NIH Behavioral and Social Sciences Research Festival on the NIH campus. This new annual meeting is organized to inform the wider BSSR community, stakeholders, and NIH Institutes and Centers (ICs) about the latest BSSR funded by the NIH and its overall impact and importance across the entire field of biomedical research. Additional goals are to assist the ICs with the establishment of research priorities and the coordination of their programmatic efforts, thus minimizing redundancy and maximizing returns on NIH investments in BSSR. The festival highlights exciting research results, emerging areas, and innovations in health-related BSSR. This trans-NIH event enables efficient leveraging of NIH resources and expertise. The BSSR-CC members contribute diverse and comprehensive perspectives on the NIH BSSR portfolio, thus facilitating the selection of an outstanding array of research results that are highlighted at the festival. For more information about past festivals, <u>click here</u>.

Dear Colleague Letter: Revised Deadline for the Advanced Computing Systems & Services (ACSS): Adapting to the Rapid Evolution of Science and Engineering Research Program

Through this Dear Colleague Letter, the Office of Advanced Cyberinfrastructure (OAC) within the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) seeks to inform the community of a revised deadline date for the Advanced Computing Systems and Services (ACSS) program. The previous ACSS program solicitation, <u>NSF</u> <u>19-534</u>, offered two deadline dates: March 4, 2019, and March 4, 2020. The recently revised solicitation (<u>NSF 19-587</u>) makes one change: the forthcoming March 4, 2020, due date has been accelerated to November 5, 2019.

<u>Dear Colleague Letter: National Science Foundation (NSF) and Japan Science and Technology</u> Agency (JST) Collaborative Research Opportunity in Smart and Connected Communities

The US National Science Foundation (NSF) and the Japan Science and Technology Agency (JST) have signed a Memorandum of Cooperation (MOC) on Research Cooperation. The MOC provides an overarching framework to encourage collaboration between the US and Japanese research communities. NSF and JST are pleased to announce a collaborative research opportunity aligned with the goals of the NSF Smart and Connected Communities (S&CC) Program. Complementary expertise and resources in the US and Japan enable research in areas which are fundamental to smart and connected community solutions. Specific areas include, but are not limited to, disaster response and emergency management, precision agriculture, cybersecurity of the electric grid and Internet-of-Things (IoT) devices, and wired and wireless networking. Proposals are expected to adhere to the solicitation guidelines for the NSF and JST programs from which the funding is sought and must represent an integrated, well-coordinated collaborative effort. This document provides guidelines for the preparation, submission, review, and award of NSF-JST collaborative proposals. Proposers are advised that all documents

submitted to NSF or JST may be shared with the other agency in order to implement the twoway agency activities.

Dear Colleague Letter: Research Protection

July 11, 2019

Dear Colleagues,

I am writing about a sensitive and important challenge that affects our entire science and engineering community. As you know, the National Science Foundation (NSF) is dedicated to maintaining a vibrant and diverse research community that thrives on the values of openness, transparency, and merit-based competition. With the support of NSF, this community is a major contributor to U.S. economic growth, national security, and global leadership. To maintain our robust research ecosystem, it is important that we understand and vigilantly address emerging risks to the nation's science and engineering enterprise.

A great strength of the U.S. research and engineering enterprise is the diversity of talent—both domestic and international—and that is a strength we are committed to maintaining. International collaboration is essential to pursuing the frontiers of science, as dramatically demonstrated by the incredible imaging of a black hole event horizon, the ambitious MOSAIC project to study Arctic changes, and the detection of gravitational waves on Earth.

Our science and engineering enterprise, however, is put at risk when another government endeavors to benefit from the global research ecosystem without upholding the values of openness, transparency, and reciprocal collaboration. Faced with such a risk, we must respond.

Our values have not changed. What has changed is the scope and sophistication of the activities threatening our research community, such as certain foreign-government-sponsored talent recruitment programs. These activities create new risks to the integrity of NSF's mission and operation. NSF is therefore taking multiple steps to mitigate these risks in concert with other agencies and stakeholders, as outlined below.

To ensure that NSF is applying consistent standards to all staff members, each of whom has access to sensitive merit review and other information, we issued a requirement in April 2018 that rotators working onsite at NSF must be U.S. citizens or have applied for U.S. citizenship.

Earlier this year, we sent a note to NSF staff reminding everyone that government ethics regulations require accurate and timely financial disclosure reports and that Federal ethics rules, which apply to both our career and rotator personnel, cover emoluments issues and gifts from foreign governments.

Since 1978, NSF has required senior project personnel on proposals to disclose all sources of support, both foreign and domestic. A renewed effort is now underway to ensure that existing requirements to disclose current and pending support information are known, understood, and followed. For example, in May, we published in the Federal Register a proposed clarification of our proposal disclosure requirements (open for public comment through July 29). Our draft NSF Proposal and Award Policies and Procedures Guide includes clarifications regarding reporting requirements for both current and pending support and professional appointments.

To streamline the process for providing these disclosures to NSF, we are proposing use of an electronic format for submission of biographical sketches, including disclosure of all appointments. As currently envisioned, this will become effective in January 2020. We are also working to develop an electronic format for disclosure of current and pending support information.

We want to ensure we have expert input into issues related to open science and security, so we have commissioned the independent scientific advisory group JASON to conduct a study. This study will assess risks and recommend possible practices for NSF and its awardee organizations to achieve the best balance between openness and security of science. They will complete their report by the end of the calendar year.

Finally, we are issuing a policy making it clear that NSF personnel and IPAs detailed to NSF cannot participate in foreign government talent recruitment programs. There is a risk that participation in foreign government talent recruitment programs by NSF personnel and IPAs will compromise the ethical principles that bind us. Moreover, such participation poses significant risks of inappropriate foreign influence on NSF policies, programs, and priorities, including the integrity of NSF's merit review process—risks we simply cannot accept.

We recognize this issue is difficult. We won't be able to make the changes needed to address this new challenge to our community without your input and support. We want to hear from you and look forward to working together to develop solutions, even if it means making changes to long-standing policies and practices. In the end, the steps we are taking and will take are aimed at protecting your vital research and continuing the kinds of international collaborations that are needed to promote the progress of science, to advance the national health, prosperity, and welfare, and to secure the national defense.

Thank you for your continued support of our mission and we look forward to hearing from you. If you have any questions, please send those to <u>research-protection@nsf.gov</u>. Sincerely, France Córdova, Director

Dear Colleagues:

NSF is very pleased to announce that as of June 24, 2019, the research community can prepare and submit full, research collaborative proposals with subawards in Research.gov. This is in addition to the existing capability (since April 2018) to prepare and submit full, research noncollaborative proposals in Research.gov. Since that initial release just over a year ago, the National Science Foundation (NSF) has implemented several enhancements to the site, including additional flexibilities for PDF uploads, support for PDFs generated from LaTeX source documents, and compliance checks for fonts and font sizes. Future enhancements to the Research.gov proposal system will allow the preparation and submission of separately submitted collaborative proposals from multiple organizations.

Compared to FastLane, our grants management system launched in 1994, the Research.gov proposal system is much easier to use and provides proposers with faster document uploads and the ability to quickly create and update documents. We encourage you to try the new system, and we are confident that you will agree that this next generation grants management system is more efficient and less burdensome than FastLane.

Also, as of June 24, 2019, a new email notification functionality was implemented to generate Sponsored Project Office (SPO)/Authorized Organizational Representative (AOR) email

notifications when Principal Investigators (PIs) enable proposal access to SPOs/AORs. A similar email notification is available in FastLane, and we are excited to add the capability in Research.gov.

Modernizing Proposal Preparation and Submission

NSF's modernization of its FastLane system continues with the goal of improving the user experience to prepare and submit NSF proposals, while also reducing administrative burden for both proposers and NSF staff. As capabilities are migrated from FastLane to Research.gov, the system features will expand until it eventually replaces FastLane for proposal preparation and submission. While proposers can still prepare and submit collaborative proposals with subawards as well as full, research non-collaborative proposals in FastLane, NSF encourages the research community to use the new Research.gov proposal system because as NSF continues to enhance the new system incrementally, your vital feedback is being incorporated during the development process.

Preparing and Submitting Proposals in Research.gov

Here's some of the current Research.gov features that proposers are enjoying:

- Integrated compliance checks for fonts, margins, and line spacing;
- Real-time compliance feedback and alerts, so proposers know a proposal section is compliant before moving on to another section;
- Specific checks on the budget screens and for Collaborators and Other Affiliations (COA) uploads;
- A few seconds to upload documents versus 30-90 seconds for each document upload in FastLane; and
- Embedded relevant sections of the *Proposal & Award Policies & Procedures Guide* (PAPPG) and video job aids, so proposers don't have to go to multiple sites to access guidance and tools.

Initiating a Proposal in Research.gov

By answering a few questions in the five-step proposal wizard, Research.gov customizes the set-up process and compliance rules for the proposal being created. In addition, the proposal wizard dynamically drives the proposal sections that are required on subsequent screens.

If you have not done so already, we invite you to initiate a proposal in Research.gov by following the steps outlined below:

- Open <u>Research.gov</u> and click "Sign In" located at the top right of the screen;
- Enter your NSF ID and password and click "Sign In;"
- From the Research.gov "My Desktop" page, click "New! Prepare Proposals (Limited proposal types)" in the "Prepare & Submit Proposals tile" or go to this option from the top navigation bar by selecting the "Prepare & Submit Proposals" tab and clicking on "New! Prepare Proposals (Limited proposal types);"
- Select the "Prepare Proposal" option in the "Prepare New Proposal" tile on the left side of the Proposal Preparation page; and

• Follow the five-step proposal wizard to set up the proposal.

After completing the initiation steps, you are ready to complete all required and optional sections of your proposal and then submit it to NSF.

Submitting Feedback

NSF wants to hear from you! To submit feedback about the new Research.gov Proposal Preparation and Submission Site:

Go to the <u>Research.gov Feedback</u> page;

Choose "Other" under the Site Area dropdown menu;

Include your feedback in the Comments or Suggestions field; and

Click Submit when you are ready to send your feedback to NSF.

Training Resources and Additional Information

<u>Research.gov About Proposal Preparation and Submission webpage</u> – This webpage includes links to FAQs and video job aids (*Initiating a Proposal, How to Manage Personnel & Senior Personnel Documents, How to Work on a Proposal Budget, How to Upload a Collaborators and* <u>Other Affiliations Document</u>, and <u>How to Submit a Research Proposal in Research.gov</u>). Note: If a video does not automatically play in your browser, please try viewing the video using a different browser.

<u>Automated Proposal Compliance Checks for Proposals Submitted via Research.gov</u> – This checklist presents all of the current Research.gov automated proposal compliance checks, together with the associated non-compliant errors or warnings.

Additional information about proposal preparation and submission in Research.gov, including FAQs, is available on the <u>Electronic Research Administration (ERA) Forum website</u>.

We encourage you to share this information with your colleagues. If you have IT system-related questions, please contact the NSF Help Desk at 1-800-381-1532 or <u>rgov@nsf.gov</u>. Policy-related questions should be directed to <u>policy@nsf.gov</u>.

Regards,

Research.gov Team at the National Science Foundation

Agency Reports, Workshops & Research Roadmaps (Back to Page 1)

NSF joins federal partners in announcing update to national AI research and development strategic plan

The National Science Foundation (NSF) joins other federal agency partners in announcing the release of the 2019 Update to the National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan. Development of the strategic plan was led by the Select Committee on AI of the National Science and Technology Council (NSTC), co-chaired by NSF, DARPA and the White House Office of Science and Technology Policy, and engaged leading AI researchers and research administrators across the federal government, with input from the broader civil society. The 2019 National AI R&D plan offers a national agenda on AI science and engineering, and follows the launch of the American AI Initiative earlier this year. AI research has enabled breakthroughs across nearly every sector of society, from fundamental scientific research and medical innovation to safer transportation and more efficient manufacturing. "Many of the transformative uses of AI that we are witnessing today are the result of NSF investments in fundamental AI research that reach back over decades," said NSF Director France Córdova, and co-chair of the NSTC Select Committee on AI. "NSF is proud to have helped shape this coordinated federal strategy to drive forward the AI research and innovations that will be essential to ensuring the U.S. retains its global leadership in this critical research area." NSF is a leading federal funder of activities supporting AI research and innovation, including foundational and translational research, advanced and scalable computing resources, and education and workforce development.

The agency's ability to bring together a vast range of scientific disciplines -- including computer and information science and engineering, cognitive science and psychology, economics and game theory, engineering and control theory, ethics, linguistics, mathematics, philosophy, and more -- uniquely positions NSF to lead the nation in addressing key research challenges. The 2019 update refreshes the 2016 National AI R&D Strategic Plan, reevaluating federal priorities for AI R&D investments in response to the rapidly advancing field and integrating feedback from key stakeholders through a Request for Information issued last fall. It identifies eight strategic priority areas for federal investment in AI research and innovation, seven of which remain unchanged from the strategic plan released in 2016. New to the 2019 plan is an imperative to expand public and private partnerships to enhance federal investments and activities in support of AI.

In line with the vision outlined in the AI R&D Strategic Plan, NSF is working to expand and foster partnerships that leverage resources such as expertise, data, and tools to capitalize on the full potential of AI to strengthen the U.S. economy, advance job growth and enhance national security. For example, NSF has recently formed industry partnerships to address key scientific challenges in AI, such as a partnership with Amazon to support research focused on fairness in AI, with a goal of contributing to trustworthy AI systems that are readily accepted and deployed to tackle grand challenges facing society. NSF is also serving as a convening force to bring together diverse stakeholders in the field, as when NSF brought together the government, industry and non-profit sectors last month to assess the current and future state of AI.

<u>A Decadal Survey of the Social and Behavioral Sciences: A Research Agenda for Advancing</u> Intelligence Analysis

The primary function of the intelligence analyst is to make sense of information about the world, but the way analysts do that work will look profoundly different a decade from now. Technological changes will bring both new advances in conducting analysis and new risks related to technologically based activities and communications around the world. Because these changes are virtually inevitable, the Intelligence Community will need to make sustained collaboration with researchers in the social and behavioral sciences (SBS) a key priority if it is to adapt to these changes in the most productive ways. A Decadal Survey Of The Social and Behavioral Sciences provides guidance for a 10-year research agenda. This report identifies key opportunities in SBS research for strengthening intelligence analysis and offers ideas for integrating the knowledge and perspectives of researchers from these fields into the planning and design of efforts to support intelligence analysis.

New Funding Opportunities

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Content Order

New Funding Posted Since June 15 Newsletter URL Links to New & Open Funding Solicitations Solicitations Remaining Open from Prior Issues of the Newsletter Open Solicitations and BAAs

[User Note: URL links are active on date of publication, but if a URL link breaks or changes a Google search on the key words will typically take you to a working link. Also, entering a grant title and/or solicitation number in the Grants.gov search box will work as well.]

New Funding Solicitations Posted Since June 15 Newsletter

<u>Electric Grid of Things – Attaining Resilience Objectives With Networks of Sensing Intelligent</u> <u>Machines</u>

The Department of Energy (DOE), National Energy Technology Laboratory (NETL), on behalf of the Office of Electricity (OE), is seeking applications under this Funding Opportunity Announcement (FOA) for university-led research (in partnership with industry, National Laboratories, or research consortia) to conceive and develop integration approaches of the vast sensing, intelligence and energy flexibility resources represented by the Internet of Things (IoT), the Industrial Internet of Things (IIoT), and analogous emerging machine platforms growing at the grid edge. More specifically, this competitive solicitation aims to provide the energy infrastructure community with robust, scalable approaches to interfacing with advanced and rapidly developing technologies (typically found in industrial, commercial and residential settings) that will enhance their operational capability to maintain energy surety to transmission or distribution connected defense critical facilities and their surrounding communities. Applicants may suggest multiple use cases that support resilience and observability while adhering to the stated scenario boundaries. In addition, Applicants may submit proposals that extend their coverage to Department of Homeland Security (DHS) defined essential function infrastructures (energy, water, telecom) within the scenario boundaries. Concept paper due July 17 and full September 9.

Youth Support and Internship Program (YSIP)

NIFA requests applications for the Youth Support and Internship Program (YSIP) for fiscal year (FY) 2019 to support a fully developed and orchestrated national internship program that engages college students motivated to serve the needs of National Guard and Reserve Component (RC) military families during all phases of deployment. **Due July 25**.

Institute of Education Sciences (IES): Research Training Programs in the Education Sciences CFDA Number 84.305B; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2019

In awarding these grants, the Institute of Education Sciences (Institute) intends to provide national leadership in expanding knowledge and understanding of (1) developmental and school readiness outcomes for infants and toddlers with or at risk for a disability, (2) education outcomes for all learners from early childhood education through postsecondary and adult education, and (3) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education). The Institute's research grant programs are designed to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to educators, learners, researchers, and policymakers. In carrying out its grant programs, the Institute provides support for programs of research in areas of demonstrated national need. **Due July 29.**

NIST Enabling Federal Technology Transfer Program

NIST, on behalf of the Federal Laboratory Consortium (FLC) Executive Board, is <u>soliciting</u> <u>applications</u> for a cooperative agreement to enable Federal technology transfer. Under the Enabling Federal Technology Transfer (EFTT) Program, members of the FLC's Executive Board, including NIST, will collaborate with academia and industry on the development of outreach and educational programs, tools, and best practices that will enhance the ability of the academic and private sectors to engage with Federal Laboratories in technology transfer and research commercialization. Specifically, the awardee will collaborate with the Federal Laboratory Consortium's Executive Board, including NIST, in the areas of technology transfer and research commercialization by: developing the necessary tools and services to promote the utilization of Federal intellectual property, user facilities, and other R&D resources by non-Federal partners; creating a suitable education and training infrastructure in technology transfer for the relevant stakeholders; and engaging the industry, academic, and state and local government communities to facilitate access to Federal R&D collaborations and Federal technology transfer opportunities on both a regional and a national level. Click here for funding announcement. **Applications are due by August 16, 2019.**

Office of Postsecondary Education (OPE): Strengthening Institutions Program (SIP) CFDA Number 84.031A; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2019

The Strengthening Institutions Program (SIP) provides grants to eligible institutions of higher education (IHEs) to help them become self-sufficient and expand their capacity to serve low-income students by providing funds to improve and strengthen the institution's academic quality, institutional management, and fiscal stability. **Due August 18**.

National Survey of Internet- and Technology-Facilitated Child Exploitation

The U.S. Department of Justice (DOJ), Office of Justice Programs (OJP), the National institute of Justice (NIJ) is seeking applications for funding for the National Survey of Internet- and Technology-Facilitated Child Exploitation. The award recipient will be expected to develop, test, and administer a national data collection from law enforcement agencies to produce accurate

and reliable national estimates of, and information about, arrests for internet and technology-facilitated child sexual exploitation crimes. **Due August 20**.

Institute of Education Sciences (IES): Education Research CFDA Number 84.305A; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2020

In awarding these grants, the Institute of Education Sciences (Institute) intends to provide national leadership in expanding knowledge and understanding of (1) developmental and school readiness outcomes for infants and toddlers with or at risk for a disability, (2) education outcomes for all learners from early childhood education through postsecondary and adult education, and (3) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education). The Institute's research grant programs are designed to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to educators, learners, researchers, and policymakers. In carrying out its grant programs, the Institute provides support for programs of research in areas of demonstrated national need. **Due August 29.**

Institute of Education Sciences (IES): Research Grants Focused on Systemic Replication CFDA Number 84.305R; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2019

In awarding these grants, the Institute of Education Sciences (Institute) intends to provide national leadership in expanding knowledge and understanding of (1) developmental and school readiness outcomes for infants and toddlers with or at risk for a disability, (2) education outcomes for all learners from early childhood education through postsecondary and adult education, and (3) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education). The Institute's research grant programs are designed to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to educators, learners, researchers, and policymakers. In carrying out its grant programs, the Institute provides support for programs of research in areas of demonstrated national need. **Due August 29**.

Institute of Education Sciences (IES): Statistical and Research Methodology in Research CFDA Number 84.305D; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2020

In awarding these grants, the Institute of Education Sciences (Institute) intends to provide national leadership in expanding knowledge and understanding of (1) developmental and school readiness outcomes for infants and toddlers with or at risk for a disability, (2) education outcomes for all learners from early childhood education through postsecondary and adult education, and (3) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education). The Institute's research grant programs are designed to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to education opportunities for all learners. These interested individuals include parents, educators, learners, researchers, and policymakers. In carrying out its grant programs, the Institute provides support for programs of research in areas of demonstrated national need. **Due August 29**.

Institute of Education Sciences (IES): Special Education Research CFDA Number 84.324A; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2020

In awarding these grants, the Institute of Education Sciences (Institute) intends to provide national leadership in expanding knowledge and understanding of (1) developmental and school readiness outcomes for infants and toddlers with or at risk for a disability, (2) education outcomes for all learners from early childhood education through postsecondary and adult education, and (3) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education). The Institute's research grant programs are designed to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to educators, learners, researchers, and policymakers. In carrying out its grant programs, the Institute provides support for programs of research in areas of demonstrated national need. **Due August 29**.

Institute of Education Sciences (IES): Research Grants Focused on Systematic Replication CFDA Number 84.324R; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2020

In awarding these grants, the Institute of Education Sciences (Institute) intends to provide national leadership in expanding knowledge and understanding of (1) developmental and school readiness outcomes for infants and toddlers with or at risk for a disability, (2) education outcomes for all learners from early childhood education through postsecondary and adult education, and (3) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education). The Institute's research grant programs are designed to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to educators, learners, researchers, and policymakers. In carrying out its grant programs, the Institute provides support for programs of research in areas of demonstrated national need. **Due August 29**.

Materials Research Science and Engineering Centers (MRSEC)

Solicitation: NSF 19-517

Institutional Limit: 1

Only one MRSEC preliminary proposal may be submitted by any one organization as the lead institution in this competition. An institution proposing research in several groups should submit a single MRSEC proposal with multiple Interdisciplinary Research Groups (IRGs). A MRSEC proposal must contain a minimum of 2 IRGs and a maximum of 3 IRGs. The IRGs in a center may be thematically related, or they may address different aspects of materials science typically supported by DMR. A single center at an organization allows efficient usage of resources, including common infrastructure, and better coordination of education and other

activities of the center. Institutions that were awarded a MRSEC in the FY 2017 competition as the lead institution are **not** eligible to submit a MRSEC proposal as a lead institution in this competition. MRSEC full proposals may be submitted by invitation only. **Due Date: November 26, 2019**

HR001119S0071, DSO Office-wide Broad Agency Announcement, Department of Defense DARPA - Defense Sciences Office 2020 BAA

The mission of the Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is to identify and create the next generation of scientific discovery by pursuing high-risk, high-payoff research initiatives across a broad spectrum of science and engineering disciplines and transforming these initiatives into disruptive technologies for U.S. national security. In support of this mission, the DSO Office-wide BAA invites proposers to submit innovative basic or applied research concepts that address one or more of the following technical domains: (1) Frontiers in Math, Computation and Design, (2) Limits of Sensing and Sensors, (3) Complex Social Systems, and (4) Anticipating Surprise. Each of these domains is described below and includes a list of example research topics that highlight several (but not all) potential areas of interest. Proposals must investigate innovative approaches that enable revolutionary advances. DSO is explicitly not interested in approaches or technologies that primarily result in evolutionary improvements to the existing state of practice. **Open to June 12, 2020.**

URL Links to New & Open Funding Solicitations

Links verified June 8, 2018

- SAMHSA FY 2017 Grant Announcements and Awards
- Open Solicitations from IARPA (Intelligence Advanced Research Projects Activity)
- Bureau of Educational and Cultural Affairs, Open Solicitations, DOS
- ARPA-E Funding Opportunity Exchange
- DOE Funding Opportunity Exchange
- <u>NPS Broad Agency Announcements (BAAs)</u>
- NIJ Current Funding Opportunities
- <u>NIJ Forthcoming Funding Opportunities</u>
- Engineering Information Foundation Grant Program
- <u>Comprehensive List of Collaborative Funding Mechanisms</u>, NORDP
- ARL Funding Opportunities Open Broad Agency Announcements (BAA)
- NASA Open Solicitations
- CDMRP FY 2018 Funding Announcements
- DOE/EERE Funding Opportunity Exchange
- New Funding Opportunities at NIEHS (NIH)
- <u>National Human Genome Research Institute Funding Opportunities</u>
- Office of Naval Research Currently Active BAAs
- HRSA Health Professions Open Opportunities

• Foundation Center RFP Weekly Funding Bulletin

Solicitations Remaining Open from Prior Issues of the Newsletter

Established Program to Stimulate Competitive Research: Workshop Opportunities (EPS-WO)

The Established Program to Stimulate Competitive Research is designed to fulfill the mandate of the National Science Foundation (NSF) to promote scientific progress nationwide. Through this program, NSF establishes partnerships with government, higher education, and industry that are designed to effect sustainable improvements in a jurisdiction's research infrastructure, Research and Development (R&D) capacity, and hence, its R&D competitiveness. Eligibility to participate in the EPSCoR Workshop Opportunities program is described according to the Outreach Eligibility Map (see eligibility map). EPSCoR welcomes proposals for workshops from institutions within EPSCoR-eligible jurisdictions. These workshops will focus on innovative ways to address multi-jurisdictional efforts on themes of regional to national importance with relevance to EPSCoR's goals and NSF's mission. **Proposals Accepted Anytime.**

19-581 GeoPRISMS Program National Science Foundation

GeoPRISMS (Geodynamic Processes at Rifting and Subducting Margins) Program investigates the coupled geodynamics, earth surface processes, and climate interactions that build and modify continental margins over a wide range of timescales. These interactions cross the shoreline and have applications to margin evolution and dynamics, construction of stratigraphic architecture, accumulation of economic resources, and associated geologic hazards and environmental management. The GeoPRISMS Program includes two broadly integrated science initiatives (Subduction Cycles and Deformation (SCD) and Rift Initiation and Evolution (RIE)), linked by five overarching scientific topics and themes, where transformative advances are likely to occur in the decade 2011-2020, and where a focused scientific program could be most effective. These overarching science topics include 1) Origin and evolution of continental crust; 2) Fluids, magmas and their interactions; 3) Climate-surface-tectonics feedbacks; 4) Geochemical cycles; and 5) Plate boundary deformation and geodynamics. Each of the initiatives has identified primary sites for focused investigations, as well as thematic studies that will complement primary site studies. The GeoPRISMS Office, supported separately by an award to Pennsylvania State University, is tasked with community outreach and engagement through conferences, meetings, and maintenance of a website. More information about the function of the national office can be found here: http://geoprisms.org/about/organization/ Please note: This phase of GeoPRISMS is focused on facilitating the integration of previously acquired data, the synthesis of results within and across disciplines, and dissemination through collaboration, education, and legacy products. This is the last solicitation for the program. NSF Publication 19-581. Due August 16.

2019 NASA Teams Engaging Affiliated Museums and Informal Institutions (TEAM II) National Aeronautics and Space Administration

NASA's Office of STEM Engagement, collaborating closely with the Mission Directorates, and also in cooperation with NASA Headquarters' Office of Communications and Mission Support

Directorate, solicits proposals led by Informal Education Institutions (IEIs) to provide inquiry- or experiential-based educational opportunities with direct alignment with major NASA missions for students and the public. These opportunities shall utilize partnerships with major networks of other IEIs, youth-serving organizations, libraries, and/or K-12 schools along with commercial entities, higher education institutions, and/or other agencies that support Federal STEM education goals. NASA's work in STEM Engagement is focused on ultimately serving students. It is recognized that providing support and resources to educators and educational institutions are vital vehicles through which to effectively engage students. Through this solicitation, NASA seeks to enhance the ability of IEIs and partners to deliver and participate in NASA-based activities, and to increase the capacity of institutions to utilize NASA resources and to provide students with the opportunity to contribute to NASA's mission using innovative tools and platforms. In particular, this solicitation seeks projects that feature the most current NASA space exploration, missions, engineering, and technologies to support NASA STEM Engagement objectives, strategies, and outcomes.

NASA TEAM II seeks to provide authentic STEM engagement opportunities for students and for their learning support systems of informal and formal educators that also support NASA STEM Engagement Core Principles, Objectives, and Strategies:

- Provide STEM engagement activities aligned with NASA mission-driven needs and priorities;
- Leverage NASA missions, content, people, and facilities to provide experiential authentic STEM opportunities that encourage innovation, critical thinking, and problem-solving skills;
- Use or develop evidenced-based educational strategies in designing and implementing the project and address state and local needs;
- Provide a measurable impact on learner interest in and positive attitudes towards STEM topics and improve self-perception of the learner's ability to participate in STEM;
- Enhance diversity and inclusion by better serving groups historically underrepresented and under served in STEM fields; and
- Utilize partnerships and regional and national networks of STEM- and STEM educationrelated IEIs to magnify and maximize reach and impact;

For this solicitation, informal education projects shall target STEM engagement for youth (particularly those of upper elementary and middle school age, in grades 4-8), and their support systems of families and informal and formal educators and institutions. **Due August 13**.

Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII)

The NSF Directorate for Computer and Information Science and Engineering (CISE) seeks to award grants intended to support research independence among early-career academicians who specifically lack access to adequate organizational or other resources. It is expected that funds obtained through this program will be used to support untenured faculty or research scientists (or equivalent) in their first three years in a primary academic position after the PhD, but not more than five years after completion of their PhD. Applicants for this program may not yet have received any other grants or contracts in the PI role from any department, agency, or institution of the federal government, including from the CAREER program or any other program, post-PhD, regardless of the size of the grant or contract, with certain exceptions as

noted below. Serving as co-PI, Senior Personnel, Postdoctoral Fellow, or other Fellow does not count against this eligibility rule. Importantly, the CRII program seeks to provide essential resources to enable early-career PIs to launch their research careers. For the purposes of this program, CISE defines "essential resources" as those that (a) the PI does not otherwise have, including through organizational or other funding and (b) are critical for the PI to conduct early-career research that will enable research independence. In particular, this program is not appropriate for PIs who already have access to resources to conduct any early-career research. **Due August 14.**

Innovative Technology Experiences for Students and Teachers (ITEST)

ITEST is an applied research and development (R&D) program providing direct student learning opportunities in pre-kindergarten through high school (PreK-12). The learning opportunities are based on innovative use of technology to strengthen knowledge and interest in science, technology, engineering, and mathematics (STEM) and information and communication technology (ICT) careers. To achieve this purpose, ITEST supports projects that engage students in technology-rich experiences that: (1) increase awareness and interest of STEM and ICT occupations; (2) motivate students to pursue appropriate education pathways to those occupations; and (3) develop STEM-specific disciplinary content knowledge and practices that promote critical thinking, reasoning, and communication skills needed for entering the STEM and ICT workforce of the future. **Due August 19**.

Agriculture and Food Research Initiative - Education and Workforce Development

The Agriculture and Food Research Initiative - Education and Workforce Development (EWD) focuses on developing the next generation of research, education, and extension professionals in the food and agricultural sciences. In FY 2019, EWD invites applications in five areas: professional development for agricultural literacy; training of undergraduate students in research and extension; fellowships for predoctoral candidates; fellowships for postdoctoral scholars, and a brand new program for agricultural workforce training. **Due August 22.**

W81XWH-19-TBDRP-CDA DOD <u>Tick-Borne Disease, Career Development Award</u> Department of Defense Dept. of the Army -- USAMRAA

The FY19 TBDRP Career Development Award supports independent, early-career investigators in their efforts to conduct impactful research with the mentorship of an experienced tick-borne diseases researcher (i.e., the Mentor), thus providing an opportunity to obtain the funding, guidance, and experience necessary for productive, independent careers at the forefront of tick-borne diseases research. This award supports impactful research projects with an emphasis on discovery that may be translational in nature, but are not clinical trials. Under this award mechanism, the early-career investigator is considered the Principal Investigator (PI), and the application should focus on the PI's research and career development. It should be clear that the proposed research is intellectually designed by the PI and not a product of the Mentor. Preliminary data are not required. However, logical reasoning and a sound scientific rationale for the proposed research must be demonstrated. **Due August 22**.

DOD Tick-Borne Disease, Investigator-Initiated Research Award

The FY19 TBDRP Investigator-Initiated Research Award (IIRA) intends to support highly rigorous, high-impact studies that have the potential to make important contributions to Lyme disease and other tick-borne diseases research, patient care, and/or quality of life. This award mechanism promotes a wide range of research from basic through translational, including preclinical studies in animal models or human subjects, as well as correlative studies associated with an existing clinical trial to establish proof-of-principle for further development in future studies. Applications should include a well-formulated, testable hypothesis based on strong scientific rationale that is established through logical reasoning, preliminary data, and critical review and analysis of the literature. Applications should articulate both the short- and long-term impact of the proposed research. High-impact research will, if successful, significantly advance Lyme disease and/or other tick-borne diseases research, patient care, and/or quality of life. **Due August 22.**

DOD Tick-Borne Disease, Idea Award

The FY19 TBDRP Idea Award intends to support conceptually innovative, highrisk/potentially high-reward research in the early stages of development that could lead to critical discoveries or major advancements that will accelerate progress in improving outcomes for individuals affected by Lyme disease and/or other tick-borne illnesses. This award mechanism promotes new ideas that represent innovative approaches to Lyme disease and other tick-borne diseases research and have the potential to make an important contribution toward the TBDRP mission. Applications should include a well-formulated, testable hypothesis based on strong scientific rationale that is established through inferential reasoning and/or critical review and analysis of the literature. Innovative research may introduce a new paradigm, challenge existing paradigms, look at existing problems from new perspectives, or exhibit other uniquely creative qualities that may include high-risk/potentially high-gain approaches to Lyme disease and other tick-borne diseases research. Research that is merely an incremental advance (the next logical step) is not considered innovative. **Due August 22**.

FY 2020 Department of Defense Multidisciplinary Research Program of the University Research Initiative

This MURI competition is open only to, and proposals are to be submitted only by, U.S. institutions of higher education (universities) with degree-granting programs in science and/or engineering, including DoD institutions of higher education. To the extent that it is a part of a U.S. institution of higher education and is not designated as a Federally Funded Research and Development Center (FFRDC), a University Affiliated Research Center (UARC) or other University Affiliated Laboratory (UAL) is eligible to submit a proposal to this MURI competition and/or receive MURI funds. Ineligible organizations (e.g., industry, DoD laboratories, FFRDCs, and foreign entities) may collaborate on the research but may not receive MURI funds directly or via subaward. When additional funding for an ineligible organization is necessary to make the proposed collaboration possible, such funds may be identified via a separate proposal from that organization. This supplemental proposal shall be attached to the primary MURI proposal and will be evaluated in accordance with the MURI review criteria by the responsible Research Topic Chief. If approved, the supplemental proposal may be funded using non-MURI or non-Government funds. **Due September 13**.

Minerva Research Initiative

The Minerva Research Initiative (Minerva) emphasizes questions of strategic importance to U.S. national security policy. It seeks to increase the Department's intellectual capital in the social sciences and improve its ability to address future challenges and build bridges between the Department and the social science community. Minerva brings together universities and other research institutions around the world and supports multidisciplinary and cross-institutional projects addressing specific interest areas determined by the Department of Defense. The Minerva program aims to promote research in specific areas of social science and to promote a candid and constructive relationship between DoD and the social science academic community. **Due September 26**.

Agriculture and Food Research Initiative Competitive Grants Program

Applications to the FY 2019 Agriculture and Food Research Initiative - Sustainable Agricultural Systems (SAS) <u>Request for Applications</u> (RFA) must focus on approaches that promote transformational changes in the U.S. food and agriculture system within the next 25 years. NIFA seeks creative and visionary applications that take a systems approach, and that will significantly improve the supply of abundant, affordable, safe, nutritious, and accessible food, while providing sustainable opportunities for expansion of the bioeconomy through novel animal, crop, and forest products and supporting technologies. These approaches must demonstrate current and future social, behavioral, economic, health, and environmental impacts. Additionally, the outcomes of the work being proposed must result in societal benefits, including promotion of rural prosperity and enhancement of quality of life for those involved in food and agricultural value chains from production to utilization and consumption. **Due September 26.**

Research Experiences for Undergraduates

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. This solicitation features two mechanisms for support of student research: (1) REU Sites are based on independent proposals to initiate and conduct projects that engage a number of students in research. REU Sites may be based in a single discipline or academic department or may offer interdisciplinary or multi-department research opportunities with a coherent intellectual theme. Proposals with an international dimension are welcome. (2) REU Supplements may be included as a component of proposals for new or renewal NSF grants or cooperative agreements or may be requested for ongoing NSF-funded research projects. Undergraduate student participants in either REU Sites or REU Supplements must be U.S. citizens, U.S. nationals, or permanent residents of the United States. Students do not apply to NSF to participate in REU activities. Students apply directly to REU Sites or to NSF-funded investigators who receive REU Supplements. To identify appropriate REU Sites, students should consult the directory of active REU Sites on the Web at https://www.nsf.gov/crssprgm/reu/reu search.cfm. NSF Publication 19-582. Due August 28.

Opportunities for Promoting Understanding through Synthesis

The OPUS program seeks to provide opportunities for mid- to later-career investigators to develop new understanding of science in the fields supported by the Division of Environmental Biology (DEB) through two tracks of synthesis activities. OPUS: Mid-Career Synthesis. This track aims to provide a mid-career researcher, defined as a candidate at the associate professor rank (or equivalent), with new capabilities to enhance their productivity, improve their retention as a scientist, and ensure a diverse scientific workforce that remains engaged in active research(including more women and minorities at high academic ranks). This track provides an opportunity for the mid-career scientist to enable a new synthesis of their ongoing research. Synthesis is achieved by developing new research capabilities through collaboration with a mentor to enable new understanding of the research system and questions of interest. OPUS: Core Research Synthesis. This track provides an opportunity for an individual or a group of investigators to revisit and synthesize a significant body of their prior research in a way that will enable new understanding of their research system and questions of interest. This track would also be appropriate early enough in a career to produce unique, integrated insight useful both to the scientific community and to the development of the investigator's future career. All four clusters within the Division of Environmental Biology (Ecosystem Science, Evolutionary Processes, Population and Community Ecology, and Systematics and Biodiversity Science) encourage the submission of these proposals enabling researchers to expand understanding and develop new insights in their research. Due August 28.

International Research Experiences for Students

The International Research Experiences for Students (IRES) program supports international research and research-related activities for U.S. science and engineering students. The IRES program contributes to development of a diverse, globally-engaged workforce with world-class skills. IRES focuses on active research participation by undergraduate or graduate students in high quality international research, education and professional development experiences in NSF-funded research areas. The overarching, long-term goal of the IRES program is to enhance U.S. leadership in research and education and to strengthen economic competitiveness through training the next generation of research leaders. This solicitation features three mechanisms; proposers are required to select one of the following tracks to submit their proposal. Track I focuses on the development of world-class research skills in international cohort experiences. Track II is dedicated to targeted, intensive learning and training opportunities that leverage international knowledge at the frontiers of research. Track III supports U.S. institutional collaborations to develop, implement and evaluate innovative models for high-impact, largescale international research and professional development experiences for U.S. graduate students. Student participants supported by IRES funds must be citizens, nationals, or permanent residents of the United States. Students do not apply directly to NSF to participate in IRES activities. Students apply to NSF-funded investigators who receive IRES awards. To identify appropriate IRES projects, students should consult the directory of active IRES awards. All PIs, co-PIs and Senior Personnel on IRES proposals must be from U.S. based institutions., Due September 24.

Advanced Computing Systems & Services: Adapting to the Rapid Evolution of Science and Engineering Research

The intent of this solicitation is to request proposals from organizations willing to serve as service providers (SPs) within the NSF Innovative High-Performance Computing (HPC) program to provide advanced cyberinfrastructure (CI) capabilities and/or services in production operations to support the full range of computational- and data-intensive research across all of science and engineering (S&E). The current solicitation is intended to complement previous NSF investments in advanced computational infrastructure by provisioning resources, broadly defined in this solicitation to include systems and/or services, in two categories:

- Category I, Capacity Systems: production computational resources maximizing the capacity provided to support the broad range of computation and data analytics needs in S&E research; and
- Category II, Innovative Prototypes/Testbeds: innovative forward-looking capabilities deploying novel technologies, architectures, usage modes, etc., and exploring new target applications, methods, and paradigms for S&E discoveries. **Due November 5**.

Critical-Zone Collaborative Network

NSF seeks proposals to establish an adaptive and responsive research network that supports investigations of the Earth's Critical Zone. This network will consist of two components that will work together to advance knowledge, education, and outreach in this convergent science:1) Thematic Clusters of fixed or temporary locations will conduct basic research on significant, overarching scientific questions concerning the structure, function, and processes of the Critical Zone. These U.S.-based Clusters could include existing observatories engaged in collecting environmental data, other monitoring locations that have been in operation for extended periods of time, and new sites that will support the scientific goals of the Cluster;2) A Coordinating Hub that will oversee the compatibility and archiving of the data resulting from the Thematic Clusters, coordinate outreach and community-building activities, support the use of network facilities by outside researchers, and plan for infrastructure needs of the network. This solicitation invites proposals for either of the two components: 1) Thematic Clusteror 2) Coordinating Hub. The Thematic Clusters will carry out interdisciplinary research on scientific questions and manage part of the network infrastructure; the Coordinating Hub will serve as the national center for the network. The infrastructure of the network will be accessible to other research teams pursuing research in the Critical Zone. Due Dec. 2.

Access to Historical Records: Major Initiatives FY 2021

The National Historical Publications and Records Commission seeks projects that will significantly improve public discovery and use of major historical records collections. The Commission is especially interested in collections of America's early legal records, such as the records of colonial, territorial, county, and early statehood and tribal proceedings that document the evolution of the nation's legal history. For more information about how to become an invited applicant, please see the <u>Preliminary Proposal announcement</u>. (https://www.archives.gov/nhprc/announcement/preliminary-proposal/prelim.html) All types of historical records are eligible, including documents, photographs, born-digital records, and analog audio and moving images. Projects may:

- Digitize historical records collections, or related collections, held by a single institution and make them freely available online
- Provide access to born-digital records
- Create new freely-available virtual collections drawn from historical records held by multiple institutions
- Create new tools and methods for users to access records

The NHPRC welcomes collaborative projects, particularly for bringing together related records from multiple institutions. Projects that address significant needs in the field and result in replicable and scalable approaches will be more competitive. We also encourage organizations to actively engage the public in the work of the project. Applicants should also consult <u>Access to Historical Records: Archival Projects</u> program, which has different requirements and award amounts. For a comprehensive list of Commission limitations on funding, please see: "What we do and do not fund" (<u>http://www.archives.gov/nhprc/apply/eligibility.html</u>). Applications that consist entirely of ineligible activities will not be considered. **Due July 9, 2020**.

Open Solicitations and BAAs

[BAA's remain open for one or more years. During the open period, agency research priorities may change or other modifications are made to a published BAA. If you are submitting a proposal in response to an open solicitation, as below, check for modifications to the BAA at Grants.gov or by utilizing Modified Opportunities by Agency to receive a Grants.gov notification of recently modified opportunities by agency name.]

HDTRA1-14-24-FRCWMD-BAA Fundamental Research to Counter Weapons of Mass Destruction

** Fundamental Research BAA posted on 20 March 2015.** Potential applicants are strongly encouraged to review the BAA in its entirety. **Please note that ALL general correspondence for this BAA must be sent to HDTRA1-FRCWMD-A@dtra.mil. Thrust Area-specific correspondence must be sent to the applicable Thrust Area e-mail address listed in Section 7: Agency Contacts.** **Open to Sept. 30, 2019.**

FY 2019 Continuation of Solicitation for the Office of Science Financial Assistance Program Open to September 30.

BAA-RQKH-2015-0001 Methods and Technologies for Personalized Learning, Modeling and Assessment Air Force -- Research Lab

The Air Force Research Laboratories and 711th Human Performance Wing are soliciting white papers (and later technical and cost proposals) on the following research effort. This is an open ended BAA. The closing date for submission of White Papers is 17 Nov 2019. This program deals with science and technology development, experimentation, and demonstration in the areas of improving and personalizing individual, team, and larger group instructional training methods for airmen. The approaches relate to competency definition and requirements analysis, training and rehearsal strategies, and models and environments that support learning and proficiency achievement and sustainment during non-practice of under novel contexts. This effort focuses on measuring, diagnosing, and modeling airman expertise and performance, rapid development

of models of airman cognition and specifying and validating, both empirically and practically, new classes of synthetic, computer-generated agents and teammates. An Industry Day was held in November 2014. Presentation materials from the Industry Day and Q&A's are attached. If you would like a list of Industry Day attendees, send an email request to <u>helen.williams@us.af.mil</u> **Open until November 17, 2019.**

BAA-AFRL-RQKMA-2016-0007 Air Force Research Laboratory, Materials & Manufacturing Directorate, Functional Materials and Applications (AFRL/RXA) Two-Step Open BAA

Air Force Research Laboratory, Materials & Manufacturing Directorate is soliciting White Papers and potentially technical and cost proposals under this two-step Broad Agency Announcement (BAA) that is open for a period of five (5) years. Functional Materials technologies that are of interest to the Air Force range from materials and scientific discovery through technology development and transition, and support the needs of the Functional Materials and Applications mission. Descriptors of Materials and Manufacturing Directorate technology interests are presented in the context of functional materials core technical competencies and applications. Applicable NAICS codes are 541711 and 541712. **Open to April 20, 2021.**

Army Research Office Broad Agency Announcement for Basic and Applied Scientific Research

This BAA sets forth research areas of interest to the ARO. This BAA is issued under FAR 6.102(d)(2), which provides for the competitive selection of basic and applied research proposals, and 10 U.S.C. 2358, 10 U.S.C. 2371, and 10 U.S.C. 2371b, which provide the authorities for issuing awards under this announcement for basic and applied research. The definitions of basic and applied research may be found at 32 CFR 22.105.Proposals submitted in response to this BAA and selected for award are considered to be the result of full and open competition and in full compliance with the provision of Public Law 98-369, "The Competition in Contracting Act of 1984" and subsequent amendments. **Open to April 30, 2022**.

FA9453-17-S-0005 Research Options for Space Enterprise Technologies (ROSET)

The Air Force Research Laboratory (AFRL) Space Vehicle Directorate (RV) is interested in receiving proposals from all offerors to advance state of the art technology and scientific knowledge supporting all aspects of space systems including payload adapters, on-orbit systems, communications links, ground systems, and user equipment. Efforts will include basic and advanced research, advanced component and technology development, prototyping, and system development and demonstration and will span the range from concept and laboratory experimentation to testing/demonstration in a relevant environment. Specific tasks include design, development, analysis, fabrication, integration, characterization, testing/experimentation, and demonstration of hardware and software products. **Open to**

September 22, 2022.

Broad Agency Announcement for the Army Rapid Capabilities Office

This Broad Agency Announcement (BAA), W56JSR-18-S-0001, is sponsored by the Army Rapid Capabilities Office (RCO). The RCO serves to expedite critical capabilities to the field to meet Combatant Commanders' needs. The Office enables the Army to experiment, evolve, and deliver technologies in real time to address both urgent and emerging threats while supporting

acquisition reform efforts. The RCO executes rapid prototyping and initial equipping of capabilities, particularly in the areas of cyber, electronic warfare, survivability and positioning, navigation and timing (PNT), as well as other priority projects that will enable Soldiers to operate and win in contested environments decisively. This BAA is an expression of interest only and does not commit the Government to make an award or pay proposal preparation costs generated in response to this announcement.

Questions concerning the receipt of your submission should be directed: http://rapidcapabilitiesoffice.army.mil/eto/

Technical questions will be sent to the appropriate Technical Points of Contact (TPOC), topic authors, and/or Subject Matter Experts (SMEs) to request clarification of their areas of interest. No discussions are to be held with offerors by the technical staff after proposal submission without permission of the Army Contracting Command-Aberdeen Proving Ground (ACC-APG) Contracting Officer. **Open to March 23, 2023.**

W911NF-18-S-0005 U.S. Army Research Institute for the Behavioral and Social Sciences Broad Agency Announcement for Basic, Applied, and Advanced Research (Fiscal Years 2018-2023)

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) announces the ARI FY18-23 Broad Agency Announcement for Basic, Applied, and Advanced Scientific Research. This Broad Agency Announcement, which sets forth research areas of interest to the United States Army Research Institute for the Behavioral and Social Sciences, is issued under the provisions of paragraph 6.102(d)(2) of the Federal Acquisition Regulation (FAR), which provides for the competitive selection of proposals. Proposals submitted in response to this BAA and selected for award are considered to be the result of full and open competition and in full compliance with the provisions of Public Law 98-369 (The Competition in Contracting Act of 1984) and subsequent amendments. The U.S. Army Research Institute for the Behavioral and Social Sciences is the Army's lead agency for the conduct of research, development, and analyses for the improvement of Army readiness and performance via research advances and applications of the behavioral and social sciences that address personnel, organization, training, and leader development issues. Programs funded under this BAA include basic research, applied research, and Advanced technology development that can improve human performance and Army readiness.

Those contemplating submission of a proposal are encouraged to contact the ARI Technical Point of Contact (TPOC) for the respective topic area cited in the BAA. If the R&D warrants further inquiry and funding is available, submission of a proposal will be entertained. The recommended three-step sequence is (1) telephone call to the ARI TPOC or responsible ARI Manager, (2) white paper submission, (3) full proposal submission. Awards may be made in the form of contracts, grants, or cooperative agreements. Proposals are sought from educational institutions, non-profit/not-for-profit organizations, and commercial organizations, domestic or foreign, for research and development (R&D) in those areas specified in the BAA. The U.S. Army Research Institute for the Behavioral and Social Sciences encourages Historically Black Colleges and Universities/Minority Serving Institutions (HBCU/MSI) and small businesses to submit proposals for consideration. Foreign owned, controlled, or influenced organizations are advised that security restrictions may apply that could preclude their participation in these efforts. Government laboratories, Federal Funded Research and Development Centers (FFRDCs), and US Service Academies are not eligible to participate as prime contractors or recipients. However, they may be able to participate as subcontractors or Subrecipients (eligibility will be determined on a case by case basis). **Open to April 29, 2023.**

FA8650-17-S-6001 Science and Technology for Autonomous Teammates (STAT)

The objective of Science and Technology for Autonomous Teammates (STAT) program is to develop and demonstrate autonomy technologies that will enable various AF mission sets. This research will be part of Experimentation Campaigns in: 1 -Multi-domain Command and Control; 2-Intelligence, Surveillance, Recognizance (ISR) Processing Exploitation and Dissemination (PED); and 3- Manned-Unmanned combat Teaming to demonstrate autonomy capabilities to develop and demonstrate autonomy technologies that will improve Air Force operations through human-machine teaming and autonomous decision-making. The technology demonstrations that result from this BAA will substantially improve the Air Force's capability to conduct missions in a variety of environments while minimizing the risks to Airmen. The overall impact of integration of autonomous systems into the mission space will enable the Air Force to operate inside of the enemy's decision loop.

STAT will develop and apply autonomy technologies to enhance the full mission cycle, including mission planning, mission execution, and post-mission analysis. Particular areas of interest include multi-domain command and control, manned-unmanned teaming, and information analytics. The technology demonstrations that result from this BAA will substantially improve the Air Force's capability to conduct missions in a variety of environments while minimizing the risks to Airmen. The overall impact of integration of autonomous systems into the mission space will enable the Air Force to operate inside of the enemy's decision loop. This effort plans to demonstrate modular, transferable, open system architectures, and deliver autonomy technologies applicable to a spectrum of multi-domain applications. Development efforts will mature a set of technologies that enable airmen to plan, command, control, and execute missions with manageable workloads. The software algorithms and supporting architectures shall:• Ingest and understand mission taskings and commander's intent• Respond appropriately to human direction and orders• Respond intelligently to dynamic threats and unplanned events Chosen technologies will be open, reusable, adaptable, platform agnostic, secure, credible, affordable, enduring, and able to be integrated into autonomous systems. The program will be comprised of various technologies developed by AFRL and Industry, integrated into technology demonstrations and deliverables with all the necessary software, hardware, and documentation to support AFRL-owned modeling and simulation environments for future capability developments. Thus, all technology development efforts must adhere to interface designs and standards. Open to July 23, 2023.

	Academic Research Funding Strategies, LLC (Page 1)
	http://academicresearchgrants.com/home
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	<u>injeonan@ginan.com</u>
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V	Ve provide consulting for colleges and universities on a wide range of topics related to
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•	developing competitive research proposals, particularly to NSF CAREER, DoD Young
	Investigator and other junior investigator programs
•	Assistance on your project narrative: in-depth reviews, rewrites, and edits
•	Editing and proof reading of journal articles, book manuscripts, proposals, etc.
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