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Contact Lucy Deckard on Webinars related to newsletter and related topics.

Katherine E. Kelly, PhD: Proposal Editing and Webinars in the Humanities & Humanities Related Social Sciences.

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Katherine E. Kelly, Humanities Editor
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Mike Cronan, PE, has 23 years of experience developing and writing successful team proposals at Texas A&M University. He was named a Texas A&M University System Regents Fellow (2001-2010) for developing and writing A&M System-wide grants funded at over $100 million by NSF and other funding agencies. He developed and directed two research development and grant writing offices, one for Texas A&M’s VPR and the other for the Texas A&M Engineering Experiment Station (15 research divisions state-wide), including the Texas A&M College of Engineering.

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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 or titles, as below, will typically take you to a working link.

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- Increasing Confidence in COVID-19 Vaccines
- New Report Charts Path to Net-Zero Carbon Emissions by 2050
- Assessing NASA’s University Leadership Initiative

COVID-19

- Reminder Requesting Extensions for Early Career Scientists Whose Career Trajectories Have Been Significantly Impacted by COVID-19 (NOT-OD-21-052)
  NIH is providing an opportunity for recipients of NIH Fellowship ("F") and NIH Career Development ("K") awards who have been impacted by COVID-19 to request extensions.
- Notice of Special Interest (NOSI): Administrative Supplement Opportunity to Study the Impact of COVID-19 on Global Cancer Prevention and Control (NOT-CA-21-033) to support NCI-funded investigators who have existing relationships/partnerships in low- and middle-income countries (LMICs).
  Application Due Date: March 31, 2021
- Notices of Special Interest (NOSIs): Medical Consequences of Smoking and Vaping Drugs of Abuse in Individuals with HIV and COVID-19 (NOT-DA-21-017)
  Long-Term Neurocognitive Consequences of COVID-19 in Individuals Living with HIV and Substance Use Disorders (NOT-DA-21-018)
  Applies to due dates on or after May 5, 2021 and subsequent receipt dates through September 7, 2024.
- Funding opportunities specific to COVID-19 from the NIH Office of Extramural Research (OER)
- Coronavirus Disease 2019 (COVID-19) information for NIH grant applicants and grant recipients, including NIH funding opportunities specific to COVID-19 from the NIH Office of Extramural Research (OER)
- Coronavirus news, funding and resources for global health researchers compiled by Fogarty
**Humanities and Arts Funding Opportunities**

*Applicants should visit agency websites to confirm deadlines, requirements, etc. Listings of funding opportunities by due dates are also included in earlier issues of this newsletter. Opportunities are listed by due date. The following list is not exhaustive.*

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Award Name</th>
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<tbody>
<tr>
<td>3/2/21</td>
<td>NEH Institutes for Advanced Topics in the Digital Humanities. Eligible: Public, State-controlled, &amp; private institutions of higher education; city or township governments; nonprofits with 501(c)(3) status; state, special district, and county governments; Native American tribal governments. This program supports national or multistate training programs for scholars, humanities professionals, and advanced graduate students to broaden their knowledge of digital humanities. This program seeks to increase the number of humanities scholars and practitioners using digital technology in their research and to disseminate knowledge about advanced technology tools and methodologies relevant to the humanities. <a href="https://www.neh.gov/grants/odh/institutes-advanced-topics-in-the-digital-humanities">https://www.neh.gov/grants/odh/institutes-advanced-topics-in-the-digital-humanities</a></td>
</tr>
<tr>
<td>3/9/21</td>
<td>NEH Institutes for Higher Education Faculty. Eligible: (see the eligible list for NEH Landmarks above, and add: Public housing authorities/Indian housing authorities). NEH Institutes are professional development programs that convene higher education faculty from across the nation to deepen and enrich their understanding of significant topics in the humanities and enrich their capacity for effective scholarship and teaching. <a href="https://www.neh.gov/grants/education/institutes-higher-education-faculty">https://www.neh.gov/grants/education/institutes-higher-education-faculty</a></td>
</tr>
<tr>
<td>3/9/21</td>
<td>NEH Institutes for K-12 Educators. Eligible: (see list for NEH Landmarks, above). The NEH Division of Education Programs is accepting applications for the Institutes for Higher Education Faculty program. NEH Institutes are professional development programs that convene higher education faculty from across the nation to deepen and enrich their understanding of significant topics in the humanities and enrich their capacity for effective scholarship and teaching. <a href="https://www.neh.gov/grants/education/institutes-k-12-educators">https://www.neh.gov/grants/education/institutes-k-12-educators</a></td>
</tr>
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</table>
4/14/21  NEH Awards for Faculty. Eligible: individuals. The (NEH) Division of Research Programs is accepting applications for the Awards for Faculty program. The purpose of this program is to strengthen the humanities at Hispanic-Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities by encouraging and expanding humanities research opportunities for individual faculty and staff members. Awards support individuals pursuing scholarly research that is of value to humanities scholars, students, and/or general audiences.

https://www.neh.gov/divisions/research

4/14/21  NEH Fellowships. Eligible: individuals. This program supports individual scholars pursuing projects that embody exceptional research, rigorous analysis, and clear writing. Fellowships provide recipients time to conduct research or to produce books, monographs, peer-reviewed articles, e-books, digital materials, translations with annotations or a critical apparatus, or critical editions resulting from previous research.

https://www.neh.gov/grants/research/fellowships

List

4/28/21  NEH + the Japan-United States Friendship Commission (JUSFC). Eligible: individual researchers with advanced Japanese language skills whose research will require use of data, sources, and documents, onsite interviews, or other direct contact in Japanese. This program promotes Japan studies in the United States, encourages U.S.-Japanese scholarly exchange, and supports the next generation of Japan scholars in the U.S. Fellows may undertake their projects in Japan, the United States, or both, and may include work in other countries for comparative purposes.

https://www.neh.gov/grants/research/fellowships-advanced-social-science-research-japan

4/28/21  NEH - Mellon Fellowships for Digital Publication. This program supports individual scholars pursuing significant humanities projects that require digital expression and digital publication. Anticipated products must be published in digital form and include, but are not limited to, monographs, peer-reviewed articles, websites, virtual exhibitions, translations with annotations or a critical apparatus, or critical editions resulting from previous research.


5/3/21  NEH State and Jurisdictional Humanities Councils General Operating Support Grants
This program provides general operating support grants to fund humanities councils in the United States and its jurisdictions. State and jurisdictional humanities councils tailor their grantmaking and programs to the needs, resources, and interests of their state or jurisdiction, while also extending the reach of NEH-funded projects and further strengthening NEH’s connection to local communities throughout the U.S. and its jurisdictions.

https://www.neh.gov/grants/fedstate/state-humanities-councils-general-operating-support-grants
NEH Research and Development. Eligible: see list for NEH Landmarks, above. The NEH Division of Preservation and Access is accepting applications for the Research and Development program. This program supports projects that address major challenges in preserving or providing access to humanities collections and resources. Research and Development offers two funding tiers in order to address projects at all stages of development and implementation. [https://www.neh.gov/grants/preservation/research-and-development](https://www.neh.gov/grants/preservation/research-and-development)

NEH Humanities Initiatives. Eligible: Public and State-controlled institutions & private institutions of higher education. Each of the five Humanities Initiatives programs has distinct eligibility criteria. (1) Humanities Initiatives at Colleges and Universities, (2) Humanities Initiatives at Hispanic-Serving Institutions, (3) Humanities Initiatives at Historically Black Colleges and Universities, (4) Humanities Initiatives at Tribal Colleges and Universities, and (5) Humanities Initiatives at Community Colleges. These programs are intended to strengthen the teaching and study of the humanities by developing new humanities programs, resources (including those in digital format), or courses, or by enhancing existing ones. [https://www.neh.gov/divisions/education](https://www.neh.gov/divisions/education)

NHPRC Institutes for Historical Editing. Eligible: see list for NEH Landmarks, above. The National Historical Publications and Records Commission seeks proposals for the training and education of historical documentary editors. Through this program, the Commission seeks to increase the number and diversity of historical documentary editors, including especially Black, Indigenous, and People of Color new to historical documentary editing; disseminate knowledge about documentary editing; and build the capacity of attendees as leaders in the field, in their own editorial projects, and in the related fields of documentary editing, digital history, and digital humanities. [https://www.archives.gov/nhprc/announcement/editing.html](https://www.archives.gov/nhprc/announcement/editing.html)

NEH Digital Humanities Advancement Grants. Eligible: See website. The NEH Office of Digital Humanities is accepting applications for the Digital Humanities Advancement Grants program. The program supports innovative, experimental, and/or computationally challenging digital projects at different stages of their lifecycles, from early start-up phases through implementation and sustainability. The program also supports scholarship that examines the history, criticism, and philosophy of digital culture or technology and its impact on society. [https://www.neh.gov/grants/odh/digital-humanities-advancement-grants](https://www.neh.gov/grants/odh/digital-humanities-advancement-grants)

NSF/NEH Linguistics. The Linguistics Program supports basic science in the domain of human language, encompassing investigations of the grammatical properties of individual human languages, and of natural language in general. Research areas include syntax, semantics, morphology, phonetics, and phonology. The program encourages projects that are interdisciplinary in methodological or theoretical perspective. Because NSF's mandate is to support basic research, the Linguistics Program does not fund research that takes as its primary
goal improved clinical practice or applied policy, nor does it support work to develop or assess pedagogical methods or tools for language instruction.

Interested scholars are advised to visit the website: NSF Program Description PD-98-1311

7/29/21 National Institute of Food and Agriculture. Agriculture and Food Research Initiative - Foundational and Applied Science. The AFRI Foundational and Applied Science Program supports grants in six AFRI priority areas to advance knowledge in both fundamental and applied sciences important to agriculture. The six priority areas are: Plant Health and Production and Plant Products; Animal Health and Production and Animal Products; Food Safety, Nutrition, and Health; Bioenergy, Natural Resources, and Environment; Agriculture Systems and Technology; and Agriculture Economics and Rural Communities. Research-only, extension-only, and integrated research, education and/or extension projects are solicited in this Request for Applications (RFA). See Foundational and Applied Science RFA for specific details. [https://nifa.usda.gov/funding-opportunity/agriculture-and-food-research-initiative-foundational-applied-science-program](https://nifa.usda.gov/funding-opportunity/agriculture-and-food-research-initiative-foundational-applied-science-program)

9/22/21 NEH Summer Stipends. The purpose of this program is to stimulate new research in the humanities and its publication. Summer Stipends support continuous full-time work on a humanities project for a period of two consecutive months. NEH funds may support recipients’ compensation, travel, and other costs related to the proposed scholarly research. [https://www.neh.gov/grants/research/summer-stipends](https://www.neh.gov/grants/research/summer-stipends)

12/1/21 NEH Scholarly Editions and Scholarly Translations. Eligible: collaborative teams (see list for NEH Landmarks, above.) This program supports collaborative teams who are editing, annotating, and translating foundational humanities texts that are vital to learning and research but are currently inaccessible or are available only in inadequate editions or translations. Typically, the texts are significant literary, philosophical, and historical materials, but other types of work, such as musical notation, may also be the subject of an edition. [https://www.neh.gov/grants/research/scholarly-editions-and-translations-grants](https://www.neh.gov/grants/research/scholarly-editions-and-translations-grants)

12/15/21 NEH Public Scholars. Eligible: individuals. This program supports the creation of well-researched nonfiction books in the humanities written for the broad public by offering grants to individual authors for research, writing, travel, and other activities leading to publication. The program is intended both to encourage non-academic writers to deepen their engagement with the humanities by strengthening the research underlying their books, and to encourage academic writers in the humanities to communicate the significance of their research to the broadest possible range of readers. [https://www.neh.gov/grants/research/public-scholar-program](https://www.neh.gov/grants/research/public-scholar-program)

News & Events

--Interested in recruiting students to study the humanities, promoting the public value of the humanities, or advocating for federal funding for the humanities on Capitol Hill? Join us on March 8-10, 2021 for the Virtual NHA Annual Meeting and Humanities Advocacy Day! Go to:
Humanities@NHAlliance.org  Register as soon as possible so that we can begin scheduling meetings with congressional offices. Registration closes on February 24.

The Future of Arts and Humanities Funding under the Biden Administration: A More Perfect Union

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by Katherine E. Kelly, PhD
(Back to Page 1)

It’s about time for some good news, and the future of funding for the arts and humanities appears to be all positive. The NEH budget for 2021 has increased by $5.25 million over the Fiscal Year 2020 budget, for a total of $167.5 million. Alongside the support for NEH’s seven grantmaking divisions and for local and regional humanities programs, the budgeting legislation provides $5.7 million for NEH’s “A More Perfect Union” initiative, launched in 2019. “A More Perfect Union” supports humanities projects related to the upcoming 250th anniversary (in 2026) of the founding of the United States, civics education, and veterans’ programming.

Projects in areas such as scholarly editions and translations, short documentaries, humanities discussions, and preservation assistance grants for smaller institutions are welcome. Applications about the contributions of under-represented communities are especially encouraged. NEH is also looking for a focus on strengthening the nation’s humanities infrastructure, civic education, and veterans’ programming. To read more about this initiative and learn whether it might coincide with your academic interests and thereby open an opportunity to apply for funds, visit https://www.neh.gov/250.

This program is viewed as complementary to the NEH’s ongoing support for the “Chronicling America” database of historic American newspapers and professional development and research opportunities for K-12 teachers, and for the NEH’s continuing work in encouraging the teaching and study of American history, culture, and democratic principles.

Speculation about the Future

The consensus among creative and scholarly communities is that American culture will fare relatively well in the years ahead. The Biden/Harris administration may reinstate the President’s Committee on the Arts and Humanities (PCAH), created in 1982 to advise the White House on cultural issues. President Biden has set four priorities: racial equity, climate change, economic recovery, and COVID-19. Funding is expected to favor these priorities, although the specifics related to this won’t be known for a while. The arts may be seen “through a lens of economic recovery,” according to Jennifer Grodsky, Vice-President for Federal Relations at Boston University, which would encourage investment in the arts as part of reigniting the economy.
Now is an important time for research offices to begin to understand the impact COVID-19 and President Biden’s election will have on research funding over the coming year. Dramatic policy changes will soon manifest themselves in many ways, particularly in new funding opportunities and/or new funding priorities at federal agencies. In addition, some common themes will begin appearing related to new funding solicitations that advance the policy initiatives of a new administration across multiple agencies. How all this shakes out over the coming months remains to be seen in terms of specifics at the programmatic and solicitation funding level. But already the broad brush outline of funding priorities driven by policy changes is taking shape.

Several administration appointments, for example, give a sense of where all this is going at the so-called “thirty thousand foot level” with the naming of geneticist Eric Lander to be Biden’s science advisor, a position now elevated to Cabinet rank. Sociologist Alondra Nelson was named to a new position as deputy director for science and society at the Office of Science and Technology Policy. America’s Hero, Dr. Anthony Fauci, was named as the president’s chief medical advisor.

Dr. Gina McCarthy, former EPA Administrator, has been named to head the White House Office of Domestic Climate Policy. John Kerry was named as Special Presidential Envoy for Climate to focus on new forms of energy globally likely to generate trillions of dollars in such areas as electric vehicles, battery storage, zero emission plants, carbon capture, and the underlying engineering and AI infrastructures needed to realize these goals. Jennifer Granholm, former Michigan governor, has been nominated as energy secretary. Granholm will oversee the Energy Act of 2020 that overhauls policy across the DOE’s applied energy and fusion R&D programs. **Shifts in climate change policy under the Biden administration will have an enormous impact on downstream funding opportunities at federal research agencies**, including the DoD. Policy changes will dramatically impact basic and applied research opportunities across multiple agencies, particularly at NSF and DOE. Moreover, keep in mind that new policy priorities in such areas as diversity and inclusion as it impacts the future education, training, and workforce development in the STEM disciplines will likely be woven in these new research program initiatives in new and more robust ways. This is clear both from the Office of Science and Technology Policy (e.g., sociologist Alondra Nelson) and in such recent NAS reports consolidated under the NAP Diversity and Inclusion in STEMM Collection. Helping faculty understand how diversity and inclusion in STEM will be funded in new research initiatives driven by policy changes will be a key area of assistance to be provided by research offices.

Moreover, policy changes, and consequent funding priorities at the U.S. Department of Education are likely to be dramatic, with Miguel Cardona nominated to serve as Secretary and a new transition team named (U.S. Department of Education Announces Biden-Harris...
Appointees). ED is a major funder of university programmatic and research funding through its discretionary grants program, as listed in Forecast of Funding Opportunities under the Department of Education Discretionary Grant Programs for Fiscal Year (FY) 2021.

Bottom line, new policy directions open the flood gates of new funding opportunities downstream that research offices need to anticipate in order to help better position faculty and institutional research units for external funding. Some of these are already in place; for example, under the recently signed National Quantum Initiative, $1.275 billion is authorized for Quantum Information Science (QIS) R&D across DOE, NSF, and NIST over the first half of the 10-year initiative. DOE is slated to allocate $125 million per year to support up to five National QIS Research Centers; NSF is slated to allocate $50 million per year to support up to five Multidisciplinary Centers for Quantum Research and Education; and NIST is slated to allocate $80 million per year to QIS.

Perhaps of most interest to research offices is NSF’s role in NQI. Specifically, NSF is slated to support both QIS research and education, training, and workforce development in all aspects of QIS and engineering, including through graduate traineeships, thereby reflecting its traditional role of integrating research and education. NSF has identified QIS as one of its 10 “Big Idea” focus areas. In particular, NSF's investments are aligned with the National Quantum Initiative and address the policy goals expressed in the National Strategic Overview for Quantum Information Science. NSF’s continued support is expressed through investments in the core NSF disciplines as well as investments in specialized activities having specific targets, many of which overlap with NSF’s Quantum Leap Big Idea (see Quantum Information Science and Engineering Research at NSF).

Clearly, how new policy changes will impact near and longer term funding opportunities important to university research offices across federal research agencies is just beginning to reveal itself. Over the next several months, these changes will likely come into much clearer focus. The key point is that the funding landscape will likely change dramatically in many areas that will be driven by new and often dramatically different policy priorities. Becoming informed about these changes is critical in positioning for funding success over the next year and beyond.
How Alondra Nelson’s Appointment to the Office of Science and Technology Policy Will Impact Funding

The naming of sociologist Alondra Nelson to a new position as Deputy Director for Science and Society at the Office of Science and Technology Policy (OSTP) has been praised as an inspired choice (see Nature ‘Inspired choice’: Biden appoints sociologist Alondra Nelson to top science post) because of her work on the impact of emerging technologies on society and social inequality. Moreover, President Biden concurrently announced a major effort to be led by Susan Rice, former US ambassador to the United Nations, to advance equity and dismantle structural racism under an Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.

As President of the Social Science Research Council, Nelson’s work, the Council notes, “brings together several research traditions: political sociology; racial and ethnic studies; the sociology of science, knowledge and technology; medical sociology; and social and cultural theory.” Nelson is president elect of the Society for Social Studies Science. Nelson will be the first person in this new position within the OSTP, which is designed to bring social science expertise explicitly into the work of federal science and technology strategy and policy.

So, you may ask, how does all this impact research offices assisting faculty in writing more competitive proposals to federal agencies? Briefly put, consider that the OSTP under President Biden will be elevated to a cabinet level office with Eric Lander (nominee) slated to be the director. Nelson’s role to bring social science expertise to sciences and technology policy, particularly as it relates to issues of equity, diversity, and inclusion, is pretty much a resounding signal that, over the coming year, new policy directions put forth by OSTP under the aegis of the President will manifest themselves in various ways in funding solicitations across the spectrum of federal research agencies.

This transition of policy to practice, so to speak, likely will be enabled by multiple mechanisms, but the one of most interest to research offices and faculty will likely be found in how new funding solicitations are designed to advance equity, diversity, and inclusion in the national research enterprise and education, training, and workforce development, all uniquely in the wheelhouse of universities and colleges.

Moreover, while these are by no means new direct ions in STEMM, the appointments of Linder and Nelson will clearly and dramatically amplify these efforts and bring them into sharper focus. Nelson’s appointment, for instance, is better understood in the context of the National Academies of Sciences, Engineering and Medicine’s Diversity and Inclusion in STEMM Collection, particularly three more recent publications: The Impacts of Racism and Bias on Black People Pursuing Careers in Science, Engineering, and Medicine: Proceedings of a Workshop (2020); Racial Justice, Diversity, Equity, and Inclusion in Neuroscience Training: Proceedings of a Workshop—in Brief (2020); and Engineering Societies’ Activities in Promoting Diversity and Inclusion: Proceedings of a Workshop—in Brief (2018), all free as pdf downloads from National Academies Press.
While there has been a strong focus on issues related to diversity and inclusion in research solicitations from NSF, NIH, and other agencies over the past decade, these OSTP appointments represent a sea change in how policy issues will be integrated into science and technology going forward. The key point for research offices is to understand the fundamental arguments that will drive this alignment of social science expertise with science and technology strategy and policy. The above referenced National Academies reports are excellent reference documents for gaining insight into the role universities can play as these policy directions unfold over the coming months.

For research offices, this means gaining sufficient insight to advise faculty on best practice models and evidence-based activities that align with programs and solicitations seeking to advance equity, diversity, and inclusion. The path from OSTP policy to STEMM practice will more clearly reveal itself over the coming year, mostly likely in multiple ways, depending on the funding agency’s research mission. But the bottom line is that it is important for research offices to be aware of and track how OSTP, and particularly the office of the deputy director for science and society led by Nelson, will eventually reveal priority policies in specific federal agency solicitations.
What Amazon Can Teach You About Proposal Writing

You may have already heard about Amazon’s unique approach to meetings where employees present new ideas. PowerPoint presentations are banished, and instead the presenter must provide everyone with a 6-page memo describing their idea in detail. Presenting new product ideas in a corporate setting may seem to have nothing to do with proposing a fundamental research project to an external funder; however, many of Amazon’s requirements and best practices for these 6-page memos illustrate fundamental principles that you can apply to make your grant proposals better. (Actually, this method is also used in Amazon meetings for purposes other than proposing a new idea, such as reporting on the state of a business, but here we’ll focus on memos proposing new product ideas, which is similar to how a researcher proposes a new research idea.)

Amazon’s 6-page Memo Process

Amazon’s process, usually credited to Jeff Bezos, has been widely described in the popular media (e.g., here, here and here). In most companies, when an employee wants to pitch a new business idea, they stand up and give a PowerPoint presentation about their idea and its potential benefits, and the audience at the meeting then asks questions and discusses the idea. Bezos argues that this approach can encourage superficial thinking and “wowing” the audience with fancy graphics and pithy bullet points.

In addition, a freewheeling conversation based on questions posed by the audience in response to this relatively superficial presentation (and often as an interruption to that presentation) can often veer off-topic and fail to identify key concerns. In this way, weak, poorly thought-out ideas can sneak through, and good ideas can be overlooked.

To avoid these problems, Amazon requires presenters to write a 6-page memo describing their idea in detail. (Jeff Bezos has said, “When you have to write your ideas out in complete sentences, complete paragraphs, it forces a deeper clarity.”) In the first part of the meeting, all attendees read the 6-page memo in silence and often write their questions on their drafts as they go. The attendees then spend the rest of the meeting interrogating the presenter about their idea. Jesse Freeman, in a blog post for The Writing Cooperative, and Sinem Günel in a different blog post give the following advice for developing a 6-page memo:

- The entire memo must hang together as a clear narrative, making it clear how different components are related to each other.
- Put an introduction and goals at the very beginning. (Many Amazon 6-pagers start with an “internal press release” that briefly summarizes the product, benefit, the problem the product will solve, and how.)
- The memo must be written in a simple, clear style that makes it easy for a meeting attendee to quickly read and understand the material at the beginning of the meeting, even if they are not experts in the topic.
- Avoid industry jargon and acronyms.
How the 6-Page Memo Process Can Inform Your Proposal Writing

Clearly, writing a proposal for an academic research project is different in many ways from proposing a new product or business for Amazon to pursue; however, there are some fundamental similarities.

In both cases, the author is proposing to address a need, gap or opportunity. Amazon is focused on addressing customer needs and desires and filling a gap in the market, whereas funding agencies have a wide range of motivations. These may include, for example, addressing a knowledge gap in a discipline or field; addressing a capacity gap in a technology that is important to the funder’s mission; or taking advantage of an opportunity that will benefit stakeholders who are important to the funder. Just as the writer of an Amazon 6-page memo must clearly identify the market gap and the intended customer, and describe how the product will address that gap, a PI should concisely and explicitly identify the gap, need or opportunity their research project will address, clearly describe how the project will address it, and make sure it is aligned with the funder’s interests. If you can’t do that clearly and concisely early in your proposal narrative, you should reexamine your idea.

The objective of the document, whether it’s an NSF Project Description or an Amazon 6-page memo, is to convince the readers, not just to inform them. For that reason, a proposal narrative has a lot more in common with a 6-page memo than it does with a journal article. If you find yourself falling back into journal article style (which is easy for academics to do), remind yourself that your proposal is, in essence, a sales document.

Bezos prefers the 6-page memo over a PowerPoint because it requires the writer to develop a clear line of logic, not just list a bunch of bullet points. If the readers don’t understand the line of logic, they will not be convinced to invest in the research project or the new product idea. Every section of your project narrative should be making an argument or backing up a component in your line of logic. If you’re not clear what your line of logic is, the reviewers won’t be either. Outline your line of logic early in your proposal and then expand on each component in that line of logic in your narrative sections.

The readers will read the document quickly, and they may not be experts in the topic. Therefore, the document should be written in a style that is easy to read and understand. Here is some writing advice from Günel on writing a good 6-page memo that could just as easily apply to a research proposal.

- Avoid long sentences.
- Avoid clutter words and phrases (e.g., use “because” instead of “due to the fact,” “now” instead of “at this point in time,” and “during” instead of “during the course of”).

It’s not unusual for employees to spend months writing their 6-page memo.
- Use simple sentence structures (subject-verb-object), and avoid long dependent phrases.
- Avoid jargon and excessive use of acronyms. (For proposals, calibrate your use of disciplinary-specific terms to the backgrounds of your likely reviewers.)
- Replace adjectives with data where possible (e.g., rather than “most,” say “57%” or whatever is accurate; instead of “more efficient” say “23% more efficient”)
- Avoid “weasel” words (e.g., “might lead to...” “should bring benefits...” “could be useful...”) These kinds of words communicate a tentative, insecure tone.

In both the 6-page memo and a proposal narrative, the author must convince the readers that the idea or project has been **thoroughly thought through**. At Amazon, as well as for research proposals, this is typically accomplished by providing details and data to back up the author’s arguments. In both cases, providing vague descriptions, failing to address pitfalls and risks, and failing to back up assertions with data will draw the ire of the readers.

In both cases, the readers will be looking for ways that the product, service or research project can fail. Many of those paths to failure start with a problem or challenge that wasn’t initially identified or adequately considered. By **clearly and honestly identifying the risks** and describing your approach to addressing them, you will build trust in your readers that you have considered these potential points of failure and are therefore more likely to succeed.

Despite these similarities, there is one big difference between the 6-page memo process and a research proposal. The author of the 6-page memo is able to be in the room to answer questions from the readers and participate in the debate. Unfortunately, PIs don’t have that opportunity when their reviewers are reading their proposals or when the panels meet to discuss the proposals. As a result, as a PI you’ll need to anticipate reviewers’ likely concerns and questions and answer them preemptively in your proposal narrative. How can you do that? Do your homework to understand likely backgrounds and priorities of your reviewers and program. **And get lots of people to read your draft and give you feedback.**
When the famous bank robber Willie Sutton of the 1920s and 1930s was asked why he robbed banks, he replied, "Because that's where the money is." A similar observation could be made about why research offices scrutinize and track the budgets of federal research agencies. Knowing where the money is represents an essential first step in research offices’ attempts to support faculty grant writing. In practice, it can often be a frustrating process to watch the back and forth involving requests from the executive branch and negotiations between the house and senate before a final budget for the federal research agencies is approved.

See the Federal Science Budget Tracker for up-to-date information on appropriations, proposals, and outcomes for physical sciences programs at agencies such as DOE, NSF, NIH, NOAA, NASA, etc. Final federal agency research budgets can often be a moving target, often leading to funding under continuing resolutions, before the budgetary dust settles and brings funding certainty to each agency. One important point to keep in mind during this annual ritual, when funding appropriations are still converging but not yet converged on a final number, is that the most important information research offices can glean from the budget process is most often not the final budget number itself, i.e., learning whether a specific agency budget is higher, the same, or lower than the previous year and by how much, but rather the relative funding levels of research priorities within any total budget number. This is a case where seeing the trees is more important than seeing the forest.

The relative importance of research priorities within any given federal agency budget is the key information needed for long-term strategic planning of institutional research and the mapping of institutional research capacities to federal agency budgets. For example, a final budget number tells you nothing about what is going on within a budget. An entire program might be eliminated and the money saved allocated to a new program area. This would represent a major shift of notable interest to research offices but it could be invisible within a single budget. More telling is the relative funding level within a budget for specific research priorities—this information gives research offices insight into how best to plan over the coming year for grant support services.

For example, consider the recent Final FY21 Appropriations: DOE Applied Energy, wherein applied energy R&D saw slight increases but was essentially flat with hopes for increases in 2022. But if you want to really understand what’s going on “under the hood,” so to speak, “an explanatory statement accompanying the appropriations legislation provides detailed funding and policy direction, and language from the House Appropriations committee report conveys additional direction unless specifically negated in the final statement.”

This 41-page DOE report takes a deep dive into the research priories of DOE not only in the current year but clearly over the next several years, including coordination among DOE units EERE, OE, FE, NE, and the Office of Science. Moreover, this report gives critical strategic
planning information and detail related to crosscutting programs at DOE that are of keen importance to university research offices, for example, grid modernization, energy storage, critical minerals, plastics innovation challenge and revolutionizing polymer upcycling, integrated energy systems, etc.

The important point here is that research offices do not have to become expert in, but only generally aware of, the research topic areas of interest to federal funding agencies as a function of their relative importance in the budget allocation process. In this instance, you don’t have to read the 41-page report, but merely scroll through it to start the process of getting a deeper understanding of what is hidden under the hood of an agency’s overall budget. This review will also reveal how a more detailed understanding of relative research priorities links back to the research offices’ knowledge base related to the institutional priorities in research external funding. This relative understanding thereby allows a better and hence more competitive match between research offices and federal agency research priorities, which is the heart of strategic planning.

The above process is a generic process that can be used along with the Federal Science Budget Tracker to stay current with the funding of research priorities at all federal research agencies, including, for example:

- Final FY21 Appropriations: National Nuclear Security Administration
- Final FY21 Appropriations: National Oceanic and Atmospheric Administration
- Final FY21 Appropriations: DOE Office of Science
- Final FY21 Appropriations: National Science Foundation
“What we’ve got here is failure to communicate.” This iconic quote directed by the prison warden to a prisoner that refused to be broken played by Paul Newman in the classic 1967 film *Cool Hand Luke* could well represent the post mortem pronouncement on an unfunded interdisciplinary team proposal. *After a fundable idea, team communications on interdisciplinary proposals is an essential ingredient for success.* Many large proposals cry out for a project communications plan as part of the management strategy. Such a plan oils the operational interactions among numerous team members often at collaborating institutions; promotes consensus-based decision making; and ensures the timely and orderly distribution of important information across the project team. In many ways, creating a communications plan for large-team proposals is as important as creating one for a funded project, and perhaps more so, since poor communications can significantly impact the funding decision in a negative way.

It is often the case in large-team proposals that no matter how well the proposal development and writing has been planned, end game stressors prior to the due date can change an orderly process into an asymmetrical one. This can result in the last several days prior to the due date becoming increasingly disorganized, at least in the perception of those responsible for producing the final research narrative and project budget. Those in research offices likely have “war stories” of this happening, perhaps putting them in mind of the William Butler Yeats poem *The Second Coming*, where he writes “Things fall apart; the centre cannot hold; Mere anarchy is loosed upon the world.”

Single-institution team proposals are challenging enough, for example, but multi-institutional team proposals often reach another order of difficulty. They present challenges related to team dynamics and multiple institutional administrative protocols, especially when they are structured like an NSF collaborative proposal requiring multiple coordinated/concurrent submittals across numerous institutions. Regardless, the challenges of organizing a successful proposal development effort increase exponentially as a function of team size and institutional partners.

In these instances, one entry point into proposal development disorder, or perhaps the “anarchy” Yeats describes, arises in the final production stages of the research narrative and budget. Under deadline pressures, these final stages transform what should be a sequential and orderly process of information exchange into a chaotic, asymmetric process among participants. In short, this is where the “failure to communicate” enters the process, which most often means the failure of *coordinated communications*.

One of the more challenging forms of anarchy to be addressed by those responsible for finalizing the project narrative comes with producing numerous, daily draft iterations of the research narrative. Numerous iterations converging on narrative perfection are a fundamental requirement of funding success, but it can’t be achieved without some major stressors. These stressors, for example, include end game narrative revising to meet page limits; rewriting narrative sections to better hone the vision, goals, and objectives of the project; improving
tables and figures and ensuring they match the research narrative; and maintaining a consensus-based narrative revision process in a compressed timeline in a large-team environment.

In the final days of a proposal, consensus-based decision making on draft iterations (edits, rewrites, comments, visuals, etc.) occurs in a significantly compressed timeline for response turnaround. This is difficult because the principal investigators and senior project personnel typically have other time commitments as well, e.g., teaching, service, graduate students, research labs, etc., that compete for their time. Some members of the research team may be able to respond quickly and others not to the orderly flow of numerous draft iterations.

In these instances, one common cause of disorder occurs when, on a daily basis, numerous participants in the project respond to numerous iterations of the project narrative and too often in an asynchronous manner, i.e., one team member responds to Draft 8 while others proceed to Draft 9 or even to Draft 6. The proposal equivalent to the adage “a day late and a dollar short” is “a day late and a draft short.”

It may be that fewer than 24 hours separates Draft 9 from Draft 6, but in end game proposal submissions, 24 hours is an eternity. Moreover, when there is no discussion on naming each subsequent draft iteration, team members often make track-edit changes and then re-name the new file “Draft 9 v.2” or “Draft 9.5” until your head is swimming in a “Dewey Decimal System” of multiply named and numbered narrative drafts.

There is likely no perfect inoculation against end game stressors, but they can be significantly ameliorated. For example, all contributors can continuously update proposal drafts to reflect nearness to the due date by putting in place team communications protocols known to all in making changes to the current draft. This protocol names one person as the keeper of the master narrative draft. This is the only person who can make changes to the master document based on a series of track-edit revisions offered by team members. This ensures that all team members know the protocol for naming each new draft iteration, and it gradually reduces the number of team members permitted to suggest draft revisions and re-writes to those whose narrative contributions are critical to the proposal’s success. A day or two prior to the due date, the finalizing of the research narrative needs to be placed in the hands of the PI and a few key team members.

The bottom line here is to keep in mind that your original proposal development plan changes over time and as the due date draws near it is helpful to reexamine the plan to ensure it is sufficiently organized to withstand the many stressors related to team communications that come with finalizing the research narrative and the budget.
USDA Releases Agriculture Innovation Research Strategy Summary and Dashboard
The U.S. Department of Agriculture (USDA) released its U.S. Agriculture Innovation Strategy Directional Vision for Research (PDF, 4.8 MB) summary and dashboard that will help to guide future research decisions within USDA. The strategy synthesizes the information USDA collected as part of a public announcement earlier this year engaging the public on research priorities under the Agriculture Innovation Agenda (AIA).

Help Us Understand How You Use Common Data Elements in NIH-Supported Research
The NIH Data Science Strategic plan drives us towards having accessible, well-organized, secure, and efficiently operated data resources to maximize the value of data generated from NIH funding. To meet the mark as we move forward, data need to be interoperable, interconnected, harmonized, standardized, and shared where and when appropriate. One way we hit the mark is through encouraging researchers to adopt Common Data Elements (CDEs). CDEs foster rigor, facilitate data sharing, and allow multiple datasets to be integrated. They also help make data more FAIR (Findable, Accessible, Interoperable, and Reusable). Many different CDEs are currently in use and can vary across research disciplines, so we would encourage researchers check out databases like the NIH CDE Repository for examples, tools, and other related resources.

Through a recently released Request for Information (NOT-LM-21-005), we seek your thoughts on how you use CDEs, potential challenges to their adoption, and how NIH might facilitate and incentivize their use to help us plan future CDE-related efforts.

Do you use CDEs? How have they benefited your work? Did you face any barriers, and how were they overcome? What resources or tools would make it easier for you to use CDEs? Can the NIH CDE Repository be enhanced? Please tell us.

Plan To Attend an Upcoming “Application Mechanics: Submitting an Application” Webinar
To provide targeted assistance to applicants applying for Department of Justice (DOJ) funding opportunities, DOJ’s JustGrants team is offering 10 webinar sessions on the application submission process.

Applicants should consider attending one of the sessions between February 11 and March 22, 2021. The upcoming “Application Mechanics: Submitting an Application” webinars will explain—

• steps to take prior to applying for funding;
• how to find open DOJ funding opportunities in Grants.gov;
• how to apply for funding using JustGrants;
• the JustGrants roles and their responsibilities and required actions;
• how to navigate and use JustGrants to submit your application; and
• where to find training materials, job aids, and other resources.
Each session will last approximately 90 minutes. The same content will be covered in each session, with time set aside for questions and answers. Registration for each session will be limited, to allow for the JustGrants team to respond to questions. Additional session information and application submission training materials are posted on the Justice Grants Training - Application Submission page.

Register for an “Application Mechanics: Submitting an Application” Webinar.

Where To Find DOJ Funding Opportunities
If you are interested in applying for funding, you can find open opportunities on these pages:

- Office of Community Oriented Policing Services
- Office of Justice Programs
- Office on Violence Against Women
Featured COVID-19 Response Resources from the REL Program
In response to COVID-19, the 10 Regional Educational Laboratories (RELs) have collaborated to produce a series of evidence-based resources and information about teaching and learning in a remote environment, as well as other considerations brought by the pandemic. See below for a roundup of featured resources on this topic. A full list of resources is available on the REL COVID-19 webpage.

- Assessing Learning Changes After Spring 2020 COVID-19 School Closures
- Supporting Young English Learners at Home
- Emerging Challenges and Creative Solutions for Early Childhood Play-Based Learning in Remote Settings
- Supporting Students Experiencing Trauma During the COVID-19 Pandemic

Going the Distance: Online Strategies for Helping Students with Disabilities

National Household Education Survey Programs of 2019 Public-Use Data Files
The National Center for Education Statistics released new National Household Education Surveys data files and documentation January 28, 2021. Two surveys were fielded in 2019 as part of the National Household Education Surveys Program: the Early Childhood Program Participation survey (ECPP) and the Parent and Family Involvement in Education survey (PFI).

The Condition of Education is a congressionally mandated annual report from the National Center for Education Statistics. The report contains key indicators on the condition of education in the United States at all levels, from prekindergarten through postsecondary, as well as labor force outcomes and international comparisons. The indicators summarize important developments and trends using the latest statistics, which are updated throughout the year as new data become available. In addition, the report’s Spotlight indicators provide more in-depth analyses on selected topics.

World Braille Day: Research on Teaching Braille to Students with Visual Impairments
In honor of World Braille Day, NCSER interviewed three Co-PIs about their IES-funded project aimed at investigating factors related to teachers of students with visual impairments and how they are associated with braille learning and proficiency.

Building a Reading Comprehension Measure for Postsecondary Students
This blog provides an overview of an IES-funded project designed to help postsecondary institutions assess the reading comprehension abilities of students and distinguish between common comprehension difficulties.
National Research & Development Center Launches Website to Provide Research Evidence and Actionable Information for Improving Education Outcomes for Secondary English Learners
The IES-funded National Research & Development Center to Improve Education for Secondary English Learners launched their website with information and resources that addresses the challenges and needs facing English learners in secondary school settings.

Catching Up with Former NCSER Fellows: Experiences and Advice for Early Career Researchers
As part of the Spotlight on IES Training Programs series, three former NCSER fellows who are now principal investigators on IES grants discuss their current and past experience with NCSER programs and provide advice for early career researchers interested in applying for IES funding.

National Mentoring Month: Celebrating Mentors in Special Education Research
NCSER showcases two different types of research programs that promote mentorship in special education research – the Early Career Development and Mentoring program and the Research Networks Focused on Critical Problems of Policy and Practice in Special Education program.
Apply Today for the Connected Communities Funding Opportunity
Concept papers for the U.S. Department of Energy’s (DOE) $65 million Connected Communities funding opportunity are due February 17 at 5 p.m. ET. DOE seeks projects that will expand its network of energy-efficient “smart” buildings that interact with solar and other distributed energy resources. The DOE Building Technologies Office (BTO) supports this effort in partnership with the DOE solar energy, vehicles, and electricity offices to study building types, grid attributes, and regulatory structures within new and existing U.S. communities. Learn more and apply.

Dear Colleague Letter: Computer and Information Science and Engineering Graduate Fellowships (CSGrad4US)
The computer and information science and engineering fields are experiencing booming undergraduate enrollments. Many of these undergraduate degree recipients have outstanding job opportunities in industry and at other organizations, and only a small fraction of these individuals considers pursuing related doctoral degree-granting programs. In order to increase the number of diverse, domestic graduate students in these areas and thereby bolster the U.S. population in the Nation’s computer and information science and engineering research and innovation workforce, the National Science Foundation’s (NSF) Directorate for Computer and Information Science and Engineering (CISE) announces its intention to support CISE Graduate Fellowships (CSGrad4US) as a pilot effort. In particular, CSGrad4US is intended for individuals who have some practical experience following their bachelor’s degree and are now interested in pursuing a research-based doctoral degree.

The goals of the CSGrad4US Fellowships are to: 1) select, recognize, and financially support early-career individuals with the demonstrated potential to be high-achieving CISE researchers and innovators; and 2) to broaden participation among groups underrepresented in CISE disciplines, including women, African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, Native Pacific Islanders, and persons with disabilities. CSGrad4US Fellowships are a part of an overall strategy by NSF’s CISE directorate to develop the national workforce necessary to ensure the Nation’s leadership in advancing CISE research and innovation.

As detailed below, the CSGrad4US Fellowship utilizes a two-phased process, comprising (i) part-time mentored preparation, followed by (ii) the fellowship itself, which constitutes three years of support for graduate study that leads to a research-based doctoral degree in a CISE discipline. This DCL invites applications which will result in decisions for the first phase in time for selected individuals to apply to doctoral degree-granting programs in CISE disciplines for matriculation in Fall 2022 or Fall 2023.

Individuals selected for CSGrad4US Fellowships who successfully enroll in a doctoral degree-granting program in a CISE discipline by no later than Fall 2023 will separately be provided guidance about the fellowship funding. The fellowship funding will be provided to CSGrad4US Fellows' institutions of higher education.
Dear Colleague Letter: Pilot Projects to Integrate Existing Data and Data-Focused Cyberinfrastructure to Enable Community-level Discovery Pathways

This Dear Colleague Letter (DCL) replaces NSF 20-085: DCL: Pilot Projects to Integrate Existing Data and Data-Focused Cyberinfrastructure to Enable Community-level Discovery Pathways.

Many research communities supported by the National Science Foundation (NSF) are challenged by the need to manage, integrate, access, and use ever larger and diverse scientific datasets to conduct research. NSF accordingly invests in the creation of a wide range of data-focused cyberinfrastructure (CI) tools, resources, and solutions for use by the various disciplinary communities that it supports in order to transform data into knowledge and discovery.

Scientific endeavors are increasingly collaborative, cross-disciplinary, and convergent. NSF thus recognizes the importance of promoting holistic CI approaches to address the growing and evolving data lifecycle and workflow challenges both within and across research fields. This holistic view is articulated in NSF’s recent vision\(^1\) for an \textit{agile CI ecosystem}, and is predicated on harmonization, integration and interoperability among CI resources, tools, services and expertise to achieve accessible, seamless and flexible end-to-end discovery pathways that drive new thinking and enable transformative discoveries.

Through this Dear Colleague Letter (DCL), NSF encourages proposals to the Cyberinfrastructure for Emerging Science and Engineering Research (CESER) program\(^2\) within the Office of Advanced Cyberinfrastructure for pilot projects that bring together researchers and CI experts to develop the means of combining existing community data resources and shared data-focused CI into new integrative and highly performing data-intensive discovery workflows that empower new scientific pathways. Aims of such pilot projects can include, but are not limited to:

- improving the end-to-end process of accessing, integrating and transforming research and education data to knowledge and discovery for one or more communities;
- creating new workflows and new usage modes to address multi-disciplinary and cross-domain scientific objectives;
- addressing emerging community-scale scientific data challenges such as real-time, streaming and on-demand data access; data discovery through knowledge networks and intelligent data delivery; enabling access to data with privacy concerns; and data fusion, integration and interoperability;
- enhancing the performance and robustness of community-scale data integration and discovery workflows such as through automated curation, end-to-end performance monitoring, provenance tracking, and means of assuring data trustworthiness; and
- federating learner data to empower innovative assessment tools for large-scale modeling of learning gains.

NSF welcomes submissions of proposals for pilot projects that address one or more of these aims in all areas of science and engineering (S&E) research and education supported by NSF. Within this array of aims, NSF encourages proposers to address, where appropriate, community-scale scientific data challenges stemming from the ongoing pandemic, whether technical in nature or related to broadening participation by, and increasing benefit to, diverse audiences, including groups underrepresented and underserved in STEM. Proposals are particularly encouraged from minority-serving institutions. Proposals from organizations in
Established Program to Stimulate Competitive Research (EPSCoR) jurisdictions are also particularly encouraged.
Mental Health, Substance Use, and Wellbeing in Higher Education: Supporting the Whole Student

Student wellbeing is foundational to academic success. One recent survey of postsecondary educators found that nearly 80 percent believed emotional wellbeing is a "very" or "extremely" important factor in student success. Studies have found the dropout rates for students with a diagnosed mental health problem range from 43 percent to as high as 86 percent. While dealing with stress is a normal part of life, for some students, stress can adversely affect their physical, emotional, and psychological health, particularly given that adolescence and early adulthood are when most mental illnesses are first manifested. In addition to students who may develop mental health challenges during their time in postsecondary education, many students arrive on campus with a mental health problem or having experienced significant trauma in their lives, which can also negatively affect physical, emotional, and psychological wellbeing.

The nation's institutions of higher education are seeing increasing levels of mental illness, substance use and other forms of emotional distress among their students. Some of the problematic trends have been ongoing for decades. Some have been exacerbated by the COVID-19 pandemic and resulting economic consequences. Some are the result of long-festering systemic racism in almost every sphere of American life that are becoming more widely acknowledged throughout society and must, at last, be addressed. Mental Health, Substance Use, and Wellbeing in Higher Education lays out a variety of possible strategies and approaches to meet increasing demand for mental health and substance use services, based on the available evidence on the nature of the issues and what works in various situations. The recommendations of this report will support the delivery of mental health and wellness services by the nation's institutions of higher education.

Changing Campus Cultures to Support Mental Health

The pandemic upended the lives of the nation’s nearly 20 million college and university students — sending many away from campus, taking away usual sources of social connection, and amplifying financial stress and fears about the future. These changes have taken a toll on students’ mental health. Students are reporting higher rates of depression than before the pandemic, and more students say that their mental health is negatively affecting their academic performance.

But even before the pandemic, rates of mental health problems were on the rise. Eighteen percent of students reported experiencing major depression in 2018-2019, compared to 8 percent in 2007. And 14 percent reported thinking about suicide in 2018, up from 6 percent in 2007. Graduate students report depression and anxiety at rates 6 times higher than that of the general population.

“These are frightening statistics, and COVID and its economic consequences are only exacerbating the problem,” said Alan Leshner, CEO emeritus of the American Association for the Advancement of Science. Leshner chaired a National Academies committee that recently
released a report on the subject, *Mental Health, Substance Use, and Wellbeing in Higher Education: Supporting the Whole Student*.

To respond to the growing problem, the report says, colleges and universities need to take a new, more holistic approach — one that doesn’t just relegate students’ mental health issues to campus counseling centers. Instead, all sectors of campus — institutional leaders, faculty, staff, and students themselves — need to play a bigger role. “What we are asking is that institutions look at themselves and ask whether there are things in their environment that contribute to the stresses and mental health problems that students are experiencing,” said Leshner.

Schools should consider how, instead of adding to students’ distress, they can positively contribute to their mental health and well-being, the report says. This will require leadership from the top, with presidents and boards of trustees setting the tone, reducing the stigma attached to mental health issues, and articulating the need for campuswide culture change.

One group that should play a key role in improving campus cultures are the faculty, the report says. “Because they are in such frequent contact with students, faculty have an underacknowledged role in students’ mental health,” said Leshner. “They need to be taught about teaching and mentoring practices that support students’ well-being.”

As an example, the report points to the Texas Well-being program at the University of Texas, Austin, which instructs faculty in how to shift their teaching. For example, it urges faculty to share personal connections to course content — such as areas where they’ve struggled or encountered surprises — and to focus less on competition and performance by students, and more on learning and mastery of content.

Most importantly, the National Academies’ report says, faculty should be taught how to identify and speak with students who could benefit from a mental health referral. “Faculty and staff can be trained, not to become therapists or counselors themselves, but to recognize students in distress and to be able to refer them to local and community resources that can help them,” said Leshner.
New Funding Opportunities

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

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

New Funding Solicitations Posted Since January 15 Newsletter

Innovation Lab for Food Systems for Nutrition Agency for International Development
The Food System Innovation Lab will design, lead and implement a program of nutrition-sensitive food system research and capacity building aimed at addressing the opportunities and challenges, and will additionally serve as a resource to RFS, missions and their partners confronting on the role of food systems in inclusive economic growth, nutrition, food safety, and a nutrition-sensitive approaches, gender-sensitive and youth inclusive development, and resilience. The Food System for Nutrition Innovation Lab is broadly expected to help implement and communicate impact pathways from nutrition sensitive food systems research to development outcomes through partnerships with USAID mission-supported value chain programs, national partners, private companies and associations, community-based organizations and other donors and their programs. The Innovation Lab will deliver on this vision by a) strengthening the capacities of select country and regional research institutions to undertake research that is relevant and sound, to communicate findings in ways that are more likely to influence government partners, policy makers, and practitioners, while b) implementing an integrated country, regional and global research agenda. Due March 8.

2021-NIST-GMSE-01 Graduate Student Measurement Science and Engineering (GMSE) Fellowship Program
The NIST’s Graduate Student Measurement Science and Engineering (GMSE) Fellowship Program is seeking applications from eligible applicants for activities to provide master’s and doctoral-level graduate students with opportunities and financial assistance to obtain laboratory experiences within the NIST laboratories in the science, technology, engineering and mathematics (STEM) disciplines. The recipient will work with NIST to foster collaborative STEM research relationships among NIST, master’s and doctoral-level graduate students, and the students’ academic institutions. Due March 23.
The Office of Naval Research (ONR) is interested in receiving proposals for its Young Investigator Program (YIP). ONR's Young Investigator Program seeks to identify and support academic scientists and engineers who are in their first or second full-time tenure-track or tenure-track-equivalent academic appointment, who have received their PhD or equivalent degree on or after 01 January 2013, and who show exceptional promise for doing creative research. The objectives of this program are to attract outstanding faculty members of Institutions of Higher Education (hereafter also called "universities") to the Department of the Navy's Science and Technology (S&T) research program, to support their research, and to encourage their teaching and research careers. Individuals who are holding U.S. non-profit equivalent positions are also encouraged to apply.

Proposals addressing research areas (as described in the ONR Science and Technology Department section of ONR's website at www.onr.navy.mil) which are of interest to ONR program officers will be considered. Contact information for each division (a subgroup of an S&T Department) is also listed within the S&T section of the website.

Applicants are STRONGLY ENCOURAGED to contact the appropriate Program Officer who is the point of contact for a specific technical area to discuss their research ideas. A list of most Program Officers and their contact information can be found at: https://www.onr.navy.mil/our-research/technology-areas or at: https://www.onr.navy.mil/our-research/our-program-managers.

Brief informal pre-proposals may be submitted to facilitate these discussions but are not required. Such discussions can clarify the content and breadth of the priority research areas and enhance the match between a subsequent proposal and Department of the Navy research needs. Please allow adequate time for such discussions with the ONR Program Officer. The brief informal pre-proposal should be emailed to the ONR Program Officer with ONRYIP@navy.mil on the cc: line. Due March 26.

The EPA Exchange Network Grant Program is soliciting project applications using the Environmental Information Exchange Network (EN) to:

- Facilitate sharing of environmental data, especially through shared and reusable services.
- Reduce burden and avoid costs for co-regulators and the regulated community.
- Streamline data collection and exchanges to improve its timeliness for decision making.
- Increase the quality and access to environmental data through discovery, publishing, outbound and analytical services so it is more useful to environmental managers.
- Increase data and IT management capabilities needed to fully participate in the EN.

Due March 31.

This solicitation is a revision of NSF 20-522, the solicitation for the National Robotics Initiative. The significant changes in the FY 2021 NRI-3.0 solicitation are as follows:

- The deadlines have been revised;
A single class of projects exists for all proposals for NRI 3.0. The NRI program now focuses on research in the innovative integration of robotic technologies.

The NRI program has expanded to include robotic research that does not necessarily emphasize collaboration.

The NRI 2.0 theme requirements have been largely eliminated.

All proposals must have a collaboration plan as described in V.A.3.

Additional solicitation-specific sections are required in the project description, as detailed in Section V.A.

NASA will only consider projects that are within its stated cost limits.

NIFA will only consider projects that are within its stated cost limits.

NIOSH will only consider projects that are within its stated cost limits.

DOT and NIH have been added as partner organizations.

Due April 19.

Understanding the Rules of Life: Emergent Networks (URoL:EN) Predicting Transformation of Living Systems in Evolving Environments

The Understanding the Rules of Life: Predicting Phenotype "Big Idea" is based on developing a predictive understanding of how key properties of living systems emerge from interactions of factors such as genomes, phenotypes, and evolving environments. This activity has launched a series of new research programs designed to elucidate "minimal rules" (building a synthetic cell), "rules of complexity" (epigenetics), and "rules of interaction" (microbiome). A list of Understanding the Rules of Life awards made thus far can be found on the NSF Awards Search.

This Understanding the Rules of Life: Emergent Networks (URoL:EN) solicitation adds to those previous foundational activities to now understand "rules of emergence" for networks of living systems and their environments. Emergent networks describe the interactions among organismal, environmental, social, and human-engineered systems that are complex and often unexpected given the behaviors of these systems when observed in isolation. The behavior of emergent networks of living systems depend on, but are not wholly predicted by, chemical and physical principles and unit-level biological properties (molecule/cell/organism/population), as well as communication and information flows among nodes in the network. Networks of living systems are reciprocally coupled with natural, built, and social environments in ways that are complex and difficult to predict. The often-unanticipated outcomes of these interactions can be both wide-ranging and enormously impactful. Prediction is further hampered by accelerating perturbations within evolving environments and the associated increase in the frequency of previously rare or extreme events. Determining the emergent properties of these networks, which arise from complex and nonlinear interactions among the different systems that in isolation do not exhibit such properties, is a critical and unsolved problem. One of many examples of this could include the emerging network of interactions across scales that arose from the arrival of the nonnative pathogen, Cryphonectria parasitica, or Chestnut blight, introduced with nursery stock. This pathogen effectively eliminated a dominant overstory tree species, American chestnut (Castanea dentata), across North America and had concomitant impacts on and feedbacks between biotic, abiotic, and social networks. For example, the
economic impacts of this pathogen ranging from local agricultural and social impacts to global scale impacts on the timber industry.

Successful projects of the URoL:EN program are expected to use convergent approaches that explore emergent network properties of living systems across various levels of organizational scale and, ultimately, contribute to understanding the rules of life through new theories and reliable predictions about the impact of specific environmental changes on behaviors of complex living systems, or engineerable interventions and technologies based on a rule of life to address associated outcomes for societal benefit.

The convergent scope of URoL:EN projects also provides unique STEM education and outreach possibilities to train the next generation of scientists in a diversity of approaches and to engage society more generally. Hence, the URoL:EN program encourages research projects that integrate training and outreach activities in their research plan, provide convergent training opportunities for researchers and students, develop novel teaching modules, and broaden participation of under-represented groups in science. Due May 10.

**Agriculture and Food Research Initiative - Education and Workforce Development**

The Agriculture and Food Research Initiative - Education and Workforce Development (EWD) focuses on developing the next generation of research, education, and extension professionals in the food and agricultural sciences. In FY 2021, EWD invites applications in seven areas: agricultural workforce training; professional development for agricultural literacy; training of undergraduate students in research and extension; fellowships for predoctoral candidates; fellowships for postdoctoral scholars, a new program for food and agricultural non-formal education, and a FY 2021-only program for evaluation of NIFA's agricultural literacy and workforce development portfolio. See EWD Request for Applications for specific details. Due July 1.

**W911NF-21-S-0007 Army Research Institute for the Behavioral and Social Sciences Broad Agency Announcement for Basic Scientific Research, Foundational Science Research Unit (2021-2022)**

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) announces the ARI FY21-22 Foundational Science Research Unit Broad Agency Announcement for Basic Scientific Research. This Broad Agency Announcement, which sets forth basic research areas of interest to the United States Army Research Institute for the Behavioral and Social Sciences, is issued under the provisions of paragraph 6.102(d)(2) of the Federal Acquisition Regulation (FAR), which provides for the competitive selection of proposals. Proposals submitted in response to this BAA and selected for award are considered to be the result of full and open competition and in full compliance with the provisions of Public Law 98-369 (The Competition in Contracting Act of 1984) and subsequent amendments. The U.S. Army Research Institute for the Behavioral and Social Sciences is the Army's lead agency for the conduct of research, development, and analyses for the improvement of Army readiness and performance via research advances and applications of the behavioral and social sciences that address personnel, organization, training, and leader development issues. Programs funded under this BAA include basic research that can improve human performance and Army readiness. Open to August 7, 2022.
Higher Education Challenge (HEC) Grants Program
Projects supported by the Higher Education Challenge Grants Program will: (1) address a state, regional, national, or international educational need; (2) involve a creative or non-traditional approach toward addressing that need that can serve as a model to others; (3) encourage and facilitate better working relationships in the university science and education community, as well as between universities and the private sector, to enhance program quality and supplement available resources; and (4) result in benefits that will likely transcend the project duration and USDA support. Due March 18.

Rural Health and Safety Education Competitive Grants Program (RHSE)
The RHSE program proposals are expected to be community-based outreach education programs, such as those conducted through Human Science extension outreach that provide individuals and families with: information as to the value of good health at any age; information to increase individual or family’s motivation to take more responsibility for their own health; information regarding rural environmental health issues that directly impact human health; information about and access to health promotion and educational activities; and training for volunteers and health services providers concerning health promotion and health care services for individuals and families in cooperation with state, local, and community partners. Due April 29.

Agriculture and Food Research Initiative Competitive Grants Program
Foundational and Applied Science Program
Fiscal Years (FY) 2021 and 2022Request for Applications
EXECUTIVE SUMMARY: The Agriculture and Food Research Initiative (AFRI) is America’s flagship competitive grants program that provides funding for fundamental and applied research, education, and extension projects in the food and agricultural sciences. In this RFA, NIFA requests applications for six AFRI priority areas through the Foundational and Applied Science Program for 2021 and 2022. Applicants considering applying to the second year should check the AFRI RFA webpage and www.grants.gov.

The goal of this program is to invest in agricultural production research, education, and extension projects for more sustainable, productive and economically viable plant and animal production systems. The global agricultural output needs to be expanded significantly to meet the food needs of the population expected in 2050; thus, it is imperative to develop innovative, safe and sustainable management strategies for livestock, crops, and critical underlying resources.

In 2021 and 2022, applications are sought in the following priority areas: 1. Plant health and production and plant products; 2. Animal health and production and animal products; 3. Food safety, nutrition, and health; 4. Bioenergy, natural resources, and environment; 5. Agriculture systems and technology; and 6. Agriculture economics and rural communities The anticipated amount available for new grants for the 2021 deadlines in this Foundational and Applied Science RFA is approximately $290 million. The anticipated amount available for new grants for the 2022 deadlines in this Foundational and Applied Science RFA is approximately $290 million. This RFA is being released prior to the passage of appropriation acts for FY 2021,
FY 2022, and FY 2023. Enactment of additional continuing resolutions or an appropriations act may affect the availability or level of funding for this program. **Due Dates May, June, July 2021.**

**Gen-4 Engineering Research Centers (ERC) Convergent Research and Innovation through Inclusive Partnerships and Workforce Development**
The ERC program supports convergent research that will lead to strong societal impact. Each ERC has interacting foundational components that go beyond the research project, including engineering workforce development at all participant stages, a culture of diversity and inclusion where all participants gain mutual benefit, and value creation within an innovation ecosystem that will outlast the lifetime of the ERC. The logical reasoning that links the proposed activities to the identified goals for each ERC should be clear. **LOI September 2; prelim October 2; full May 7, 2021.**

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

**BAA-AFRL-RQKMA-2016-0007 Air Force Research Laboratory, Materials & Manufacturing Directorate, Functional Materials and Applications (AFRL/RXA) Two-Step Open BAA**
Air Force Research Laboratory, Materials & Manufacturing Directorate is soliciting White Papers and potentially technical and cost proposals under this two-step Broad Agency Announcement (BAA) that is open for a period of five (5) years. Functional Materials technologies that are of interest to the Air Force range from materials and scientific discovery through technology development and transition, and support the needs of the Functional Materials and Applications mission. Descriptors of Materials and Manufacturing Directorate technology interests are presented in the context of functional materials core technical competencies and applications. Applicable NAICS codes are 541711 and 541712. **Open to April 20, 2021.**

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

**FA9453-17-S-0005 Research Options for Space Enterprise Technologies (ROSET)**
The Air Force Research Laboratory (AFRL) Space Vehicle Directorate (RV) is interested in receiving proposals from all offerors to advance state of the art technology and scientific knowledge supporting all aspects of space systems including payload adapters, on-orbit systems, communications links, ground systems, and user equipment. Efforts will include basic and advanced research, advanced component and technology development, prototyping, and system development and demonstration and will span the range from concept and laboratory experimentation to testing/demonstration in a relevant environment. Specific tasks include design, development, analysis, fabrication, integration, characterization, testing/experimentation, and demonstration of hardware and software products. **Open to September 22, 2022.**

**Broad Agency Announcement for the Army Rapid Capabilities Office**

This Broad Agency Announcement (BAA), W56JSR-18-S-0001, is sponsored by the Army Rapid Capabilities Office (RCO). The RCO serves to expedite critical capabilities to the field to meet Combatant Commanders' needs. The Office enables the Army to experiment, evolve, and deliver technologies in real time to address both urgent and emerging threats while supporting acquisition reform efforts. The RCO executes rapid prototyping and initial equipping of capabilities, particularly in the areas of cyber, electronic warfare, survivability and positioning, navigation and timing (PNT), as well as other priority projects that will enable Soldiers to operate and win in contested environments decisively. This BAA is an expression of interest only and does not commit the Government to make an award or pay proposal preparation costs generated in response to this announcement.

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

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

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

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

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

**FA8650-17-S-6001 Science and Technology for Autonomous Teammates (STAT)**
The objective of Science and Technology for Autonomous Teammates (STAT) program is to develop and demonstrate autonomy technologies that will enable various AF mission sets. This research will be part of Experimentation Campaigns in: 1 -Multi-domain Command and Control; 2-Intelligence, Surveillance, Recognizance (ISR) Processing Exploitation and Dissemination (PED); and 3- Manned-Unmanned combat Teaming to demonstrate autonomy capabilities to develop and demonstrate autonomy technologies that will improve Air Force operations through human-machine teaming and autonomous decision-making. The technology demonstrations that result from this BAA will substantially improve the Air Force's capability to conduct missions in a variety of environments while minimizing the risks to Airmen. The overall impact of integration of autonomous systems into the mission space will enable the Air Force to operate inside of the enemy’s decision loop.

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

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

- **Strategic Planning** - Assistance in formulating research development strategies and building institutional infrastructure for research development (including special strategies for Emerging Research Institutions, Predominantly Undergraduate Institutions and Minority Serving Institutions)

- **Training for Faculty** - Workshops, seminars and webinars on how to find and compete for research funding from NSF, NIH, DoE and other government agencies as well as foundations. Proposal development retreats for new faculty.

- **Large proposals** - Assistance in planning, developing and writing institutional and center-level proposals (e.g., NSF ERC, STC, NRT, ADVANCE, IUSE, Dept of Ed GAANN, DoD MURI, etc.)

- **Assistance for new and junior faculty** - help in identifying funding opportunities and developing competitive research proposals, particularly to NSF CAREER, DoD Young Investigator and other junior investigator programs

- **Assistance on your project narrative**: in-depth reviews, rewrites, and edits

- **Editing and proof reading** of journal articles, book manuscripts, proposals, etc.

- **Facilities and Instrumentation** - Assistance in identifying and competing for grants to fund facilities and instrumentation

- **Training for Staff** - Professional Development for research office and sponsored projects staff

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

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