Research Development & Grant Writing News

Volume 4, Issue 10: June 15, 2014

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Research Narrative Integration Strategies

By Mike Cronan, co-publisher

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As research solicitations become more interdisciplinary, the challenges of writing the research narrative become more complex. Moreover, interdisciplinarity in research solicitations is largely synonymous with team grants, wherein multiple investigators lead multiple research strands designed to synergistically address a research problem that cannot be addressed within the scope of a single discipline. Conceptualizing the structure and organization of the research narrative of such proposals presents organizational difficulties to even the most experienced grant writer.

For example, the growing trend towards interdisciplinarity and team proposals requires a new organizing structure for the project description. The linear design typical of single-topic proposals addressable within a single discipline does not adapt well to a multidisciplinary project. Of course, the significant increase in interdisciplinary and transdisciplinary solicitations published by federal research agencies has not led to an increase in the pages allocated to the research narrative. Nor do the new, complex solicitations permit smaller font sizes. This is actually a good thing, although perhaps frustrating to some, because it does not offer an illusory solution to a complex narrative problem. ***Instead, it forces the authors to think more deeply about the rationale for an interdisciplinary team and the interdependences among the aggregate disciplines represented by that team***. How well this is done lies at the heart of any successful interdisciplinary team proposal.

So this narrative problem is fundamentally a conceptual issue rather than one of inadequate narrative space. While some authors assume that a research idea expressed in 12 pt. font becomes a great idea when expressed in 10 pt. font with all white space removed, this is never the case. This just presents the reviewers with a decidedly "reader unfriendly" narrative that makes it more difficult to judge the quality of the proposed research.

With this in mind, one of the key decisions to be made by the proposal team is how to present the proposed research in the narrative when the proposed research is comprised of multiple, interdependent research strands or thrust areas. (Many major research center proposals, for example, may present three to five thrust areas.) The end goal of the interdisciplinary research narrative can be characterized in several ways in terms of what it needs to convey to reviewers. For example, a rationale for the interdisciplinary team structure must be presented in terms of value-added benefits that accrue in ways not otherwise possible were the research strands funded as independent grants.

The traditional linear narrative structure is often insufficiently robust to clearly convey to reviewers the "***integrated, interdisciplinary, interdependent, synergistic***" nature of these proposals in which not only the interdependencies but the stepwise sequencing of those interdependencies function as the critical catalysts of a successful project. For example, within the page limits imposed by the solicitation, the narrative must provide a sufficiently vivid research description of multiple research strands, and even substrands, so that reviewers can

clearly understand and evaluate the quality of the proposed project and its value-added benefits to the agency mission or the field. Keep in mind that even on a 25-page center proposal, the research project description may be limited to 10 or 15 pages, something not uncommon at NSF, with other page limits assigned to the management plan, strategic plan, education plan, evaluation plan, innovation plan, diversity plan, etc.

So what to do? Too often the solution is a project description that puts reviewers on a forced march from one superficially described research thrust silo to another, until the page limit is used up. Of course, this solution goes back to poor proposal development planning. A common but ineffective allocation of a 10-page project description comprised of five research thrusts begins with an email from a PI to each thrust leader asking for a 2-page project description of her research topic area. It will likely take a very disciplined reviewer, or one drinking Red Bull, to read through these ten pages without dozing off.

Too often, the members of an interdisciplinary team do not adequately discuss how to write the project description. As a group, they need to consider the rationale for the team composition as well as the interdependencies among the team members' disciplines in the context of responding to the vision, goals, and objectives defined in the funding solicitation. This "***Why are we a team?***" question needs to be answered before the team can begin to write the project description. If it is not answered, the project description will never rise above the level of siloed detail.

Once answered, however, the crafting of an integrated, interdisciplinary project description can begin. The team's challenge then becomes to establish a hierarchy of information critical to convey to reviewers and to understand why that hierarchy is critical. The research project detail will be important in this, but it needs to be guided by the key objective to describe not only the proposed research but also how the various research disciplines complement and synergize one another.

To this end, the team must consider how to clearly convey to reviewers the "***integrated, interdisciplinary, interdependent, synergistic***" nature of the proposed research. One strategy for conveying this integration should consider whether a stronger research project description can be written by a ***few in-depth descriptions of one or two research thrusts*** rather than by a serial description of each thrust. This strategy has several advantages over the linear narrative that discusses first thrust one, and then thrust two, etc. The linear strategy uses up valuable space that might otherwise be used giving reviewers a deeper understanding of how the multithrust project actually works—***disciplinary interdependencies and integration***. By analogy, it would be the difference between explaining our solar system in a linear fashion by describing each planet, starting with the closest to the sun and advancing to the furthest, as opposed to using an orrery, a mechanical model of the solar system that illustrates the relative positions and motions of the planets and moons around the sun.

Another advantage of picking one or two thrust areas for an in-depth, representative description of how multiple disciplinary thrusts will interact is that it gives the reviewers a clearer and more memorable mental model of the proposed research than that provided by a serial listing of research detail that appears stubbornly siloed to the reviewer.

NSF Ferrets Out and Punishes Research Misconduct

By Mike Cronan, co-publisher

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NSF's Office of the Inspector General (OIG) issued its Semi-Annual Report to Congress on March 31. As the 43-page report notes, "OIG promotes economy, efficiency, and effectiveness in administering NSF programs; detects and prevents fraud, waste, and abuse within the NSF ***or by individuals that receive NSF funding***; and identifies and helps to resolve cases of research misconduct." See our article "*Avoid NSF's 'Perp Walk' Audit for Plagiarism"* in the August 2013 issue of this newsletter. The following is a very *condensed summary quotation* of the 43-page report noting some of the more egregious cases of research misconduct, particularly related to plagiarism in the research narrative and research misconduct.

"Research misconduct," the agency notes, "damages the scientific enterprise, is a potential misuse of public funds, and undermines the trust of citizens in government-funded research. It is imperative to the integrity of research funded with taxpayer dollars that NSF-funded researchers carry out their projects with the highest ethical standards." For these reasons, as NSF states in the report, "***pursuing allegations of research misconduct*** (***plagiarism, data fabrication, and data falsification***) ***by NSF-funded researchers continues to be a focus of OIG's investigative work***." In recent years, the agency observes, "***OIG has seen a significant rise in the number of substantive allegations of research misconduct associated with NSF proposals and awards***."

In one notable case summarized in the report, OIG set its sights "on pursuing fraud in the Small Business Research Innovation/ Small Business Technology Transfer programs. An investigation by OIG culminated in a trial that ***resulted in a Principal Investigator (PI) being convicted on seven felony counts including wire fraud, mail fraud, falsification of records, and theft***. His sentencing is scheduled for July 2014. The PI, a full-time professor at a Maryland university, created a company and applied to NSF's STTR program. He falsely certified on his STTR proposals and reports that he was primarily employed by the small business during the period of the award, while he continued as a full-time university professor. ***This case arose from OIG's ongoing proactive review of STTR and SBIR companies***."

This most recent OIG report to Congress should serve as a "warning shot across the bow" that NSF/OIG take research misconduct in all its multiple manifestations very seriously, regardless, as the report notes, of whether this misconduct relates to fiscal misconduct on NSF funded purchases, plagiarism in the research narrative, falsification of research data, or fabrication of research data. None of the cases in this 43-page investigative report rise to the level of major crimes, ***although it could be argued they rise to the level of major stupidity***, nor does the report provide the night time crime drama entertainment that could be had by watching TNT's *Major Crimes* this summer season.

Of course, a similar question comes to mind in reading both the OIG investigative report and watching *Major Crimes*—***how dumb can these "perps" possibly be***?! However, for anyone involved in the submission of proposals to NSF, either as a principal investigator or member of a research office, this OIG report should be interpreted as ***the first kick of the mule***, in keeping

with Speaker Sam Rayburn's wise observation that "***there is no education in the second kick of the mule***."

Most importantly for those actually involved in the writing of an NSF Project Description, some reflection on the sections of this investigative report that address the OIG's investigative audits related to plagiarism is clearly warranted. The sections of your proposal to be scrutinized include both the core research narrative, the broader impacts-related proposal sections, as well as biosketches and commitment letters, which should be reviewed for plagiarism, data fabrication, and other embellishments of the facts, such as the fraudulent paperwork submitted by the above mentioned PI on an STTR.

For example, this report notes that "OIG referred 13 cases of research misconduct to NSF. These included a graduate student who admitted fabricating data, a professor who plagiarized in eight NSF proposals, and a PI who plagiarized in a CAREER proposal." However, under the old observation that "*what is good for the goose is good for the gander*," OIG also ferrets out cases of misconduct by NSF program officers.

In one case, the report notes, "OIG investigated a complaint alleging that an NSF program officer violated conflict of interest rules and was making award decisions based on personal and professional relationships, rather than on the merits of the proposals. OIG's investigation revealed that the program officer, who was the principal and founder of an outside business, created conflicts of interests by misusing his NSF position to benefit himself, his family, and his friends financially. The misconduct included:

- approving an NSF award supplement to employ his stepson;
- facilitating the employment of his girlfriend by one of his awardees;
- soliciting work from NSF awardees to benefit his private company;
- receiving a "finder's fee" as a result of setting up a business venture for an NSF awardee;
- entering into an outside contract between his private company and a Texas university, facilitated by the president of one of his awardee companies;
- making introductions to and/or intervening in his NSF colleagues' decisions for the purpose of aiding his private business and its clients, and, in one instance, getting paid for it; and
- receiving a personal benefit for reviewing patents for an individual whose company had an active NSF award on which he served as program officer."

When NSF learned about this last item, the report states, "it deprived him of all of his responsibilities for representing NSF and handling proposals and awards, giving him other duties to perform. NSF referred this matter for criminal prosecution, which was declined. NSF then referred the findings to NSF management, after which the program officer resigned—***after nearly nine months without performing program officer responsibilities***. OIG recommended that NSF debar him governmentwide; NSF's decision is pending."

In another case noted in the report, an "***OIG investigation identified copied text in three NSF proposals submitted by a professor from a Tennessee university***. A university investigation found that the professor committed plagiarism, but that his actions were careless and did not constitute a significant departure from the standards of his research community. However, the OIG investigation concluded that the professor acted recklessly and that his

actions did constitute a significant departure from the standards of his research community, ***and therefore that he did commit research misconduct***."

"The OIG investigation also determined that, between 2004 and 2011, the professor served as an NSF review panelist six times. On each occasion, the report notes, NSF provided him a flat rate to cover expenses for lodging and meals; nonetheless, he also requested and received duplicate lodging and meal reimbursements from his university. Based on his plagiarism and deceptive conduct, OIG recommended that the professor be debarred for two years and that NSF require him to complete an ethics course within one year."

In another case in the report, "a Florida university determined that a ***professor intentionally committed extensive plagiarism in several proposals, including two proposals he submitted to NSF as PI***. Despite the professor's claim that no other proposals contained copied text, ***OIG's investigation found substantial plagiarism in six additional NSF proposals***. OIG recommended that NSF debar the professor for one year, followed by a three-year ban on serving as a reviewer, advisor, or consultant; and a required three years of certifications and assurances."

In yet another case in the report, "a lab director in Illinois plagiarized text, ideas, and structure from an awarded NSF proposal she had obtained from the proposal's PI. During the inquiry, she told OIG she thought the PI had given her permission to copy text and ideas from the proposal, which was aimed at the same NSF program as hers. Her institution investigated, found that she violated its code of ethics, and imposed sanctions. ***OIG concluded that the lab director knowingly plagiarized and recommended that NSF debar the lab director for one year***, require three years of certifications and assurances, and bar her from serving as a consultant or reviewer for NSF for three years."

In yet another plagiarism case, the report notes that "a professor at a Tennessee university plagiarized in a CAREER proposal submitted to NSF. The professor asserted that he was rushed in preparing the proposal and did not have time to properly edit his submission. ***However, the same copied text appeared in proposals he later submitted to other federal agencies, seeking support for the same research that was already funded by the NSF CAREER award***. The university made a finding of research misconduct, required training in the responsible conduct of research, and placed the professor under the mentorship of a senior faculty member. OIG agreed with the university's conclusions, and recommended that NSF impose a three-year period of certifications and assurances, and a concurrent prohibition from service to NSF as a reviewer, consultant, or advisor."

The OIG report notes the case of "a professor from a Texas university who plagiarized about three pages of material in his NSF proposal. Claiming that he was rushed by deadlines, the professor accepted full responsibility for his actions. His university determined that he committed research misconduct in failing to properly attribute the work of others within his proposal. OIG concurred with the university's assessment and recommended that NSF require certifications and assurances for three years and bar the professor from serving as a reviewer for two years."

The examples above should give everyone pause of sufficient duration to make sure there are no such problems in your proposals.

A copy of the full report can be found HERE.

Using Databases of Previous Awards to Understand What Funders Want

By Lucy Deckard, co-publisher

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Most federal funders, and many private foundations, provide information on projects they have previously funded. This information can be invaluable in helping you determine whether your project will be of interest to the funder. It can also help you determine where within the organization (which program or program officer) to apply. Some agencies, most notably NSF and NIH, provide extensive searchable databases, while others simply provide a list of funded projects.

What to Look For

If you're trying to figure out if a particular funder or program might be interested in your project, use the award database to see if anything roughly similar has been funded. If every project you see is very different from your idea, odds are that it's not a good fit. You can also look to make sure that the same idea hasn't already been funded by the program. Obviously, a funder won't be interested in funding the same idea twice.

You can also look to see who has been funded by the agency or program. Often, you may recognize a PI as a colleague or acquaintance. If that's the case, you should consider contacting the PI to ask her about her experience with the funder (often, previously funded PIs are also tapped to be peer reviewers). Even in cases where you don't personally know the PI, they may be happy to talk to you if they don't see you as a future competitor for funding at the agency.

In cases where the funder lists grant amounts, this information may give you a better idea of the customary amount to ask for (which is not always explicitly stated, particularly in the case of investigator-initiated grants). The number of grants awarded by a particular funder or program in the last year can also give you a better idea of your chances. (If only three grants were awarded last year, you know that the competition will probably be very stiff.)

Information on funded awards is particularly useful when you're researching small private foundations. Some of these foundations fund the same people or institutions most of the time, or they tend to fund grants in a specific geographic area, but they don't always explicitly state that on their websites. Checking their website or, if they don't include information on prior awards, checking the foundation's 990 form (see table) can help you determine if that's the case.

For links to awards databases, see the table on the next page.

Agency	Where to Find Funded Projects Info	Comments
National Science Foundation **(NSF)**	Searchable database: http://www.nsf.gov/awardsearch/advancedSearch.jsp Video: https://www.youtube.com/watch?v=s7yqEXPaTdA	Powerful database searchable by key words, program, PI, and more.
National Institutes of Health **(NIH)** Centers for Disease Control **(CDC)** Agency for Healthcare Research and Quality **(AHRQ)** Health Resources and Services Administration **(HRSA)** Substance Abuse and Mental Health Services Administration **(SAMHSA)** U.S. Department of Veterans' Affairs **(VA)**	Searchable database (RePORTER): http://projectreporter.nih.gov/reporter.cfm Video: https://www.youtube.com/watch?v=CrSXdRg2_c0 *New version released June 5, 2014*; Release notes at http://projectreporter.nih.gov/Release_notes.cfm	Extremely powerful database searchable by key words, program, PI, type of grant, similar grants, etc.
Congressionally Mandated Directed Medical Research **(CDMRP)**	http://cdmrp.army.mil/search.aspx	
Department of Defense Small Business Innovation and Small Business Technology Transfer (**DoD SBIR and STTR)**	http://www.dodsbir.net/awards/Default.asp	Limited to SBIRs and STTRs
US Department of Agriculture **(USDA)**	Searchable database (CRIS) http://cris.csrees.usda.gov/	
Department of Education Institute for Education Science **(IES)**	Searchable database http://ies.ed.gov/funding/grantsearch/index.asp	
US Department of Energy Office of Science **(DOE SC)**	http://science.energy.gov/ber/funding-opportunities/award-search/?adv=1 or http://science.energy.gov/ber/funding-opportunities/award-search/	
Environmental Protection Agency **(EPA)**	http://www.epa.gov/enviro/facts/igms/search.html	
National Endowment for the Arts (NEA)	http://arts.gov/grants/recent-grants	List (not searchable); search page not working at time of writing
National Endowment for the Humanities (NEH)	https://securegrants.neh.gov/publicquery/main.aspx	
Private Foundations (the Foundation Center)	First, check the foundation website. If they don't list recently funded awards, go to http://foundationcenter.org/findfunders/990finder/	Provides 990 IRS forms, which include list of funded projects (usually near the back)

Unrealistic Expectations for Wordsmithing

By **Mike Cronan**, co-publisher

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It can be the case that poor writing disguises a good idea. It can also be the case that poor writing disguises a mundane idea, the latter being the notorious "double whammy" of grant writing. Over time, anyone with experience in the development, planning, and writing of the proposal narrative will encounter both of these situations. In the former case, when an editorial intervention can produce the research narrative analog of a biological metamorphosis and result in a competitive proposal, everyone celebrates. In the latter case, when it becomes clear that no amount of editorial intervention can transform a mundane idea into a competitive idea, the situation is more challenging. This is the dilemma of "putting lipstick on a pig," wherein cosmetic changes cannot disguise the fact that, when all is said and done, the pig is still a pig.

Moreover, it is particularly challenging when the PI of a proposal believes all the deficiencies of the research narrative are correctable by "wordsmithing," a very scary misconception indeed. In this context, "wordsmithing" is akin to the notion that a poorly expressed idea can be reinvigorated by the addition of "some boilerplate." While wordsmithing can help reveal a good idea disguised or out of focus, much like corrective lenses allow us to see a horizon we didn't know was there, ***it cannot reveal what is not there***, ***nor can it magically transform a mundane idea into a fundable idea***. Too often the person asked to do the narrative wordsmithing confronts the Gertrude Stein dilemma in attempting an editorial intervention—discovering that, in terms of the narrative, "*there is no there there*." Unfortunately, no known editorial legerdemain can save a mundane idea from ending up in the declined proposal graveyard, a very populated place indeed given the proposal success rates at federal research agencies.

So what to do? Well, the easy path out of this dilemma is to perform the so-called perfunctory "mortician's edit" on the proposal and let it go at that. However, the more arduous solution, and ultimately the most satisfying one, is to go back to the fundamentals and build up from there. Many who seek assistance on proposals in the form of editorial interventions, re-writing, strategic planning, and the like have had little or no training whatsoever in the basics of grant writing, particularly in the process of developing ideas and mapping them to the research expectations described in the funding solicitation.

Clearly, it is unrealistic for a PI to seek "wordsmithing" assistance on a proposal that is poorly written and lacks a core competitive research idea in the mistaken belief that an editorial intervention is all that stands between the proposal and funding success. But unrealistic expectations often reflect inexperience. Unfortunately, when a poorly written proposal is declined for funding, PIs often come to believe that "***the reviewers failed to understand the significance of my research and the importance of funding it***." In these instances, PIs must ask not whether the reviewers have failed to grasp the significance of the proposed research but whether the PI assumes a significance that is not there, or has so poorly

presented the research that its significance has been disguised by a poorly organized, poorly written, and poorly argued narrative.

When writing proposals, it's best to adopt the working philosophy that ***reviewers are never at fault*** for failing to recognize the importance of your research to advancing the field. As Shakespeare's Cassius reminded Brutus, "The fault, dear Brutus, is not in our stars, But in ourselves." Had Brutus received a set of poor reviews, Cassius's counsel offered him the best way forward to a resubmittal, just as Hamlet's eternal soliloquy on grant writing best sums up the dilemma: "*To resubmit or not to resubmit. That is the question*." The bottom line is this: ***blaming reviewers for your funding fate is a waste of time and energy***. These are resources best spent on making the important revisions needed.

The other caution to keep in mind is that ***wordsmithing is never a substitute for a good idea***. For funding success, they must both be present, with the former always grounded on the latter. ***A poorly written proposal is often the tell tale sign of a poorly developed idea***. Some of the common failures of a research narrative—too broad, too vague, lacking specifics, lacking details, lacking clarity, lacking context, etc.—have their origins in a research idea not yet fully mature or fully defined in the context of the state of the field. Wordsmithing and editorial interventions can only sharpen the focus and clarity of otherwise well conceptualized research objectives that meet the intent of the funding solicitation. ***They cannot be a surrogate for good ideas***.

Diversity Topics and Directions at NIH

By **Mike Cronan**, co-publisher

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Beginning last January, as part of the Enhancing the Diversity of the NIH-Funded Workforce program, NIH launched a new on-line discussion forum "to stimulate conversations about novel and creative strategies needed to engage a diverse student pool in the early phases of biomedical research training, sustain their interest, and enable success at each career phase." This is a good forum to follow if you are engaged in the planning, development, and writing of proposals that address STEM diversity in whole or in part, regardless of whether the proposal is to NIH, NSF, or other federal agencies or foundations. Over the past five months, the forum has focused on those submitting an application for one of the three initiatives (BUILD, NRMN, and CEC) in the NIH's "Enhancing the Diversity of the NIH-Funded Workforce" program (also see *Mentorship Matters for the Biomedical Workforce*).

The forum discussion on innovation in workforce training for the biomedical sciences is especially relevant to future directions in STEM diversity, particularly as it relates to new models. Coupled to this goal of innovation is the critical goal of putting in place a rigorous evaluation protocol of novel and innovative approaches to training and mentoring. The protocol is intended to help investigators understand what works and for whom. Finally, the successful protocols will be broadly disseminated as models of successful approaches. While the forum is specific to NIH and programs such as BUILD, its relevance is generic and helpful to anyone writing proposals related to STEM diversity, from small proposals to large center grants such as the current NSF ERC.

You can join the conversation and exchange ideas here. At this site, "NIH encourages potential applicants and other interested parties to network and exchange ideas for innovative and creative strategies to engage a diverse student pool in the early phases of biomedical research training, sustain their interest, and enable success at each career phase. These discussions will focus on four key topics:

- **Student Engagement**. What factors influence student decisions to engage in, or not to engage in, biomedical research training, and how can these factors be addressed?
- **Sustaining Interest In Research.** How can initial interest in research be sustained so that the biomedical research career pipeline retains highly talented students?
- **Mentoring**. How can mentoring help to engage students, sustain their interests, and prepare them for research careers? What novel mentoring strategies might be developed?
- **Innovation in Research Training.** What new types of curricula or laboratory experiences may need to be developed to diminish the exodus of highly talented students from the biomedical research training pathway? How can training be enhanced to ensure students are fully prepared for success in biomedical research careers?"

The NIH Peer-Review Challenge

The National Institutes of Health Center for Scientific Review (CSR) is issuing two Challenges: (1) for ideas to detect potential bias in peer review, and (2) ideas to strengthen reviewer training to enhance impartiality and fairness in the review of grant applications. A First Prize in the amount of $10,000 and a Second Prize in the amount of $5,000 is offered in each category below. Submissions: Must be received by 11:59 PM (EST) on June 30, 2014. Late submissions will not be considered.

Challenge #1: New Methods to Detect Bias in Peer Review

Submit your idea for detecting bias among reviewers due to gender, race/ethnicity, institutional affiliation, area of science, and/or applicants' amount of research experience. First and Second prizes will be offered in two categories, best empirically-based idea and most creative idea. Additional details can be found at **FRN Doc.2014-10196**.

Challenge #2: Strategies to Strengthen Fairness and Impartiality in Peer Review

Submit your idea for strengthening reviewer training methods to enhance fairness and impartiality in peer review. First and Second prizes will be offered for the best overall ideas. Additional details can be found at **FRN Doc.2014-10203**.

NETWORKING RESOURCE: NIH Women of Color Research Network

The NIH Women of Color Network is an online community that addresses the challenges faced by all women and minorities entering and advancing in scientific careers. The network is open to everyone who values diversity in the scientific workplace. Its website includes links to forums, blogs, resources, and upcoming events. WOCRN is free and open to the community, but requires a login account. All members can connect or communicate through the site, or link to resources such as below.

- Cultural Evolution
- We're Back!
- Applying for an NIH Research Grant: Getting Started
- NIH 101: Who We Are, How We Work, and What It All Means for You
- Inside the NIH: Demystifying Grant Review
- NIH Grant Application Examples
- Mentoring Resources
- NIGMS - Workshop for Postdocs Transitioning to Independent Positions
- Minority Postdoc

ANNOUNCEMENT: Three Universities Unite to Replicate and Spread Successful STEM Program

The University of Maryland, Baltimore County (UMBC), the Pennsylvania State University (Penn State), the University of North Carolina (UNC) at Chapel Hill , and Howard Hughes Medical Institute (HHMI) are working together to learn how to adapt the highly successful Meyerhoff Scholars Program for adoption by more universities. The program is regarded as a national powerhouse when it comes to fostering diversity in the sciences. However, despite the program's success and national stature, it has never been replicated at another university. UMBC, HHMI, Penn State and UNC are launching a collaborative project to learn whether elements of the Meyerhoff Program can be adapted at Penn State and UNC. The partners plan

to document, assess, and share information about what they learn so other universities might follow.

RESEARCH RESOURCE: NIH Office of Research on Women's Health (ORWH)

Looking for resources for basic or clinical research opportunities related to women's health or sex differences research? Check out the NIH Office of Research on Women's Health (ORWH) at the above URL. This site includes current funding opportunities, mentoring resources, and additional resources for researchers at all levels.

Fact Sheet: Mentoring Women in Science — for mentees (PDF - 3.3 MB)
Fact Sheet: Mentoring Women in Science — for mentors (PDF - 2.1 MB)

Research Grant Writing Web Resources

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Honing Your Proposal Writing Skills, George A. Hazelrigg, National Science Foundation

Notice to Presidents of Universities and Colleges and Heads of NSF Awardee Organizations

Subject: NSF Abstracts and Titles

Since the issuance of the December 11, 2013 Important Notice to the Community (IN-135) that announced our focus on transparency and accountability, we have developed and are now implementing an approach for addressing the two primary areas of the initiative. The first is improving public understanding of our funding decisions through our award Abstracts and Titles. The second is ensuring that the broad areas of supported research (or portfolios) are aligned to the national interest, as defined by NSF's mission, "…to promote the progress of science; to advance the national health, prosperity and welfare; to secure the national defense…"

In this notice, the NSF policy on award Abstracts and Titles is clarified. We are acting to ensure that our award Abstracts and Titles clearly convey to the public justification for our actions. First, NSF abstracts are the public face of NSF investments and decision-making and they can be used to immediately address a specific area of interest from those outside of the NSF regarding what projects are supported and why. By providing clearer articulation of our actions we will benefit the scientific enterprise and better communicate the value and excitement of what we do. An NSF award abstract, with its title, is an NSF document that describes the project and justifies the expenditure of Federal funds.

There are two major components of the NSF Abstract:

A nontechnical description of the project that states the problem to be studied, and explains the project's broader significance and importance, that serves as a public justification for NSF funding. This component should be understandable to an educated lay reader. It may include such information as the theoretical or analytical foundation of the proposed research, the fundamental issues that may be resolved by the research, the project's relation to NSF's mission, the project's place in the context of ongoing research in the field, the project's potential impact on other fields, and the prospect that it will lead to significant advances or the integration of related lines of inquiry.

A technical description of the project that states the goals and scope of the research, and the methods and approaches to be used. In many cases, the technical description may be a modified version of the project summary submitted with the proposal. **Thus, an NSF award abstract which is intended for a broad audience may differ from the Project Summary that is submitted as part of a technically reviewed proposal.** Furthermore, the title of an NSF supported project must describe the purpose of the research in nontechnical terms to the fullest possible extent.

Publication: Federal Grant Writing Manual

Developed to help grant applicants write federal grant proposals. Includes basic information on how to evaluate if an applicant is qualified to apply for a federal grant. Manual also focuses on the different components of a grant application: goals and objectives, budget, work plan, project sustainability and how to evaluate the proposed project. This is a publication of the Technical Assistance and Services Center (TASC), a program of the National Rural Health Resource Center. The project described was supported by Grant Number UB1RH24206 from the U.S. Department of Health and Human Services, Health Resources and Services Administration, Federal Office of Rural Health Policy.

Changes to the NIH Biosketch

We're set for a major change in how you portray your body of work when applying for NIH funds. With strong support from NIH leadership, we will be rolling out a new biosketch format. The new NIH biosketch emphasizes your accomplishments instead of just a list of publications, which, as previously discussed, we questioned as the best way to showcase your scientific contributions.

The primary focus of the new NIH biosketch will be the magnitude and significance of the scientific advances associated with a researcher's discoveries and the specific role the researcher played in those findings. This change will help reviewers evaluate you not by where you've published or how many times, but instead by what you've accomplished. Hopefully, this change will redirect the focus of reviewers and the scientific community more generally from widely questioned metrics, like the number of published papers, the number of citations received by those papers, or one of several statistical approaches used to normalize citations. We strongly believe that allowing a researcher to generate an account of his or her own work will provide a clearer picture of each individual's contributions and capabilities. But one might question whether this new biosketch will have a negative impact on younger investigators whose body of work may not be as robust as more established investigators. I believe the contrary is true; this new format will give early career investigators a platform for describing and framing the significance of their contributions, which should help reviewers better understand their accomplishments without having to rely simply on a list of publications.

The implementation of the new biosketch has a few steps: this month, NIH will launch a second round of pilot tests of the modified format. The first round was conducted last year and appeared in two requests for applications (RFA-CA-13-501 and RFA-CA-13-502). The next round of tests will involve more applications and will include surveys of both reviewers and applicants to help us fine tune the application instructions and guidance to reviewers.
The new format, completely described on the SF424 (R&R) Applications and Electronic Submission Page, will allow up to five pages for the entire biosketch, and researchers will be permitted to describe up to five of their most significant contributions to science, the influence of their contributions on their scientific field, and any subsequent effects of those contributions on health or technology. The new format also will allow researchers to describe their specific role in those discoveries and to annotate their description with up to four publications.

Additionally, researchers will be allowed to include a link to their complete list of publications in SciENcv or My Bibliography. Later this year we will be able to update SciENcv to help researchers collect the information needed to generate biosketches using the new format,

fully positioning NIH to roll out the modified biosketch for all grant applications received for FY 2016 funding and beyond (which generally refers to applications submitted in early 2015). I suggest — if you haven't already — giving SciENcv a try. Setting up your profile and testing it out now can be helpful as you are thinking about pulling together your biosketch information.

Educational Grant Writing Web Resources

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STEM Learning Is Everywhere:

Summary of a Convocation on Building Learning Systems (2014)

Science, technology, engineering, and mathematics (STEM) permeate the modern world. The jobs people do, the foods they eat, the vehicles in which they travel, the information they receive, the medicines they take, and many other facets of modern life are constantly changing as STEM knowledge steadily accumulates. Yet STEM education in the United States, despite the importance of these subjects, is consistently falling short. Many students are not graduating from high school with the knowledge and capacities they will need to pursue STEM careers or understand STEM-related issues in the workforce or in their roles as citizens. For decades, efforts to improve STEM education have focused largely on the formal education system. Learning standards for STEM subjects have been developed, teachers have participated in STEM-related professional development, and assessments of various kinds have sought to measure STEM learning. But students do not learn about STEM subjects just in school. Much STEM learning occurs out of school in organized activities such as afterschool and summer programs, in institutions such as museums and zoos, from the things students watch or read on television and online, and during interactions with peers, parents, mentors, and role models.

To explore how connections among the formal education system, afterschool programs, and the informal education sector could improve STEM learning, a committee of experts from these communities and under the auspices of the Teacher Advisory Council of the National Research Council, in association with the California Teacher Advisory Council organized a convocation that was held in February 2014. Entitled STEM Learning Is Everywhere: Engaging Schools and Empowering Teachers to Integrate Formal, Informal, and Afterschool Education to Enhance Teaching and Learning in Grades K-8, the convocation brought together more than 100 representatives of all three sectors, along with researchers, policy makers, advocates, and others, to explore a topic that could have far-reaching implications for how students learn about STEM subjects and how educational activities are organized and interact. This report is the summary of that meeting. STEM Learning is Everywhere explores how engaging representatives from the formal, afterschool, and informal education sectors in California and from across the United States could foster more seamless learning of STEM subjects for students in the elementary and middle grades. The report also discusses opportunities for STEM that may result from the new expectations of the Next Generation Science Standards and the Common Core Standards for Mathematics and Language Arts.

WWC Review of the Report "The Effectiveness of Secondary Math Teachers from Teach for America and the Teaching Fellows Programs," Analysis of the Teach for America Program

The study examined whether students taught by teachers in the Teach for America (TFA) and The New Teacher Project Teaching Fellows (Teaching Fellows) programs had greater mathematics achievement than students taught by teachers who were not in either of these programs. This WWC report focuses on the TFA intervention, and a separate single study review

provides information about the Teaching Fellows intervention. Within each school, students who were enrolled in the same math subject were randomly assigned to take the class with either a TFA teacher or a comparison teacher who did not enter teaching through a highly selective alternative route. The study authors found, and the WWC confirmed, that TFA teachers were more effective than comparison teachers in raising the mathematics achievement of their students.

WWC Review of the Report "Interactive Learning Online at Public Universities: Evidence from a Six-Campus Randomized Trial"

The study investigated the effect of interactive learning online (ILO), a form of online course instruction in which computer-guided instruction substitutes for some, though not all, traditional face-to-face instruction. The study used data from 605 students enrolled in an introductory statistics courses at six public university campuses—two each from the State University of New York (SUNY); the City University of New York (CUNY) system; and the University of Maryland system.

Of the 605 students in the study, 313 were randomly assigned to hybrid ILO course sections, and the other 292 students were randomly assigned to sections taught via traditional face-to-face instruction. Based on data provided by the participating universities, the study authors examined the impact of ILO on the course pass rate (i.e., course completion with a passing grade).

Pass rates in both the intervention and comparison course sections were similar (80% vs. 76%, respectively). There was no statistically significant difference between these rates.

The Condition of Education 2014

The Condition of Education 2014 summarizes important developments and trends in education using the latest available data. The report presents 42 indicators on the status and condition of education. The indicators represent a consensus of professional judgment on the most significant national measures of the condition and progress of education for which accurate data are available.

Agency Research News

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DCL: Cybersecurity Education EAGERs - Pushing the Dimensions of the Domain

The National Science Foundation (NSF) is announcing its intention to fund a small number of Early Concept Grants for Exploratory Research (EAGERs) to encourage advances in cybersecurity education, an area supported by the Foundation's Secure and Trustworthy Cyberspace (SaTC) (see solicitation NSF 13-578:) and CyberCorps®: Scholarship for Service (see solicitation NSF 14-510) programs.

EAGER is a mechanism for supporting exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches. This work may be considered especially "high risk - high payoff" in the sense that it, for example, involves radically different approaches, applies new expertise, or engages novel disciplinary or interdisciplinary perspectives.

In particular, with this Dear Colleague Letter (DCL), we wish to alert you that we are interested in using the EAGER mechanism to encourage new collaborations between the cybersecurity research and computing education research communities. The proposed research should fit the Cybersecurity Education (EDU) perspective within the SaTC solicitation.

The results of SaTC-funded research can lead to widespread changes in our understanding of the foundations of cybersecurity that can, in turn, give rise to fundamentally new ways to motivate and educate students about cybersecurity. Basic research in cybersecurity together with research on learning can address the challenge of expanding existing educational opportunities and resources in cybersecurity. Below are some examples of research pathways that could facilitate advances in how cybersecurity education is defined, delivered, and assessed. This list is by no means intended to be complete, nor is it meant to suggest what topics are of interest to NSF; instead, it is meant to give some notion of the broad spectrum of possibilities for such research under this DCL. [**MORE AT ABOVE URL**]

NSF and NIJ Offer Funding for Forensics Sciences Industry/University Cooperative Research Centers

The National Institute of Justice and the National Science Foundation have partnered to solicit proposals to establish Industry/University Cooperative Research Centers (I/UCRCs) for the forensic sciences. The cooperative centers will convene forensic experts, industry developers, and researchers to develop long-term partnerships to address the needs and challenges of the forensic sciences. The centers are catalyzed by sponsorship investments from both NIJ and NSF. I/UCRC membership will also be open to local, state, and federal agencies, private philanthropic foundations, and other institutions. Federal agencies can also become members, contributing their practical experience as well as access to testing research concepts in working crime laboratories. The I/UCRC may also involve international collaboration. NSF has helped create 170 I/UCRCs on a variety of topics since 1979; 67 of these are currently being supported but many others are now independently self-sustaining. NIJ and NSF welcome proposals on a range of relevant forensic science topics, such as human judgment and decision making; new principles and approaches for remote and field-based chemical measurement and imaging; and

pattern-based analysis. Proposals should adhere to the terms and guidance in the I/UCRC solicitation, including requirements for the letter of intent. The title should begin with the phrase "Forensics I/UCRC" followed by a brief descriptor that conveys the main focus of the proposal. **The deadline for letters of intent is June 27, 2014.** Please contact forensic-science-inquiries@nsf.gov for more information.

DoD Request for Information (RFI) Institutes for Manufacturing Innovation

The Department of Defense (DoD) wishes to consider input from Industry and Academia as part of an effort to select and scope the technology focus areas for future Institutes for Manufacturing Innovation (IMIs). These IMIs will be regionally centered Public Private Partnerships enabling the scale-up of advanced manufacturing technologies and processes with the goal of successful transition of existing science and technology into the marketplace for both Defense and commercial applications. Each Institute will be led by a not-for-profit organization and focus on one technology area. The Department is requesting responses which will assist in the selection of a technology focus area from those currently under consideration, based upon evidence of national security requirement, economic benefit, technical opportunity, relevance to industry, business case for sustainability, and workforce challenge.

BAA-DIA-STIP-2014 The USAID Development Innovation Accelerator BAA

This Broad Agency Announcement (BAA) seeks opportunities to co-create, co-design, co-invest, and collaborate in basic and applied research and development for Science, Technology, Innovation, and Partnership (STIP). The United States Agency for International Development (USAID) invites organizations and companies to participate with USAID in response to a Critical Development Challenge Addendum issued under this BAA, as described below, to provide innovations and technologies that further USAID's development goal of dramatically improving or saving the lives of over 200 million people over the next five years. Cost Sharing, Matching or Leveraging details: Whether cost share, match, and/or leverage are required will be determined by the individual BAA Addendum, final award type, and/or the mutual agreement of the parties. Nothing in the BAA precludes reasonable cost sharing, matching, leveraging, or other exchange of resource arrangements, and proposers are encouraged to suggest creative approaches to resourcing projects. This notice has also been posted on FedBizOpps at www.fbo.gov . This BAA serves to inform the public of the opportunity for funding for STIP in USAID. **Actual opportunities for funding and partnering to address Critical Development Challenges will be issued as Addenda to the BAA.** The terms of the BAA apply to each Addendum. Individual Critical Development Challenge Addenda may have specific requirements for evaluation criteria and administrative information, such as the requirements for expressions of interest, concept papers, and response deadlines.

RFI-497-14-ISIAP Request for Information USAID/Indonesia: Climate Change Adaptation Project Agency for International Development

Reference Number: RFI-497-14-ISIAP Release Date: June 3, 2014 **Response Due Date: July 4**, 2014, 17:00 (Indonesia Time) The United States Agency for International Development, Indonesia Mission (USAID/Indonesia) is in the process of designing a new stand-alone program

and concept **to support climate change adaptation in Indonesia** (**est. $20 million**). USAID/Indonesia is posting this Request for Information (RFI) in order to provide public information to any parties interested in USAID's support for climate change adaptation in Indonesia, as well as to collect information and suggestions about needs for climate adaptation programming in Indonesia. ***The information contained within this RFI is intended solely as a thought-piece; ideas may change significantly during the Mission's program design, consultation and approval process.*** In addition, any information collected through this RFI may or may not be used to help guide thinking about adaptation programming. THIS IS A REQUEST FOR INFORMATION ONLY. It is not a Request for Proposal, a Request for Quotation, a Request for Application, an Invitation for Bids, a Solicitation, or an indication OAA will contract for the items contained in this Special Notice. The RFI is an attempt to reach out in an effort to determine industry capabilities and interest and will be treated as information only. In accordance with FAR 15.201(e), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. Responses to this RFI are strictly voluntary and USAID will not pay respondents for information provided in response to this RFI. Responses to this RFI may not be returned and respondents may not be notified of the result of the review. If a Solicitation is issued, it will be announced on the Federal Business Opportunities website www.fbo.gov or www.grants.gov at a later date, and all interested parties must respond to that Solicitation announcement separately from any response to this announcement. This RFI does not restrict the Government's acquisition approach on a future Solicitation. Instructions for Submitting Responses/Comments Responses (comments, suggestions, and enhancements) to this RFI are due on July 4, 2014, 17:00 (Indonesia Time). ***Respondents may also include self/organization information including past experiences working in this subject area***, experience working with other stakeholders, including implementing partners on the ground or host country government officials, or capacity information. **Send responses to this RFI via email to proposals-indo@usaid.gov with the subject title "Request for Information (RFI): USAID/Indonesia Climate Change Adaptation Project",** no later than July 4. You will only receive an electronic confirmation acknowledging receipt of your response, but will not receive individualized feedback on any suggestions. This Notice can be viewed and downloaded from the internet at both www.grants.gov and www.fbo.gov.

Agency Reports, Workshops & Research Roadmaps

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The Future of Advanced Nuclear Technologies: Interdisciplinary Research Team Summaries

The National Academies Keck Futures Initiative (NAKFI) Conference in 2013 focused on the Future of Advanced Nuclear Technologies to generate new ideas about how to move nuclear technology forward while making the world safer and more secure. Beyond the public's apprehension concerning the safety of nuclear power, which calls out for better communications strategies, several challenges lie ahead for the nuclear enterprise in the United States. The workforce in nuclear technology is aging, there is an overreliance on large, high-risk reactor designs, and the supply of radioisotopes for nuclear medicine remains unstable--all problems crying out for solutions. The Future of Advanced Nuclear Technologies summarizes the 14 Interdisciplinary Research (IDR) teams' collaborations on creative solutions to challenges designed to propel the policy, engineering, and social aspects of the nuclear enterprise forward.

Mentorship Matters for the Biomedical Workforce

The mentorship of early-career scientists is necessary to their individual career success and the future of the biomedical research enterprise as a whole. Recently launched NIH programs and tools aim to facilitate this important type of training.

As scientists, we have the opportunity to make new discoveries that contribute to fundamental knowledge and improve people's health and quality of life through our research. But we also influence lives by fostering the careers of the less experienced investigators with whom we interact on a daily basis. We shape their professional development by mentoring them on how to be productive researchers who contribute to both science and the community. Being a mentor goes beyond supervising lab projects and teaching sound experimental design. It includes training less experienced investigators how to conduct research ethically and with integrity. It includes advising on potential career paths, providing networking and collaboration opportunities and helping new researchers navigate the research funding process. Seasoned scientists can attest that breadth of knowledge is just as important as depth, and they can encourage mentees to develop a range of professional skill sets.

Biomedical research needs scientists who can effectively translate and communicate its intricacies and value to many stakeholders, such as journalists, advocates, members of industry, policy makers and the general public. Good mentors transfer these skills to their mentees. We can show young investigators how valuable they are to the future of science. They are the next generation of great ideas, further propelling us toward our goal of advancing the scientific enterprise and improving health.

In the last decade, more graduate students and postdoctoral fellows are supported by research grants, not just career- or training-focused awards. In 2011, 65% of full-time graduate students supported by the US National Institutes of Health (NIH) received funding from research assistantships, compared to 60% in 2001. This speaks to the evolving landscape of biomedical workforce support and the need to reaffirm the importance of both formal and

informal mentorship, as students and postdocs on research grants may not receive the formal mentorship that is part of NIH-sponsored training programs.

The NIH's extramural and intramural programs have long recognized the importance of mentorship in research training. The agency offers mentored career ('K') awards for research career development under the guidance of an experienced mentor or mentoring team. For these and most pre- and post-doctoral fellowship ('F') awards, mentors provide a statement of support in the application that describes their mentoring plans and provide progress report updates throughout the duration of the award. Similarly, the NIH's institutional training ('T') review criteria ensure that reviewers will consider both the training records of the proposed mentors and historical trainee outcomes. **[MORE at above URL]**

Report Identifies Barriers to Successful Incorporation of Increasingly Autonomous Unmanned Aircraft in the Nation's Aviation System, Outlines Research Priorities to Overcome Hurdles

WASHINGTON -- While civil aviation is on the threshold of potentially revolutionary changes with the emergence of increasingly autonomous unmanned aircraft, these new systems pose serious questions about how they will be safely and efficiently integrated into the existing civil aviation structure, says a new report from the National Research Council. The report identifies key barriers and provides a research agenda to aid the orderly incorporation of unmanned and autonomous aircraft into public airspace.

"There is little doubt that over the long run the potential benefits of advanced unmanned aircraft and other increasingly autonomous systems to civil aviation will indeed be great, but there should be equally little doubt that getting there while maintaining the safety and efficiency of the nation's civil aviation system will be no easy matter," said John-Paul Clarke, co-chair of the committee that wrote the report and associate professor of aerospace engineering at the Georgia Institute of Technology.

The report uses the term "increasingly autonomous" systems to describe a spectrum of technologies, from unmanned aircraft that are piloted remotely – which describes most such aircraft currently in use -- to advanced autonomous systems for unmanned aircraft that would adapt to changing conditions and require little or no human intervention. Increasingly autonomous systems could also be used in crewed aircraft and air traffic management systems to lessen the need for human monitoring and control.

Development of such systems is accelerating, prompted by the promise of a range of applications, such as unmanned aircraft that could be used to dust crops, monitor traffic, or execute dangerous missions currently undertaken by crewed planes, such as fighting forest fires. The FAA currently prohibits commercial use of unmanned aircraft without a waiver or special authorization. NASA's Aeronautics Research Mission Directorate requested that the Research Council convene a committee to develop a national research agenda for autonomy in civil aviation. One critical, crosscutting goal that must be achieved before increasingly autonomous aircraft and other systems can reach their full potential is ensuring that they will perform with the high level of safety and reliability expected of civil aviation systems, says the report. It identifies specific technological, regulatory, and other barriers that must be overcome in order to reach that goal.

Understanding the Connections Between Coastal Waters and Ocean Ecosystem Services and Human Health:

Workshop Summary (2014)

Understanding the Connections Between Coastal Waters and Ocean Ecosystem Services and Human Health discusses the connection of ecosystem services and human health. This report looks at the state of the science of the role of oceans in ensuring human health and identifies gaps and opportunities for future research. The report summarizes a workshop convened by the Institute of Medicine's Roundtable on Environmental Health Sciences, Research, and Medicine. Participants discussed coastal waters and ocean ecosystem services in the United States in an effort to understand impacts on human health. Understanding the Connections Between Coastal Waters and Ocean Ecosystem Services and Human Health focuses on key linkages by discussing the ecosystem services provided by coastal waterways and oceans that are essential for human health and well-being; examining the major stressors that affect the ability of coastal waterways and ocean systems to provide essential services; and considering key factors that can enhance the resiliency of these systems.

Science Needs for Microbial Forensics:

Developing an Initial International Science Roadmap (2014)

Microbial forensics is a scientific discipline dedicated to analyzing evidence from a bioterrorism act, biocrime, or inadvertent microorganism or toxin release for attribution purposes. This emerging discipline seeks to offer investigators the tools and techniques to support efforts to identify the source of a biological threat agent and attribute a biothreat act to a particular person or group. Microbial forensics is still in the early stages of development and faces substantial scientific challenges to continue to build capacity.

The unlawful use of biological agents poses substantial dangers to individuals, public health, the environment, the economies of nations, and global peace. It also is likely that scientific, political, and media-based controversy will surround any investigation of the alleged use of a biological agent, and can be expected to affect significantly the role that scientific information or evidence can play. For these reasons, building awareness of and capacity in microbial forensics can assist in our understanding of what may have occurred during a biothreat event, and international collaborations that engage the broader scientific and policy-making communities are likely to strengthen our microbial forensics capabilities. One goal would be to create a shared technical understanding of the possibilities - and limitations - of the scientific bases for microbial forensics analysis.

New Funding Opportunities

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Content Order

New Funding Posted Since May 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.]

New Funding Solicitations Posted Since May 15 Newsletter

USDA-NIFA-SRGP-004532 Special Research Grants Program - Aquaculture Research
The Aquaculture Research program is to support the development of an environmentally and economically sustainable aquaculture industry in the U.S. and generate new science-based information and innovation to address industry constraints. Over the long term, results of projects supported by this program may help improve the profitability of the U.S. aquaculture industry, reduce the U.S. trade deficit, increase domestic food security, provide markets for U.S.-produced grain products, increase domestic aquaculture business investment opportunities, and provide more jobs for rural and coastal America. The Aquaculture Research program for FY 2014 will fund projects that directly address major constraints to the U.S. aquaculture industry and focus on one or more of the following program priorities: (1) Genetics of commercial aquaculture species. (2) Critical disease issues impacting aquaculture species. (3) Design of environmentally and economically sustainable aquaculture production systems. (4) Economic research for increasing aquaculture profitability. **Due June 23.**

ED-GRANTS-051914-001 Office of Postsecondary Education (OPE):Fulbright-Hays Group Projects Abroad Program: Short Term Projects
The Fulbright-Hays Group Projects Abroad (Fulbright-Hays GPA) Program supports overseas projects in training, research, and curriculum development in modern foreign languages and area studies for groups of teachers, students, and faculty engaged in a common endeavor. Short-term projects may include seminars, curriculum development, or group research or study. **Due June 24.**

ED-GRANTS-051914-002 Office of Postsecondary Education (OPE): Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program
The Fulbright-Hays DDRA Fellowship Program provides opportunities to doctoral candidates to engage in full-time dissertation research abroad in modern foreign languages and area studies. The program is designed to contribute to the development and improvement of the study of modern foreign languages and area studies in the United States. **Due June 24.**

ED-GRANTS-052814-002 The Office of Postsecondary Education (OPE): Promoting Postbaccalaureate Opportunities for Hispanic Americans (PPOHA)
The purposes of the PPOHA Program are to: (1) Expand postbaccalaureate educational opportunities for, and improve the academic attainment of, Hispanic students; and (2) expand the postbaccalaureate academic offerings, as well as enhance the program quality, in the institutions of higher education that are educating the majority of Hispanic college students and helping large numbers of Hispanic and low-income students complete postsecondary degrees. **Due June 27.**

Program Announcement to Doe National Laboratories
The Atmospheric System Research Program (ASR) in the Office of Biological and Environmental Research (BER) of the Office of Science (SC), U.S. Department of Energy (DOE), supports research that uses laboratory studies or field data from the Atmospheric Radiation Measurement (ARM) Climate Research Facility, along with process level models, to study key cloud, aerosol, precipitation, and radiative transfer processes that are relevant to improving the accuracy of regional and global climate model predictions. Key ASR science goals are to determine the properties of, and interactions among, aerosols, clouds, precipitation, and radiation that are most critical to understand in order to improve their representation in climate models; ascertain the roles of atmospheric dynamics, thermodynamic structure, radiation, surface properties, and chemical and microphysical processes in the life cycles of aerosols and clouds; and identify and quantify processes along the aerosol-cloud-precipitation continuum that affect radiative fluxes at the surface and top of the atmosphere and radiative and latent heating rate profiles. ASR also supports research that develops and evaluates models of these aforementioned processes. More information on the ASR program is available at http://science.energy.gov/ber/research/cesd/atmospheric-system-research-program/ . A key aspect of ASR research is utilization of the unique long-term cloud, aerosol, precipitation, meteorological, and radiation data sets from the ARM Climate Research Facility to understand atmospheric processes. ARM has recently established a new fixed site in the Eastern North Atlantic (ENA) and has deployed the third ARM Mobile Facility (AMF) for an extended campaign at Oliktok Point, Alaska. The ASR program hereby announces its interest in receiving research proposals to conduct ASR-relevant research focusing on either the ENA or Oliktok Point sites, such that proposed research is based on a broad range of the given site's instruments and capabilities to advance early scientific output from the site. **Required pre-application due June 27; full July 31.**

ED-GRANTS-051614-001 Fund for the Improvement of Postsecondary Education (FIPSE)
Purpose of Program: The President has set a clear goal for the Nation's education system. By 2020 the United States will once again lead the world in the proportion of its citizens holding college degrees or other postsecondary credentials. To support this national effort the Department of Education has outlined a comprehensive education agenda that includes expanding quality and opportunity at all levels of education from early learning programs through higher education. The FITW Program is a key part of this agenda. Applications for grants under the First in the World Program, CFDA number 84.116F, must be submitted

electronically using the Government- wide Grants.gov Apply site at www.Grants.gov.You may access the electronic grant application for First in the World Program at www.Grants.gov. You must search for the downloadable application package for this competition by the CFDA number. Do not include the CFDA number's alpha suffix in your search (e.g., search for 84.116, not 84.116F). The telephone number for the Grants.gov Helpdesk is 1-800-518-4726 or e-mail: support@grants.gov. **Due June 30.**

USDA-RMA-RME-2014-PP Risk Management Education Partnership Program

The purpose of this competitive cooperative partnership agreement program is to deliver crop insurance education and risk management training to U.S. agricultural producers to assist them in identifying and managing production, marketing, legal, financial, and human risk. **Due June 30.**

DE-FOA-0000854 Clean Energy Supply Chain and Manufacturing Competitiveness Analysis for Hydrogen and Fuel Cell Technologies Department of Energy

With this Funding Opportunity Announcement (FOA), the Department of Energy (DOE) seeks to fund Outreach and Analysis type projects. Topics include: Topic 1: Outreach to develop strategies and new approaches to facilitate development and expansion of the domestic supply chain of hydrogen and fuel cell-related components in the U.S. Identify gaps in the supply chain and strategies to mitigate the gaps for hydrogen and fuel cell components and systems. Develop supply chain enhancement strategies (e.g., online supply chain exchanges, supply chain outreach, and supply chain exchange event type events). Topic 2: Global manufacturing competitive analysis for hydrogen and fuel cell-related technologies. Carry out comprehensive analysis of the factors affecting U.S. manufacturing competitiveness for hydrogen and fuel cell components and systems. Provide manufacturing-related market analyses related to the global fuel cell industry trends, including the number of units and size (megawatts) of fuel cells shipped and binned by country and type of application. The full Funding Opportunity Announcement (FOA) is posted on the EERE eXCHANGE website at https://eere-exchange.energy.gov. Applications must be submitted through the EERE eXCHANGE website to be considered for award. The applicant must first register and create an account on the EERE eXCHANGE website. A User Guide for the EERE eXCHANGE can be found on the EERE website at http://eere.energy.gov/financing/exchangeExchange/Manuals.aspx after logging in to the system. Information on where to submit questions regarding the content of the announcement and where to submit questions regarding submission of applications is found in the full FOA posted on the EERE eXCHANGE website. **Due June 30**.

BJS-2014-3933 2015 Criminal History Record Assessment and Research Program (CHRARP)

The Bureau of Justice Statistics (BJS) is seeking proposals to support the Criminal History Record Assessment and Research Program (CHRARP). This statistical program furthers BJS's mission to produce accurate and timely information on the criminal histories of offenders. The recipient of funds will transform automated criminal history records into databases that support statistical research and studies of the criminal behaviors for various cohorts of individuals. The recipient of funds will 1) prepare and maintain a software system that converts the contents of

automated criminal history records into research databases; 2) generate a set of at least three research databases, including technical assistance in the design of sampling frames and sampling weights; 3) design and implement a quality assurance system to validate the conversion of raw criminal history information into these research databases; 4) provide BJS with a set of analyses of each research database based on BJS's specifications; 5) work with BJS to determine how variations in the quality, completeness, and variability of the computerized criminal history information maintained by the Federal Bureau of Investigation (FBI) and state repositories affect the content of the research databases; and 6) prepare technical reports detailing these findings and proposing methods to compensate for these attributes when analyzing these administrative records. BJS anticipates making one award of up to $1,000,000 for the 18-month program described herein. The program includes an option to continue the work for an additional 42 months. Funding in subsequent years will be based on the selected applicant's performance during the initial 18 months, the availability of funds, and the scope of work developed by BJS following the first 18 months. This award may be supplemented in the future at BJS discretion, depending on the selected applicant's performance and the availability of appropriations. **Due June 30.**

USDA/NIFA Healthy Homes Partnership

NIFA requests applications for the Healthy Homes Partnership (HHP) for fiscal year (FY14) for a public outreach education program that will reduce housing deficiencies and risks associated with childhood diseases and injuries. **Due July 7.**

Fuel Cell Technologies Incubator - Innovations in Fuel Cell and Hydrogen Fuel Technologies

The U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is an organization focused on achieving aggressive and well-defined mid-to-long term clean energy goals for the United States of America. In that context, EERE has established multi-year plans and roadmaps. EERE focuses the majority of its resources on a limited number of "highest probability of success" pathways/approaches to ensure that the program initiatives are supported at a critical mass (both in terms of dollars and time) for maximum impact. This roadmap-based approach is one of EERE's greatest strengths, which can create challenges in recognizing and exploring unanticipated, game changing pathways/approaches which may ultimately be superior to the pathways/approaches on our existing roadmaps. To enhance the responsiveness of the roadmap approach, EERE is issuing "Incubator" Funding Opportunity Announcements (FOAs) within its existing Offices and programs to support innovative technologies and solutions that could help meet existing goals but are not represented in a significant way in the Offices' existing Multi-Year Program Plans (MYPPs) or current portfolios. The Incubator programs will allow EERE to assess new technologies for their potential to be ?on ramped? to future MYPPs. Successful incubator projects will reduce the risk associated with potentially breakthrough approaches and technologies so that they could be viable candidates for inclusion in future program roadmaps. The full Funding Opportunity Announcement (FOA) is posted on the EERE eXCHANGE website at https://eere-exchange.energy.gov . Applications must be submitted through the EERE eXCHANGE website to be considered for award. The applicant must first register and create an account on the EERE eXCHANGE website. A User

Guide for the EERE eXCHANGE can be found on the EERE website https://eere-exchange.energy.gov/Manuals.aspx after logging in to the system. Information on where to submit questions regarding the content of the announcement and where to submit questions regarding submission of applications is found in the full FOA posted on the EERE eXCHANGE website. **LOI due July 7; full due September 13.**

ED-GRANTS-060414-001 Office of Postsecondary Education (OPE): Gaining Early Awareness and Readiness for Undergraduate Programs (Partnership Grants)

The GEAR UP Program is a discretionary grant program that provides funding for academic and related support services to eligible low-income students, including students with disabilities, to help them obtain a secondary school diploma and to prepare for and succeed in postsecondary education. Services must include providing financial aid information, encouraging enrollment in challenging coursework in order to reduce the need for remediation at the postsecondary level, and implementing activities to improve the number of students who obtain a high school diploma and complete applications for and enroll in a program of postsecondary education. GEAR UP funds may also be used to provide a number of additional support services such as mentoring, tutoring, academic and career counseling, and exposure to college campuses. **Due July 7.**

ED-GRANTS-060614-001 Office of Postsecondary Education: Language Resource Centers

The Language Resource Centers (LRC) Program provides grants to institutions of higher education or consortia of these institutions for establishing, strengthening, and operating centers that serve as resources for improving the Nation's capacity for teaching and learning foreign languages through teacher training, research, materials development, and dissemination projects. Catalog of Federal Domestic Assistance (CFDA) Number: 84.229A. Applications for grants under the Language Resource Centers (LRC) Program, CFDA number 84.229A, must be submitted electronically using the Governmentwide Grants.gov Apply site at www.Grants.gov. **Due July 9.**

Undergraduate Research Education Program (UP) to Enhance Diversity in the Environmental Health Sciences (R25)

The goal of this NIEHS undergraduate research education R25 program is to support educational activities that enhance the diversity of the biomedical, behavioral and clinical research workforce in the environmental health sciences. To this end, this funding opportunity announcement (FOA) encourages the development of creative educational activities with a primary focus on research experiences for undergraduates at the junior and senior level. **LOI July 15; full August 15.**

USDA-NIFA-OP-004541 Renewable Resource Extension Act - National Focus Fund Projects

NIFA requests applications for the Renewable Resources Extension Act – National Focus Fund Projects (RREA-NFF) for fiscal year (FY) 2014 to provide funds for expanded and comprehensive extension programs for forest and rangeland renewable resources at a national, regional, or multi-institutional level. **Due July 16.**

NIH Science Education Partnership Award (SEPA) (R25)

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The goal of the Science Education Partnership Award (SEPA) program is to invest in educational activities that enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs. To this end, this funding opportunity announcement (FOA) encourages the development of innovative educational activities for pre-kindergarten to grade 12 (P-12), teachers and students from underserved communities with a focus on Courses for Skills Development, Research Experiences, Mentoring Activities, Curriculum or Methods Development or Informal science Education (ISE) exhibits, and Outreach activities. Details on current ORIP SEPA projects can be found at the following links: http://dpcpsi.nih.gov/orip/ose/sepa/science_education_partnership_awards_index and http://nihsepa.org. Applicants are strongly encouraged to consult with the SEPA Scientific/Research Contact to be advised on the appropriateness of the intended P-12 STEM or ISE project for the SEPA program objectives and Office of Science Education/SEPA priorities.
- See more at: http://grants.nih.gov/grants/guide/pa-files/PAR-14-228.html#sthash.Zb2UnQ87.dpuf **Due July 30.**

DE-FOA-0001139 Atmospheric System Research

The Atmospheric System Research Program (ASR) in the Office of Biological and Environmental Research (BER) of the Office of Science (SC), U.S. Department of Energy (DOE), supports research that uses laboratory studies or field data from the Atmospheric Radiation Measurement (ARM) Climate Research Facility, along with process level models, to study key cloud, aerosol, precipitation, and radiative transfer processes that are relevant to improving the accuracy of regional and global climate model predictions. Key ASR science goals are to determine the properties of, and interactions among, aerosols, clouds, precipitation, and radiation that are most critical to understand in order to improve their representation in climate models; ascertain the roles of atmospheric dynamics, thermodynamic structure, radiation, surface properties, and chemical and microphysical processes in the life cycles of aerosols and clouds; and identify and quantify process es along the aerosol-cloud-precipitation continuum that affect radiative fluxes at the surface and top of the atmosphere and radiative and latent heating rate profiles. ASR also supports research that develops and evaluates models of these afore-mentioned processes. More information on the ASR program is available HERE. **Due July 31.**

RFA-OAA-14-000029 Feed the Future Biotechnology Partnership

Over the past decade, USAID has funded a consortium of institutions in Asia and Africa under the Agricultural Biotechnology Support Program to use modern biotechnology, particularly genetic engineering, to develop products to address major production constraints for which conventional plant breeding tools have been ineffective. The work has included development of disease and nematode resistant banana, fruit and shoot borer resistant eggplant (Bt Eggplant), and late blight resistant potato (LBR Potato). The Feed the Future Biotechnology Partnership, for which applications are requested by this RFA, will lead and manage a product development and capacity-building program supporting development of late blight resistant potato in

Bangladesh, India, and Indonesia, as well as fruit and stem borer resistant eggplant in Bangladesh, India and the Philippines. The Program Description set forth in Section I of this RFA includes project management, oversight and technical support to public & private sector partners for all phases of the product development cycle, as relevant for the particular crop/country, including event selection, confined field trials, regulatory biosafety data collection and dossier preparation/submission, commercial launch and stewardship. The Feed the Future Biotechnology Partnership is described in more detail in Section I of this RFA**. Due August 1 ($10 million).**

ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE)

The goals of the ADVANCE program are (1) to develop systemic approaches to increase the representation and advancement of women in academic STEM careers; (2) to develop innovative and sustainable ways to promote gender equity in the STEM academic workforce; and (3) to contribute to the development of a more diverse science and engineering workforce. ADVANCE also has as its goal to contribute to and inform the general knowledge base on gender equity in the academic STEM disciplines. There are three tracks with distinct purposes. The Institutional Transformation (IT) track is meant to produce large-scale comprehensive change and serve as a locus for research on gender equity and institutional transformation for academic STEM. The Institutional Transformation Catalyst (IT Catalyst) track is meant either to conduct self-assessment or to implement unique strategies – either adapted from those found effective in the IT track or ones designed to be responsive to the unique environments of eligible institutions – and evaluate their effectiveness. The Partnerships for Learning and Adaptation Networks (PLAN) track is meant to provide a larger scale environment for adapting, implementing and creating knowledge about the effectiveness of a particular strategy for change within a context of networked adaptation and learning. PLAN is focused on adaptation/implementation and learning either in particular STEM disciplines (PLAN D) or across institutions of higher education (PLAN IHE). **Multiple deadlines beginning August 11.**

Partnerships for Innovation: Accelerating Innovation Research- Technology Translation

The NSF Partnerships for Innovation (PFI) program within the Division of Industrial Innovation and Partnerships (IIP) is an umbrella for two complementary subprograms, Accelerating Innovation Research (AIR) and Building Innovation Capacity (BIC). Overall, the PFI program offers opportunities to connect new knowledge to societal benefit through translational research efforts and/or partnerships that encourage, enhance and accelerate innovation and entrepreneurship. The subject of this solicitation is PFI: AIR-Technology Translation (PFI: AIR-TT). The PFI: AIR-TT solicitation serves as an early opportunity to move previously NSF-funded research results with promising commercial potential along the path toward commercialization. Projects are supported to demonstrate proof-of-concept, prototype, or scale-up while engaging faculty and students in entrepreneurial/innovative thinking. **WEBINAR**: A webinar will be held within 6 weeks of the release date of this solicitation to answer any questions about this solicitation. Details will be posted on the IIP website (http://www.nsf.gov/eng/iip/pfi/air-tt.jsp) as they become available. **Required LOI September 2; full March 15.**

EPA-G2014-STAR-J1 Air, Climate and Energy (ACE) Centers: Science Supporting Solutions

The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is seeking applications for Air, Climate and Energy (ACE) Centers. EPA is interested in supporting research on the development of sound science to systematically inform policy makers at the state and local levels regarding the development of innovative approaches to enable effective implementation of air pollution control strategies to achieve the greatest public health benefits by reducing exposure to harmful air pollution. Priority research areas include: enhancing understanding of spatial and temporal differences in individual pollutants and pollutant mixtures within and across different areas (including urban areas, or between urban, suburban, and rural areas) or geographic regions; identifying and improving the characterization of the most important factors contributing to regional or city-to-city differences or similarities in air pollution and health effects beyond topography and meteorology; improving the ability to understand and project how these contributing factors and differences may change over the next one to several decades; and advancing scientific knowledge and tools needed to develop robust strategies for air pollution control to improve public and environmental health under a variety of conditions, including consideration of approaches for addressing climate change preparedness. **Due September 4.**

ONRBAA14-008 Fiscal Year 2015 Non-Lethal Weapons Technologies

The Office of Naval Research is soliciting proposals for: (1) applied non-lethal weapon (NLW) research; (2) early NLW technology development, and (3) rapid NLW development, test, and demonstration of next-generation NLW and capabilities. The objective of this BAA is to stimulate applied research, advanced technology development (ATD), and advanced component development and prototypes (ACD&P) to include rapid-prototyping, testing and evaluation of NLW technologies in an attempt to address known military needs. Refer to the BAA or application instructions for white paper due dates. **Due September 26.**

NPS-BAA-14-002 FY14 Acquisition Research Program Department of Defense

The Government is interested in stimulating and supporting scholarly research in academic disciplines that bear on public policy and management in the field of government acquisition. These include economics, finance, financial management, information systems, organization theory, operations management, human resources management, risk management, and marketing, as well as the traditional acquisition areas such as contracting, program/project management, logistics, test and evaluation and systems engineering management. The ARP primarily supports scholarly research through assistance vehicles that will benefit the general public and/or private sector to a larger extent than any direct benefits that may be gained by the Department of Defense (DOD). Studies of government processes, systems, or policies should focus on expanding the body of knowledge, theory and/or research methodologies that are also relevant to processes, systems, or policies outside the DOD. The Government in this BAA is interested only in proposals that will provide unclassified and non-proprietary findings suitable for publication in open scholarly literature. Offerors bear prime responsibility for the design, management, direction, and conduct of research, and exercise judgment and original

thought toward attaining the goals within broad parameters of the research areas proposed and the resources provided. **Due September 30.**

Centers of Research Excellence in Science and Technology (CREST)

The Centers of Research Excellence in Science and Technology (CREST) program provides support to enhance the research capabilities of minority-serving institutions (MSI) through the establishment of centers that effectively integrate education and research. CREST promotes the development of new knowledge, enhancements of the research productivity of individual faculty, and an expanded presence of students historically underrepresented in science, technology, engineering, and mathematics (STEM) disciplines. HBCU-RISE awards specifically target HBCUs to support the expansion of institutional research capacity as well as the production of doctoral students, especially those from groups underrepresented in STEM, at those institutions. The CREST program supports the following types of projects: CREST Center awards provide multi-year support (typically 5-years) for eligible minority-serving institutions that demonstrate a strong research and education base, a compelling vision for research infrastructure improvement, and a comprehensive plan with the necessary elements to achieve and sustain national competitiveness in a clearly defined area of national significance in science or engineering research. Successful Center proposals will demonstrate a clear vision and synergy with the broad goals of the CREST Program and the Human Resource Development Division with respect to development of a diverse STEM workforce. CREST Centers are expected to provide leadership in the involvement of groups traditionally underrepresented in STEM at all levels (faculty, students, and postdoctoral researchers) within the Center. Centers are required to use either proven or innovative mechanisms to address issues such as recruitment, retention and mentorship of participants from underrepresented groups. [Anticipated number of awards is across fiscal years 2015 and 2016. In fiscal year 2015, up to 2 Broadening Participation Research in STEM Education standard grants, up to 8 SBIR/STTR Diversity Collaborative Supplements, up to 4 Partnership Supplements and up to 4 HBCU-RISE standard grants. In fiscal year 2016, up to 4 CREST Center continuing grants, up to 2 Broadening Participation Research in STEM Education standard grants, up to 8 SBIR/STTR Diversity Collaborative Supplements, up to 3 Partnership Supplements and up to 2 HBCU-RISE standard grants.] **CREST LOI due October 6; CREST preliminary due November 5; and CREST full June 5, 2015.**

W81XWH-14-SCIRP-IIRA DoD Spinal Cord Injury Investigator-Initiated Research Award

The SCIRP Investigator-Initiated Research Award mechanism was first offered in FY09. Since then, 211 Investigator-Initiated Research Award applications have been received, and 47 have been recommended for funding. The SCIRP Investigator-Initiated Research Award is intended to support studies that have the potential to make an important contribution to SCI research and/or patient care. Important aspects of this award mechanism include:  Impact: Applications should articulate both the short- and long-term impact of the proposed research. Projects should address an FY14 Area of Encouragement or other research areas relevant to SCI.  Military Relevance: Projects should impact spinal cord injured military Service Members, Veterans, and/or their family members, as well as their caregivers. All applications

must specifically and clearly address the military relevance of the proposed research project. Collaboration with military researchers and clinicians is encouraged.  Preliminary Data: Observations that drive a research idea may be derived from laboratory discovery, population-based studies, a clinician's first-hand knowledge of patients, or anecdotal data. Applications must include preliminary and/or published data that is relevant to SCI and the proposed research project. Investigator-Initiated Research Award applications may focus on any phase of research from basic through translational, including preclinical studies in animal models or human subjects, as well as correlative studies associated with an existing clinical trial. Clinical trials are not allowed under this funding opportunity. **Due October 30.**

PAR-14-242 Role of the Microflora in the Etiology of Gastro-Intestinal Cancer (R01)
This Funding Opportunity Announcement (FOA) encourages innovative multidisciplinary research projects that will advance our mechanistic understanding of microflora influences on Gastro-Intestinal (GI) carcinogenesis. Recent advances in our knowledge of GI microflora composition and function have generated a flood of new information, technologies, and capabilities that may for the first time allow mechanistic investigations of very complex, networked host/microbiome interactions on a systems wide scale. This FOA encourages investigators to ingrate this new information into hypothesis-driven studies that can define and validate molecular mechanisms that determine microbe-induced carcinogenic outcomes. Applicants may integrate information from existing large data sets, including metagenomic data sets, or may also propose to generate appropriate new data sets, including but not limited to analysis of host and microbial genomes, proteomes, metabalomes, post-translational modifications, secreted signals, and protein-protein interaction data. An additional goal of this program is to encourage collaborative efforts between scientists currently engaged in GI cancer research with those in scientific disciplines that may not otherwise apply their expertise to study cancer etiology and prevention. **Investigators particularly from the disciplines of microbiology, microbial ecology, molecular biology, immunology, nutrition sciences, bioinformatics, and computational sciences are encouraged to apply.** A value added from stimulating integrated, multidisciplinary experimental approaches may include the discovery of emergent properties of the GI ecosystem that could not be elucidated using either descriptive bioinformatics or molecular studies alone. **Due November 4**.

URL Links to New & Open Funding Solicitations

Links verified: Wednesday, February 19, 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
- CDMRP FY 2014 Funding Announcements
- Office of Minority Health
- Department of Justice Open Solicitations
- DOE/EERE 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

Jacob K. Javits Gifted and Talented Students Education Program

The purpose of the Jacob K. Javits Gifted and Talented Students Education (Javits) program is to carry out a coordinated program of scientifically based research, demonstration projects, innovative strategies, and similar activities designed to build and enhance the ability of elementary and secondary schools nationwide to meet the special educational needs of gifted

and talented students. Catalog of Federal Domestic Assistance (CFDA) Number: 84.206A. **Due June 24.**

USDA-NIFA-OP-004529 Biodiesel Fuel Education Program

The goals of the Biodiesel Fuel Education Program as originally established in Sec. 9004 of the Farm Security Investment Act of 2002 (7 U.S.C. 8104) were to stimulate biodiesel consumption and to stimulate the development of a biodiesel infrastructure. The information and outreach activities to raise awareness of the benefits of biodiesel fuel use complemented the incentives provided by the Energy Policy Act of 2005 (EPAct) (Pub. L. 109-58), and the Energy Independence and Security Act of 2007 (Pub. L. 110-140). As a result of increased awareness and consumption of biodiesel over the past decade, the FY 2014 Biodiesel Education program will focus on educational programs which will support advances in infrastructure, technology transfer, fuel quality, fuel safety and increasing feedstock production. **Due June 26.**

FANRP2014001 Competitive Grant to Establish a USDA Center for Behavioral Economics and Healthy Food Choice Research

The U.S. Department of Agriculture (USDA's) Economic Research Service (ERS), in collaboration with USDA's Food and Nutrition Service (FNS), invites proposals for a competitive grant to establish and fund a USDA Center for Behavioral Economics and Healthy Food Choice Research. The USDA Center will facilitate new and innovative research on the application of behavioral economics theory to healthy food choice behaviors that would contribute to enhancing the nutrition, food security, and health of American consumers. The USDA Center will complement the work currently being conducted by the USDA-funded Cornell Center for Behavioral Economics in Child Nutrition Programs (Cornell BEN Center). With the exception of work that would be duplicative of the Cornell BEN Center, all food choice behavioral factors that are relevant to USDA policy issues will be within the scope of the USDA Center for Behavioral Economics and Healthy Food Choice Research. There is, however, a requirement that the USDA Center shall devote a substantial portion of its efforts to factors that would facilitate healthy and cost-effective food choices by participants in (a) the Supplemental Nutrition Assistance Program (SNAP) and (b) the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The USDA Center will be expected to (1) establish an innovative research program on behavioral economics and healthy food choice that addresses questions of public policy interest and importance; (2) broaden the network of social scientists who participate in research that applies principles and theories of behavioral economics to the study of healthy food choice behaviors that will lead to improvement of nutrition, food security, and health outcomes; and (3) disseminate information obtained via its research program to a diverse stakeholder audience, including other researchers, policy and program officials, and the general public. We anticipate that up to $1.9 million will be available in fiscal year 2014 to support this activity over the next 3 years. And, subject to availability of funds and the viability of USDA Center expansion, additional funds may be available in subsequent years. This publication describes USDA Center responsibilities and application requirements. **Due June 30.**

USDA-NIFA-ICGP-004527 National Integrated Water Quality Program

The goal of the National Integrated Water Quality Program (NIWQP) is to contribute to the improvement of the quality of surface water and groundwater resources through research, education, and extension activities. Projects funded through this program will work to solve water resource problems by advancing and disseminating the knowledge base available to agricultural, rural, and urbanizing communities. Funded projects should lead to science-based decision making and management practices that improve the quality of the Nations surface water and groundwater resources in agricultural, rural, and urbanizing watersheds. See RFA for priority areas. **Due July 3.**

Humanities Collections and Reference Resources

The Humanities Collections and Reference Resources (HCRR) program supports projects that provide an essential underpinning for scholarship, education, and public programming in the humanities. Thousands of libraries, archives, museums, and historical organizations across the country maintain important collections of books and manuscripts, photographs, sound recordings and moving images, archaeological and ethnographic artifacts, art and material culture, and digital objects. Funding from this program strengthens efforts to extend the life of such materials and make their intellectual content widely accessible, often through the use of digital technology. Awards are also made to create various reference resources that facilitate use of cultural materials, from works that provide basic information quickly to tools that synthesize and codify knowledge of a subject for in-depth investigation. HCRR offers two kinds of awards: 1) for implementation and 2) for planning, assessment, and pilot efforts (HCRR Foundations grants). **Due July 17.**

Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR)

CEDAR is a broad-based, community-guided, upper atmospheric research program. The goal is to understand the behavior of atmospheric regions from the middle atmosphere upward through the thermosphere and ionosphere into the exosphere in terms of coupling, energetics, chemistry, and dynamics on regional and global scales. These processes are related to the sources of perturbations that propagate upward from the lower atmosphere as well as to solar radiation and particle inputs from above. The activities within this program combine observations, theory and modeling. **Due July 17.**

National Research Center for The Education of Gifted and Talented Children and Youth

The purpose of the National Research Center for the Education of Gifted and Talented Children and Youth is to conduct research on improving academic outcomes for underserved students with high academic potential. These students (often low-income students, racial/ethnic minority students, English learners, students living in small towns or rural communities, and/or students with disabilities) are disproportionally underrepresented in programs for students with high academic potential in the United States. In its first two years, the Center will focus on studying the implementation of at least two or three academic programs established to serve these students and the ways in which students are identified, selected into, and participate in these academic programs. The Center will explore how these academic programs and their selection procedures relate to student academic outcomes (i.e., achievement in the core

academic content areas). Also, in the second year, the Center will submit an impact evaluation plan to the Institute describing the programs and procedures to be evaluated from among those identified as promising during the Center's first two years, the evaluation designs to be used, and evidence of a willingness to collaborate in the evaluation by state and local education agencies. **Due July 22.**

BAA-RIK-2014-0008 Centers of Excellence: Autonomy, Cyber Security, and Research Data Analysis at Historically Black Colleges and Universities and Other Minority-Serving Institutions of Higher Education

DoD announces its intent to establish Centers of Excellence (hereafter, "Center" or "Centers," depending on the context) at HBCUs/MIs (see Section III.1, Eligibility Information – Eligible Applicants, for a definition) in each of the following areas of importance to the DoD mission and support of the warfighter: autonomy, cyber security, and research data analysis hereafter, "area(s) of research emphasis." Each Center will be funded for a 5-year period of performance. **Due July 22.**

Decision Frameworks for Multi-Hazard Resilient and Sustainable Buildings (RSB)

The goal of the Decision Frameworks for Multi-Hazard Resilient and Sustainable Buildings (RSB) solicitation is to advance knowledge for new concepts for multi-hazard resilient and sustainable SFSE building systems using decision frameworks for selection among alternative building system designs. Research for multi-hazard resilient and sustainable SFSE building systems supported under the this solicitation must include the consideration of a rational decision framework, preferences, concepts for SFSE systems, and design optimization methods for generating and choosing among alternative SFSE systems. Multidisciplinary collaborations are essential for this research. Proposals must broadly integrate across the fields of architecture; engineering; material, environmental, social, behavioral, and economic sciences; and other disciplines necessary to address the research scope. Research supported under this solicitation may include computational, analytical, and/or experimental work. Research may also undertake the collection of new data or the use of existing data, but the data must be integral to the decision framework. This solicitation does not support research that generically addresses materials research or decision frameworks outside the context of decision making for multi-hazard resilient and sustainable SFSE building systems. **Due July 24.**

RFA-HG-14-004 Predoctoral Training in Biomedical Big Data Science (T32)

The purpose of this Funding Opportunity Announcement (FOA) is to solicit applications for graduate training programs in Big Data Science, for the expressed purpose of training the next generation of scientists who will develop computational and quantitative approaches and tools needed by the biomedical research community to work with biomedical Big Data in the biomedical sciences (see definition under Funding Opportunity Description). This proposed training initiative should prepare qualified individuals for careers in developing new technologies and methods that will allow biomedical researchers to maximize the value of the growing volume and complexity of biomedical data. **Due July 28.**

Jan S. Bashinski Criminalistics Graduate Thesis Assistance Grant

The Jan Grant Award is to provide Graduate Students with -financial assistance to complete their thesis or independent research project as required for a graduate degree in Criminalistics/Forensic Sciences. The thesis or research project must be in the field of Criminalistics/Forensic Sciences. **Due July 31.**

NSF Opportunities for Promoting Understanding through Synthesis

All four clusters within the Division of Environmental Biology (Population and Community Ecology, Ecosystem Science, Evolutionary Processes, and Systematics and Biodiversity Science) encourage the submission of proposals aimed at synthesizing a body of related research projects conducted by a single individual or a group of investigators over an extended period. OPUS proposals will often be appropriately submitted in mid-to-late career, but will also be appropriate early enough in a career to produce unique, integrated insight useful both to the scientific community and to the development of the investigator's future work. In cases where multiple scientists have worked collaboratively, an OPUS award will provide support for collaboration on a synthesis. **Due August 1.**

Geography and Spatial Sciences Doctoral Dissertation Research Improvement Awards

The Geography and Spatial Sciences Program sponsors research on the geographic distributions and interactions of human, physical, and biotic systems on Earth. Investigators are encouraged to propose plans for research about the nature, causes, and consequences of human activity and natural environmental processes across a range of scales. Projects on a variety of topics qualify for support if they offer promise of contributing to scholarship by enhancing geographical knowledge, concepts, theories, methods, and their application to societal problems and concerns. **Due August 14.**

Cultural Anthropology Program - Doctoral Dissertation Research Improvement Grants

As part of its effort to encourage and support projects that explicitly integrate education and basic research, CA provides support to enhance and improve the conduct of doctoral dissertation projects carried out by doctoral students enrolled in U.S. universities who are conducting scientific research that enhances basic scientific knowledge. **Due August 15.**

14-SN-0012 Compact High-Density Tactical Energy Storage Office of Naval Research

The Office of Naval Research (ONR) is interested in receiving proposals on the topic of "Compact High-Density Tactical Energy Storage." The objective is to encourage innovation, advance technology development, and foster technology transition that benefits future war-fighters and meets US Marine Corps future needs. One example of USMC future needs for energy storage is documented in the 2012 Marine Corps Science & Technology Strategic Plan1 that identifies Expeditionary Energy Science & Technology Objective, EE STO-04, entitled "Energy Storage Other than Liquid" as a technology needed to bridge the gap between on-site energy harvesting and demand. Another example is the 2011 Marine Corps Initial Capabilities Document (ICD) for Expeditionary Energy, Water and Waste2 which identifies five gaps to be addressed by its Mobile Electric Hybrid Power Sources (MEHPS) initiative: 1) Lack of existing

capability to automatically match load to demand (3.LC.1); 2) Lack existing capability to autonomously and automatically match power production to consumption (6.LC.1); 3) Lack of existing capability to efficiently integrate multiple energy sources (6.LC.2); 4) Lack of common and/or renewable power sources (14.LC.1); and 5) No scalable expeditionary energy storage capability (22.LC.1). See BAA for whitepaper instructions. **Due August 20.**

DoD Amyotrophic Lateral Sclerosis Therapeutic Development Award

The Therapeutic Development Award supports the preclinical assessment of therapeutics for ALS. The proposed studies are expected to be empirical in nature and product-driven but may have a hypothesis-driven approach, provided the focus is on therapeutics. It is anticipated that the agents and/or data generated from these awards will lead to the advancement of new therapies for ALS. **Due August 20.**

DoD Amyotrophic Lateral Sclerosis Therapeutic Idea Award

The Therapeutic Idea Award is designed to promote new ideas that are still in the early stages of development with the potential to yield highly impactful data and new avenues of investigation for novel therapeutics for ALS treatment. This mechanism supports conceptually innovative, high-risk/high-reward research that could ultimately lead to critical discoveries or major advancement in ALS therapeutics. Proposed research projects should include a well-formulated, testable hypothesis based on strong scientific rationale that holds translational potential to improve ALS treatment and/or advances a novel treatment modality. Projects that focus primarily on investigating the pathophysiology of ALS are outside the scientific scope of this mechanism. **Due August 20.**

Geography and Spatial Sciences Program (GSS)

This solicitation provides instructions for preparation of a set of different kinds of proposals to the Geography and Spatial Sciences (GSS) Program, including regular research awards; proposals for awards for conferences, workshops, group-travel support, and community-development or community-serving activities; proposals for research coordination network (RCN) awards; and proposals for rapid-response research (RAPID) awards. This solicitation replaces instructions that had been included in the general GSS solicitation (previously NSF 12-570). The Geography and Spatial Sciences Program sponsors research on the geographic distributions and interactions of human, physical, and biotic systems on Earth. Investigators are encouraged to propose plans for research about the nature, causes, and consequences of human activity and natural environmental processes across a range of scales. Projects on a variety of topics qualify for support if they offer promise of contributing to scholarship by enhancing geographical knowledge, concepts, theories, methods, and their application to societal problems and concerns. **Due September 4.**

DARPA-BAA-14-30 Hand Proprioception DARPA - Biological Technologies Office

The HAPTIX program will develop new science and technology to achieve closed-loop control of dexterous mechatronic prostheses that will provide amputees with prosthetic limb systems that feel and function like natural limbs. HAPTIX will focus on development of implantable

peripheral interfaces for volitional motor recording and sensory feedback signals; implantable electronic systems to transferport information between these interface(s) and the prosthesis; and sophisticated encoding and decoding algorithms to transform recorded volitional motor control signals into limb movements and patterned stimulation into naturalistic touch and proprioceptive sensations. System performance and the ultimate benefit to prosthetic users will be determined in a year-long, take-home trial before the end of the HAPTIX program. **Due September 10.**

NEH/DFG Bilateral Digital Humanities Program

The National Endowment for the Humanities in the United States and the German Research Foundation (Deutsche Forschungsgemeinschaft e.V., DFG) are working together to offer support for projects that contribute to developing and implementing digital infrastructures and services for humanities research. **Due September 25.**

NPS-BAA-14-001 FY14 Masint Emerging Technologies Research Program

Research Areas: Measurement and Signature Intelligence (MASINT) is an intelligence discipline that employs a broad range of scientific developments to gather foreign intelligence. In our efforts to enhance this intelligence competency we are interested in stimulating and supporting research that creates new knowledge and capabilities, or the transition of current capabilities, that have the potential to enhance the following areas: Remote assessment and detection of weapons of mass destruction, specifically nuclear and radiological weapons, as well as chemical and biological weapons. Remote assessment and detection of directed energy weapons. This would include all lasers that are primarily designed as weapons as well as high-powered microwave (HPM) and electromagnetic pulse (EMP) weapons. Bioinformatics, the science of collecting and analyzing complex biological data such as genetic codes, has become an important part of many areas of biology. Research should focus on how this science promotes the extraction of useful results from large amounts of raw data as well as how its intrinsic characteristics are applicable to many related research topics. Telematics typically is any integrated use of telecommunications and informatics, also known as ICT (Information and Communications Technology). Possible telematics applications can track vehicles, trailers, and shipping containers. Telematics is also used for relaying environmental conditions within vehicles, trailers or shipping containers, fleet management, mobile data and mobile television, wireless vehicle safety communications allowing vehicles to communicate with those around it and emergency warning system for vehicles. Navy seeks White Papers only from the most knowledgeable experts and universities in the field, with submissions briefly describing expertise. Note: Proposals for workshops, conferences, and symposia, or for acquisition of technical, engineering and other types of support services will not be considered (Link to all NPS BAA's). **Due September 30.**

NPS-BAA-14-002 FY14 Acquisition Research Program, Naval Supply Systems Command

The Government is interested in stimulating and supporting scholarly research in academic disciplines that bear on public policy and management in the field of government acquisition. These include economics, finance, financial management, information systems, organization

theory, operations management, human resources management, risk management, and marketing, as well as the traditional acquisition areas such as contracting, program/project management, logistics, test and evaluation and systems engineering management. The ARP primarily supports scholarly research through assistance vehicles that will benefit the general public and/or private sector to a larger extent than any direct benefits that may be gained by the Department of Defense (DOD). Studies of government processes, systems, or policies should focus on expanding the body of knowledge, theory and/or research methodologies that are also relevant to processes, systems, or policies outside the DOD. The Government in this BAA is interested only in proposals that will provide unclassified and non-proprietary findings suitable for publication in open scholarly literature. Offerors bear prime responsibility for the design, management, direction, and conduct of research, and exercise judgment and original thought toward attaining the goals within broad parameters of the research areas proposed and the resources provided. **Due September 30.**

NSF/DOE Partnership On Advanced Frontiers In Renewable Hydrogen Fuel Production Via Solar Water Splitting Technologies 2014-2016

The Directorate for Engineering at the National Science Foundation (NSF) has established a partnership with the Fuel Cell Technologies (FCT) Office of the U.S. Department of Energy (DOE) in order to address critical fundamental and applied research challenges associated with advanced technologies for the production of hydrogen fuel via solar water splitting processes. The goal of the partnership is to leverage the complementary missions of applied research, development and demonstration (DOE) and use-inspired fundamental research and education (NSF) to address issues of national importance that impact the sustainable production of fuels using renewable resources. The Directorate for Engineering seeks proposals with transformative ideas that meet the detailed requirements delineated in this solicitation. **LOI October 6; full December 11.**

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.**

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.**

Research Interests of the Air Force Office of Scientific Research

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, Funding Opportunity Description. AFOSR is seeking unclassified, white papers and proposals that do not contain proprietary information. We expect our research to be fundamental. **Open until superseded.**

DARPA Microsystems Technology Office-Wide

The Microsystems Technology Office (MTO) supports DARPA's mission of maintaining technological superiority and preventing technological surprise by investing in areas such as microelectromechanical systems (MEMS), electronics, system architecture, photonics, and biotechnology. In recent years, the proliferation of commercial components and manufacturing processes has allowed our adversaries to achieve capabilities that were previously not possible. **Open to September 1, 2014.**

NINDS SBIR Technology Transfer (SBIR-TT [R43/R44])

This Funding Opportunity Announcement (FOA) encourages Small Business Innovation Research (SBIR) grant applications from small business concerns (SBCs) for projects to transfer technology out of the NIH intramural research labs into the private sector. If selected for SBIR funding, the SBC will be granted a royalty-free, non-exclusive internal research-use license for the term of and within the field of use of the SBIR award to technologies held by NIH with the intent that the SBC will develop the invention into a commercial product to benefit the public. **Open November 5, 2011, to September 8, 2014.**

Agriculture and Food Research Initiative: Foundational Program National Institute of Food and Agriculture USDA-NIFA-AFRI-004412

The AFRI Foundational Program is offered to support research grants in the six AFRI priority areas to continue building a foundation of knowledge critical for solving current and future societal challenges. The six priority areas are: Plant Health and Production and Plant Products; Animal Health and Production and Animal Products; Food Safety, Nutrition, and Health; Renewable Energy, Natural Resources, and Environment; Agriculture Systems and Technology; and Agriculture Economics and Rural Communities. Single-function Research Projects, multi-function Integrated Projects and Food and Agricultural Science Enhancement (FASE) Grants are expected to address one of the Program Area Priorities (see Foundational Program RFA for details). **Open until September 29.**

Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology 14-001 ONRBAA14-001

This **BAA** is intended for proposals related to basic research, applied research, or advanced technology development. For NAVY and Marine Corps Science, Technology, Engineering & Mathematics (STEM) programs, refer to ONRBAA13-007, which may be found at the ONR Broad Agency Announcement (BAA) webpage- http://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements.aspx . 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. **Open to September 30, 2014.**

NOAA-NFA-NFAPO-2014-2003949 FY 2014 - 2015 Broad Agency Announcement (BAA)

The purpose of this notice is to request applications for special projects and programs associated with NOAA's strategic plan and mission goals, as well as to provide the general public with information and guidelines on how NOAA will select proposals and administer discretionary Federal assistance under this Broad Agency Announcement (BAA). This BAA is a mechanism to encourage research, education and outreach, innovative projects, or sponsorships that are not addressed through our competitive discretionary programs. It is not a mechanism for awarding congressionally directed funds or existing funded awards. Funding for potential projects in this notice is contingent upon the availability of Fiscal Year 2014 and Fiscal Year 2015 appropriations. Applicants are hereby given notice that funds have not yet been appropriated for any potential activities in this notice. Publication of this announcement does

not oblige NOAA to review an application, or to award any specific project, or to obligate any available funds. **Open to September 30, 2014.**

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 . **Open to April 24, 2015.**

Small University Grants Open 5-Year Broad Agency Announcement

Open to August 26, 2015

DHS-2014-OHA-BIOWATCH BioWatch Program: 2014-2015

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.**

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.**

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) Solider/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**.

Academic Research Funding Strategies, LLC (Page 1)

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What We Do--

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

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- 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

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