

Research Development & Grant Writing News

Volume 8, Issue 11: July 15, 2018

Table of Contents

- [Topics of Interest URLs](#)
- [It is Not Easy to Disinvite a Team Member](#)
- [Overview of the New DoED IES RFAs](#)
- [NSF's STEM Education for the Future](#)
- [How ED and IES Review Grant Applications](#)
- [Topics in Brief](#)
- [Writing the 1.5-Page Practice Proposal](#)
(Reprinted from July 2013)
- [Research Grant Writing Web Resources](#)
- [Educational Grant Writing Web Resources](#)
- [Agency Research News](#)
- [Agency Reports, Workshops & Roadmaps](#)
- [New Funding Opportunities](#)
- [About Academic Research Funding Strategies](#)

!! Thanks to Subscribers !!

Thank you for your 2018-2019 subscription to *RD&GW News*, running from this issue through June 15, 2019. We welcome any suggestions or observations you have on the newsletter. *Best regards, Mike Cronan and Lucy Deckard, co-Publishers.*

Have You Hired New Faculty?

2nd edition [New Faculty Guide to Competing for Research Funding!! Order Here](#)

Our Large Team Grant eBook!

[Strategies for Planning, Developing, and Writing Large Team Grants](#) [Order Here](#)

ARFS Expands Editing Services ([Link Here](#))

[Katherine E. Kelly, PhD](#): Editing in the Humanities

Research Development & Grant Writing News ©

Published monthly since 2010 for faculty and research professionals by [Academic Research Funding Strategies, LLC](#) [Mike Cronan](#) & [Lucy Deckard](#), co-Publishers

Copyright 2018. All rights reserved.

[Subscribe Online \(Hotlink\)](#)

Queries: mjcronan@gmail.com

©Please do not post to open websites©

About the co-publishers

[MIKE CRONAN, PE](#) (Texas 063512, inactive) has 23 years of experience developing and writing successful team proposals at Texas A&M University. He was named a [Texas A&M University System Regents Fellow](#) (2001-2010) for developing and writing A&M System-wide grants funded at over \$100 million by NSF and other funding agencies. He developed and directed two research development and grant writing offices, one for Texas A&M's VPR and the other for the Texas A&M Engineering Experiment Station (15 research divisions state-wide), including the Texas A&M College of Engineering.

[LUCY DECKARD](#) (BS/MS Materials) worked in research development and grant writing at Texas A&M University and across the A&M System for nine years. She directed A&M's [New Faculty Research Initiative \(2004-09\)](#), helping junior faculty System-wide jumpstart their research careers with federal agency funding. She served as associate director of two research development and grant writing offices. She founded [ARFS](#) in 2010.

About the Editor

[KATHERINE E. KELLY](#), Ph.D., is a retired English professor from Texas A&M University. She is the author of several books and numerous articles and served as a contributing editor for an academic journal for five years. She provides **editorial services** to [RD&GW News](#) and to ARFS clients on proposals, journal articles, and manuscripts.

Research Development & Grant Writing News

Topics of Interest URLs

(Back to [Page 1](#))

[National Academies Study on Sexual Harassment Calls for Culture Shift at Academic Institutions To Prevent Sexual Harassment, Academic Institutions Should Go Beyond Legal Compliance to Promote a Change in Culture](#)

[The NSF 2026 Idea Machine](#)

[Forecast of Funding Opportunities under the Department of Education Discretionary Grant Programs for Fiscal Year \(FY\) 2018](#)

[Humanities for All](#)

[Building Evidence: Changes to the IES Goal Structure for FY 2019](#)

[Dear Colleague Letter: Research Coordination Networks for Driving Convergent Science in the Critical Zone](#)

[Dear Colleague Letter: Research Experience for Teachers \(RET\): Funding Opportunity in the Biological Sciences](#)

[Dear Colleague Letter: Research Assistantships for High School Students \(RAHSS\): Funding to Broaden Participation in the Biological Sciences](#)

[Dear Colleague Letter: Transforming the CMMI Advanced Manufacturing Core Programs to Revitalize the Nation's Strategic Industries](#)

[New Podcast on NIH Advisory Councils: Understanding What Happens During the Second Round of Peer Review Expiring Appropriations and What it Means for You – New Video and Podcast](#)

[Beyond the Check: a Roadmap for Engaging Individual Donors](#)

[NIH Releases First Ever Strategic Plan for Data Science](#)

[Rigorous Resources for Rigorous Research](#)

[Charting Your Small Business' Course with NIH](#)

[When to Share or When Not to Share, that is the Privacy Question](#)

[Quantum Legislation Leaps Forward](#)

[Returning Individual Research Results to Participants: Guidance for a New Research Paradigm](#)

[NIST Disaster Resilience Research Program: Building Design and Building Codes](#)

[NIH to host workshop on using artificial intelligence and machine learning to advance biomedical research](#)

[Senate panel proposes \\$2 billion, 5.4% increase for NIH](#)

[What do I do if my proposed study involves both an existing dataset/resource AND recruitment of new participants? How do I address inclusion and complete the forms?](#)

[Does the NIH inclusion policy apply to research using existing datasets or other types of existing resources involving human subjects?](#)

[New Report Identifies Three Critical Areas of Research to Fill Gaps in Scientific Knowledge of the Gulf Coast's Interconnected Natural and Human System](#)

[FY19 Appropriations Bills: National Oceanic and Atmospheric Administration](#)

[20 Actions to Transforming Food and Agriculture](#)

[White House Plan to Overhaul Federal Government Includes Science Agency Reforms](#)

[Lymphoma Research Foundation Accepting Applications for Career Development Award](#)

[Division of Materials Research \(DMR\) Newsletter - Summer 2018](#)

[The USAID Global Health Broad Agency Announcement for Research and Development](#)

[What happened when Elsevier tried open peer review? And which field says "no, thanks?"](#)

[U.S. Army Research Institute for the Behavioral and Social Sciences Broad Agency Announcement for Basic, Applied, and Advanced Research \(Fiscal Years 2018-2023\)](#)

[STEM Education Advisory Panel announced](#)

[Prediction of and Resilience against Extreme Events \(PREEVENTS\)](#)

[Defense Policy Bill Heads to Conference with Focus on Strategic Technologies](#)

[If You've Met One Foundation...You've Met One Foundation](#)

[Revision of NSF Agency Specific Requirements to the Research Terms and Conditions](#)

[Federal Register Notice, "Solicitation of Commodity Board Topics and Contribution of Funding Under the Agriculture and Food Research Initiative Competitive Grants Program \(more URLs next page\)](#)

Research Development & Grant Writing News

[USDA/NIFA Tweet Log](#)

[Food and Agriculture Defense Initiative: Extension Disaster Education Network](#)

[Call for Proposals – Systemic Solutions for Healthy Food Systems: The positive health benefits and impacts of sustainable food systems](#)

[Division of Physics: Investigator-Initiated Research Projects \(PHY\)](#)

[Spencer Foundation Invites LOIs for Large-Scale Education Projects](#)

[Search for and browse Spencer Foundation funded work](#)

[Spencer Foundation has a number of grant programs that are currently accepting applications](#)

[The Simons Foundation advances the frontiers of research in mathematics and the basic sciences](#)

[Simons Foundation 2017 Annual Report](#)

[Mozilla Announces \\$225,000 available for Art and Advocacy Exploring Artificial Intelligence](#)

[Council on Foreign Relations Seeks Applications for International Affairs Fellowships](#)

[Dear Colleague Letter: STEM Education for the Future](#)

[The Future of Work at the Human-Technology Frontier: Shaping the Future \[FW-HTF\]](#)

[Harnessing the Data Revolution for 21st Century Science and Engineering \[HDR\]](#)

[Agriculture — A river runs through it — The connections between agriculture and water quality](#)

[Hundreds of new genes may underlie intelligence-but also autism and depression](#)

[Understanding the influence of nutrients on stream ecosystems in agricultural landscapes](#)

[National Water-Quality Assessment \(NAWQA\) Program](#)

[NIH-Wide Strategic Plan Fiscal Years 2016-2020](#)

[Department of Health and Human Services Strategic Plan 2018-2022](#)

[40 Years of Basic Energy Sciences at the Department of Energy](#)

[Subbaccalaureate occupational education students are focus of new NCES report](#)

[Update: Quantum physics gets attention-and brighter funding prospects-in Congress](#)

[The Maya civilization used chocolate as money](#)

[Weekend reads: The fall of a Crossfit science watchdog; a CDC retraction about suicides; “superb subterfuge” by predatory journals](#)

[DOE Awards \\$100 Million for Energy Frontier Research Centers](#)

[Video: Ten Big Ideas for Future NSF Investment](#)

[Procter & Gamble Fund Higher Education Grant Program](#)

[Administrative Guide for Program Solicitation NSF 15-501, Postdoctoral Research Fellowships in Biology \(PRFB\)](#)

[New Report on Postcollegiate Outcomes of 2007–08 College Graduates](#)

[Thirty-eight percent of postsecondary students are in occupational programs below the bachelor’s degree level, with health care and business/marketing fields predominating](#)

[‘A cataclysmic wake-up call’: Can more candor win back support for animal research?](#)

[Learning from the Science of Cognition and Perception for Decision Making: Proceedings of a Workshop](#)

[Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017 \(Data update\)](#)

[Reports of misconduct investigations can tell us a lot. Here are more than a dozen of them](#)

[Expiring Appropriations and What it Means for You – New Video and Podcast](#)

[New Report Examines Public 2-year Students Working Before, During, and After Beginning at a Public 2-Year Institution](#)

[Our ancestors may have left Africa hundreds of thousands of years earlier than thought](#)

[Foundation Assets Saw Double-Digit Growth in 2017, Report Finds](#)

[National Academy of Education Invites Applications for Dissertation Fellowships](#)

[National Academy of Education Invites Applications for Research Fellowships](#)

[Simons Foundation Accepting Applications for Fellowships in Mathematics and Theoretical Physics](#)

[Obesity alone does not increase risk of death](#)

[After at Least Five Decades of Growth, High-Income Countries are Now Investing Less in Public Agricultural R&D](#)

[Microgrant Awards for Early Career Science Policy Groups](#)

[A Review of the Citrus Greening Research and Development Efforts Supported by the Citrus Research and Development Foundation: Fighting a Ravaging Disease](#)

[Retraction Watch readers, we could still really use your help](#)

It's Not Easy to Disinvite a Team Member

Copyright 2018 Academic Research Funding Strategies. All rights reserved.

By Mike Cronan, co-publisher

[\(Back to Page 1\)](#)

In a perfect world a competitive team with a track record of success already exists when a new research solicitation is posted for funding, but anyone who has spent sufficient time in a research office supporting faculty with proposal development soon comes to the realization that the world of grant writing is rarely a perfect one, and in many cases a very imperfect one where the test of the team is how well they adapt to the unexpected, overcome timeline challenges, and find “work-arounds” to research narrative production barriers in ways that allow them to go on to funding success.

Funding agency solicitations increasingly address complex scientific and engineering problems for which a kernel of a team may exist but a full team competitive for funding does not. Such a full team must therefore be configured once the goals and objectives of the specific funding solicitation are fully understood, either from the published solicitation or through an agency's Notice of Intent to Publish a solicitation. In most cases, however, the team-building process continues for some time after the actual publication of a solicitation and an informed assessment or modified SWOT analysis based on the solicitation can be made with sufficient certainty to expand the team in ways that optimize its competitiveness.

Unfortunately, at this stage of expanding the team, the core team too often gives insufficient consideration to the processes and competitive criteria needed to add additional team members who will provide the additional expertise needed for a funding recommendation. In many ways, building a competitive proposal team is not unlike, albeit at a much smaller scale, building an academic department where a core of faculty hires new faculty to build on existing strengths or build capacity in new areas. This is always a very deliberate process for which predetermined criteria are important. ***A deliberate process of selecting predetermined criteria is also, again at a much smaller scale, important in expanding a core proposal team to position it for funding success.***

However, it is not sufficient that when an area where the team is lacking, or can be significantly improved, is identified through self-assessment and additional team members must be identified and added to the team for funding success, to just have someone on the team say “Hey, I know someone that will work for this,” and, unfortunately, no further vetting is made ***as a team*** before an invitation is made to add the recommended person to the team. In some cases this can work based on a prior research relationship the suggesting team member has had with the recommended team member, but ***an unguided process for adding team members to a proposal can be sufficiently dicey to warrant a more thoughtful, predetermined team selection process for adding new members.***

As the title of this article suggests, once a person is invited to join a team, it is hard to rescind that offer without some very awkward moments. Further, such a rejection is rarely given because the added team member usually performs adequately but perhaps not as well as a more carefully vetted member would have done. The bottom line is that a team member should be added with the expectation that he or she will make a significant contribution to the potential success of the proposal. “Good” is not good enough when it comes to funding success

Research Development & Grant Writing News

and ***every decision related to a winning research narrative must be optimized for excellence***, including the selection of new team members. This deliberate process could be guided in part, for example, by considering the characteristics of an effective team member as addressed in last month's article, "*Characteristics of an Effective Proposal Team Member.*"

Fortunately, this is not an onerous process so much as it is a step that the PIs on the core research team must take seriously when doing a self assessment of the core team's competitiveness. However, this can present a greater challenge to team building in the new world of "convergence research" ***where heretofore traditionally disparate disciplinary domains must come together in an integrated fashion to be competitive for funding.***

For example, it is likely easier for a core research team in electrical engineering addressing the cyber security of the smart grid to knowledgably add a team member(s) from computer science in big data analytics to help develop predictive scenarios for preventing malicious hacking than it is for that same team to knowledgably add a behavioral scientist to address issues related to the public's reaction to smart grid metering at the customer level.

Regardless, while there is a wide variation in the decision challenges the core research team faces in adding new team members, at every level the addition of a new team member should be a team-based decision with some predetermined criteria set as key to funding success rather than simply "rubber stamping" an impromptu suggestion by one team member with no further vetting.

Research Development & Grant Writing News

Overview of the New DoED IES RFAs

Copyright 2018 Academic Research Funding Strategies. All rights reserved.

By Lucy Deckard, co-publisher

[\(Back to Page 1\)](#)

The Institute for Education Science (IES), which is the research arm of the Department of Education, has announced its new research grant competitions. IES is organized into the National Center for Education Research ([NCER](#), which focuses on education from early childhood to adulthood) and the National Center for Special Education Research ([NSCER](#), which focuses on education for students from birth to high school with, or at risk for, disabilities). These include the competitions for:

- [Education Research Grants Program](#) (NCER)
- [Special Education Research Grants Program](#) (NSCER)
- [Low-Cost Short-Duration Evaluation of Education Intervention](#) (NCER)
- [Low-Cost Short-Duration Evaluation of Special Education Interventions](#) (NSCER)
- [Statistical and Research Methodology in Education](#) (NCER)
- [Research Training Programs in Special Education](#) (NSCER)
- [Partnerships and Collaborations Focused on Problems of Practice or Policy](#) (NCER)
- [Research Networks Focused on Critical Problems of Policy and Practice in Special Education: Multi-Tiered systems of Support](#) (NSCER)

Below, we'll discuss changes from last year.

What's Changed?

Goals for Education Research Grants Programs and Special Education Grants Programs

Both the Education Research Grants Programs and the Special Education Grants Programs classify types of projects into "Goals". Applicants must choose both a **topic** and a **goal**. This year, **Goals Three and Four have been revised**. In previous years, Goal Three supported initial efficacy evaluations as well as replication, follow-up, and retrospective studies. Goal Four supported effectiveness studies (individual evaluations of interventions with prior evidence of efficacy to determine their impacts when implemented under routine conditions). Analyses related to implementation and analyses of key moderators and/or mediators were recommended but not required.

This year, **Goal Three** will continue to support initial efficacy evaluations of interventions that have not been rigorously tested before, in addition to follow-up and retrospective studies, and **Goal Four** will support all replications evaluating the impact of an intervention, including Efficacy Replication studies and Re-analysis studies when a justification for such a study is provided. Analyses related to implementation and analyses of key moderators and/or mediators are now required. Goal Four Efficacy Replication studies have a maximum award amount of \$3,600,000, Effectiveness studies have a maximum award amount of \$4M, and Re-analysis Studies have a maximum award amount of \$7M.

Research Development & Grant Writing News

Education Research Grants Programs (see page 11 of the [RFA](#))

- ❖ The Education Research Grants Programs focus around [designated topics](#). Which ones are funded can vary from year to year. This year, IES has added a **brand new topic**: [Career and Technical Education](#). This topic was a special topic in the FY2017 and FY2018 competitions, and it has now been promoted to one of the 11 long-term topics. In addition, there are [2 special topics](#) this year: Foreign Language Education and Social Studies. Brief descriptions follow:
 - **Career and Technical Education**: Supports research to understand the implementation and effects of CTE programs and policies at the K-12 level on the education and career outcomes of students.
 - **Foreign Language Education**: Supports research that examines how best to support English-speaking students who are learning a foreign language in school and how proficiency in two or more languages is linked to student education outcomes.
 - **Social Studies**: Seeks to strengthen the research base for teaching and learning social studies and its core disciplines.
- ❖ Sample requirements have changed for some NCER topics
- ❖ The definition of “student education outcomes” has been broadened to include employment and earnings outcomes when appropriate (*this change has also been made in a number of programs below*).
- ❖ The **Dissemination Plan** will now be considered by the scientific peer reviewers as part of their review of the Significance section (*this change has also been made in a number of programs below*).

Special Education Grants Programs (see page 15 of the [RFA](#))

- ❖ The Special Education Grants Programs focus on [12 long-term topics](#), and has designated [3 special topics](#):
 - **Career and Technical Education for Students with Disabilities**: Supports research that contributes to the improvement of secondary and post-secondary transition outcomes for students with or at risk for disabilities in secondary school.
 - **English Learners with Disabilities**: Supports research that contributes to positive education or school readiness outcomes of English learners with or at risk for disabilities in preschool through Grade 12.
 - **Systems-Involved Students with Disabilities**: Supports research to improve the outcomes of students with or at risk for disabilities in Grades K-12 who are in juvenile justice, foster care, or out of home (e.g., residential) placements.
- ❖ The Institute has revised requirements for cost analyses to allow schools, districts, and states to compare different interventions and identify which are most likely to lead to the greatest gains in student outcomes for the lowest costs.
 - **Goal Two** now requires a cost analysis for interventions delivered in the pilot study, and encourages a cost-effectiveness analysis when possible.
 - **Goal Three** and **Goal Four** now require a cost-effectiveness analysis for the primary student outcomes as well as the previously required cost analysis of the intervention being evaluated.

Research Development & Grant Writing News

- ❖ The **Mathematics and Science Education** topic has been expanded to include a focus on Science, Technology, Engineering, and Mathematics (STEM) Education.
- ❖ The **Dissemination Plan** will now be considered by the scientific peer reviewers as part of their review of the Significance section.

Low-Cost, Short-Duration Evaluation of Education Interventions (see page 4 of the [RFA](#)) & **Low-Cost, Short-Duration Evaluation of Special Education Interventions** (see page 4 of the [RFA](#))

- ❖ The Institute has expanded its definition of Student Education Outcomes to include employment and earnings outcomes when appropriate.
- ❖ Grant funds may be used to collect primary data for analyses if the education agency partner deems these data and the analyses of them key to its decision-making regarding the intervention being evaluated. However, Low-Cost Evaluation projects should rely primarily on secondary data to obtain the student education outcomes.
- ❖ The **Dissemination Plan** will now be considered by the scientific peer reviewers as part of their review of the Significance section of your Research Narrative. In addition, reviewers will consider the resources you have available for dissemination as part of their review of the Significance.

Statistical and Research Methodology in Education (See page 4 of [the RFA](#))

- ❖ The format has been revised along the lines of the Institute's other RFAs. The four sections of the Project Narrative now list Requirements (the minimum criteria required for an application to be sent forward for scientific peer review) and Recommendations for a Strong Application (criteria that make for a strong application and are used by the peer reviewers).
- ❖ There is now a **required Dissemination Plan** in Appendix A. (Because of this the titles "Appendix A, B, C," etc. for the various appendices have changed.)
- ❖ The maximum award for **Early Career Grants** has been increased to \$225K.

Research Training Programs in Special Education

- ❖ The Institute is not competing the Postdoctoral Training program or the Methods Training program in FY 2019. **Only the Early Career program** will be competed in FY 2019.
- ❖ The maximum award amount has been increased to \$500,000.
- ❖ The maximum payment that may be requested for mentors was increased to \$5,000 per year for all mentors. If there are co-mentors, this maximum allowable sum must be divided among all the mentors.
- ❖ The eligibility requirements for the Principal Investigator have changed. The Principal Investigator must not have served as a Principal Investigator or Co-Principal Investigator on an IES-funded research grant, but may have served as a Co-Investigator or other key personnel.
- ❖ The Institute has clarified its definition of **student outcomes** to include all science, technology, engineering and mathematics outcomes as well as employment and earnings outcomes for research related to transitions from secondary to post-secondary opportunities.

Research Development & Grant Writing News

- ❖ The scientific peer reviewers will consider the quality of the **Dissemination Plan** presented in Appendix A as part of their review of the Significance section of your Training Program Narrative.
- ❖ For the Early Career program see the Special Education Research Grants program changes (above) for changes in Goals, topics, etc.

Partnerships and Collaborations Focused on Problems of Practice or Policy (see page 11 of the [RFA](#))

- ❖ Topics selected for FY 2019 are:
 - **Researcher-Practitioner Partnerships in Education Research**, which supports partnerships of research institutions and state/local education agencies who will work together to address a high priority problem for the education agency with important implications for improving student education outcomes
 - **Evaluation of State and Local Education Programs and Policies**, which supports evaluation of fully developed programs and policies implemented by state/local education agencies
- ❖ The definition of **Student Education Outcomes** has been expanded to include employment and earnings outcomes when appropriate
- ❖ The **Dissemination Plan** will be considered by the scientific peer reviewers as part of their review of the Significance section, along with resources you have available for dissemination.
- ❖ For the Evaluation of State and Local Education Programs and Policies topic, revisions were made in the Research Plan section: 1) based on updates to the [WWC Standards Handbook](#); 2) PIs are now required to conduct a cost-effectiveness study; and 3) PIs must describe plans to analyze key moderators and/or mediators.

Research Networks Focused on Critical Problems on Policy and Practice in Special Education: Multi-Tiered Systems Support (see page 11 of the [RFA](#))

- ❖ The role of Network Lead is not being competed for FY 2019
- ❖ Research Teams must now adopt the use of common measures, at least one in each domain (academic and behavioral), as applicable.
- ❖ Requirements for cost analysis now allow schools, districts, and states to compare different interventions and identify which are most likely to lead to the greatest gains in student outcomes for the lowest cost.
- ❖ Efficacy and effectiveness research now requires a **cost-effectiveness analysis** for primary student outcomes as well as cost analysis of the intervention being evaluated.
- ❖ Development work now requires a **cost analysis** for interventions delivered in a pilot study and encourages a cost-effectiveness analysis when possible.
- ❖ There is more emphasis on the importance of collaborative skills and past working experience in collaborations with other research partners.
- ❖ The **Dissemination Plan** will now be considered by scientific peer reviewers as part of the Significance section.

Research Development & Grant Writing News

IES Funding Opportunities Webinars Available On Demand

IES has posted a number of informational and training webinars to help applicants prepare competitive proposals. Even if you're familiar with these programs, it's a good idea to watch these in order to be sure you understand changes in priorities and criteria. These webinars are available on demand along with the PowerPoint slides [here](#). Webinar titles include: IES Basic Overview of Research Grants and Information for New Applicants to IES; National Research and Development Centers; Research Networks Focused on Critical Problems of Policy and Practice in Special Education: Multi-Tiered Systems of Support; NCSE Research Training Programs in Special Education: Early Career Development and Mentoring; Partnerships and Collaborations Focused on Problems of Practice or Policy; and Funding Opportunities for Minority Serving Institutions.

Also, don't forget that IES Program Officers can be extremely helpful in providing advice, helping you decide which topic and goal fits your project, and giving you feedback on your proposal idea. Because they're not involved in the review process, they have the liberty to give you very specific guidance, which can be invaluable. Be sure to reach out to them.

NSF's STEM Education for the Future

Copyright 2018 Academic Research Funding Strategies. All rights reserved.

By Mike Cronan, co-publisher

([Back to Page 1](#))

NSF's June 11 [Dear Colleague Letter: STEM Education for the Future](#) is an important read for faculty and research offices involved in proposals related to advanced technologies and scientific advances as defined in the [Big Ideas for Future NSF Investments](#) and in the forthcoming [The NSF 2026 Idea Machine](#). In the context of this particular DCL, an "important read" should be understood as requiring a very finely-grained explication of text rather than a casual skim. That's because **this DCL will establish the framework for what a successful STEM education proposal, or STEM education component of a research proposal, will look like going forward**. Moreover, this is all implicitly intertwined with the March 23 [Dear Colleague Letter: Growing Convergence Research](#) and [Convergence Research at NSF](#). Understanding how these documents intersect will offer research offices significant competitive insights into NSF's long-term vision for STEM education and hence funding success when assisting and advising faculty (see [STEM Education Advisory Panel announced](#)).

As background to this discussion, The *NSF 2026 Idea Machine* will be launched this coming August. NSF notes that it **"is a competition to help set the U.S. agenda for fundamental research in science and engineering**". Participants can earn prizes and receive public recognition by suggesting the pressing research questions that need to be answered in the coming decade, the next set of '[Big Ideas](#)' for future investment by NSF. It's an opportunity for researchers, the public and other interested stakeholders to contribute to NSF's mission to support basic research and enable new discoveries that drive the U.S. economy, enhance national security and advance knowledge to sustain the country's global leadership in science and engineering."

In the aggregate, these reports represent NSF's expanded future vision for STEM education and the integration of that vision into the new research directions the agency will support going forward. For those writing or assisting in writing proposals to NSF in education and research, familiarity with the new configurations proposed by NSF will be important, particularly as they relate to the development and integration of new STEM education models and convergence research. Where NSF is going with all of this is still evolving, but those seeking to compete for funding will want to join them on this journey.

Historically, the NSF mantra has always insisted on "*the integration of research and education*," so these new documents are really on the continuum of that long-standing process. In the past, that process has undergone sudden punctuated transformations resulting in new model(s) better aligned with an evolved agency vision for future education and research. Together, these documents nicely forecast NSF's future in research and education, and hence funding. It's therefore important for both faculty and research offices to travel with NSF on that journey and arrive at this new destination together to better ensure funding success.

Specifically, through this DCL, "NSF aims to support STEM educational research and development projects whose results can enable our country to: better prepare its scientific and technical workforce for the future; use technological innovations effectively for education;

Research Development & Grant Writing News

advance the frontiers of science; and adapt to both new work environments and new education pathways needed to prepare students at all levels for those environments.”

“This DCL seeks proposals related to harnessing the data revolution and the future of work at the human-technology frontier. This DCL will support three categories of proposals:

1. **Proposals focused on educational transformation:** These proposals will leverage technology, computation and/or big data to develop, implement, and analyze educational interventions designed to prepare a diverse workforce, researchers, and innovators of the future. Proposals that explore how students learn to integrate knowledge across disciplines to solve complex problems fall into this category.
2. **Proposals focused on the science of teaching and learning:** These proposals will leverage technology, computation and/or big data to develop, implement, and analyze new tools for assessing and evaluating convergent education strategies that aim to promote student learning at all levels.
3. **Planning grants, Research Coordination Networks, Conference Proposals:** These proposals will create communities of STEM educators to address convergent curriculum and pedagogical challenges across disciplinary boundaries brought about by the human-technology frontier, the data revolution, or both.”

“This DCL emphasizes proposals that cross departmental and disciplinary boundaries. This DCL encourages original proposals for curricular innovations that cross boundaries, so that students gain the tools and knowledge needed to thrive in the technology revolution and become the creators/innovators of the future. This DCL encourages proposals that reflect a coordinated effort from interdisciplinary research teams of at least two PIs from different disciplines. Such teams can make learning a convergence experience and accomplish learning goals that are not otherwise achievable. Examples include, but are not limited to: computational skills in an application area such as genetics; automation and sensing in natural and manufactured environments; calculus, modeling and simulation of physical contexts and objects; art, psychology, conceptual design and mechanical design for better product development; or sociology and earth sciences to address adaptation to our environment. Proposals that **use convergence approaches** to instill the development of needed non-technical abilities for the 21st century are also appropriate, including ones that focus on development of teamwork, higher level thinking, problem solving, creativity, adaptability, and the ability to communicate across disciplinary boundaries.”

Finally, these recent documents are rich in important information, an organizational listing of relevant programs and brief descriptions along with URL links, that will help those faculty and research offices that take the time to read through and integrate them to become more competitive for NSF funding going forward.

How ED and IES Review Grant Applications

Copyright 2018 Academic Research Funding Strategies. All rights reserved.

By Mike Cronan, co-publisher

([Back to Page 1](#))

For those seeking funding from the US Department of Education ([ED](#)), there are two key, linked strategies to increase your chances of funding success. Both center on how ED reviews your application. The first is familiarity with the review process described in the funding solicitation and as addressed in the “go-to” document for anyone submitting or assisting with submitting an ED application for discretionary funding: [Grantmaking at ED, Answers to Your Questions About the Discretionary Grants Process](#) (PDF format [here](#)). The second is to serve as a reviewer for ED: [OPE Peer Reviewers: Frequently Asked Questions](#). See *Why Review Proposals for Funding Agencies?* in the February 2018 issue of this newsletter.

For peer reviewers, ED notes the following: “The reviewer training, grant review procedures, time commitment, and compensation vary from grant program to grant program. A few programs require travel to Washington, D.C. (at the Department’s expense). The majority of programs use G5 e-Reader or teleconferences so that grant application reviews can be conducted from the reviewer’s home or office. If you are interested in becoming a reviewer, contact the program office that administers the grant programs in your area of interest or visit the program office’s website on the Department’s website. You will need to complete an application or submit a resume or a curriculum vitae providing information that the program staff can use to determine whether you have the necessary qualifications.”

“The 61-page *Grantmaking at ED* is one road map to successful funding at that agency. For the majority of the Department’s grant competitions, program offices recruit application reviewers (reviewers) from outside the federal government who have expertise in the subject area of the grant program for which the applications were submitted. Reviewers will score your application against the selection criteria stated in the Federal Register notice, which is included in the application package (e.g., the recent [Applications for New Awards; Strengthening Institutions Program](#); also note how application sections are numerically scored by section). These selection criteria can be based on merit, statute, regulation, and preferences, but do not include eligibility criteria. Cost sharing or matching, if part of the grant program, can either be an eligibility or an evaluation criterion—the application package will specify which. In reviewing your application, reviewers are not permitted to use other criteria or consider any information that is not in the application.

Generally, ED averages the scores given by all of the reviewers who read an application. Specific information can be found in the application package, as noted in the above link to an application. The application notice sometimes includes opportunities for you to earn additional points for other considerations, such as absolute or **competitive priorities**, that are not part of the evaluation criteria. After the applications, reviews, and related documents are checked for completeness, program staff conduct a series of steps to determine which applicants will be funded. The steps comprise the following:

- Develop a **rank order** list from the panel scores for each application.
- Determine how many applications can be funded with the available appropriations.

Research Development & Grant Writing News

- Perform a cost analysis on those applications that can be considered for funding. A cost analysis will be conducted on your application to determine whether the proposed costs in your budget are allowable, allocable, and reasonable. Through this analysis, program staff ensure that costs relate to the activities and objectives of the project. All unallowable costs are deleted from the budget. During this stage, program staff might contact you for clarifying information, usually by telephone. If the program staff requests a written response, your response should address only the specific items needing clarification. This clarification contact should not be misconstrued as an offer of funding.
- Create a formal list, called a “**funding slate**,” of the applications recommended for funding and the recommended funding level for each.
- Evaluate the risk posed by the applicant. To complete this analysis, the Department must consult various repositories of information to review eligibility or financial integrity information. In addition the Department may review your history through past performance monitoring, audits, and other available records.
- Forward the funding slate to the principal officer of the program office (or his or her designee) for final review and approval.
- Issue grant award notices (GANs) to the successful applicants.

There is no particular score that guarantees that an application will be funded. Even if an application ranks high, it might not be funded. ED might be unable to fund all high-scoring applications because of the large number of high-quality applications submitted and the level of funds that Congress appropriates for a program. Some applications might not be funded because an applicant’s risk review indicates it is ineligible to receive federal funds, despite a high score. If the risk analysis indicates poor past performance, ED can either assign a high-risk designation or decide not to fund the application, depending on the specifics of the poor performance.

Keep in mind as well that ED requires the submission of annual and final project performance reports (outcomes, performance measures) on funded applications. These include your specific project goals and objectives, program-specific *Government Performance and Results Act (GPRA)* measures, and, if applicable, data or evaluations required by the program statute. ***Most applications require applicants to propose performance measures and to specify the targeted outcome levels the applicant expects to achieve on the performance measures.*** The application package will specify the types of measures the applicant should propose. For the project goals and objectives, ***applicants are encouraged to use performance measures that will produce data about the primary desired outcomes of a project***, such as increased teacher retention, decreased dropout rates, or increased student assessment scores. The program-specific *GPRA* measures are established by ED and specified in the application package. ***Every project that receives funds from that program must include the established GPRA measures in its project evaluation.***

Finally, ***given their importance in the review process and annual evaluation of a successful project***, you should ***incorporate these measures in the planning, development, and writing of your application.*** In addressing selection criteria, you must describe the measures and the proposed targets of your project and describe the data collection and analysis methods

Research Development & Grant Writing News

you will use to provide data for each of the program measures referenced in the application package. To be successful, you must provide convincing evidence that the proposed approaches (which may include evaluation studies) are appropriate to yielding the intended data.

It is important to be aware whether your application is being submitted to the **Institute of Education Sciences (IES)**. If it is, the governing document is [Procedures for Peer Review of Grant Applications](#). Also see [Building Evidence: Changes to the IES Goal Structure for FY 2019](#). Specifically, The IES Standards and Review Office oversees peer review of reports and research grant applications, including [Peer Review of Reports](#) and the [Peer Review of Grant Applications Standards and Review Office](#). The IES Procedures for Peer Review of Grant Applications, adopted by the National Board for Education Sciences January 24, 2006, is available here: [Download, view, and print as a PDF file](#) (134 KB) and [Download, view, and print as an MS Word file](#) (97 KB).

IES also has a letter of intent (LOI) process and that LOI is reviewed. The LOIs are examined to identify potential applicants who may be considering submitting an application that is likely to be non-responsive to the Request for Applications. Program officers contact these individuals to clarify the Request for Applications, and, when appropriate, to **suggest alternative sources of funding**.

IES reviews and screens applications for compliance with the application rules (e.g., page length and formatting requirements, completion of all parts of the application), responsiveness to the Request for Applications, and identification of resubmissions. Applications are then matched to a panel according to the overall expertise of reviewers on each panel and the content and methodological approach proposed in each application.

Each application is assigned to at least 2 reviewers. Applications to conduct randomized trials submitted to Goal 3 (efficacy evaluations) or Goal 4 (effectiveness evaluations) have **3 reviewers**, one of whom is an experienced methodologist in the implementation and evaluation of randomized trials (see detail [here](#)). Applications to conduct studies implementing single-subject methodologies are assigned at least one reviewer who is experienced in the implementation and analysis of single-subject studies. IES has two types of Scientific Review Panels: standing panels and single session panels.

Finally, IES seeks reviewers and uses the following selection process: “Recruitment of Panel Members: The identification of potential panel members is a continuous process involving an annual call for nominations from the IES Board, consideration of IES report external reviewers, solicitation of suggestions from IES and Center experts, literature review, and networking with known experts in relevant fields. After receiving the Director’s approval (for potential principal panel members), the Deputy Director for Science generally sends the initial letter (electronic mail) of invitation to all potential reviewers (including rotating and ad hoc). This contact is followed by phone calls and electronic mail to the potential reviewer from the Institute staff member responsible for the panel.”

Research Development & Grant Writing News

Topics in Brief

Copyright 2018 Academic Research Funding Strategies. All rights reserved.

By Mike Cronan, co-publisher

[\(Back to Page 1\)](#)

[Budget and Appropriation July Update by American Society of Agronomy](#)

The federal budget process typically starts with the annual President's Budget Request (PBR), which lays out a federal spending plan for research and development. Then Congress debates the actual spending through the federal appropriations committees. Here we track the current debate of the upcoming fiscal year discretionary federal budget and include letters written by the Science Policy Office on behalf of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America submitted to Congress stressing our funding priorities for the annual budgets for several agencies, including: U.S. Department of Agriculture, National Science Foundation, and Department of Energy Office of Science

[Philanthropy News Digest](#)

This is a helpful link produced by the Foundation Center and continuously refreshed with new information related to foundation funding for higher education programs, among others, and distributed several times each month as free content by email and RSS feeds (See [PND Alerts and Newsletters](#) and [PND News RSS](#)).

As noted by the Foundation Center, "*Philanthropy News Digest* (PND) a daily news service of the Foundation Center, is a compendium, in digest form, of philanthropy-related articles and features culled from print and electronic media outlets nationwide. Published daily, PND news items summarize the contents of original articles, press or news releases, and/or grantmaker communications. Each item includes a citation for the original source, which readers of PND can use to locate/read the original source document. Published weekly on Tuesdays, our flagship *Philanthropy News Digest* newsletter delivers a full week's worth of news in a convenient, easy-to-read format.

We publish [RFP \(Request for Proposals\)](#) listings daily, and the RFP Bulletin summarizes the week's listings every Friday afternoon. Each RFP listing provides a brief overview of a current funding opportunity offered by a foundation or other grantmaking organization. Interested applicants should read the full RFP at the grantmaker's website or contact the grantmaker directly for complete program guidelines and eligibility requirements before submitting a proposal. The [Job board](#) in PND features current full-time job openings at U.S. foundations, grantmaking public charities, nonprofit organizations, and educational institutions. Job descriptions remain on the board for two months."

[National Center for Education Statistics](#)

Whether you are writing an educational grant or a research grant with a required educational component, NCES (along with [ERIC](#), [What Works Clearinghouse](#), and [MSPnet](#)) is a valuable reference tool to support your project objectives and demonstrate to program officers and reviewers that what you proposed for educational activities is evidence based and follows best practices in the field, something critical to funding success.

Research Development & Grant Writing News

NCES is the primary federal entity for collecting and analyzing data related to education in the U.S. and other nations. NCES is located within the U.S. Department of Education and the Institute of Education Sciences. NCES fulfills a Congressional mandate to collect, collate, analyze, and report complete statistics on the condition of American education; conduct and publish reports; and review and report on education activities internationally. The structure and activities of the center are as follows (click above for staff listings for each program). The Institute of Education Sciences supports research that addresses important issues in education and develops solutions that improve school readiness and academic achievement for all students. [Learn more](#). Steps to Applying for IES Grants:

1. **Identify** a current funding opportunity that matches your research interests and identify the relevant [Letter of Intent and application deadlines](#).
2. **View** a [funding opportunities webinar](#) to learn more about the application process and choosing an appropriate funding opportunity.
3. **Download** the appropriate [Request for Applications](#) and [application package](#) (Search for CFDA 84.305 or CFDA 84.324).
4. **Submit** your [Letter of Intent](#) (optional but strongly encouraged).
5. **Register** (or update) your organization on [Grants.gov](#).
6. **Submit** your application to [Grants.gov](#) before the application [deadline](#).

As noted elsewhere in this issue of the newsletter, the [Institute of Education Sciences](#) has posted three new on-demand webinars for those who are interested in Fiscal Year 2019 funding opportunities and learning more about IES. These pre-recorded webinars are hosted by the [National Center for Education Research](#) and the [National Center for Special Education Research](#) and you can access them on the [IES Webinar Series website](#).

DoD Grant Awards Database

Note from Lucy Deckard, co-Publisher: *The link for the DoD Awards database is <https://dodgrantawards.dtic.mil>. However, there is something wrong with their certificate, and you will get a notice from your browser saying the site is not secure. Depending on which browser you use, look for an "advanced" link and then you'll find an override option. This isn't an unusual issue for DoD websites. After getting the website to load, click on "Advanced Search."*

Welcome to the Department of Defense (DoD) Grant Awards Website. This website was established in response to a statutory requirement contained in Section 8123 of the fiscal year 2015 DoD Appropriations Act (Division C of the Consolidated and Further Continuing Appropriations Act, Public Law 113-235). This website contains publicly-searchable descriptive abstracts of DoD grant awards from December 9, 2014 (the date of passage of the Act), along with other grant award information. Members of the public may conduct searches using a variety of fields and/or keywords, and view or download the results. For more information on the DoD grant award data available from this website, please see the frequently asked questions (FAQ) section under the Help menu.

DoD awarding offices add DoD grant awards to this website on a continuing basis per awarding office procedures and available resources. If you are looking for a recent grant award and it does not appear in your search, please try again at a later date. You may also contact the awarding office about a specific award if you are not able to find it here.

Research Development & Grant Writing News

[Simple Search](#)

Search by the following fields: *project title, award abstract, award number, DoD awarding office, and recipient organization name.*

[Advanced Search](#)

Search by these additional fields: *award amount, fiscal year, funding agency, start/end dates, creation/modified dates, and POC name.*

Writing the 1.5-Page Practice Proposal

Copyright 2018 Academic Research Funding Strategies. All rights reserved.

Reprinted from July 2013

By [Mike Cronan](#), co-publisher

[\(Back to Page 1\)](#)

When seeking research funding, it's just as important to ask the right questions (*How to go from Research Ideas to Research Dollars*, June 2013) as it is to answer them correctly. Moreover, answering the core generic questions asked by every funding agency is not a trivial task, particularly given the simplicity and clarity typically required for success. Even very experienced researchers oftentimes struggle with explaining succinctly and in simple terms the core vision, goals, and objectives of their research within the context of its significance or value-added benefits to the funding agency or the field. Success at grant writing is a learned skill grounded on multiple experiences of planning, developing, and writing proposals. In addition, it depends upon learning, from both failures and successes, how to amplify reviewer identified strengths and eliminate reviewer identified weaknesses in your research narrative.

In this context, it is important to keep in mind that reviewer comments you receive from one specific program solicitation, or in response to an investigator initiated (unsolicited) proposal, often have relevance beyond the immediate proposal under consideration. Program officers' and reviewers' comments often help illuminate the broader characteristics, both good and bad, of your grantsmanship, and thereby give you a better insight into improving your grant-writing skills on all your proposals, not just the one under review. The basic mistakes you make in writing one proposal will typically manifest themselves in the other proposals you write.

Common, basic mistakes in grant writing are eerily transportable from one proposal to another. The metastases of mistakes throughout proposals is something you must contain if you hope for sustained success in research funding. Keep in mind the admonition of Congressman Sam Rayburn, Speaker of the U.S. House of Representatives for 17 years, that "*there is no education in the second kick of the mule.*" Learning and perfecting the art of research grant writing will serve as a firewall to prevent common mistakes from corroding the competitiveness of all your proposals. For instance, if you are writing as part of a team, you may be structuring a siloed research narrative (bad) rather than an integrated, synergistic one (good). In other cases, the proportionality of your research narrative may be poorly balanced, perhaps by writing too much about the general research background of the disciplinary field and writing too little about the importance of your research to that field.

Furthermore, as has often been noted in this newsletter, no amount of grantsmanship can turn a bad idea into a good one, but there are many ways in which poor grantsmanship can disguise a good idea (see the 7-part series "*Why Halloween is Bad for Proposals*," April-October 2012, on how these disguises defeat good ideas). Proposals commonly fail as a result of poor writing and poor planning, development, and structuring. In this context, poor writing means the poor communication of research ideas, which occurs, for example, when ambiguity is introduced into the research narrative. Ambiguity is the nemesis of the successful research narrative; it is to proposals what Kryptonite is to Superman.

Research Development & Grant Writing News

Of course, the basic mechanics of good writing must always be followed in proposals, such as correct grammar, punctuation, spelling, and sentence structure. In many ways, proposals are not unlike surfing, golf, baseball, tennis, curling, and numerous other activities that can benefit enormously from countless hours of repetitive practice. However, it is not necessary, and likely undesirable, to be a trained rhetorician to write successful proposals. Proposals are a very unique “genre” representing a mix of persuasive writing, marketing, and sales (a research “pitch”), but above all the successful proposal is able to represent your ideas clearly, simply, and logically. Successful proposals quickly answer some basic questions that are always asked by program officers and reviewers, such as: *What research do you propose to do? What is the significance of your research? What value-added benefits derive to the agency or the field from your research? What prior research/preliminary results validate your capacity to perform? What barriers or challenges must be addressed if your research is to be successful?*

While each funding opportunity will differ, both within agencies and across agencies, with respect to the goals and objectives of a specific solicitation, or guidelines for submitting an unsolicited proposal in a specific topic area, the aforementioned core questions will typically resemble the requirements of a funding opportunity. Learning to craft an initial response to these questions will give you valuable practice in refining and developing your ideas in a narrative format. Think of this as writing a “Goldilocks Proposal,” one that is neither too long nor too short, but just right.

For these purposes, a 1 to 1.5 page practice proposal offers a significant opportunity to develop your skill at crafting and revising what lies at the core of a well-written and hence competitive proposal—a concise narrative overview of your research that responds to the key questions program officers and reviewers expect you to address in any proposal. Moreover, most research agencies, regardless of their mission or objectives, will ask you to answer the above questions. Obviously, these questions will be asked and framed within the context of the specific agency’s mission, culture, and language, but their essence will be essentially the same across agencies and disciplines—from DARPA to NEH.

Moreover, writing the “Goldilocks Proposal” is different than practicing the so-called “elevator speech” that you might develop for talking to program officers and colleagues about your research, perhaps at a research conference. The transition from talking about your research to actually writing about your research is one often fraught with difficulty, not just for new faculty but for all faculty. Verbal communications are by nature ephemeral, whereas written communications represent a permanent record of how well or how poorly you explain your research. Moreover, keep in mind when writing your Goldilocks Proposal Mark Twain’s observation in a letter to a friend—*“if I had had more time I would have written you a shorter letter.”* Writing simply, clearly, and succinctly is a difficult but foundational skill that must be mastered if you are to succeed in grantwriting. If you meld Twain’s observation with Albert Einstein’s observation that *“If you can't explain it simply, you don't understand it well enough,”* you have the two key waypoints needed to start the process of becoming a more successful proposal writer.

Just as golfers go to driving ranges and batters go to batting cages to improve their game by better mastering through repetitive practice the ***fundamental, correct techniques*** of their sport, writers of research proposals will benefit significantly from a similar process that

Research Development & Grant Writing News

will help them develop the fundamental, correct techniques of research grant writing. One way to start this process is by imposing some very limiting boundary conditions on the process.

For example, ***my initial goal for this exercise is to describe in 750 jargon free words or less the following seven points in a way that is understandable and easily accessible for a scientifically or disciplinarily literate audience but not an audience of experts in the field:***

- Research goals and objectives
- Research plan
- Significance of my research
- Value-added benefits and impact on an agency mission or a research field
- Prior results/preliminary data that validate my capacity to perform
- Barriers and challenges to achieving results and my plan for overcoming them
- Payoffs from my success

My midterm goal for this exercise is to ask colleagues or a mentor to read my 750 word “Goldilocks Proposal” and give me feedback on this narrative, such as, what was clear and what was not clear; what was convincing and what was not convincing; what questions came to mind that were not adequately addressed; how could the write-up be improved, etc.

My final goal for this exercise is to consider the review comments of my colleagues and rewrite the “Goldilocks Proposal” to improve it by addressing those comments ***while concurrently reducing the document from the initial 750 words to 600 words.***

Keep iterating this document to perfection!

Research Grant Writing Web Resources

(Back to [Page 1](#))

[National Academies' Gulf Research Program and Sea Grant to Conduct Workshops Around the Country on Improving Regional Oil Spill Preparedness](#)

The Gulf Research Program (GRP) of the National Academies of Sciences, Engineering, and Medicine is collaborating with the Sea Grant Oil Spill Science Outreach Program to convene a series of workshops aimed at improving community preparedness for future oil spills. The workshops, to be held in five regions around the United States, will bring together practitioners and stakeholders focusing on lessons learned about the health, social, and economic impacts of oil spills and identify regional needs and priorities for improving preparedness.

Since the *Deepwater Horizon* disaster, attention has focused on the impacts of oil spills in the Gulf of Mexico region, and much has been learned about the public health effects, social disruption, and economic impacts of oil spills. Oil spills occur throughout the country, though, and different areas face different issues and concerns. These workshops aim to combine what is now known about oil spill impacts with the perspectives and experiences of people in five different coastal regions of the country: western Gulf of Mexico, eastern Gulf of Mexico, West Coast, mid-Atlantic, and Alaska.

“Our program focuses on synthesizing, translating, and delivering oil spill science to the audiences that can use it,” said Steve Sempier of the Sea Grant Oil Spill Science Outreach Program. “While much of our initial work was concentrated on the Gulf of Mexico region, with these workshops we will partner with others in the national network of Sea Grant programs to both expand the conversation and tailor it to the diverse needs of coastal communities around the country that have been or could be impacted by oil spills.”

At least five regional workshops will occur between fall 2018 and winter 2019. The workshops will include representatives from the oil spill response and public health sectors, elected officials and community leaders, relevant industries and groups directly impacted by spills, social workers, scientists, and educators. ***The workshops will produce regional and national research and outreach priorities, possible protocols to include in existing response and regulatory frameworks, pilot project ideas to address identified issues, and the foundations for increased regional capacities in oil spill preparedness for communities around the country.*** For more information about the Sea Grant Oil Spill Science Outreach Program, visit www.gulfseagrant.org/oilspilloutreach.

New complimentary webinar from *Science*:

Technology breakthrough of the year: Compelling science driven by curious minds

You are invited to hear our panel of experts on July 17, 2018, in this live, online educational seminar. For more information and complimentary registration visit: webinar.sciencemag.org

Date: Tuesday, July 17, 2018; Time: 10 a.m. Eastern, 7 a.m. Pacific, 3 p.m. UK, 4 p.m. Central Europe' Duration: 1 hour

About This Webinar

Research Development & Grant Writing News

Join some of today's most innovative and accomplished thinkers, scientists, and entrepreneurs as they discuss the future of science and technology. This webinar panel discussion is part of the Curious2018 – Future Insight conference, hosted by Merck KGaA, Darmstadt, Germany, on the occasion of its 350th anniversary. The illustrious panelists represent a broad range of fields, including synthetic biology, artificial intelligence (AI), astrobiology/solar system exploration, and material sciences. Moderated by Tim Appenzeller, News Editor for *Science* magazine, the two-hour roundtable discussion will delve into how breakthroughs in science and technology are born, and attempt to predict what direction these fields will take over the next century and beyond, and how advances in technology will impact the planet and its inhabitants. Will AI bring an end to society as we know it, as some anticipate? What impact might the discovery of extraterrestrial life have on our understanding of the universe, and indeed of human evolution? And how might the development of new materials or advances in synthetic biology enhance — or diminish— our lives? More information on the panelists and their backgrounds can be found at curious2018.com/agenda/aaas-science-roundtable.

Educational Grant Writing Web Resources

([Back to Page 1](#))

[Student Ideas about Computational Thinking Concepts When Learning About Modeling Hydrologic Systems](#)

Integrating computational thinking into science instruction is a relatively new focus in science education. Computational thinking is listed in the Framework for K-12 Science Education (National Research Council, 2012) and the Next Generation Science Standards (NGSS Lead States, 2013) as one of the eight scientific practices that students should participate in while learning science. Yet, defining what computational thinking is, identifying what students should learn about it, providing examples of what it looks like in a science curriculum, and understanding how students think about and engage in computational thinking practices are all new territory. In this paper we lay out our framework for integrating computational thinking into instruction about water in environmental systems and present some data on student ideas about computational thinking concepts.

[Computational Thinking for Teacher Education](#)

This article emphasizes the importance of embedding computational thinking curricula in teacher education and provides recommendations for how teacher educators might be able to do it. For this effort to succeed, however, computer science and education faculty must work collaboratively, as both groups bring complementary expertise in computing and teacher development.

[STEM Education Advisory Panel announced](#)

NSF, in consultation with the Department of Education, NASA and the National Oceanic and Atmospheric Administration (NOAA) today announced the appointment of 18 members to a new advisory panel created to encourage U.S. scientific and technological innovations in education, as authorized by the American Innovation and Competitiveness Act.

Gabriela Gonzalez, deputy director of the Intel Foundation, Intel Corporation, will chair the new STEM Education Advisory Panel. David Evans, executive director of the National Science Teachers Association, will serve as vice chair. Congress authorized creation of the STEM Education Advisory Panel to advise a group of federal organizations called the Committee on Science, Technology, Engineering and Mathematics Education (CoSTEM) on matters related to STEM education.

In particular, Congress authorized the panel to help identify opportunities to update the **2013-2018 Federal STEM Education 5-Year Strategic Plan**, which CoSTEM developed to improve the efficiency, coordination and impact of federally supported STEM education investments. In addition, the panel will assess CoSTEM's progress in carrying out responsibilities mandated by the America COMPETES Reauthorization Act.

"This new panel has an opportunity to bring fresh eyes and novel approaches to CoSTEM's next five-year strategic plan, which will help enhance the nation's entire STEM ecosystem," said NSF Director France Córdoba, who co-chairs CoSTEM. "NSF continues to

Research Development & Grant Writing News

generate benefits for society through STEM research. To fulfill that mission, we and our federal partners need to make strategic investments to create new generations of discoverers." "This advisory panel is another strong step taken by this administration to advance educational options in the STEM fields," said Secretary of Education Betsy DeVos, a CoSTEM member. "I look forward to working with this exceptional new group of STEM leaders to ensure we are constantly rethinking what education means for America's students."

"STEM is vital for NOAA to protect lives and property, enhance the economy, and conserve natural resources," said NOAA acting undersecretary of commerce for oceans and atmosphere, retired Navy Rear Adm. Tim Gallaudet. "As a member of CoSTEM, I look forward to working with this distinguished panel and hearing their recommendations that will help advance these efforts."

"NASA is proud of the many ways that its missions inspire the next generation of STEM leaders. Across the spectrum of our work, students and educators have many opportunities to learn from and engage with our work," said NASA Administrator Jim Bridenstine, who co-chairs CoSTEM.

The [Institute of Education Sciences](#) (IES) will be posting a series of on-demand webinars for those who are interested in Fiscal Year 2019 funding opportunities and learning more about IES. These pre-recorded webinars are hosted by the [National Center for Education Research](#) and the [National Center for Special Education Research](#) and you can access them on the [IES Webinar Series website](#).

On-Demand Webinars will be available on July 5, 2018

- IES Basic Overview of Research Grants and Information for New Applicants to IES
- IES Grant Writing Workshop
- National Research and Development Centers
- Research Networks Focused on Critical Problems of Policy and Practice in Special Education: Multi-Tiered Systems of Support

Additional On-Demand Webinars will be available soon

Visit the [IES Funding Opportunities website](#) for more information about these and other research programs. Follow IES on [Twitter](#) and [FaceBook](#) to learn about other on-demand recordings, webinars, and training opportunities.

Project Evaluation Resources

- [The 2010 User-Friendly Handbook for Project Evaluation](#)
- [Online Evaluation Resource Library for NSF's Directorate for Education and Human Resources](#)
- [Field-Tested Learning Assessment Guide \(FLAG\) for Science, Math, Engineering, and Technology Instructors](#)
- The EvaluATE Center (<http://www.evaluate.org>)

Using Research to Inform Decisions—An On-line Summer Workshop for Practitioners

State and local education officials are invited to take part in a two-week online training designed to help practitioners find and use research to inform educational decisions. The

Research Development & Grant Writing News

training is offered by the [National Center for Research in Policy and Practice](#) (an IES-funded research and development center) and the Harvard Graduate School of Education.

The program, [Using Research to Inform Decisions](#), is designed for state and district education officials, school leaders, and school district decision-makers, including directors of research, curriculum and instruction, and special education. The training will guide participants in how to find and evaluate pertinent research, with an eye toward how such research is used to inform various school- and district-level decisions.

Participants will get an overview of how practitioners can use research and will learn about several simple tools to help attendees find the relevant studies. They will also learn strategies and structures that help foster an environment where research truly informs the decision-making process. The workshop will be jointly led by Harvard Professor Heather Hill, University of Colorado Professor Bill Penuel, and will feature other leaders in the field.

The online format will consist of video lectures, readings, facilitated online discussions, and exploration exercises to help participants engage with research and gain confidence in using evidence to make sound decisions.

Dates: **July 16-29, 2018**

Sponsored by: **Harvard Graduate School of Education (on-line training)**

Cost: **\$149.00**; Registration Deadline: **July 16, 2018**

Registration information is available [on-line](#). For additional information, contact the admissions team at ppe@gse.harvard.edu or call 800-545-1849. For questions about the [IES grant](#) supporting the National Center for Research in Policy and Practice, please contact [Dr. Rebecca McGill-Wilkinson](#).

Key Grant Information Links at ED

- [G5](#) - The Department of Education's Grants Management system. G5 replaces the former e-Grants, Grant Administration and Payment systems. G5 is available to applicants, grantees, payees as well as internal Education staff.
- [Guide to U.S. Department of Education Programs and Resources](#) - A guide to our programs: descriptions, eligibility information, contact numbers for more info about applying, and more.
- [Federal Student Aid](#) - Information about our FSA grant and loan programs, including the Free Application for Federal Student Aid (FAFSA).
- [Grants Forecast](#) - Information and projected deadlines on new discretionary grant competitions. The online Grants Forecast will be updated periodically. *Note: This notice is advisory only and is not an official application notice of the Department of Education.*
- [Grant Application Announcements](#) - Grant program announcements requesting applications and other announcements in the Federal Register. Link to other [ED Federal Register documents](#).
- [ED Electronic Grant Initiatives](#) - The Department is using electronic submission systems with selected programs. The [e-Grants](#) portal provides access to several sites: e-Application (Electronic Grant Application System), e-Reports (Electronic Grant Performance Reporting System), e-Reader (Electronic Peer Review System).

Research Development & Grant Writing News

- [Protection of Human Subjects in Research](#) - Information for grant applicants, contract offerers, and researchers on the Department's Regulations for the Protection of Human Subjects, 34 CFR 97.
- [Grantmaking at ED, Answers to Your Questions About the Discretionary Grants Process](#) - An overview of the discretionary grants process for new and experienced grant seekers (formerly “What Should I Know about ED Grants”).
- [Other Resources](#) - Links to other grant, student financial assistance, and contract resources.

[Building Evidence: Changes to the IES Goal Structure for FY 2019](#)

The [IES Goal Structure](#) was created to support a continuum of education research that divides the research process into stages for both theoretical and practical purposes. Individually, the five goals – Exploration (Goal 1), Development and Innovation (Goal 2), Efficacy and Replication (Goal 3), Effectiveness (Goal 4), and Measurement (Goal 5) – were intended to help focus the work of researchers, while collectively they were intended to cover the range of activities needed to build evidence-based solutions to the most pressing education problems in our nation. Implicit in the goal structure is the idea that over time, researchers will identify possible strategies to improve student outcomes (Goal 1), develop and pilot-test interventions (Goal 2), and evaluate the effects of interventions with increasing rigor (Goals 3 and 4).

Over the years, IES has received many applications and funded a large number of projects under Goals 1-3. In contrast, IES has received relatively few applications and awarded only a small number of grants under Goal 4. To find out why – and to see if there were steps IES could take to move more intervention studies through the evaluation pipeline – IES hosted a Technical Working Group (TWG) meeting in 2016 to hear views from experts on what should come after an efficacy study (see the relevant [summary](#) and [blog post](#)). IES also issued a [request for public comment](#) on this question in July 2017 ([see summary](#)).

Agency Research News

([Back to Page 1](#))

[Comparative Genomics Research Program](#)

The purpose of this Notice is to inform potential applicants that the USDA National Institute of Food and Agriculture (NIFA) is participating, effective immediately, in [PAR-17-482 \(link is external\)](#) "Comparative Genomics Research Program". NIFA invites application for research developing comparative approaches that can be used to understand genome structure and function and the relationship between genomic features and phenotypes. NIFA will support studies that enable the use of a diverse array of species to advance our ability to improve genome annotations that complements Functional Annotation of Animal Genomes (FANNG) efforts or understand basic biological processes related to health and disease of agriculturally important animals, as well as studies that develop novel analytical tools and resources for the comparative genomics research community. Award grants may be made to State agricultural experiment stations; colleges and universities; university research foundations; other research institutions and organizations; Federal agencies; national laboratories; private organizations or corporations; individuals who are U.S. citizens, nationals, or permanent residents; or any group consisting of two or more of the aforementioned entities. See NIH NHGRI comparative genomics program solicitation for details: New proposals: October 5, 2018, Feb 5, 2019, and June 5, 2019. Resubmissions: November 5, 2018, March 5, 2019, and July 5, 2019.

[DE-FOA-0001949 Notice of Intent: Energy-Water Desalination Hub](#)

The purpose of this Notice is to provide potential applicants advance notice that the Advanced Manufacturing Office (AMO), on behalf of the DOE Office of Energy Efficiency and Renewable Energy (EERE), intends to issue Funding Opportunity Announcement (FOA) DE-FOA-0001905 entitled "Energy-Water Desalination Hub". This FOA will support the establishment of an Energy Innovation Hub in the area of Energy-Water Desalination (referred to as the "Hub") to accelerate transformational advances in science and engineering focused on reducing the energy and cost requirements of desalination to provide clean and safe water. The Hub will include highly collaborative research teams, spanning multiple scientific, engineering, and where appropriate, economic and public policy disciplines. By bringing together top talent from across the full spectrum of research and development (R&D) performers—including universities, private industry, non-profits, and National Laboratories—the Hub will serve as the world-leading R&D center in Energy-Water Desalination. THIS IS A NOTICE OF INTENT (NOI) ONLY. This Notice is issued so that interested parties are aware of the EERE's intention to issue this FOA in the near term. All of the information contained in this Notice is subject to change. EERE may issue a FOA as described herein, may issue a FOA that is significantly different from the FOA described herein, or EERE may not issue a FOA at all. Complete information, including the full Notice of Intent, can be found on the EERE Exchange website: <https://eere-exchange.energy.gov/>

[Division of Physics: Investigator-Initiated Research Projects \(PHY\)](#)

Research Development & Grant Writing News

This solicitation has annual deadlines that vary across programs. PIs are responsible for selecting the correct deadline from this solicitation for the program to which they are submitting their proposal; they should not rely upon aggregated deadlines posted on external websites. This division-wide solicitation supersedes version [NSF 17-561](#). The solicitation follows most of the requirements in the *NSF Proposal & Award Policies & Procedures Guide*, but has additional requirements listed below. These are specified in the sub-section labeled Additional Information in section (V.A) Proposal Preparation Instructions with further Additional Solicitation Specific Review Criteria specified in section (VI.A) Merit Review Principles and Criteria below. These relate primarily to proposers who anticipate having multiple sources of support, proposals involving significant instrumentation development and/or long-duration efforts, and proposals with letters of collaboration. Proposals received after a program deadline will only be considered in next year's funding cycle. Note that programs are listed after their associated deadlines. All proposals submitted to the Physics Division that are not governed by another solicitation (such as CAREER and Major Research Instrumentation (MRI)) should be submitted to this solicitation; otherwise they will be returned without review.

Commodity Boards

The 2014 Farm Bill allows eligible national and state commodity boards to propose topics for research and outreach that they are willing to equally co-fund with NIFA through the Agriculture and Food Research Initiative Competitive Grants Program (AFRI). [Federal Register Notice \(link is external\)](#): **“Solicitation of Commodity Board Topics and Contribution of Funding Under the Agriculture and Food Research Initiative Competitive Grants Program,”** was published May 31, 2018. **This notice invites topic submissions** from eligible commodity boards, outlines the process NIFA will use to evaluate the appropriateness of these topics for inclusion in AFRI Requests for Applications (RFAs); and describes the commitment commodity boards will be required to make regarding jointly-funded AFRI applications selected for an award.

Dear Colleague Letter: STEM Education for the Future

NSF invites proposals to solve educational challenges created by the technology revolution. To effectively respond to many of the problems facing our nation, new scientific advances are needed, as defined in the [Big Ideas for Future NSF Investments](#). Achieving these advances will require changes in what people learn and how they learn it. Through this STEM Education for the Future Dear Colleague Letter (DCL), existing NSF education and workforce development programs encourage innovative proposals to prepare scientists and engineers for work in new contexts created by technology and big data.

Specifically, through this DCL, NSF aims to support STEM educational research and development projects whose results can enable our country to: better prepare its scientific and technical workforce for the future; use technological innovations effectively for education; advance the frontiers of science; and adapt to both new work environments and new education pathways needed to prepare students at all levels for those environments.

John Simon Guggenheim Memorial Foundation – The Online Application

Research Development & Grant Writing News

The John Simon Guggenheim Memorial Foundation decided to suspend its Latin American and Caribbean competition for the year 2018 while we examine the workings and efficacy of the program. The U.S. and Canadian competition is unaffected by this suspension.

The application submission deadline for the 2018 United States and Canada competition has passed, and new applications can no longer be created at this time. The results will be announced in April 2018. If you are interested in applying in the upcoming 2018 United States and Canada competition, applications will be available on this page in July 2018.

Further details regarding the application process can be found in [Application Resources](#), [Submission Materials](#) and the [Guide](#) to the John Simon Guggenheim Memorial Foundation Online Application.

Research Development & Grant Writing News

Agency Reports, Workshops & Research Roadmaps

([Back to Page 1](#))

[Beyond the Check: a Roadmap for Engaging Individual Donors](#)

There is considerable research on the behaviors, motivations and trends surrounding donors, with recent literature focusing on how generational differences, gender, race and other demographics impact charitable giving. There is more limited data specifically focused on arts and culture giving or the pool of high-net-worth (HNW) donors in the Philadelphia region. Still, the existing literature paints a picture of a donor environment that is at once stable in terms of giving strength, but also highly dynamic as economic, technological, generational and demographic shifts influence donor activity in the U.S. Drawing from both formal research and media observations and commentary, a number of key observations can be made.

[Biodefense in the Age of Synthetic Biology](#)

Scientific advances over the past several decades have accelerated the ability to engineer existing organisms and to potentially create novel ones not found in nature. Synthetic biology, which collectively refers to concepts, approaches, and tools that enable the modification or creation of biological organisms, is being pursued overwhelmingly for beneficial purposes ranging from reducing the burden of disease to improving agricultural yields to remediating pollution. Although the contributions synthetic biology can make in these and other areas hold great promise, it is also possible to imagine malicious uses that could threaten U.S. citizens and military personnel. Making informed decisions about how to address such concerns requires a realistic assessment of the capabilities that could be misused. *Biodefense in the Age of Synthetic Biology* explores and envisions potential misuses of synthetic biology. This report develops a framework to guide an assessment of the security concerns related to advances in synthetic biology, assesses the levels of concern warranted for such advances, and identifies options that could help mitigate those concerns.

[Paths Through Mathematics and Science: Patterns and Relationships in High School Coursetaking](#)

This report examines mathematics and science coursetaking in high school by providing a description of coursetaking within each of the mathematics and science subject areas in ninth, tenth, eleventh and twelfth grades, as well as by showing the association between early mathematics coursetaking and subsequent science coursetaking. The report also describes coursetaking in engineering and technology, and the associations between coursetaking in these subject areas and in mathematics and science. The results are based on 2009 high school transcripts that are linked to 2009 NAEP mathematics & science 12th grade assessments.

[New Report Identifies Three Critical Areas of Research to Fill Gaps in Scientific Knowledge of the Gulf Coast's Interconnected Natural and Human System](#)

WASHINGTON - Improved understanding of the coupled natural-human coastal system will help promote resilience of coastal communities and ecosystems under rapidly changing environmental conditions and support informed decision-making, says a new [report](#) from the National Academies of Sciences, Engineering, and Medicine.

Research Development & Grant Writing News

The physical and ecological systems, people, and economy in the Gulf Coast are inextricably linked. The natural system includes processes such as sea-level rise, subsidence, storm surges and flooding, sediment management, marsh and wetland loss, and conservation and restoration activities. The human system encompasses land use and coastal development, adaptation, and migration or relocation. The interactions and feedbacks between the natural and human systems are what make up the coupled system.

The committee that carried out the study and wrote the report identified three critical areas of research that could address gaps in high-priority scientific knowledge, helping to inform decision-making and research planning related to the strategic initiatives of the National Academies' Gulf Research Program (GRP):

- How will coastal landforms and coastal ecosystems along the Gulf Coast respond to rapidly changing conditions (both natural and human-induced), especially given the expectation for continued relative sea-level rise acceleration?
- How will human settlement and economic activity along the Gulf Coast respond to evolving coastal landforms and ecosystems under rapidly changing conditions?
- How can improved understanding of both near- and long-term evolution of the Gulf Coast's coupled natural-human system be applied to inform stakeholder decisions made at local, state, and regional levels? How will the coupled system evolve when decision-making is updated as scientific understanding advances?

The report recommends that GRP create an integrated research program that focuses on understanding of the evolution of the coupled coastal system. This research program should support collaborative, multidisciplinary research teams; encourage comprehensive, Gulf-wide integrated observational and modeling efforts; offer research opportunities that are longitudinal and multidecadal; and deliver easily accessible observational data and model results. Such an effort has the potential to positively transform living along the Gulf Coast and in coastal zones around the world by informing decisions from local to federal levels, says the report.

Turning research products into actionable policies for a re-envisioned future Gulf entails communication and collaboration between scientists and stakeholders such as city planners or emergency managers, but current barriers prevent effective communication. The report identifies opportunities to overcome these barriers, such as targeted funding that would allow stakeholders to better interpret and use scientific information, creating an incentive structure that fosters information sharing between the energy industry and other stakeholders, and encouraging scientists to engage substantially with stakeholders from product development to delivery stage.

Such a research program will enable significant advancement toward understanding the feedbacks and interactions among the physical, ecological, and human components and the resulting evolution of the coupled system along the Gulf Coast, in the context of both human and climate drivers.

The report recommends focusing planning efforts on a near-decadal scale (10-50 years) and a decadal-century scale (50-200 years). These periods encompass the time scales of the physical and ecological drivers of anticipated changes and the motivating factors for human response and decision-making.

The study was sponsored by the Academies' Gulf Research Program, which was established at the request of the U.S. government as part of legal settlements in the aftermath of the Deepwater Horizon oil spill. The National Academies of Sciences, Engineering, and Medicine are private, nonprofit institutions that provide independent, objective analysis and advice to the nation to solve complex problems and inform public policy decisions related to science, technology, and medicine. They operate under an 1863 congressional charter to the National Academy of Sciences, signed by President Lincoln. For more information, visit <http://national-academies.org>. A committee roster follows.

New Funding Opportunities

([Back to Page 1](#))

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

[WHS-AD-FOA-18 Minerva Research Initiative Department of Defense](#)

The Office of the Secretary of Defense (OSD) is interested in receiving proposals for the Minerva Research Initiative (<http://minerva.defense.gov>), a university-led defense social science program seeking fundamental understanding of the social and cultural forces shaping U.S. strategic interests globally. OSD is particularly interested in projects that align with and support the National Defense Strategy, found at:

<https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>

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. The Minerva Research Initiative competition is for research related to the eight (8) topics below.

Topic 1: Sociopolitical (In)Stability, Resilience, and Recovery

Topic 2: Economic Interdependence and Security

Topic 3: Alliances and Burden Sharing

Topic 4: Fundamental Dynamics of Scientific Discovery

Topic 5: Adversarial Information Campaigns

Topic 6: Automated Cyber Vulnerability Analysis

Topic 7: Power, Deterrence, Influence, and Escalation Management for Shaping Operations

Topic 8: Security Risks in Ungoverned & Semi-Governed Spaces

Innovative white papers and proposals related to these research areas are highly encouraged. See the full Minerva funding opportunity posted under the Related Documents section of this opportunity for details. **Due August 14.**

[NIST Disaster Resilience Research Program: Building Design and Building Codes](#)

Research Development & Grant Writing News

The Disaster Resilience (DR) Research Grants Program seeks applications from eligible applicants to conduct research aimed at advancing the principles of resilience in building design and building codes and standards. Research proposals must support the overall effort of developing science-based building codes by evaluating potential technologies and architectural design criteria to improve disaster resilience in the built environment. Research projects must be aligned with existing NIST Engineering Laboratory (EL) Disaster Resilience programs, as described in Section I. of this NOFO/Full Announcement, and any application that is non-research related (such as developing a product) will be disqualified. **Due August 27.**

[Preemptive Expression of Protective Alleles and Response Elements \(PREPARE\)](#)

[Solicitation Number: HR001118S0037 Agency: DARPA](#)

The PREPARE program aims to develop programmable gene modulators for humans that can provide specific, effective, safe, and transient medical countermeasures and prophylaxes to combat biological, chemical, and/or radiological threats to public health and national security. **Due August 27.**

[Division of Materials Research: Topical Materials Research Programs \(DMR-TMRP\)](#)

This solicitation applies to six DMR Topical Materials Research Programs (Biomaterials, Condensed Matter Physics, Electronic and Photonic Materials, Metals and Metallic Nanostructures, Polymers, and Solid-State and Materials Chemistry) and replaces their previous funding opportunities (respectively PD 06-7623, PD 03-1710, PD 03-1775, PD 09-1771, PD 03-1773, and PD 10-1762). It does not apply to the following Topical Materials Research Programs in DMR, which are governed by their own separate solicitations: Ceramics ([NSF 16-597](#)), and Condensed Matter and Materials Theory ([NSF 16-596](#)). All proposals submitted to these six DMR Topical Materials Research Programs (other than the following exceptions) must be submitted through this solicitation, otherwise they will be returned without review. **Due Oct. 1-Nov. 1.**

[Joint DMS/NIGMS Initiative to Support Research at the Interface of the Biological and Mathematical Sciences \(DMS/NIGMS\)](#)

The Division of Mathematical Sciences (DMS) in the Directorate for Mathematical and Physical Sciences (MPS) at the National Science Foundation (NSF) and the National Institute of General Medical Sciences (NIGMS) at the National Institutes of Health (NIH) plan to support fundamental research in mathematics and statistics necessary to answer questions in the biological and biomedical sciences. Both agencies recognize the need to promote research at the interface between mathematical and life sciences. This program is designed to encourage new collaborations, as well as to support innovative activities by existing teams. **Due October 1-18.**

[Spencer Foundation Invites LOIs for Large-Scale Education Projects](#)

The [Spencer Foundation](#) is accepting Letters of Intent from investigators for its Lyle Spencer Research Awards program. Grants of up to \$1 million will be awarded in support of intellectually ambitious, large-scale education research projects. In an effort to create much-needed space for creative and ambitious research projects that promise to advance our

Research Development & Grant Writing News

understanding of educational practice and its improvement, the program encourages proposals from scholars across a variety of disciplines and fields. To be eligible, principal investigators and co-PIs must have an earned doctorate in an academic discipline or professional field, or appropriate experience in an education research-related profession. In addition, the PI must be affiliated with a college, university, school district, nonprofit research facility, or nonprofit cultural institution that is willing to serve as the administering organization if the grant is awarded. The foundation does not award grants directly to individuals. LOIs must be received no later than October 2, 2018. Upon review selected applicants will be invited to submit a brief essay explaining the aims, context, and rationale for the proposed project. See the Spencer Foundation website for complete program guidelines, an FAQ, information about previous grant recipients, and application procedures. [Link to Complete RFP](#) . **LOI due Oct. 2.**

NOAA-NOS-NCCOS-2019-2005608, NOAA RESTORE Science Program

The purpose of this document is to advise the public that NOAA/NOS/NCCOS is soliciting applications for the NOAA RESTORE Science Program for projects of five years in duration with the option for a five year, non-competitive renewal award for high performing projects. This funding opportunity invites applications that propose to identify, track, understand, and/or predict trends and variability in the Gulf of Mexico's living coastal and marine resources and the processes driving them. Funding is contingent upon the availability of funds in the Gulf Coast Restoration Trust Fund. It is anticipated that final recommendations for funding under this Announcement will be made in June 2019, and that projects funded under this Announcement will have a September 1, 2019 start date. Total funding for this competition will be approximately \$15 million over five years and approximately six projects may be funded. The minimum individual award amount is approximately \$500,000 over five years (an average of \$100,000 per year) and the maximum individual award amount is approximately \$7.5 million over five years (an average of \$1.5 million per year). An additional \$15 million may be available for five year, non-competitive renewals for high performing projects. Electronic Access: The NOAA RESTORE Science Program website (<http://restoreactscienceprogram.noaa.gov/>) furnishes supplementary information. Full applications should be submitted through Grants.gov (<http://www.grants.gov>). **Due October 29.**

FA9550-18-S-0003 Research Interests of the Air Force Office of Scientific Research

AFOSR plans, coordinates, and executes the Air Force Research Laboratory's (AFRL) basic research program in response to technical guidance from AFRL and requirements of the Air Force. Additionally, the office fosters, supports, and conducts research within Air Force, university, and industry laboratories; and ensures transition of research results to support U.S. Air Force needs. The focus of AFOSR is on research areas that offer significant and comprehensive benefits to our national war fighting and peacekeeping capabilities. These areas are organized and managed in two scientific Departments: Engineering and Information Science (RTA) and Physical and Biological Sciences (RTB). The research activities managed within each Department are summarized in this section. **Open Until Superseded.**

Research Development & Grant Writing News

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](#)
- [NPS Broad Agency Announcements \(BAAs\)](#)
- [NIJ Current Funding Opportunities](#)
- [NIJ Forthcoming Funding Opportunities](#)
- [Engineering Information Foundation Grant Program](#)
- [Comprehensive List of Collaborative Funding Mechanisms, 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 \(NIH\)](#)
- [National Human Genome Research Institute Funding Opportunities](#)
- [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

NSF/FDA Scholar-in-Residence at FDA

The National Science Foundation (NSF), through the Directorate for Engineering, the Directorate of Computer and Information Science and Engineering Division of Computer and Network Systems, and the Directorate for Mathematical and Physical Sciences Division of Materials Research, along with the U.S. Food and Drug Administration (FDA), through its Center for Devices and Radiological Health (CDRH), have established the NSF/FDA Scholar-in-Residence Program at FDA. This program comprises an interagency partnership for the investigation of scientific and engineering issues concerning emerging trends in medical device technology. This partnership is designed to enable investigators in science, engineering, and computer science to develop research collaborations within the intramural research environment at the FDA. This solicitation features three flexible mechanisms for support of research at the FDA: 1) Principal Investigators at FDA; 2) Postdoctoral Researchers at FDA; and 3) Graduate Students at FDA.

Proposals accepted anytime.

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

With the goal of encouraging research independence immediately upon obtaining one's first academic position after receipt of the PhD, the Directorate for Computer and Information Science and Engineering (CISE) will award grants to initiate the course of one's independent

Research Development & Grant Writing News

research. Understanding the critical role of establishing that independence early in one's career, **it is expected that funds 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 a total of five years after completion of their PhD.** One may not yet have received any other grants or contracts in the Principal Investigator (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 noted below. Serving as co-PI, Senior Personnel, Postdoctoral Fellow, or other Fellow does not count against this eligibility rule. Grants, contracts, or gifts from private companies or foundations; state, local, or tribal governments; or universities do not count against this eligibility rule. It is expected that these funds will allow the new CISE Research Initiation Initiative PI to support one or more graduate students for up to two years. Faculty at undergraduate and two-year institutions may use funds to support undergraduate students, and may use the additional RUI designation (which requires inclusion of a RUI Impact Statement) -- see https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5518 for additional information. In addition, submissions from all institutions may use funds for postdoctoral scholars, travel, and/or research equipment. **Due August 8.**

WHS-AD-FOA-18 Minerva Research Initiative Department of Defense

The Office of the Secretary of Defense (OSD) is interested in receiving proposals for the Minerva Research Initiative (<http://minerva.defense.gov>), a university-led defense social science program seeking fundamental understanding of the social and cultural forces shaping U.S. strategic interests globally. OSD is particularly interested in projects that align with and support the National Defense Strategy, found at:

<https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>

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. The Minerva Research Initiative competition is for research related to the eight (8) topics below.

Topic 1: Sociopolitical (In)Stability, Resilience, and Recovery

Topic 2: Economic Interdependence and Security

Topic 3: Alliances and Burden Sharing

Topic 4: Fundamental Dynamics of Scientific Discovery

Topic 5: Adversarial Information Campaigns

Topic 6: Automated Cyber Vulnerability Analysis

Topic 7: Power, Deterrence, Influence, and Escalation Management for Shaping Operations

Topic 8: Security Risks in Ungoverned & Semi-Governed Spaces

Innovative white papers and proposals related to these research areas are highly encouraged.

See the full Minerva funding opportunity posted under the Related Documents section of this opportunity for details. **Due August 14.**

Preemptive Expression of Protective Alleles and Response Elements (PREPARE)

Solicitation Number: HR001118S0037 Agency: DARPA

Research Development & Grant Writing News

The PREPARE program aims to develop programmable gene modulators for humans that can provide specific, effective, safe, and transient medical countermeasures and prophylaxes to combat biological, chemical, and/or radiological threats to public health and national security.

Due August 27.

Bridges to the Baccalaureate Program (R25)

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this National Institute of General Medical Sciences (NIGMS) R25 program is to support educational activities that enhance the diversity of the biomedical research workforce. To accomplish the stated over-arching goal, this FOA will support creative educational activities with a primary focus on Courses for Skills Development, Research Experiences, and Curriculum or Methods Development. A program application must include each activity, and describe how they will be synergized to make a comprehensive program. The Bridges to Baccalaureate Program is intended to provide these activities to community college students to increase transition to and completion of Bachelor's degree in biomedical sciences. This program requires partnerships between community colleges or other two-year post-secondary educational institutions granting the associate degree with colleges or universities that offer the baccalaureate degree. Additionally, recruitment and retention plans are required as part of the application. **Due September 25.**

NIH: Bridges to the Doctorate (R25)

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this NIGMS R25 program is to support educational activities that enhance the diversity of the biomedical, behavioral and clinical research workforce. To accomplish the stated over-arching goal, this FOA will support creative educational activities with a primary focus on Courses for Skills Development and Research Experiences. The Bridges to Doctorate Program is intended to provide these activities to master's level students to increase transition to and completion of PhDs in biomedical sciences. This program requires partnerships between master's degree-granting institutions with doctorate degree-granting institutions. Applicants should directly address how the set of activities will complement and/or enhance the training of a diverse workforce that also meets the nation's biomedical and clinical research needs by discussing 1) the rationale underlying the balance of effort and resources dedicated to each activity; 2) how the activities integrate; and 3) objective indicators that can measure the effectiveness of the program. A program application must include each activity, and describe how they will be synergized to make a comprehensive program. Additionally, recruitment and retention plans are expected as part of the application. **Due September 25.**

Innovations at the Nexus of Food, Energy and Water Systems (INFEWS)

The INFEWS program seeks to support research that conceptualizes FEW systems broadly and inclusively, incorporating social and behavioral processes (such as decision making and governance), physical processes (such as built infrastructure and new technologies for more efficient resource utilization), natural processes (such as biogeochemical and hydrologic cycles), biological processes (such as agroecosystem structure and productivity), and cyber-components

Research Development & Grant Writing News

(such as sensing, networking, computation and visualization for decision-making and assessment). Investigations of these complex systems may produce discoveries that cannot emerge from research on food or energy or water systems alone. It is the synergy among these components in the context of sustainability that will open innovative science and engineering pathways to produce new knowledge, novel technologies, and innovative predictive capabilities.

The overarching goal of the INFEWS program is to catalyze well-integrated, convergent research to transform understanding of the FEW Nexus as integrated social, engineering, physical, and natural systems in order to improve system function and management, address system stress, increase resilience, and ensure sustainability. The NSF INFEWS activity is designed specifically to attain the following goals:

1. Significantly advance our understanding of the food-energy-water system of systems through quantitative, predictive and computational modeling, including support for relevant cyberinfrastructure;
2. Develop real-time, cyber-enabled interfaces that improve understanding of the behavior of FEW systems and increase decision support capability;
3. Enable research that will lead to innovative and integrated social, engineering, physical, and natural systems solutions to critical FEW systems problems;
4. Grow the scientific workforce capable of studying and managing the FEW system of systems, through education and other professional development opportunities.

This initiative enables interagency cooperation on one of the most pressing problems of the millennium - understanding interactions across the FEW nexus - how dynamics of the FEW Nexus are likely to affect our world, and how we can proactively plan for consequences. This solicitation allows the partner agencies - National Science Foundation (NSF) and the United States Department of Agriculture National Institute of Food and Agriculture (USDA/NIFA) - to combine resources to identify and fund the most meritorious and highest-impact projects that support their respective missions, while eliminating duplication of effort and fostering collaboration between agencies and the investigators they support. **Due September 26.**

Agriculture and Food Research Initiative - Sustainable Agricultural Systems

Applications to the FY 2018 Agriculture and Food Research Initiative - Sustainable Agricultural Systems (SAS) Request for Applications (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. See AFRI SAS RFA for details. [Webinar: AFRI Sustainable Agricultural Systems \(May 23\)](#) **Due October 10.**

Research Development & Grant Writing News

Fiscal Year (FY) 2019 Department of Defense Multidisciplinary Research Program of the University Research Initiative

The MURI program supports basic research in science and engineering at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined in the DoD Financial Management Regulation: Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress (DoD 7000.14-R, vol. 2B, chap. 5, para. 050201.B). DoD's basic research program invests broadly in many fields to ensure that it has early cognizance of new scientific knowledge. The FY 2019 MURI competition is for the topics listed below. Detailed descriptions of the topics and the Topic Chief for each can be found in Section II. I, entitled, "SPECIFIC MURI TOPICS," The detailed descriptions are intended to provide the applicant a frame of reference and are not meant to be restrictive to the possible approaches to achieving the goals of the topic and the program. Innovative ideas addressing these research topics are highly encouraged. Proposals from a team of university investigators are warranted when the necessary expertise in addressing the multiple facets of the topics may reside in different universities, or in different departments in the same university. By supporting multidisciplinary teams, the program is complementary to other DoD basic research programs that support university research through single-investigator awards. Proposals shall name one Principal Investigator (PI) as the responsible technical point of contact. Similarly, one institution shall be the primary awardee for the purpose of award execution. The PI shall come from the primary institution. The relationship among participating institutions and their respective roles, as well as the apportionment of funds including sub-awards, if any, shall be described in both the proposal text and the budget. **Due October 16.**

NOAA-NOS-NCCOS-2019-2005608, NOAA RESTORE Science Program

The purpose of this document is to advise the public that NOAA/NOS/NCCOS is soliciting applications for the NOAA RESTORE Science Program for projects of five years in duration with the option for a five year, non-competitive renewal award for high performing projects. This funding opportunity invites applications that propose to identify, track, understand, and/or predict trends and variability in the Gulf of Mexico's living coastal and marine resources and the processes driving them. Funding is contingent upon the availability of funds in the Gulf Coast Restoration Trust Fund. It is anticipated that final recommendations for funding under this Announcement will be made in June 2019, and that projects funded under this Announcement will have a September 1, 2019 start date. Total funding for this competition will be approximately \$15 million over five years and approximately six projects may be funded. The minimum individual award amount is approximately \$500,000 over five years (an average of \$100,000 per year) and the maximum individual award amount is approximately \$7.5 million over five years (an average of \$1.5 million per year). An additional \$15 million may be available

Research Development & Grant Writing News

for five year, non-competitive renewals for high performing projects. Electronic Access: The NOAA RESTORE Science Program website (<http://restoreactscienceprogram.noaa.gov/>) furnishes supplementary information. Full applications should be submitted through Grants.gov (<http://www.grants.gov>). **Due October 29.**

FA9550-18-S-0003 Research Interests of the Air Force Office of Scientific Research

AFOSR plans, coordinates, and executes the Air Force Research Laboratory's (AFRL) basic research program in response to technical guidance from AFRL and requirements of the Air Force. Additionally, the office fosters, supports, and conducts research within Air Force, university, and industry laboratories; and ensures transition of research results to support U.S. Air Force needs. The focus of AFOSR is on research areas that offer significant and comprehensive benefits to our national war fighting and peacekeeping capabilities. These areas are organized and managed in two scientific Departments: Engineering and Information Science (RTA) and Physical and Biological Sciences (RTB). The research activities managed within each Department are summarized in this section. **Open Until Superseded.**

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.]

National Geospatial-Intelligence Agency Academic Research Program (NARP)

NGA welcomes all innovative ideas for path-breaking research that may advance the GEOINT mission. The NGA mission is to provide timely, relevant, and accurate geospatial intelligence (GEOINT) in support of national security objectives. GEOINT is the exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth. GEOINT consists of imagery, imagery intelligence, and geospatial information. NGA offers a variety of critical GEOINT products in support of U.S. national security objectives and Federal disaster relief, including aeronautical, geodesy, hydrographic, imagery, geospatial and topographical information. The NGA Academic Research Program (NARP) is focused on innovative, far-reaching basic and applied research in science, technology, engineering and mathematics having the potential to advance the GEOINT mission. The objective of the NARP is to support innovative, high-payoff research that provides the basis for revolutionary progress in areas of science and technology affecting the needs and mission of NGA. This research also supports the National System for Geospatial Intelligence (NSG), which is the combination of technology, systems and organizations that gather, produce, distribute and consume geospatial data and information. This research is aimed at advancing GEOINT capabilities by improving analytical methods, enhancing and expanding systems capabilities, and leveraging resources for common NSG goals. The NARP also seeks to improve education in scientific, mathematics, and engineering skills necessary to advance GEOINT capabilities. It is NGA's intent to solicit fundamental research under this BAA. Fundamental research means basic and applied research in science and engineering, the results of which

Research Development & Grant Writing News

ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from Industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reason. (National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical, and Engineering Information). NGA seeks proposals from eligible U.S. institutions for path-breaking GEOINT research in areas of potential interest to NGA, the DoD, and the Intelligence Community (IC). **Open to Dec. 31, 2018.**

[PAR-16-242 Bioengineering Research Grants \(BRG\) \(R01\) Department of Health and Human Services National Institutes of Health](#)

The purpose of this funding opportunity announcement is to encourage collaborations between the life and physical sciences that: 1) apply a multidisciplinary bioengineering approach to the solution of a biomedical problem; and 2) integrate, optimize, validate, translate or otherwise accelerate the adoption of promising tools, methods and techniques for a specific research or clinical problem in basic, translational, or clinical science and practice. An application may propose design-directed, developmental, discovery-driven, or hypothesis-driven research and is appropriate for small teams applying an integrative approach to increase our understanding of and solve problems in biological, clinical or translational science. **Open to May 9, 2019.**

[BAA-RQKD-2014-0001 Open Innovation and Collaboration Department of Defense Air Force -- Research Lab](#)

Open innovation is a methodology to capitalize on diverse, often non-traditional talents and insights, wherever they reside, to solve problems. Commercial industry has proven open innovation to be an effective and efficient mechanism to overcome seemingly impossible technology and/or new product barriers. AFRL has actively and successfully participated in collaborative open innovation efforts. While these experiences have demonstrated the power of open innovation in the research world, existing mechanisms do not allow AFRL to rapidly enter into contractual relationships to further refine or develop solutions that were identified. This BAA will capitalize on commercial industry experience in open innovation and the benefits already achieved by AFRL using this approach. This BAA will provide AFRL an acquisition tool with the flexibility to rapidly solicit proposals through Calls for Proposals and make awards to deliver innovative technical solutions to meet present and future compelling Air Force needs as ever-changing operational issues become known. The requirements, terms and specific deliverables of each Call for Proposals will vary depending on the nature of the challenge being addressed. It is anticipated that Call(s) for Proposals will address challenges in (or the intersection between) such as the following technology areas: Materials: - Exploiting material properties to meet unique needs - Material analysis, concept / prototype development, and scale up Manufacturing Processes that enable affordable design, production and sustainment operations Aerospace systems: - Vehicle design, control, and coordinated autonomous and/or manned operations - Power and propulsion to enable next generation systems Human Effectiveness: - Methods and techniques to enhance human performance and resiliency in challenging environments - Man – Machine teaming and coordinated activities Sensors and Sensing Systems: - Sensor and sensing system concept development, design, integration and prototyping - Data integration and exploitation. **Open to July 12, 2019.**

Research Development & Grant Writing News

[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.**

[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 helen.williams@us.af.mil **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

Research Development & Grant Writing News

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

Research Development & Grant Writing News

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

Research Development & Grant Writing News

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.**

Changes at Academic Research Funding Strategies

By Lucy Deckard

[\(Back to Page 1\)](#)

Expanded Editing Services

In response to numerous requests, we are now expanding our editing services to accommodate clients working on manuscripts as well as proposals. We are also offering editing only (as opposed to intensive grantsmanship assistance) at several levels:

- **Technical editing:** Editing for technical clarity as well as grammar, punctuation, etc.
- **Editing:** Editing for grammar, punctuation, etc.
- **Editing Especially for Non-native English Speakers:** Editing for grammar, punctuation, usage, etc. with special attention to mistakes commonly made by non-native English speakers.

These options will provide a more economical option for authors who don't need our intensive review and editing services. More information will be posted on [our website](#) soon.

Former NIH branch chief, Dr. John Williamson, joining ARFS

We are excited to announce that [Dr. John Williamson](#) is joining Academic Research Funding Strategies as one of our consultants. He will work with clients applying to NIH, providing one-on-one mentoring as well as reviews of NIH proposal drafts. A short bio is provided below.

Dr. Williamson is an emeritus professor of medicinal chemistry at the University of Mississippi, a former NIH branch chief, and currently a research initiatives coordinator at the University of Dayton. During his tenure as a full professor he garnered millions in extramural funding from: federal agencies including the NIH, NSF, CDC, and DoD; pharmaceutical companies including Merck and Schering-Plough; as well as foundations and societies including the Elsa Pardee Foundation, Sigma Xi, the American Society of Pharmacognosy, and the Bill and Melinda Gates Foundation.

At NIH he served as a Branch Chief of Basic and Mechanistic Research, maintaining a branch grants and contract portfolio of approximately \$50M/yr. The portfolio included projects associated with brain neuroscience, bioengineering of opiate pathways, mechanisms associated with chronic pain, brain microbiome connection mechanisms, pharmacodynamics and pharmacokinetics and methodologies associated with bioactive natural products, analgesic cannabinoids, various small business awards, complementary medical approaches, and training programs. While at NIH, Williamson's portfolio contained a broad array of funding mechanisms including: DP1, DP2, F31, F32, K00, K01, K99, P01, P20, P30, P50, R01, R03, R13, R15, R21, R41, R42, R43, R44, R61, R61, R90, T32, T42, T90, and U01s. In addition, he was the named program contact on more than 75 published funding opportunity announcements (RFAs & PAs). Williamson also worked on interagency collaborative programs with the NSF, FDA, USDA, and FTC. He is currently associated with the University of Dayton where, as Research Initiatives Coordinator, he helps faculty and staff in developing and submitting competitive research proposals.

Research Development & Grant Writing News

Academic Research Funding Strategies, LLC [\(Page 1\)](#)

<http://academicresearchgrants.com/home>

ph: 979-693-0825

LDeckard@academicresearchgrants.com

mjcronan@gmail.com

What We Do--

We provide consulting for colleges and universities on a wide range of topics related to research development and grant writing, including:

- Strategic Planning - Assistance in [formulating research development strategies and building institutional infrastructure](#) for research development (including special strategies for Emerging Research Institutions, Predominantly Undergraduate Institutions and Minority Serving Institutions)
- Training for Faculty - Workshops, seminars and webinars on [how to find and compete for research funding](#) from NSF, NIH, DoE and other government agencies as well as foundations. Proposal development retreats for new faculty.
- Large proposals - Assistance in [planning, developing and writing institutional and center-level proposals](#) (e.g., NSF ERC, STC, NRT, ADVANCE, IUSE, Dept of Ed GAANN, DoD MURI, etc.)
- Assistance for [new and junior faculty](#) - help in identifying funding opportunities and 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.
- Facilities and Instrumentation - Assistance in identifying and competing for [grants to fund facilities and instrumentation](#)
- Training for Staff - [Professional Development](#) for research office and sponsored projects staff

Workshops by Academic Research Funding Strategies

We offer workshops on research development and grant writing for faculty and research professionals based on all published articles.

[\(View Index of Articles\)](#)

Copyright 2017 Academic Research Funding Strategies. All rights reserved.