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Published monthly for faculty and research professionals by

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Mike Cronan & Lucy Deckard, co-Publishers

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About the co-publishers

**Mike Cronan, PE** (Texas 063512, inactive) has 23 years of experience developing and writing successful 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 Engineering Experiment Station (15 research divisions state-wide).

**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.

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**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.
Workshop

Strategies for Planning, Developing and Writing Large Team Grants

An interactive workshop presented by Mike Cronan

mjcronan@gmail.com

Academic Research Funding Strategies, LLC

ABOUT THE WORKSHOP: This interactive workshop offers a step-by-step “how to” guide to faculty and research offices to help them better meet the unique challenges of successfully writing large team grants (LTG) such as the newly announced NSF Science and Technology Center. **LTGs differ from smaller grants in many ways that make them more challenging to plan, develop and write.** LTGs involve more disciplines, components, and moving parts (i.e., complexity); more team members and team dynamics; more partnered institutions; more time needed to plan, develop, and write; more interdisciplinarity; a clear vision for the synergy required to demonstrate the value-added benefits of team research and center structures; and more development challenges for PIs.

The workshop addresses key LTG topics (below), including, how best to communicate a compelling research vision; demonstrate major value-added benefits to the team structure; achieve research synthesis, integration, and synergy; address multiple program components that build on the research core; offer a management plan that enables the research vision to succeed; propose a convincing research strategic plan over a multi-year performance period; convince program officers and reviewers the proposed research is transformational and not merely incremental; and navigate multiple review gates to funding success.

**4-HOUR WORKSHOP SCHEDULE OF TOPICS**

- Introduction to Team Grants (30 minutes)
- Interactive Discussion: Characteristics of a Successful Research Vision (15 minutes)
- Strategic Planning (30 minutes)
- Interactive Discussion: Characteristics of Research Synergy (15 minutes)
- Proposal Planning and Production (30 minutes)
- Writing the Project Description (30 minutes)
- Writing Key Narrative Sections (30 minutes)
- Characteristics of Successful Narratives (30 minutes)
- Red Teaming and Writing for Reviewers (30 minutes)

**SAME DAY POST WORKSHOP INCLUDED CONSULTATIONS:** Individual or group consultations with faculty and/or research office staff on workshop topics (e.g., 8 consultations @30 minutes each).
WORKSHOP COSTS: Cost of the 4-hour interactive workshop and 4-hours of individual consultations with faculty and/or research office staff on presentation topics: $2,950 plus travel costs. A second day of consultations is available at a rate of $100/hr (4 hour minimum). Please contact Mike Cronan (mjcronan@gmail.com; 979-229-8009) for a full cost quote that will include travel costs. Final workshop cost will be invoiced as one lump sum.

WORKSHOP LOGISTICS: Workshops may be scheduled any day Monday through Saturday, March 16 to May 22, 2015. CLIENT PROVIDES all facilities, handouts, and IT set-up support, including presentation room, projector, and computer with compatible version of Microsoft PowerPoint. PRESENTER PROVIDES all workshop materials to the client in electronic form for loading on the presentation computer and producing hard copy handouts three days prior to the workshop.

ABOUT THE PRESENTER
Mike Cronan is a research development and grant writing consultant with Academic Research Funding Strategies, LLC. He is the principal co-publisher of the nationally distributed newsletter Research Development and Grant Writing News, co-author of the book New Faculty Guide to Competing for Research Funding, and author of the book Strategies for Planning, Developing and Writing Large Team Grants. He has 23 years of experience developing and writing successful proposals at Texas A&M University (1987-2010). 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 research agencies, 1990-2000. He developed, staffed, and directed two research and proposal development offices at Texas A&M, one for the 15-division, statewide Texas Engineering Experiment Station (1994-2004), and the second for the Vice President for Research (2004-09). Mike Cronan has undergraduate degrees in civil engineering (University of Michigan), political science (Michigan State University), and an MFA in English (University of California-Irvine). He is a registered professional engineer in Texas (inactive).
Dear Colleague Letter: MPS Graduate Research Supplement for Veterans (MPS-GRSV)

ARPA-E issued a $125 million open Funding Opportunity Announcement (FOA)

OPEN 2015 FOA - Notice of Intent / Concept Paper - 01.07.2015

NSF Award and Administration Guide, December 2014

NSF Grant Proposal Guide, December 2014

Tips for Thriving in Your Research Career

Spurring Innovation in Food and Agriculture: A Review of the USDA Agriculture and Food Research Initiative Program

NIH 2014 By the Numbers

Research and Evaluation on the Investigation and Adjudication of Campus Sexual Assault

Future Directions of Credentialing Research in Nursing: Workshop Summary

USDA Announces Fellowships for Future Agricultural Scientists

NIJ Current Funding Opportunities

NIJ Graduate Research Fellowship in Science, Technology, Engineering, and Mathematics

BWF Collaborative Research Travel Grant (CRTG)

SAMHSA Suicide Prevention Resource Center

NASA Glenn Faculty Fellowship Program (NGFFP) - 2015

IARPA Automatic Speech recognition In Reverberant Environments (ASpIRE) Challenge

NEH: Preservation Assistance Grants for Smaller Institutions

Data and Research to Improve the U.S. Food Availability System and Estimates of Food Loss: A Workshop Report

U.S. Air Force Strategic Deterrence Analytic Capabilities: An Assessment of Tools, Methods, and Approaches for the 21st Century Security Environment

Measuring Research and Development Expenditures in the U.S. Nonprofit Sector: Conceptual and Design Issues: Summary of a Workshop

India-United States Cooperation on Science and Technology for Countering Terrorism: Summary of a Workshop
Counseling PIs on Broader Impacts

One of the most useful ways offices that provide research development and grant writing related services to PIs, particularly on large team grants and center proposals, is to function as an informative filter and advisor to partnerships that fall under the umbrella of broader impacts (BI) and education. This is true most notably at NSF, but at other federal research agencies as well. After all, as one NSF program manager noted in a recent webinar for reviewers of the IUSE program, “A project must have intellectual merit before its broader impacts become relevant.”

This is a key point to keep in mind because it clarifies the enormous challenge facing the PI of a center level research proposal on managing and integrating a research team that is inclusive of one or more BI partnerships. Moreover, it points, albeit indirectly, to a very common challenge on large research proposals, such as the currently open NSF STC, in that the PI’s domain of expertise is the research domain of the proposed center and it is not in the realm of broader impacts, education, and related areas. Consequently, the PI must rely on others to provide expertise in these broader impacts domains. This can become problematic, however. For example, how can the PI judge the quality of advice given in the area of broader impacts? In some cases, the advice given PIs may be good, or even excellent, but in other cases, the advice can be less good, and in still other cases, downright horrid.

PIs on research center grants typically lack the broader impacts knowledge to differentiate good from poor advice on appropriate BI components. It’s unreasonable to expect that research PIs can become expert in what NSF defines as “evidence based educational practices,” or “knowledge-using” and “knowledge-producing” educational models. After all, the domain of theory-driven, theory-generating, theory-testing, and predictive educational models is a research domain in and of itself at NSF under such programs as (NSF 15-509), the EHR Core Research (ECR). Moreover, the pressure exerted by the PI’s need to be well advised on BI issues can be exacerbated by the demand to develop and write the research narrative. As a consequence, a harried PI can become overly eager to find BI partners without vetting them as carefully as he would research partners.

Another common point of failure in partnerships addressing broader impacts arises when educational partners do not fully understand the research context into which the BI component must be embedded. This is the common Achilles heel of research center proposals requiring multiple BI components. It is expressed when the BI components do not integrate organically into the research context of the center. When this occurs, one of the fundamental questions reviewers will want answered in the proposal narrative—why do the proposed BI, education, or societal benefits components of the narrative make sense in terms of the research goals and objectives of the proposed center?—will remain unanswered.

This disconnect between the motivating logic of the research goals and objectives and that of the BI components leads inevitably to broader impacts and educational components that are siloed from the research core from the start and fail to become integrated through
multiple draft iterations of the narrative. It is here that experienced research and proposal development professionals can provide the research center PI with an invaluable service: *provide a knowledge bridge* between the proposed research of the center and the proposed BI, educational, and societal impacts. This also helps those who provide operational and management support to the BI components, perhaps a team member designated as director of education and outreach activities for the center.

It is often the case that those experienced in research development have a history of support for center-level research initiatives and the best models for integrating the research core with BI and educational components of the proposed center. This corporate memory of what does and doesn’t work in potential BI partnerships is invaluable for producing a proposal narrative without identifiable weaknesses, either in the research core or the BI components complementing that core.

Moreover, BI, educational, societal impacts, etc. partners on a research center grant that do not understand or remain uninformed about the research goals and objectives forming the underpinnings of the intellectual merit of the proposed center significantly increase the obstacles to writing a winning proposal narrative. Here too, those in research development positions are often able to bridge this disconnect between the proposed research and the proposed BI program components by keeping the focus on answering the core question: “*Why do these proposed educational activities make sense within the context of the proposed center research?*”

Of course, the answer to the question “*Why does this activity make sense in the research context of what we are proposing?*” should be evident in all parts of the proposal narrative to prevent reviewers and program offices from asking a similar question about proposed BI or educational activities: “*What sense do these activities make within the scope of the proposed research?*” If reviewers or program officers are prompted to ask this question, the chances of a funded proposal have dramatically diminished.

For example, one of the more typical “*What sense does this make?*” observations by reviewers and program officers on center research proposals can focus on the believability of the proposed partnership. This question is rightfully asked when it comes to partnerships with minority-serving institutions or other diversity partnerships proposed as part of outreach for research and education, but presented without any history of past collaboration or interaction between the institution or among the faculty. It is telling that research offices at minority-serving institutions are replete with stories of “cold calls” and emails received from unknown PIs at research one institutions seeking minority partnerships for a research center proposal due in a few weeks’ time.

Experienced research offices can help faculty avoid these pitfalls and develop robust and authentic research and educational partnerships that enhance rather than detract from the proposal’s competitiveness.
The basic narrative structure of successful proposals varies little across disciplines and agencies. The successful narrative structure typically answers a series of key questions about the proposed research in a logical sequence designed to present a compelling and convincing argument for funding. These questions are generic rather than disciplinary or agency specific. Examples include: What do you propose to do? Why do you propose to do it? Why is what you propose significant to the field or the mission of the funding agency, or both? What is your research rationale and methodology? Upon what prior research does the proposed research build? What are the anticipated outcomes? What does success look like? Why should reviewers and program officers have confidence in your capacity to perform?

Of course, the answers to these questions will differ by discipline, agency, and specific program solicitation. In some cases, these key questions may be embedded in the funding solicitation and be phrased in the agency’s language. Regardless of these variations, you will be required to answer the essence of these questions in every proposal you write. They will be posed in either the agency funding solicitation or in the agency guidelines for submitting an unsolicited or investigator-initiated proposal.

For example, the significance of your proposed research to a basic research agency may lie in the way it advances the field, perhaps by opening up new research directions. For a mission agency, research significance is a function of the value-added benefits that accrue to the agency’s mission priorities by funding your research. In the humanities, for instance, what might be described as “value-added benefits to the agency mission priorities” might have the term “agency mission” replaced by the value of your proposed research to the field, or, in some cases, to the museum, library, collection, foundation, etc. that funds your research to advance a certain line of inquiry.

However, while these generic core questions, such as those above, represent the principal waypoints of making a successful argument to convince reviewers and program officers to fund your research, nothing is more beneficial to gaining a more nuanced, deeper, and more robust understanding of the role of these questions in your funding success as seeing how members of your discipline actually answer them.

One of the best places to find examples of successful proposals for humanities funding is at the National Endowment for the Humanities website, particularly Match Your Project to a Grant Program. (at this URL, NEH offers an RSS feed to keep you up-to-date on new funding opportunities) and NEH Upcoming Grant Deadlines. Each NEH program offers Sample Application Narratives, typically ranging from several to a dozen, in a pdf format that you can download and review to better understand what constitutes a successful NEH proposal. However, it’s important to remember that these sample application narratives have great relevance beyond gaining insight into writing a funded NEH grant. These narratives offer generic clarity and insight into writing any grant to any organization funding humanities research.
This is important because research funding sources in the humanities are not only more dispersed but also more limited than they are in the scientific and technical disciplines. Keep in mind that most of the research funding in the humanities lies outside such federal agencies as NEH and NEA, whose budgets are miniscule compared to the research funding available in the technical disciplines at agencies such as NSF, NIH, DoD, etc. The pie chart produced by AAAS at the end of this article shows the distribution within NEH for 12 different funding categories which, in aggregate, will likely represent many of the kinds of humanities funding that you will seek from non-NEH funding sources.

There are many excellent resources for finding funding opportunities in the humanities from literally hundreds of sources, including humanities-funding websites at Michigan State University, University of Kansas, Northwestern University, Duke University, Arizona State University, University of Florida, Boston University, Brandeis University, and Vanderbilt University, among many others. Also, the Humanities Indicators, a project of the American Academy of Arts and Sciences, does a nice job of “describing public funding for humanities agencies and higher education and then goes on to estimate the extent of private investment in the humanities.”

So, while the hundreds of sample application narratives spanning all program areas available for download from NEH offer an invaluable insight into how to be successful at NEH, these sample narratives will be equally important for demonstrating how to write a successful proposal to any organization funding humanities research. When combined with such articles on successful grant writing as “The Art of Writing Proposals,” by Adam Przeworski and Frank Salomon, “Writing Proposals for ACLS Fellowship Competitions,” by Christina Gillis, and the grant-writing articles published in this newsletter since 2010 (Index to Articles), you will have an excellent foundation for funding success in the humanities.

For example, the NEH Match Your Project to a Grant Program offers a good way to start the process of reviewing sample application narratives because it categorizes NEH funding opportunities under many general areas of humanities research. Consider, for instance, the NEH program Bridging Cultures at Community Colleges. According to NEH, “Bridging Cultures at Community Colleges grants are intended to strengthen and enrich humanities education and scholarship at community colleges or community college systems. Grants are used to enhance the humanities content of existing programs, develop new programs, or lay the foundation for more extensive endeavors in the future. . . .Today, more than half of post-secondary students in the U.S. attend community colleges. Yet the essential role of humanities instruction at these institutions is sometimes overlooked – despite the fact that many students’ only serious study of the humanities takes place in two-year college classrooms.”

Three Sample Application Narratives of projects funded under this program are available for download, as shown below:
- Bunker Hill Community College, Asian American Studies (PDF)
- Community College of Philadelphia, Interdisciplinary Study of South Asia (PDF)
- University of Pittsburgh, Cultural Study of Pittsburgh’s East European Ethnic Groups

Consider reading the above sample applications using as a reference point the key generic questions reviewers and program officers expect to be answered in any proposal:
What do you propose to do? Why do you propose to do it? Why is what you propose significant
Research Development & Grant Writing News

to the field or the mission of the funding agency, or both? What is your research rationale and methodology? Upon what prior research does the proposed research build? What are the anticipated outcomes? What does success look like? Why should reviewers and program officers have confidence in your capacity to perform?

Using the first paragraph of the successful Bunker Hill Community College Proposal Narrative as a talking point, consider several points about this introductory paragraph: (1) It is simply written, clear, and concise; (2) it answers two key questions quickly—what are you going to do? (yellow highlight) and why are you going to do it? (green highlight); and (3) it links them to the strategic educational mission of the institution. Next, consider what this introductory paragraph does not do: It does not begin with a long, verbose, and overly general introduction and background section elaborating on the history of Asian American Studies and Learning Communities, but is nonetheless disconnected from the core educational mission of the institution and irrelevant to the core narrative argument. This introductory paragraph (below) is well written and reflects the well written proposal narrative that follows.

“Intellectual rationale: Bunker Hill Community College (BHCC) proposes to partner with the University of Massachusetts Boston (UMB) to design and integrate Asian American Studies curricula into BHCC’s humanities-based Learning Communities. BHCC is a diverse urban institution. Two-thirds of the student population is made up of students of color, including 12% Asian students. BHCC is designated by the U.S. Department of Education as a Minority Serving Institution (MSI) and an Asian American Native American Pacific Islander Serving Institution (AANAPISI). Bridging cultures is at the core of the College’s mission, and essential in fostering a rich and relevant learning experience. Learning Communities are a critical component of the College’s strategy to strengthen its academic underpinning and educational environment. BHCC’s Learning Communities prepare students to think critically, communicate effectively, make connections across disciplines, and apply classroom learning to real world concerns.”

A similar process can be followed in exploring a program such as Institutes for Advanced Topics in the Digital Humanities. These grants, NEH states, “support national or regional (multistate) training programs for scholars and advanced graduate students to broaden and extend their knowledge of digital humanities. With these programs, NEH seeks to increase the number of humanities scholars using digital technology in their research and to broadly disseminate knowledge about advanced technology tools and methodologies relevant to the humanities.” Keep in mind that while the below sample application narratives were written to NEH, they can serve as excellent models not only for requesting funding for digital humanities from other sources but also for writing successful proposals for humanities research. The Sample Application Narratives for digital humanities include:

- Folger Shakespeare Library, Institute on Early Modern Digital Agendas (PDF)
- George Mason University, Doing Digital History (PDF)
- University of California, Los Angeles, Institute on Teaching in the Geospatial Humanities
- University of Maryland, Building an Accessible Future for the Humanities (PDF)
- University of Texas, Institute for High Performance Sound Technologies (PDF)
- Vanderbilt University, Advancing XML-Based Scholarship (PDF)

A final example here is the NEH Summer Seminars and Institutes program. These grants, according to NEH, “support faculty development programs in the humanities for school
teachers and for college and university teachers. NEH Summer Seminars and Institutes may be as short as two weeks or as long as five weeks.” Moreover, the following sample narratives provide further examples of successful proposals to NEH that can serve as models for anyone submitting proposals to any organization funding humanities research. Read them and disassemble them to understand what a successful proposal framework looks like and then reassemble that framework to fit your humanities research proposal.

- Summer Seminar for School Teachers: Punishment, Politics, and Culture (PDF)
- Summer Seminar for School Teachers: The Political Theory of Hannah Arendt (PDF)
- Summer Seminar for School Teachers: The Spanish Influenza of 1918 (PDF)
- Summer Institute for School Teachers: Archaeology in the Upper Mississippi Valley (PDF)
- Summer Institute for School Teachers: Literatures, Religions, and Arts of the Himalayan Region (PDF)
- Summer Institute for School Teachers: Roots of the Arab Spring (PDF)
- Summer Seminar for College Teachers: America's China Dream and China's American Dream (PDF)
- Summer Seminar for College Teachers: Metaphysics and Mind (PDF)
- Summer Seminar for College Teachers: Reassessing British Romanticism (PDF)
- Summer Institute for College Teachers: American Material Culture in Nineteenth-Century New York (PDF)
- Summer Institute for College Teachers: Empires and Interactions Across the Early Modern World (PDF)
- Summer Institute for College Teachers: History of Political Economy (PDF)
Two New Funding Mechanisms at NSF

NSF has recently announced two new funding mechanisms you may want to consider pursuing: one—the new Ideas Labs mechanism—is now included in the new Grant Proposal Guide (GPG) that took effect the end of last month (you can find a summary of other significant changes to the GPG here); the other is a pilot INSPIRE mechanism. Both of these new mechanisms can provide strategic stepping stones toward larger, interdisciplinary grants from NSF for especially creative, “outside-the-box” ideas. These mechanisms may be of particular interest to faculty who are considering working toward a large interdisciplinary center-level NSF grant (e.g., a Science and Technology Center or Engineering Research Center) a few years from now.

In prior newsletter articles about competing for these kinds of large team and center-level grants, we often discuss the importance of developing a long-term strategy that allows you to build a strong interdisciplinary team focused on a creative and exciting research vision, and then using “building block” grants to generate joint publications and produce exciting preliminary results. These new funding mechanisms have the potential to help you develop some of these creative research ideas, build interdisciplinary collaborations, and conduct these types of building block research projects.

Ideas Labs

The Ideas Lab mechanism is described in Section II D.3 of the new GPG. We discussed Ideas Labs at length in an article in our February 2014 issue. NSF has been experimenting with the concept for quite a while, but this is the first time they have included a specific Ideas Lab funding mechanism—a sign that they plan to expand the use of this mechanism. Ideas Labs are one strategy that NSF is using in their increased efforts to promote high-impact, innovative (and often interdisciplinary) research. This trend has been evident at many of the funding agencies (especially NSF and NIH), accelerated in recent years in response to criticism—most notably from the US Congress—that the peer review process has resulted in funding decisions that are too conservative and risk-averse and, as a result, miss the opportunity to fund potentially transformative research ideas.

The conventional model has been for the funding agencies to issue solicitations and then leave it to the research community to form teams and develop innovative ideas to address the solicitation’s criteria. However, it appears that NSF had decided that the research community needs some help, particularly when it comes to bringing together researchers from vastly different research areas such as, for example, engineering and social sciences.

The EAGER funding mechanism was one of NSF’s early responses to this concern. IDEAS Labs focus even earlier in the process of developing innovative and potentially transformative ideas. Ideas Labs grew out of a suite of programs pioneered by UK’s Engineering and Physical Sciences Research Council (EPSRC) called the IDEAS Factory which was designed to generate highly innovative research projects that “would be difficult to conceive under normal circumstances.” “Sandpits” are an important component of the IDEAS Factory approach. Sandpits are generally meant for problems that have already received considerable research
attention, but progress has stalled and a profoundly different approach is needed. The fundamental strategy of sandpits is to bring together researchers from different communities who probably would not otherwise connect with each other, along with facilitators and mentors, in an intense workshop environment.

Ideas Labs are a version of sandpits, modified to meet NSF’s needs. They have been employed intermittently by various NSF Directorates since 2008, most extensively by the NSF BIO directorate, but also by GEO, ENG and EHR. It seems that NSF has been happy enough with the results to incorporate the process into a new NSF-wide funding mechanism.

In essence, Ideas Labs are a multi-stage process. In the first stage, NSF issues a solicitation for proposals to participate in an Ideas Lab focused on a specific research challenge. Researchers apply as individuals, not as teams, because teams will be formed in the Ideas Lab. Applicants submit a 2-page proposal that describes their expertise in the area of interest as well as characteristics that will make them particularly suited for the Ideas Lab activity. The applicant must be willing to take the time to participate in the intense Ideas Lab experience, which may be up to 5 days. These characteristics might include a history of collaboration across disciplines or a track record of innovative approaches. In contrast to a conventional proposal to NSF, having set ideas or a research agenda on how to tackle the topic of interest will work against you, as they are looking for people with strong expertise but an open mind.

During the Ideas Lab experience, participants form teams and generate project ideas which will be evaluated by a separate Ideas Lab panel. These evaluations will be communicated to the Program Officers, who will decide which projects and teams should be invited to submit full proposals. Full proposals will be evaluated by the cognizant NSF Program Officers, the Ideas Lab panelists and other external reviewers. These awards will then be handled like conventional NSF awards.

INSPIRE

A recent Dear Colleague Letter describes INSPIRE, another new funding mechanism that is being piloted. Like EAGER and RAPID, proposals to this funding mechanism will be internally reviewed rather than being subjected to the conventional external peer review process. The motivation behind INSPIRE is similar to that for EAGER: very innovative, unconventional ideas at the cusp of two disciplines, or that bring multiple disciplines together in an unconventional way don’t normally fare well in disciplinary review panels. The Dear Colleague letter lists three criteria that project must meet for this funding mechanism:

1. Scientific advances lie outside the scope of a single program or discipline, such that substantial funding support from more than one program or discipline is necessary.
2. Lines of research promise transformational advances.
3. Prospective discoveries reside at the interfaces of disciplinary boundaries that may not be recognized through traditional review or co-review.

As with EAGER, NSF wants to ensure that this mechanism isn’t used simply as a way to avoid normal peer review. For that reason, they have developed stringent criteria for what types of proposals may be submitted under this mechanism. Before you submit an INSPIRE proposal, you must obtain approval from two NSF Program Officers who oversee different programs that
are both germane to your proposal topic, which can be in any areas that NSF supports. INSPIRE grants are meant for single PIs or small teams and provide up to $1M for up to 5 years. Proposals should follow the normal GPG requirements (15-page project description, etc.).

Review criteria are specifically tailored to the goals for this mechanism. As part of Intellectual Merit, NSF will evaluate the project’s “interdisciplinarity” and “transformative potential,” which they define as follows:

**Interdisciplinarity**: “An INSPIRE proposal must address questions at the interfaces of more than one discipline, as opposed to incorporating disciplinary contributions additively. The proposal must identify and justify how the project is interdisciplinary, for example by:

- Combining concepts/methods from multiple fields in new, surprising ways;
- Proposing problem-driven research that requires a comprehensive and integrative approach to a grand challenge issue;
- Raising new fundamental questions or interesting new directions for research at the interface of disciplines; or
- Making major changes in understanding by integrating existing concepts or methods in new ways to address complex phenomena.”

**Transformative Potential**: “An INSPIRE proposal must be potentially transformative. The proposal must identify and justify what is potentially transformative in the project, by showing specifically how at least one of the following characteristics is fulfilled:

- Challenges conventional wisdom;
- Leads to insights that enable new techniques or methodologies; or
- Redefines the boundaries among disciplines of science, mathematics, engineering, or education.”

PIs who are considering pursuing a grant under INSPIRE should focus particularly on these criteria, clearly distinguishing their proposed project from proposals that could be handled by a single NSF program or through standard co-review.

Other Resources

- **A case study of an NSF Ideas Lab** (article by T. Collins, M. Kearney and D. Maddison)
- **Report by Rand Europe: Alternatives to Peer Review in Research Project Funding 2013 Update**

Past NSF Sandpit or Ideas Lab Solicitations/Dear Colleague Letters:

- **New Directions in Synthetic Biology** (NSF BIO and UK-EPSRC, April 2009)
- **Innovations in Biological Instrumentation and Visualization** (NSF BIO, May 2010)
- **Surpassing Evolution: Transformative Approaches to Enhance the Efficiency of Photosynthesis** (NSF BIO and UK-BBSRC, September 2010)
- **Assembling, Visualizing, and Analyzing the Tree of Life** (NSF BIO, August 2011)
- **Nitrogen Utilization in Plants** (NSF BIO and UK-BBSRC, December 2012)
- **Data-Intensive Research to Improve Teaching and Learning – An Ideas Lab to Foster Transformative Approaches to Teaching and Learning** (NSF EHR, October 2013)
Phase I Ideas Labs on Undergraduate STEM Education (NSF EHR, BIO, ENG, GEO, March 2014)

Projects and teams awarded out of the Nitrogen Utilization Ideas Lab

Original INSPIRE solicitation (2013)
Strategies for Preparing for a Site Visit

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By Mike Cronan, co-publisher
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Site visits are part of a continuum that typically runs from preliminary proposal to full proposal to site visit to funded project and from there on to rigorous annual reviews and periodic on-site reviews during a 5 or 10-year project performance period. At any given point along this continuum, it is always beneficial to be mindful of the next waypoint. For example, you would not write a preliminary proposal, say, for the currently open NSF Science and Technology Centers, by focusing solely on the requirements of the 8-page preliminary proposal without looking ahead in the solicitation to determine the requirements of the 25-page full proposal. Nor would you write a full proposal for an STC without anticipating the questions likely to be raised in a site visit, thereby laying the groundwork for a successful site visit for the full proposal, and, from there, successful annual reviews.

When writing center proposals, you are always scanning the horizon for what will come next in the process and strategically positioning for it by anticipating the probing questions reviewers might ask based on what you have written—or failed to write—in the research narrative, the latter a too common (and fatal) flaw of many declined proposals, and certainly the kiss of death to your chances of a site visit for a center proposal. Failure to anticipate the likely critical perspective of reviewers reading your research narrative is a common strategic weakness in grant writing. In fact, grant writers would do well to rephrase Chinese military general and philosopher Sun Tzu’s (circa 544-496 BC) observation, “To know your Enemy, you must become your Enemy” as follows: “To know your Reviewer, you must become your Reviewer.” For, as Tzu states, “If you know the enemy and know yourself, you need not fear the result of a hundred battles.”

In this regard, you are somewhat like the sailor on watch in the crow’s nest of an old sailing ship—ever vigilant for the unexpected event that could throw you off course towards your final destination, i.e., a funded center. Any augments you make to a preliminary proposal must provide a seamless transition to the full proposal where your core arguments will be expanded upon with more detail, specificity, and elaboration. Furthermore, your full proposal needs to be framed in a way that anticipates a seamless transition to a site visit.

With this in mind, when you are planning ahead for a site visit, typically a very scripted event framed on the funding agency’s objectives for the site visit team, keep in mind that following a successful site visit, i.e., a funded project, the next likely waypoint will be an annual performance review, either on site by an agency review team, or perhaps virtual, but regardless of the venue, a very rigorous and probing process. So anticipating an annual performance review can help you better frame the site visit just as anticipating the full proposal helps you write a more competitive preliminary proposal. Here, as in the research narrative itself, think in terms of synergistic and integrated rather than siloed waypoints.

How, you may ask, can you anticipate what your annual performance review might entail before you even have a site visit? This is where the technique of “generic estimation” or “generic approximation” comes into play as a strategy to enhance your competitiveness. Both
site visits and annual performance reviews by any given agency share many common features regardless of the specific program being reviewed. For example, the site visit for an NSF ERC and the site visit for an NSF STC are much more similar than dissimilar.

By and large, agencies use a template for site team reviews and annual performance reviews that are refined over time, but are more similar than dissimilar and can be planned for by the strategically prepared. So, for example, a site visit or annual performance review for the ADVANCE program at NSF can share common characteristics with a site visit for an NSF STC or ERC, and an annual performance review for an ERC can help you anticipate what might be asked in an NSF site visit on that program or other programs.

Just as in real estate the mantra is “location, location, location,” in grant writing the mantra is “generic common denominators, generic common denominators, generic common denominators.” Your capacity to know and understand the generic common denominators of grant writing, irrespective of discipline, agency, or specific solicitation, gives you a powerful tool to increase your chances of success, just as the Conservation of Energy Principle gives us a powerful “generic tool” for understanding the physical world.

When it comes to preparing for site visits by anticipating your team’s preparation objectives, keep in mind Mark Twain’s observation that “History doesn’t repeat itself, but it does rhyme.” Two excellent sources of “generic information” that can help you better plan for and anticipate what you might expect from a site visit are downloadable pdf files from the BEACON Center for the Study of Evolution in Action, an NSF Science and Technology Center led by Michigan State University. Specifically, note the BEACON 2014 Annual Report and the BEACON 2013 Strategic Plan.

Many NSF-funded centers such as the ERC and the STC have program websites, but the BEACON website is among the very best of them, if not the best, largely because it contains annual reports, a strategic plan, and other component information on the center that effectively represent an implicit and very collegial “how to” for transiting all of the many waypoints of a successful center. BEACON reflects the NSF cultural expectation that, once you have center funding, you are expected to communicate the steps you've taken to conduct your center’s operations. If you are invited to submit a full proposal under the current STC program and you have not yet read the above documents at the BEACON website, you would be well advised to do so before proceeding further.

So what, you may ask, will I learn about preparing for a site visit from reading the BEACON 2014 Annual Report and the BEACON 2013 Strategic Plan? Well, beginning with the BEACON 2013 Strategic Plan, the first take-away message is that this strategic plan for a funded STC successfully transited all the waypoints, including the site visit, to a funded center. In this 19-page document, the multiple operational goals, objectives, and outcomes of the STC (from research to Broader Impacts to Education, to the key sections related to student engagement in center activities and the Management Plan, etc.) are stated, described (with rationale), and integrated along with clearly defined and measurable metric frameworks and outcomes that will be used to evaluate the center.

Structuring your site visit presentations in this way is very important, and it lays the groundwork for successful annual performance reviews that are metrics enabled. If you are currently writing an STC full proposal, reading this strategic plan will give great insight into what
you must accomplish in your 25-page narrative. Moreover, a core question asked by the review team in any site visit has to do with what might be described as the “\textit{unit of change}.” That is, after a five or ten year performance period of a funded center being in operation \textit{what has changed, what is different, and what does a successful center look like?}

Next, fast forward to the BEACON 2014 Annual Report. The annual report is the first key waypoint after a successful site visit, and, in this case, it’s a 120-page document. The Report addresses the BEACON’s “Strategic Implementation Plan (which) sets goals in six areas: Education, Human Resources & Diversity; Leadership and Management; Knowledge Transfer; Integrative Research, Ethical Research; and \textbf{Research Output}.” Each of these six strategic areas (is) presented in a tabular fashion with descriptions under three key headings: \textbf{Goal, Metrics, and Progress}.

You can think of the site visit as prologue to the first annual report, just as you should consider the preliminary proposal as prologue to the full, and the full as prologue to the site visit. However, in reading through these BEACON documents, consider what are the \textit{generic common denominators}? By and large, they are exactly what is presented in the BEACON annual report: \textit{Goal, Metrics, and Progress.} This characterizes the \textit{unit of change} question and allows you to answer it with great specificity for a site visit team. So, while much of the structure of the site visit is determined by the funding agency, how you structure your presentations to map to those requirements will be important as well. BEACON’s strategic plan and annual report will help you get a sense in a very practical way of how to prepare for a site team visit.

Of course, there are other issues to be considered when preparing for a site visit, particularly taking note of the diversity of the team participating in the proposed center activities, and, in the case of an NSF STC or ERC, the engagement of students in center activities. For example, depending on the site review team, it is not uncommon for members of the site team to want to meet privately with students who will be engaged in and benefit from center activities. A good example of an STC site visit schedule from Purdue can be seen \textit{here}. 
Expanding ASSISTance to Additional Grant Programs in 2015
In 2015, applicants will have more submission options as ASSIST joins Grants.gov downloadable Adobe forms and system-to-system solutions as viable ways to submit grant applications to NIH. ASSIST, NIH’s online system for application preparation and submission, was launched in 2012 for use with NIH’s complex, multi-project grant programs. Since that time, multi-project ASSIST users have benefited from pre-submission validations of Grants.gov and NIH business rules, pre-submission preview of application images in the NIH format and a host of other features. Over the next year, applicants to single-project programs will be able to take advantage of these same ASSIST features. NIH’s R03 and R21 grant programs will be supported in ASSIST at the end of January and support for additional programs will be announced throughout the year. For more information about the rollout of ASSIST to single-project grant programs, please read NIH Guide Notice NOT-OD-15-044.

SBIR/STTR Due Dates Are Changing
NIH’s standard due dates for the small business innovation research (SBIR) and small business technology transfer research (STTR) programs are changing. These changes are in response to small business community feedback, congressional mandates, and recommendations from the NIH Scientific Management Review Board to decrease delays between submission and award funding.

The next standard due date for these programs is April 5, 2015, and there will not be an August 5, 2015 due date. From then on, SBIR/STTR due dates will fall on September 5, January 5, and April 5, as described in the NIH Guide.

The current SBIR and STTR Grant Omnibus funding opportunity announcements are being extended one cycle during the transition, to allow submissions on the April 5, 2015 due date and May 7, 2015 AIDS/AIDS-related due date. Be sure to review the following NIH Guide announcements if you are considering an application to the SBIR/STTR programs:

- HHS Changes Standard Due Dates for SBIR/STTR Grant Applications
- Notice To Extend PA-14-071 “PHS 2014-02 Omnibus Solicitation of the NIH, CDC, FDA and ACF for Small Business Innovation Research Grant Applications (Parent SBIR [R43/R44])”
- Notice To Extend PA-14-072 “PHS 2014-02 Omnibus Solicitation of the NIH for Small Business Technology Transfer Grant Applications (Parent STTR [R41/R42])”

Looking for more information on the NIH SBIR and STTR programs? Check out the new NIH SBIR/STTR website at sibir.nih.gov.

Links for Research Funding in the Humanities
- How to Get a Grant from NEH
- Writing Proposals for ACLS Fellowship Competitions
• **How to Write Effective Proposals in Humanities**, Susan Stanford Friedman, Department of English, University of Wisconsin-Madison
• **Ten Myths About Fulbright**
• **Humanities Resource Center**
• **How to Write Grants in the Arts and Humanities**
• **Signposting and Front-Loading**, by James Mulholland, Assistant Professor of English at Wheaton College in Massachusetts.
Educational Grant Writing Web Resources

Guide to Implementing the Next Generation Science Standards
A Framework for K-12 Science Education and Next Generation Science Standards (NGSS) describe a new vision for science learning and teaching that is catalyzing improvements in science classrooms across the United States. Achieving this new vision will require time, resources, and ongoing commitment from state, district, and school leaders, as well as classroom teachers. Successful implementation of the NGSS will ensure that all K-12 students have high-quality opportunities to learn science.

Guide to Implementing the Next Generation Science Standards provides guidance to district and school leaders and teachers charged with developing a plan and implementing the NGSS as they change their curriculum, instruction, professional learning, policies, and assessment to align with the new standards. For each of these elements, this report lays out recommendations for action around key issues and cautions about potential pitfalls. Coordinating changes in these aspects of the education system is challenging. As a foundation for that process, Guide to Implementing the Next Generation Science Standards identifies some overarching principles that should guide the planning and implementation process.

The new standards present a vision of science and engineering learning designed to bring these subjects alive for all students, emphasizing the satisfaction of pursuing compelling questions and the joy of discovery and invention. Achieving this vision in all science classrooms will be a major undertaking and will require changes to many aspects of science education. Guide to Implementing the Next Generation Science Standards will be a valuable resource for states, districts, and schools charged with planning and implementing changes, to help them achieve the goal of teaching science for the 21st century.

A Practitioner’s Guide To Implementing Early Warning Systems
To stem the tide of students dropping out, many schools and districts are turning to early warning systems (EWS) that signal whether a student is at risk of not graduating from high school. While some research exists about establishing these systems, there is little information about the actual implementation strategies that are being used across the country. This report summarizes the experiences and recommendations of EWS users throughout the United States.

The Development and Design of the Common Core State Standards for Mathematics
As one of the lead writers of the Common Core State Standards for Mathematics, I begin by explaining what the standards are, what they are not, and how they were developed. Then I detail some ways in which the standards differ from previous state standards. Finally, I describe some of the developments I have seen in the implementation of the standards and the key developments I would like to see in the future.

Coordinating Research & Practice: New Models for Engaging Teachers with the Research-Base Related to STEM Practices
How can engagement with research support classroom adoption of Common Core Math and Next Generation Science Standards? In this session we review three professional development approaches to engaging teachers with research related to STEM Practices, as espoused by the new standards. We highlight models that support classroom mathematics, classroom science, and informal science engineering instruction; stressing in particular how the plans and processes for engaging educators with research morphed over time, as questions, experiences and knowledge from practice encountered concepts and findings from research. This session will engage participants in dialogue about the reflexive relationship between research and practice in STEM educational improvement efforts, specifically focused on the practice turn that is being suggested for implementation of the new standards.

RSVP NOW: Making Sense of Measuring Implementation in Educational Research
February 25, 2015 - 2:00 PM (Eastern)
Presenters: Jeanne Century and Amy Cassata

Over the past several years, the National Science Foundation, the Institute of Education Sciences in the Department of Education and other funders have brought to light the critical importance of rigorously measuring implementation fidelity, or the extent an intervention is enacted as planned, and the contextual factors that affect fidelity. Researchers are expected to discuss the psychometric properties of their measures, specifically describe their approaches to analysis and how those analyses will be used. This poses a challenge, however, because implementation measurement is still relatively new and only now is a general consensus about what it is and how to do it emerging.

This webinar will provide participants with a high-level overview of the key issues related to implementation measurement including: 1) definitions, theory and background; 2) study design and measurement approaches; 3) analysis strategies; and 4) differences between implementation measurement and other kinds of studies (such as design-based implementation research). The webinar will describe each of the issues and give concrete examples of both progress and challenges in each area. The webinar will also address where implementation measurement fits in to the study types outlined in the Common Guidelines and include specific examples from NSF- and IES-funded studies.

SAVE THE DATE: The Current State of K-12 Computer Science Education in the US
March 12, 2015 - 2:00 PM (Eastern)
Presenters: Sarah Wille and Jeanne Century

Momentum is growing around expanding computing opportunities for students. Organizations like the National Science Foundation and the non-profit Code.org are working to improve computer science educational opportunities for all students, but especially females and underrepresented minorities in the discipline. Still, despite that work and the work of many others, opportunities for students to learn computer science and what it is are relatively scarce.

This webinar will provide participants with an overview of what is currently happening in K-12 computer science education now and areas for future educational research and development. Researchers from Outlier Research & Evaluation at CEMSE at the University of Chicago will provide examples from their research and evaluation work including a current NSF-
funded research project (the BASICS Study) that focuses on identifying key supports for and barriers to implementing introductory computer science in large school districts.

Classroom observation protocol: User guide, AIM: K-8 Science MSP, December 2014. "AIM: K-8 Science MSP created a classroom observation protocol explicitly tied to research on learning. The protocol was developed to assess student opportunity to develop conceptual understanding of a targeted science idea across all instruction on that idea. This user guide includes an annotated version of the protocol describing how the protocol is intended to be used."

Upcoming Technical Evaluation Assistance in Mathematics and Science (TEAMS) Webinars
Save The Date: Calculating Power
February 17, 2015 - 3:00 PM (Eastern)
Presenters: Mary Gray, Dan Jesse, and Xin Wang

What is power? What influences power? How do you use power calculations to determine the appropriate sample size for your evaluation? What if the subjects are in different schools, districts, or states? What is realistic to do with a limited budget? These kinds of questions must be considered when designing evaluations. This session will cover the basics of calculating power for simple and complex designs, aligning unit of analysis and unit of alignment, and cost effectively allocating resources. Evaluation design examples and open access software packages will also be discussed.
Dear Colleague Letter: MPS Graduate Research Supplement for Veterans (MPS-GRSV)
The National Science Foundation recognizes that Veterans represent a potential underutilized workforce for America's research and industrial communities. The Directorate for Mathematical and Physical Sciences (MPS) at the National Science Foundation (NSF) is now accepting supplemental requests to support one (additional) Ph.D. student per award, as long as the graduate student is a United States Veteran. The proposed MPS-GRSVs will afford Veterans an opportunity to conduct research towards a doctoral degree with an NSF MPS Directorate active grantee.

The purpose of this Notice of Intent (NOI) is to provide potential applicants advance notice that the Department of Energy, Office of Energy Efficiency and Renewable Energy intends to issue, on behalf of the Vehicle Technologies Office, a Funding Opportunity Announcement, number DE-FOA-0001201 entitled "FY 2015 Vehicle Technologies Office Program Wide Funding Opportunity Announcement". PLEASE NOTE THAT NO APPLICATIONS WILL BE ACCEPTED THROUGH THIS NOTICE. Please do not submit questions or respond to this NOI. Prospective applicants to the FOA should begin developing partnerships, formulating ideas, and gathering data in anticipation of the issuance of this FOA. It is anticipated that this FOA will be posted to the EERE Exchange website in the January or February 2015 timeframe.

The National Science Foundation’s National Center for Science and Engineering Statistics (NCSES) has released an updated program solicitation, Research on the Science and Technology Enterprise: Statistics and Surveys. Through this research program, NCSES intends to enhance its efforts in advancing analytic and methodological research in support of its surveys and to engage in the education and training of researchers in the use of large-scale nationally representative data sets. NCSES welcomes efforts by the research community to use NCSES data for research on the science and technology (S&T) enterprise, to develop improved survey methodologies for NCSES surveys, to create and improve indicators of S&T activities and resources, and to strengthen methodologies to analyze and disseminate S&T statistical data. To that end, NCSES invites proposals under this program for individual or multi-investigator research projects, doctoral dissertation improvement awards, workshops, experimental research, survey research, and data collection and dissemination projects. The full proposal deadline is February 18, 2015. Approximately $750,000 has been allocated, with 7–12 grants expected to be awarded. For additional information, contact Nirmala Kannankutty (nkannank@nsf.gov; 703-292-7797).

Dear Colleague Letter: I/UCRC Clusters for Grand Challenges, a Collaborative Opportunity for Research to Address Grand Challenges
The National Science Foundation (NSF) invites supplemental requests to establish collaborative research clusters between NSF Industry/University Cooperative Research Centers (I/UCRC). To this end, NSF is interested in supporting two types of activities: Planning Conferences and Collaborative Research Cluster Partnerships.

This Dear Colleague Letter (DCL) replaces the Collaborative Opportunity for Research between I/UCRCs (CORBI). The goal is to enable active I/UCRCs to leverage each other’s expertise, research results, resources and existing networks and partnerships to establish a cross-center cluster that will tackle a cross-disciplinary, cross-sector portfolio of research projects that hold the potential to catalyze technology breakthroughs and advance national priorities. As appropriate, the cluster of existing I/UCRCs may team up with Engineering Research Centers (ERCs), Science and Technology Centers (STCs), and/or additional academic and industrial collaborators to advance these goals. The active participation of industry in the design and implementation of cluster research efforts is expected. Projects proposed under this mechanism must have industrial relevance as evidenced by the written approval of all of the Industry Advisory Boards (IABs) of the involved I/UCRCs. Research projects could be accelerated or scope enhanced with industry funds directed to the cluster. Additional industry and other sponsors external to IABs can participate in cluster research activities.

I/UCRCs planning to respond to this DCL may request funds to organize a preparatory conference with all stakeholders to identify research priorities and develop the portfolio of research projects prior to submission of a request for supplemental funding for a collaborative research cluster. A limited amount of funds are available for these conferences. Substantial industry presence and participation in the conference is critical.

In light of the recent call by the President to identify the most pressing challenges and transformative opportunities to improve the technologies, processes and products across multiple manufacturing industries, “Ensuring American Leadership in Advanced Manufacturing” (reference the President’s Council of Advisors on Science and Technology report, Accelerating U.S. Advanced Manufacturing, Advanced Manufacturing Partnership 2.0 http://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/amp20_report_final.pdf and http://www.whitehouse.gov/the-press-office/2014/10/27/fact-sheet-president-obama-announces-new-actions-further-strengthen-us-m), potential precompetitive research topics that are of particular interest include but are not limited to:

- Advanced sensing, controls, and platforms for manufacturing
- Visualization, informatics & digital manufacturing
- Advanced materials manufacturing (AMM)

Although Advanced Manufacturing has been highlighted, I/UCRC clusters addressing any precompetitive research areas identified among the science and technology priorities for the nation are welcome and will be fully considered.

Dear Colleague Letter: Employment Opportunities in the Division of Computing and Communication Foundations (CCF) (Open Until Closed)

The Division of Computing and Communication Foundations announces a nationwide search for program directors in the following programs under the provisions of the Intergovernmental Personnel Act.
• Communication and Information Foundations (CIF), with a focus on communications, information theory, signal processing, and networking to fill a Program Director position.
• Software and Hardware Foundations (SHF), with a focus on computer architecture, computer systems, and file and storage systems.

Formal consideration of interested applicants will begin immediately upon receipt of the first application and will continue until a selection is made. We are evaluating candidates who would be available to start between July 2015 and January 2016.
Measuring Research and Development Expenditures in the U.S. Nonprofit Sector: Conceptual and Design Issues: Summary of a Workshop Free Download

National Center for Science and Engineering Statistics (NCSES) of the National Science Foundation is responsible for national reporting of the research and development (R&D) activities that occur in all sectors of the United States economy. For most sectors, including the business and higher education sectors, NCSES collects data on these activities on a regular basis. However, data on R&D within the nonprofit sector have not been collected in 18 years, a time period which has seen dynamic and rapid growth of the sector. NCSES decided to design and implement a new survey of nonprofits, and commissioned this workshop to provide a forum to discuss conceptual and design issues and methods.

Measuring Research and Development Expenditures in the U.S. Nonprofit Sector: Conceptual and Design Issues summarizes the presentations and discussion of the workshop. This report identifies concepts and issues for the design of a survey of R&D expenditures made by nonprofit organizations, considering the goals, content, statistical methodology, data quality, and data products associated with this data collection. The report also considers the broader usefulness of the data for understanding the nature of the nonprofit sector and their R&D activities. Measuring Research and Development Expenditures in the U.S. Nonprofit Sector will help readers understand the role of nonprofit sector given its enormous size and scope as well as its contribution to identifying new forms of R&D beyond production processes and new technology.

Data and Research to Improve the U.S. Food Availability System and Estimates of Food Loss: A Workshop Report Free Download

The United States Department of Agriculture's (USDA's) Economic Research Service's (ERS) Food Availability Data System includes three distinct but related data series on food and nutrient availability for consumption. The data serve as popular proxies for actual consumption at the national level for over 200 commodities (e.g., fresh spinach, beef, and eggs). The core Food Availability (FA) data series provides data on the amount of food available, per capita, for human consumption in the United States with data back to 1909 for many commodities. The Loss-Adjusted Food Availability (LAFA) data series is derived from the FA data series by adjusting for food spoilage, plate waste, and other losses to more closely approximate actual intake. The LAFA data provide daily estimates of the per capita availability amounts adjusted for loss (e.g., in pounds, ounces, grams, and gallons as appropriate), calories, and food pattern equivalents (i.e., "servings") of the five major food groups (fruit, vegetables, grains, meat, and dairy) available for consumption plus the amounts of added sugars and sweeteners and added fats and oils available for consumption. This fiscal year, as part of its initiative to systematically review all of its major data series, ERS decided to review the FADS data system. One of the goals of this review is to advance the knowledge and understanding of the measurement and technical aspects of the data supporting FADS so the data can be maintained and improved.
Data and Research to Improve the U.S. Food Availability System and Estimates of Food Loss is the summary of a workshop convened by the Committee on National Statistics of the National Research Council and the Food and Nutrition Board of the Institute of Medicine to advance knowledge and understanding of the measurement and technical aspects of the data supporting the LAFA data series so that these data series and subsequent food availability and food loss estimates can be maintained and improved. The workshop considered such issues as the effects of termination of selected Census Bureau and USDA data series on estimates for affected food groups and commodities; the potential for using other data sources, such as scanner data, to improve estimates of food availability; and possible ways to improve the data on food loss at the farm and retail levels and at restaurants. This report considers knowledge gaps, data sources that may be available or could be generated to fill gaps, what can be learned from other countries and international organizations, ways to ensure consistency of treatment of commodities across series, and the most promising opportunities for new data for the various food availability series.

Spurring Innovation in Food and Agriculture: A Review of the USDA Agriculture and Food Research Initiative Program
The U.S. Department of Agriculture (USDA) is the primary agency responsible for supporting innovations and advances in food and agriculture. USDA funds are allocated to support research through several mechanisms, including the Agriculture and Food Research Initiative (AFRI). In 2008, Congress replaced USDA's National Research Initiative with AFRI, creating USDA’s flagship competitive research grants program, and the 2008 Food, Conservation, and Energy Act, known as the Farm Bill, outlined the structure of the new program. Spurring Innovation in Food and Agriculture assesses the effectiveness of AFRI in meeting the goals laid out by Congress and its success in advancing innovations and competitiveness in the U.S. food and agriculture system. Spurring Innovation in Food and Agriculture evaluates the value, relevance, quality, fairness, and flexibility of AFRI. This report also considers funding policies and mechanisms and identifies measures of the effectiveness and efficiency of AFRI's operation. The study examines AFRI's role in advancing science in relation to other research and grant programs inside of USDA as well as how complementary it is to other federal research and development programs. The findings and conclusions of this report will help AFRI improve its functions and effectiveness in meeting its goals and outcomes.
New Funding Opportunities
(Back to Page 1)

Content Order
New Funding Posted Since December 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 typically work as well.]

New Funding Solicitations Posted Since December 15 Newsletter

**NIST Precision Measurement Grant Program (PMGP)**
NIST is soliciting applications from eligible applicants to support significant research in the field of fundamental measurement or the determination of fundamental constants. **Due February 3.**

**DARPA-BAA-15-16 Fast Lightweight Autonomy (FLA)**
The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative research proposals in the area of minimalistic high-speed aerial navigation in cluttered environments. Proposed research should investigate innovative approaches that enable revolutionary advances in science or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice. **Due Feb. 5.**

**Science of Learning: Collaborative Networks (SL-CN)**
This solicitation launches the National Science Foundation’s (NSF’s) next phase of research in the Science of Learning (SL). The new SL Program is designed to capitalize on the momentum created by the Science of Learning Centers (SLC) Program to continue developing an integrated, interdisciplinary SL community. The goals of the SL Program are to: advance fundamental knowledge about learning through integrated research; connect the research to specific scientific, technological, educational, and workforce challenges; and enable research communities to capitalize on new opportunities and discoveries. The Program is designed to support projects that – due to the activities supported and their interdisciplinarity and integrative breadth – do not fit into existing NSF programs. **LOI Feb. 6; full March 18.**

**ED-GRANTS-122914-001 Office of Elementary and Secondary Education (OESE): College Assistance Migrant Program (CAMP)**
The purpose of CAMP is to provide academic and financial support to help migrant and seasonal farmworkers and members of their immediate family complete their first year of
college and continue in postsecondary education. Priorities: This competition includes one competitive preference priority and three invitational priorities. In accordance with 34 CFR 75.105(b)(2)(iv), the competitive preference priority is from section 418A(e) of the Higher Education Act of 1965, as amended by section 408 of the Higher Education Opportunity Act of 2008 (20 U.S.C. 1070d-2(e)). The first invitational priority is for applications that promote science, technology, engineering, and mathematics (STEM) education. The second invitational priority is for applications that propose to engage faith-based and community organizations in the delivery of services under this program. The third invitational priority is for applications that submit a plan supported by evidence of strong theory (e.g., a fully developed logic model (as defined in this notice) of the proposed project). Due February 12.

**ARPA-E issued a $125 million open Funding Opportunity Announcement (FOA)**

OPEN 2015 FOA - Notice of Intent / Concept Paper - 01.07.2015

ARPA-E has issued a $125 million open Funding Opportunity Announcement (FOA). Called OPEN 2015, this FOA will support the development of potentially disruptive new technologies in all areas of energy research and development, for both transportation and stationary applications. OPEN 2015 is the third open funding solicitation in ARPA-E’s history. Open solicitations ensure that ARPA-E does not miss opportunities to support potentially transformational projects outside the scope of existing ARPA-E programs. The projects selected under OPEN 2015 will pursue novel approaches to energy innovation and support the development of potentially disruptive new technologies across the full spectrum of energy applications. The deadline to submit a Notice of Intent for OPEN 2015 is 5 p.m. ET on February 20, 2015. For more information, including the full FOA, please visit available ARPA-E’s online application portal, ARPA-E eXCHANGE. Areas of research responsive to this FOA include (but are not limited to) electricity generation by both renewable and non-renewable means; electricity transmission, storage, and distribution; energy efficiency for buildings, manufacturing and commerce, and personal use; and all aspects of transportation, including the production and distribution of both renewable and non-renewable fuels, electrification, and energy efficiency in transportation. Notice of Intent Deadline: 2/20/2015 5:00 PM ET; Concept Paper Submission Deadline: 2/27/2015 5:00 PM ET; Full Application Submission Deadline: TBD

**RFA-RM-14-030 Nuclear Organization and Function Interdisciplinary Consortium (NOFIC)(US4)**

This FOA seeks to establish technology-development and data-production centers whose mission will be to develop, benchmark, standardize, and validate the next generation of high-throughput technologies that can produce three dimensional physical and functional maps of mammalian genomes, develop predictive models of mammalian genome structure-function relationships, and test the relevance of new nuclear organizational principles within the context of specific biological paradigms and systems. Due February 23.


The purpose of this applied research (6.2) topic is to identify, understand, and resolve key issues associated with the operation of a free space optical quantum key distribution (QKD)
system that functions in a maritime environment including the development and maturation of algorithms, protocols; and methods that resolve these issues; determine the performance of and demonstrate the capability of these algorithms, protocols and methods in order to understand their benefits and limitations; as well as to identify and provide technical solutions for performance barriers associated with supporting technologies such as single photon sources, detectors, and adaptive optics, needed to support operating in the context of a free space optical QKD system in the maritime environment. **Due February 24.**

**20150310-HT Institutes for Advanced Topics in the Digital Humanities**

These NEH grants support national or regional (multistate) training programs for scholars and advanced graduate students to broaden and extend their knowledge of digital humanities. Through these programs, NEH seeks to increase the number of humanities scholars using digital technology in their research and to broadly disseminate knowledge about advanced technology tools and methodologies relevant to the humanities. The projects may be a single opportunity or offered multiple times to different audiences. Institutes may be as short as a few days and held at multiple locations or as long as six weeks at a single site. For example, training opportunities could be offered before or after regularly occurring scholarly meetings, during the summer months, or during appropriate times of the academic year. The duration of a program should allow for full and thorough treatment of the topic. Today, complex data its form, manipulation, and interpretations are as important to humanities study as more traditional research materials. Datasets, for example, may represent digitized historical records, high-quality image data, or even multimedia collections, all of which are increasing in number due to the availability and affordability of mass data storage devices and international initiatives to create digital content. Moreover, extensive networking capabilities, sophisticated analytical tools, and new collaboration platforms are simultaneously providing and improving interactive access to and analysis of these data as well as a multitude of other resources. The Institutes for Advanced Topics in the Digital Humanities program seeks to enable humanities scholars in the United States to incorporate advances like these into their scholarship and teaching. **Due March 10.**

**2015NEA03LFCW NEA Literature Fellowships: Prose, FY 2016**

The Arts Endowment’s support of a project may begin any time between January 1, 2016, and January 1, 2017, and extend for up to two years. Grant Program Description The NEA Literature Fellowships program offers $25,000 grants in prose (fiction and creative nonfiction) and poetry to published creative writers that enable recipients to set aside time for writing, research, travel, and general career advancement. Applications are reviewed through an anonymous process in which the only criteria for review are artistic excellence and artistic merit. To review the applications, the NEA assembles a different advisory panel every year, each diverse with regard to geography, race and ethnicity, and artistic points of view. The NEA Literature Fellowships program operates on a two-year cycle with fellowships in prose and poetry available in alternating years. For FY 2016, which is covered by these guidelines, fellowships in prose (fiction and creative nonfiction) are available. Fellowships in poetry will be offered in FY 2017 and guidelines will be available in the fall of 2015. You may apply only once each year.
Competition for fellowships is extremely rigorous. We typically receive more than 1,000 applications each year in this category and award fellowships to fewer than 5% of applicants. You should consider carefully whether your work will be competitive at the national level. **Due March 11.**

**2015-NIST-RET-01 NIST Research Experience for Teachers**

NIST is soliciting applications from eligible public school districts and accredited private educational institutions in the U.S. and its territories nominating science teachers in grades six (6), seven (7), and/or eight (8), who have successfully completed the NIST Summer Institute for Middle School Science Teachers (NIST Summer Institute) Program. Teachers must have completed the NIST Summer Institute Program prior to applying to participate in the NIST RET Program. The NIST RET Program will allow the selected teachers to participate in scientific research with NIST scientists and engineers at the NIST Campus in Gaithersburg, Maryland. **Due March 18.**

**NIJ-2015-4016 NIJ FY 15 Collecting Digital Evidence from Large-Scale Computer Systems and Networks**

NIJ seeks proposals for funding to conduct research and technology development leading to the introduction into practice of new and innovative means to speed the processing of large-scale computer systems and computer networks for digital evidence in a forensically sound manner that preserves the probative value of the evidence that the computer system or network may contain. **Due March 23.**

**NSF 15-534 Campus Cyberinfrastructure - Data, Networking, and Innovation Program**

The Campus Cyberinfrastructure - Data, Networking, and Innovation (CC*DNI) program invests in campus-level data and networking infrastructure and integration activities tied to achieving higher levels of performance, reliability and predictability for science applications and distributed research projects. Science-driven requirements are the primary motivation for any proposed activity. **Due March 24.**

**USDA-NIFA-AFRI-004797 AFRI Food, Agriculture, Natural Resources and Human Sciences Education and Literacy Initiative**

The AFRI Food, Agriculture, Natural Resources and Human Sciences Education and Literacy Initiative (AFRI ELI) focuses on developing the following: opportunities for undergraduate students at colleges and universities, including those from underrepresented ethnicities and economically disadvantaged groups at minority-serving institutions, community colleges, and other universities to obtain hands-on experience at land-grant and non-land-grant universities and USDA laboratories and obtain training to join the agricultural workforce or pursue graduate studies in food, agriculture, natural resources and the human sciences. technical and functional competence for predoctoral students; and the research independence and teaching credentials of postdoctoral students. **Due May 6.**
GCC-GRANT-SEP-15-001 Spill Impact Component Planning Grants Gulf Coast Ecosystem Restoration Council

This announcement provides guidance to the Gulf Coast States – defined as any of the States of Alabama, Florida, Louisiana, Mississippi, and Texas – or the Gulf Coast States’ administrative agents and the Gulf Consortium of Florida counties to apply for grants to fund planning activities to develop individual State Expenditure Plans (SEP) under the Spill Impact Component of the Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act). The eligible entities may apply to the Council for a grant to use the minimum allocation available under the Spill Impact Component of the RESTORE Act for planning purposes. The submission process for this announcement is organized into two phases: (1) the submission of a planning SEP by a Gulf Coast State; and (2) the administrative application process, which includes the submission of all administrative grant application materials by the eligible entities. All planning activities proposed under this announcement are limited to the development of a comprehensive SEP, including conceptual design and feasibility studies related to specific projects. This announcement does not include engineering and environmental studies related to specific projects. It also does not include any pre-award costs incurred prior to August 22, 2014. **December 31, 2015**

**URL Links to New & Open Funding Solicitations**

*Links verified: Saturday, October 04, 2014*

- HHS Grants Forecast
- American Cancer Society Index of Grants
- SAMHSA FY 2014 Grant Announcements and Awards
- DARPA Microsystems Technology Office Solicitations
- 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
- NIAID Funding Opportunities List
- 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)
- HHS Grants Forecast
- American Psychological Association, Scholarships, Grants and Awards
- EPA 2014 Science To Achieve Results (STAR) Research Grants
- NASA Open Solicitations
- Defense Sciences Office Solicitations
- The Mathematics Education Trust
EPA Open Funding Opportunities

- EPA Open Funding Opportunities
- CDMRP FY 2014 Funding Announcements
- Office of Minority Health
- Department of Justice Open Solicitations
- DOE/EEERE Funding Opportunity Exchange
- New Funding Opportunities at NIEHS (NIH)
- National Human Genome Research Institute Funding Opportunities
- Army Research Laboratory Open Broad Agency Announcements (BAA)
- SBIR Gateway to Funding
- Water Research Funding
- Fellowship and Grant Opportunities for Faculty Humanities and Social Sciences
- DARPA Current Solicitations
- Office of Naval Research Currently Active BAAs
- HRSA Health Professions Open Opportunities
- NIH Funding Opportunities Relevant to NIAID
- National Institute of Justice Current Funding Opportunities
- Funding Opportunities by the Department of Education Discretionary Grant Programs
- EPA’s Office of Air and Radiation (OAR) Open Solicitations
- NETL Open Solicitations
- DoED List of Currently Open Grant Competitions
- Foundation Center RFP Weekly Funding Bulletin

Solicitations Remaining Open from Prior Issues of the Newsletter

EPA-EE-14-01 Environmental Education Model Grants Program -- Solicitation Notice for 2014
The purpose of the Environmental Education Model Grant Program is to support model, replicable projects that increase public awareness and knowledge about environmental issues and provide the skills that participants in its funded projects need to make informed environmental decisions and take responsible actions toward the environment. Due Feb. 2.

2015-NIST-SURF-01 Summer Undergraduate Research Fellowship (SURF) Program
NIST is soliciting applications from eligible colleges and universities in the U.S. and its territories, nominating undergraduate students to participate in the Summer Undergraduate Research Fellowship (SURF) Program. The SURF Program will provide research opportunities for undergraduate students to work with NIST scientists and engineers, to expose them to cutting-edge research, and to promote the pursuit of graduate degrees in science and engineering. Due February 13.

R15AS00021 Desalination and Water Purification Research and Development (DWPR) Pilot
Department of the Interior
Through this Funding Opportunity Announcement (FOA), the U.S. Department of the Interior (DOI), Bureau of Reclamation (Reclamation), is accepting
applications for projects to be funded by the Desalination and Water Purification Research and Development Program (DWPR). Through this program, Reclamation is forming partnerships with private industry, universities, water utilities, and others to address a broad range of desalting and water purification needs. Also see: http://www.grants.gov/web/grants/search-grants.html?keywords=R15AS00021 P1 Due Feb. 16 and P2 April 27.

**DARPA-BAA-14-49 Biological Robustness in Complex Settings (BRICS)**

Through the Biological Robustness in Complex Settings (BRICS) program, DARPA is soliciting innovative research proposals to develop the necessary fundamental understanding and component technologies to create robust engineered biological systems. It is expected that technology developed in the BRICS program will enable the safe transition of synthetic biological systems from stringently controlled laboratory environments to more complex settings (Grants.gov posting). The BRICS portfolio will consist of a set of programs, of which this is the first, that aim to elucidate the design principles of engineering robust biological consortia and apply this fundamental understanding towards specific DoD applications. This announcement calls for the development of generalizable approaches that may be ultimately integrated into a complex biological system. DARPA anticipates a second BAA comprising specific challenge scenarios that require the integration of capabilities developed within this program.

Though not strictly required, it is expected that proposals will involve multidisciplinary teams that include expertise from both the traditional synthetic biology community, as well as areas that have not typically engaged in this area (e.g., process control and systems engineers, population biologists, and ecologists).

For example, in one technical area, proposers are asked to develop the necessary technology to create a functional, multi-species, synthetic microbial community. The community must be engineered to perform a function, which is at the discretion of the proposers but must require essential contributions from all species of the microbial community. Examples of engineered functions include, but are not limited to, the biosynthesis of a specific molecule or the ability to sense and respond to a substance in the environment. The complexity of community composition and function should increase as the BRICS program progresses.

The development of techniques and tools to rapidly sequence, synthesize, and manipulate genetic material has led to the rapidly maturing discipline of synthetic biology. The potential applications enabled by this field include efficient on-demand bio-production of novel drugs, fuels and coatings; engineered microbes able to optimize human health or prevent or treat disease; and bio-based sensors, tags, or tracking systems. To date, work in synthetic biology has focused primarily on manipulating individual species of domesticated organisms. These species tend to be fragile, requiring precise environmental controls to survive, and unstable, subject to losing their engineered advantages through genetic attrition or recombination. The costs of maintaining required environmental controls and detecting and compensating for genetic alterations are substantial. If applications such as those highlighted above are to come to fruition, methods to increase the biological robustness and stability of engineered organisms must be achieved while maintaining or enhancing assurances of safety.
The Biological Robustness in Complex Settings (BRICS) program will develop the fundamental understanding and component technologies to engineer biosystems that maintain their functional value in environments less stringently controlled than those in which these systems are today cultivated, eventually enabling the safe transition of synthetic biological systems from well-defined laboratory environments into more complex settings where they can achieve greater biomedical, industrial, and strategic potential. While this program will support the development of technologies that would be prerequisite to the safe application of engineered biological systems in the full range of environments in which the DoD has interests, all work performed in this program will occur in controlled laboratory settings.

There are multiple technical focus areas within the solicitation. Initial program funding of $42.5 million. Proposals due February 17.

20150218-HK Digital Humanities Implementation Grants NEH
This program is designed to fund the implementation of innovative digital-humanities projects that have successfully completed a start-up phase and demonstrated their value to the field. Such projects might enhance our understanding of central problems in the humanities, raise new questions in the humanities, or develop new digital applications and approaches for use in the humanities. The program can support innovative digital-humanities projects that address multiple audiences, including scholars, teachers, librarians, and the public. Applications from recipients of NEH’s Digital Humanities Start-Up Grants are welcome. Unlike NEH’s start-up grant program, which emphasizes basic research, prototyping, experimentation, and potential impact, the Digital Humanities Implementation Grants program seeks to identify projects that have successfully completed their start-up phase and are well positioned to have a major impact. Proposals are welcome for digital initiatives in any area of the humanities. Due February 18.

NEH Landmarks of American History and Culture: Workshops for School Teachers
National Endowment for the Humanities
The Landmarks of American History and Culture program supports a series of one-week residence-based workshops for a national audience of K-12 educators. NEH Landmarks of American History and Culture Workshops use historic sites to address central themes and issues in American history, government, literature, art, music, and related subjects in the humanities. Each workshop is offered twice during the summer. Workshops accommodate thirty-six school teachers (NEH Summer Scholars) at each one-week session. The goals of the workshops are to • increase knowledge and appreciation of subjects, ideas, and places significant to American history and culture through humanities reading and site study; • build communities of inquiry and provide models of civility and of excellent scholarship and teaching; • provide teachers with expertise in the use and interpretation of historical sites and of material and archival resources; and • foster interaction between K-12 educators and scholarly experts. NEH Landmarks Workshops are academically rigorous and focus on key primary sources and scholarly works relevant to major themes of American history and culture. Leading scholars should serve as lecturers or seminar leaders. Workshops should also enable participants to work with primary documents and develop a project. NEH Landmarks Workshops are held at or near sites
important to American history and culture, such as presidential residences or libraries; colonial-era settlements; major battlefields; historic districts; parks and preserves; sites of key economic, social, political, and constitutional developments; and places associated with major writers, artists, and musicians. Applicants should make a compelling case for the historical significance of the site(s), the material resources available for use, and the ways in which the site(s) will enhance the workshop. Due February 24.

**NEH Summer Seminars and Institutes**

These grants support faculty development programs in the humanities for school teachers and for college and university teachers. NEH Summer Seminars and Institutes may be as short as two weeks or as long as five weeks. NEH Summer Seminars and Institutes extend and deepen knowledge and understanding of the humanities by focusing on significant topics and texts; contribute to the intellectual vitality and professional development of participants; build communities of inquiry and provide models of civility and excellent scholarship and teaching; and link teaching and research in the humanities. An NEH Summer Seminar or Institute may be hosted by a college, university, learned society, center for advanced study, library or other repository, cultural or professional organization, or school or school system. The host site must be suitable for the project, providing facilities for scholarship and collegial interaction. These programs are designed for a national audience of teachers. Note that NEH Summer Seminars and Institutes may be held only in the United States and its territories. Projects in foreign countries are no longer supported. Program formats

- **Seminar for school teachers** sixteen participants (NEH Summer Scholars): A seminar enables sixteen participants (of whom two may be full-time graduate students who intend to pursue a K-12 teaching career) to examine an important text, study works of well-known authors, or review scholarship on a significant historical period or event. The principal goals are to deepen teachers understanding of the subject at hand through reading, discussion, reflection, and writing, and to sustain their intellectual commitment to teaching. The director, an expert in the field, guides discussion of common readings and offers advice for individual study and projects.

- **Institute for school teachers** twenty-five to thirty participants (NEH Summer Scholars): An institute, which is typically guided by a team of core faculty and visiting scholars, presents the best available scholarship on important topics and works in the humanities that are taught in the nation’s schools. Participants (of whom three may be full-time graduate students who intend to pursue a K-12 teaching career) compare and synthesize the various perspectives offered by the faculty and make connections between the institute content and classroom teaching. The emphasis throughout is on teaching the specific humanities subject matter and not on pedagogical theory and approaches.

- **Seminar for college and university teachers** sixteen participants (NEH Summer Scholars): A seminar enables participants (including two full-time graduate students in the humanities) to conduct scholarly research and focused study under the direction of a scholarly expert. The director designs a program to articulate key topics and focus discussion in seminar meetings. The director also advises participants on individual projects.

- **Institute for college and university teachers** twenty-five to thirty participants (NEH Summer Scholars): An institute focuses on a subject of major importance in undergraduate education. Guided by a team of core and visiting scholars, participants (including three full-time graduate students in the
humanities) explore a variety of perspectives on the subject. The primary goal is to advance humanities teaching. Due February 24.

**DARPA-BAA-15-06 Electrical Prescriptions (ElectRx) Biological Technologies Office**
The DARPA ElectRx program seeks innovative research proposals for creating closed-loop neuromodulation systems that utilize innate neurophysiological circuits to achieve therapeutic benefits. To achieve this goal, ElectRx will simultaneously drive biological understanding and technology development. Specifically, ElectRx is looking to develop and leverage fundamental understanding of the anatomy and physiology of neural circuits in the spinal cord or peripheral nerves that mediate health status. This knowledge will be leveraged to design and demonstrate feedback-controlled neuromodulation systems for the direct regulation of immune system functions and CNS disorders. In parallel, technology development focused on next-generation minimally-invasive neural interfaces and biosensors will enable interaction with the neurophysiology of interest at unmatched spatiotemporal resolution, precision, and specificity. These neuromodulation treatments will be tuned automatically and continuously to the unique physiology of each individual and will produce no off-target effects. Due Feb. 25.

**DARPA-BAA-15-12 Agnostic Compact Demilitarization of Chemical Agents (ACDC)**
The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative research proposals to develop prototype systems for agnostic conversion of chemical warfare agents to inert material. Proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice. Due March 2.

**Cultivating Cultures for Ethical STEM (CCE STEM)**
Cultivating Cultures for Ethical STEM (CCE STEM) funds research projects that identify factors that are efficacious in the formation of ethical STEM researchers in all the fields of science and engineering that NSF supports. CCE STEM solicits proposals for research that explores the following: ‘What constitutes ethical STEM research and practice? Which cultural and institutional contexts promote ethical STEM research and practice and why?’ Factors one might consider include: honor codes, professional ethics codes and licensing requirements, an ethic of service and/or service learning, life-long learning requirements, curricula or memberships in organizations (e.g. Engineers without Borders) that stress social responsibility and humanitarian goals, institutions that serve under-represented groups, institutions where academic and research integrity are cultivated at multiple levels, institutions that cultivate ethics across the curriculum, or programs that promote group work, or do not grade. Do certain labs have a ‘culture of academic integrity’? What practices contribute to the establishment and maintenance of ethical cultures and how can these practices be transferred, extended to, and integrated into other research and learning settings? Successful proposals typically have a comparative dimension, either between or within institutional settings that differ along these or other factors. CCE STEM research projects will use basic research to produce knowledge about what constitutes responsible or irresponsible, just or unjust scientific practices and sociotechnical systems, and how to best instill students with this knowledge. Due March 12.
ONR-15-FOA-0003 National Security Science And Engineering Faculty Fellowship
Research Opportunity Description The National Security Science and Engineering Faculty Fellowship (NSSEFF) program is sponsored by the Basic Research Office, Office of Assistant Secretary of Defense for Research and Engineering (ASD (R&E)). NSSEFF supports innovative basic research within academia, as well as education initiatives that seek to create and develop the next generation of scientists and engineers for the defense and national security workforce. The Office of Naval Research (ONR) manages the NSSEFF program for ASD (R&E). To accomplish this task, ONR is soliciting proposals for the NSSEFF program through this Funding Opportunity Announcement. This FOA seeks outstanding and distinguished researchers for the purpose of conducting innovative basic research in areas of interest to the Department of Defense (DoD) and fostering long-term relationships between the NSSEFF Fellows and the DoD. For full description, see full announcement. Proposal due April 24.

Open Solicitations and BAAs

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; fosters, supports, and conducts research within Air Force, university, and industry laboratories; and ensures transition of research results to support USAF needs. The focus of AFOSR is on research areas that offer significant and comprehensive benefits to our national warfighting and peacekeeping capabilities. These areas are organized and managed in three scientific directorates: Aerospace, Chemical and Material Sciences, Physics and Electronics, and Mathematics, Information and Life Sciences. Open until superseded.

W912HZ-14-BAA-01 2014 BAA Engineer Research and Development Center — DOD
The U.S. Army Engineer Research and Development Center (ERDC) has issued a Broad Agency Announcement (BAA) for various research and development topic areas. The ERDC consists of the Coastal and Hydraulics Lab (CHL), the Geotechnical and Structures Lab (GSL), the Environmental Lab (EL) and the Information Technology Lab (ITL) in Vicksburg, Mississippi; the Cold Regions Research and Engineering Lab (CRREL) in Hanover, New Hampshire; the Construction Engineering Research Lab (CERL) in Champaign, Illinois; and the Topographic Engineering Center (TEC) in Alexandria, Virginia. The ERDC is responsible for conducting research in the broad fields of hydraulics, dredging, coastal engineering, instrumentation, oceanography, remote sensing, geotechnical engineering, earthquake engineering, soil effects, vehicle mobility, self-contained munitions, military engineering, geophysics, pavements, protective structures, aquatic plants, water quality, dredged material, treatment of hazardous waste, wetlands, physical/mechanical/ chemical properties of snow and other frozen precipitation, infrastructure and environmental issues for installations, computer science, telecommunications management, energy, facilities maintenance, materials and structures, engineering processes, environmental processes, land and heritage conservation, and ecological processes. The BAA is available at http://erdc.usace.army.mil/ and is open until
superseded. Proposals may be accepted at any time. For questions regarding proposals to CHL, EL, GSL, TEC & ITL, contact Derek Howard at 601-634-3310 or via email at Derek.A.Howard@usace.army.mil. For questions concerning proposals to CERL, contact Wanda Huber at 217-373-6730 or via email at wanda.l.huber@usace.army.mil or Andrea Krouse at 217-373-6746 or via email at andrea.j.krouse@usace.army.mil. For questions concerning proposals to CRREL, contact Wendy Adams at 603-646-4323 or via email at Wendy.A.Adams@usace.army.mil. Contact the technical personnel listed at the end of each topic area for questions concerning the topic areas themselves. **Open to January 31, 2015.**

**DARPA-BAA-14-25 Innovative Systems for Military Missions**
The Tactical Technology Office of the Defense Advanced Research Projects Agency is soliciting executive summaries, white papers and proposals for advanced research and development of Innovative Systems for Military Missions. This solicitation seeks system and subsystem level technologies that enable revolutionary improvements to the efficiency and effectiveness of the military. Novel concepts are sought in the following focus areas: Ground Systems, Maritime Systems, Air Systems, and Space Systems. Proposals may be submitted at any time while this solicitation is open. TTO may publish groups of special topics as modifications to this BAA throughout the year. TTO also welcomes classified submissions. A copy of the Broad Agency Announcement, DARPA-BAA-14-25, has been posted to the Federal Business Opportunities (FedBizOpps.gov) website at [https://www.fbo.gov/spg/ODA/DARPA/CMO/DARPA-BAA-14-25/listing.html](https://www.fbo.gov/spg/ODA/DARPA/CMO/DARPA-BAA-14-25/listing.html). **Open to April 24, 2015.**

**DARPA-BAA-14-54 Biological Technologies EZ**
The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative research proposals of interest to the Biological Technologies Office (BTO). Of particular interest are those proposals from entities (both small and large business) that have never received Government funding, or who do not normally propose to Government solicitations. Proposed research should investigate leading edge approaches that enable revolutionary advances in science, technologies, or systems at the intersection of biology with engineering and the physical and computer sciences. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of the art. BTO seeks unconventional approaches that are outside the mainstream, challenge assumptions, and have the potential to radically change established practice, lead to extraordinary outcomes, and create entirely new fields. **Open to July 23, 2015.**

**Broad Agency Announcement for Research Initiatives at Naval Postgraduate School**
The Naval Postgraduate School (NPS) is interested in receiving proposals for research initiatives that offer potential for advancement and improvement in the NPS core mission of graduate education and research. Readers should note that this is an announcement to declare NPS’s solicitation in competitive funding of meritorious research initiatives across a spectrum of science and engineering, business, politics and public/foreign policy, operational and information sciences, and interdisciplinary disciplines that are in line with the NPS’ graduate education and research mission. Additional information on the Naval Postgraduate School’s
graduate education and research mission is available at: General Information: http://www.nps.edu/About/index.html; NPS Strategic Plan: http://www.nps.edu/About/NPSStratPlan.html; Academic Programs: http://www.nps.edu/Academics/index.html; Research Programs: http://www.nps.edu/Research/index.html; Prior to preparing proposals, potential Offerors are strongly encouraged to contact an NPS point of contact (POC) whose program and research efforts best match the Offeror’s field of interest. The academic and research programs links above can be used to locate an appropriate POC by exploring the information provided about the faculty members in NPS’ schools, research institutes, and interdisciplinary centers and research groups. **Open to July 31, 2015.**

**Small University Grants Open 5-Year Broad Agency Announcement**

Open to August 26, 2015

**DARPA-BAA-14-48 Strategic Technologies**

DARPA is seeking innovative ideas and disruptive technologies that offer the potential for significant capability improvement across the Strategic Technology Office focus areas. This includes technology development related to Battle Management, Command and Control (BMC2), Communications and Networks, Electronic Warfare, Intelligence, Surveillance, and Reconnaissance (ISR), Position, Navigation, and Timing (PNT), Maritime, and Foundational Strategic Technologies and Systems. **BAA Closing Date: September 17, 2015**

**ONRBAABAA15-001 Long Range BAA for Navy and Marine Corps Science and Technology**

The Office of Naval Research (ONR) is interested in receiving proposals for Long-Range Science and Technology (S&T) Projects which offer potential for advancement and improvement of Navy and Marine Corps operations. Readers should note that this is an announcement to declare ONR’s broad role in competitive funding of meritorious research across a spectrum of science and engineering disciplines. A brief description of the ONR Program Codes and the science and technology thrusts that ONR is pursuing is provided below. Additional information can be found at the ONR website at http://www.onr.navy.mil/Science-Technology/Departments.aspx. Potential Offerors are urged to check the program areas that they are interested in throughout the year for updates to thrust areas and research priorities on the ONR website at http://www.onr.navy.mil. Prior to preparing proposals, potential offerors are strongly encouraged to contact the ONR point of contact (POC). To identify the POC, follow the link for the appropriate code or division listed below and then click on the link to the thrust or topic area. Each thrust or topic area will provide a POC or e-mail address. **BAA Closing Date: September 30, 2015**


The BioWatch Program is a cornerstone of the Department of Homeland Security’s (DHS) comprehensive strategy for countering biological terrorism. The BioWatch Program is an early warning system that is designed to detect the intentional release of select aerosolized biological agents. The BioWatch Program’s mission is to provide and maintain a continuous bio-terrorism air monitoring system in metropolitan areas and coordinate with state and local public health
communities to prepare for and respond to a bioterrorist event. This mission is accomplished by serving as an early warning system which enhances the security of jurisdictions by providing the needed time to execute their comprehensive concept of operations plans to counter biological terrorism. The Biowatch Program is a critical part of an ongoing national effort to build and sustain preparedness which helps the United States to maintain momentum through targeted jurisdictional planning that highlights preventative actions necessary to allow for a proper and timely response and begin the process to recovery from a biological agent release. The BioWatch Evaluation Program (BWEP) will be conducted under the BioWatch Quality Assurance Program effective April 1, 2013. This program will consist of independent external audits (Quality Assurance) by Signature Science and internal audits (Quality Control) by BioWatch Systems Program Office field personnel. This approach will initially be conducted with a focus on adherence to the BioWatch Field Operations Standard Operating Procedure (SOP), Version 1.3 and will eventually evolve to encompass the Field Operations Quality Assurance Program Plan (QAPP). In order to ensure a robust QA / QC program the jurisdictions may be subject to a QA external audit and a QC internal audit during the same cooperative agreement cycle (year). Closes September 30, 2015.

DE-FOA-0001204 FY 2015 Continuation of Solicitation for the Office of Science
The Office of Science of the Department of Energy hereby announces its continuing interest in receiving grant applications for support of work in the following program areas: Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, and Nuclear Physics. On September 3, 1992, DOE published in the Federal Register the Office of Energy Research Financial Assistance Program (now called the Office of Science Financial Assistance Program), 10 CFR 605, as a Final Rule, which contained a solicitation for this program. Information about submission of applications, eligibility, limitations, evaluation and selection processes and other policies and procedures are specified in 10 CFR 605. This Funding Opportunity Announcement (FOA), DE-FOA-0001204, is our annual, broad, open solicitation that covers all of the research areas in the Office of Science and is open throughout the Fiscal Year. This FOA will remain open until September 30, 2015, 11:59 PM Eastern Time, or until it is succeeded by another issuance, whichever occurs first. This annual FOA DE-FOA-0001204 succeeds FOA DE-FOA-0000995, which was published October 1, 2013. Open to September 30, 2015.

Nuclear Energy University Programs - Fellowship and Scholarship
This program supports education and training for future nuclear scientists, engineers and policy-makers who are attending U.S. universities and colleges in nuclear-related graduate, undergraduate and two-year study programs. These are zero-dollar awards that will be funded as students apply through the Department of Energy, Office of Nuclear Energy. Open until November 30, 2015.

FY2011 – 2016 Basic Research for Combating Weapons of Mass Destruction (C-WMD) Broad Agency Announcement (BAA)
This BAA is focused on soliciting basic research projects that support the DTRA mission to safeguard America and its allies from WMD (e.g., chemical, biological, radiological, nuclear, and high-yield explosives) by providing capabilities to reduce, eliminate, and counter the threat and mitigate its effects.

**Open Solicitations from IARPA (Intelligence Advanced Research Projects Activity)**

**Army Research Laboratory Broad Agency Announcement for Basic and Applied Scientific Research**

This Broad Agency Announcement (BAA), which sets forth research areas of interest to the Army Research Laboratory (ARL) Directorates and Army Research Office (ARO), is issued under the paragraph 6.102(d)(2) of the Federal Acquisition Regulation (FAR), which provides for the competitive selection of basic research 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 provision of Public Law 98-369, "The Competition in Contracting Act of 1984" and subsequent amendments. **Open June 1, 2012 to March 31, 2017.**

**ARL Core Broad Agency Announcement for Basic and Applied Scientific Research for Fiscal Years 2012 through 2017**

**Air Force Research Laboratory, Directed Energy Directorate**

**University Small Grants Broad Agency Announcement**

This is a five-year, open-ended Broad Agency Announcement (BAA) to solicit research proposals for the United States Air Force Research Laboratory (AFRL) Directed Energy (RD) Directorate. This BAA is a university grant vehicle that can provide small grants of $100k or less to students/professors in a timely manner for the purpose of engaging U.S./U.S. territories’ colleges and universities in directed energy-related basic, applied, and advanced research projects that are of interest to the Department of Defense. **Open to April 1, 2017.**

**HM0210-14-BAA-0001 National Geospatial-Intelligence Agency Academic Research Program**

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 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 September 30, 2017.**

**AFRL Research Collaboration Program**
The objective of the AFRL Research Collaboration program is to enable collaborative research partnerships between AFRL and Academia and Industry in areas including but not limited to Materials and Manufacturing and Aerospace Sensors that engage a diverse pool of domestic businesses that employ scientists and engineers in technical areas required to develop critical war-fighting technologies for the nation’s air, space and cyberspace forces through specific AFRL Core Technical Competencies (CTCs). **Open until December 20, 2017.**

**United States Army Research Institute for the Behavioral and Social Sciences Broad Agency Announcement for Basic, Applied, and Advanced Scientific Research (FY13-18)**
Announcement for Basic, Applied, and Advanced Scientific Research. This Broad Agency Announcement (BAA), which sets forth research areas of interest to the United States Army Research Institute for the Behavioral and Social Sciences, is issued under the provisions of paragraph 6.102(d)(2) of the Federal Acquisition Regulation (FAR), which provides for the competitive selection of proposals. Proposals submitted in response to this BAA and selected for award are considered to be the result of full and open competition and in full compliance with the provisions of Public Law 98-369 (The Competition in Contracting Act of 1984) and subsequent amendments. The US 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. The funding opportunity is divided into two sections- (1) Basic Research and (2) Applied Research and Advanced Technology Development. The four major topic areas of research interest include the following: (1) Training; (2) Leader Development; (3) Team and Inter-Organizational Performance in Complex Environments; and (4) Soldier/Personnel Issues. Funding of research and development (R&D) within ARI areas of interest will be determined by funding constraints and priorities set during each budget cycle. **Open to February 5, 2018.**
**BAA-HPW-RHX-2014-0001 Human-Centered Intelligence, Surveillance Air Force Research Lab**

This effort is an open-ended BAA soliciting innovative research concepts for the overall mission of the Human-Centered Intelligence, Surveillance, & Reconnaissance (ISR) Division (711 HPW/RHX). It is intended to generate research concepts not already defined and planned by RHX as part of its core S&T portfolio. The core RHX mission is to develop human-centered S&T that (1) enables the Air Force to better identify, locate and track humans within the ISR environment and (2) enhance the performance of ISR analysts. To accomplish this mission, the RHX core S&T portfolio is structured into three major research areas: (1) Human Signatures - develop technologies to sense and exploit human bio-signatures at the molecular and macro (anthropometric) level, (2) Human Trust and Interaction – develop technologies to improve human-to-human interactions as well as human-to-machine interactions, and (3) Human Analyst Augmentation – develop technologies to enhance ISR analyst performance and to test the efficacy of newly developed ISR technologies within a simulated operational environment.

The RHX mission also includes research carried over from the Airman Biosciences and Performance Program. While not directly linked to the core S&T strategic plan, there exists a unique capability resident within RHX to address critical Air Force operational and sustainment needs resulting from chemical and biological hazards. Research areas include contamination detection, hazard assessment and management, individual and collective protection, and restoration and reconstitution of operational capability. **Open to Feb. 12, 2018.**

**Research Interests of the Air Force Office of Scientific Research**

The Air Force Office of Scientific Research (AFOSR) manages the basic research investment for the U.S. Air Force (USAF). To accomplish this task, AFOSR solicits proposals for basic research through this general Broad Agency Announcement (BAA). This BAA outlines the Air Force Defense Research Sciences Program. AFOSR invites proposals for research in many broad areas. These areas are described in detail in Section I of the BAA, Funding Opportunity Description. 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; fosters, supports, and conducts research within Air Force, university, and industry laboratories; and ensures transition of research results to support USAF needs. The focus of AFOSR is on research areas that offer significant and comprehensive benefits to our national warfighting and peacekeeping capabilities. These areas are organized and managed in five scientific directorates: Dynamical Systems and Control (RTA), Quantum & Non-Equilibrium Processes (RTB), Information, Decision, and Complex Networks (RTC), Complex materials and Devices (RTD), and Energy, Power, and Propulsion (RTE). The research activities managed within each directorate are summarized in Section I of the BAA. **Open until superseded.**

**Air Force BAA - Innovative Techniques and Tools for the Automated Processing and Exploitation (APEX) Center**

The AFRL/RIEA branch performs Research and Development (R&D) across a broad area of Air Force Command, Control, Communications, Computers/Cyber, and Intelligence (C4I). All applicable "INTs" are investigated with emphasis on Ground Moving Target Indication (GMTI),
Electronic Intelligence (ELINT), Signals Intelligence (SIGINT), Image Intelligence (IMINT), Non Traditional Intelligence, Surveillance and Reconnaissance (NTISR), and Measurement and Signature Intelligence (MASINT). The APEX Center is used to perform analysis for seedling efforts, provide baseline tool development for major programs, and to provide realistic operational systems/networks/databases for integration efforts. The APEX Center resources will be used by the Government to perform the necessary research, development, experimentation, demonstration, and conduct objective evaluations in support of emerging capabilities within the Processing and Exploitation (PEX) area. Software tools, data sets, metrics (Measures of Performance/Measures of Effectiveness), and analysis are needed for the Government to perform the vetting, maturing, and analysis of efforts related to PEX, e.g. Automatic Tracking, Activity Based Intelligence, Entity, Event & Relationship (EER) Extraction, Association & Resolution (A&R), Analysis & Visualization (A&V), Social Network Analysis, Network Analytics, Pattern Discovery, Scalable Algorithms, and Novelty Detection. The AFRL APEX Center is the AFRL/RI gateway into the cross-directorate PCPAD-X (Planning & Direction, Collection, Processing & Exploitation, Analysis & Production, and Dissemination eXperimentation) initiative. **Open to FY 2018.**

**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.**
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 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 and developing institutional and center-level proposals (e.g., NSF ERC, STC, IGERT, STEP, 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

- 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)

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