Our Co-Publisher & Editors

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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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Katherine E. Kelly, Ph.D., a retired English professor from Texas A&M University, is the author of several books and numerous articles supported by research grants and served as a contributing editor for an academic journal for five years. She provides ARFS clients editorial services on proposals, journal articles, and manuscripts and presents seminars on grant writing and funding in the humanities.

About Us

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**Topics of Interest URLs**

**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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• DOJ: https://www.justice.gov/grants
• NASA: https://nspires.naspars.com/external/
• NEH: https://www.neh.gov/
• NEA: https://www.arts.gov/
• NIH: https://grants.nih.gov/funding/index.htm
• HHS: http://www.hhs.gov/asrt/og/aboutog/grantsnet.html
• NSF: https://www.nsf.gov/funding/index.jsp
• DOC: https://www.commerce.gov/work-with-us/grants-and-contract-opportunities
• NIST: https://www.nist.gov/oaam/grants-management-division/nist-nofo-information
• NOAA: https://www.noaa.gov/organization/acquisition-grants
• DoED: https://www2.ed.gov/fund/grants-apply.html?src=go
• DOE/OS: https://www.energy.gov/science/office-science-funding/office-science-funding-opportunities
• EERE: https://www.energy.gov/eere/funding/eere-funding
• DOE: https://www.energy.gov/energy-economy/funding-financing
• USDA: https://www.nal.usda.gov/waic/funding
• NIFA: https://www.nifa.usda.gov/grants
• EPA: http://www.epa.gov/ogd/competition/open_awards.htm
• NCER: http://epa.gov/ncer/listserv/
• FBO/BETA SAM: https://fbohome.sam.gov/
• Federal Register: https://www.federalregister.gov/
• Grants.gov: https://www.grants.gov/web/grants/search-grants.html
• CFDA: https://www.investopedia.com/terms/c/catalog-of-federal-domestic-assistance-cfda.asp
## December 2022 Select List of Humanities, HSS, and Arts Opportunities & News

December 2022 Select List of Humanities, HSS, and Arts Opportunities & News

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<thead>
<tr>
<th>Due Date</th>
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<td>1/11/23 ACLS The Robert H. N. Ho Family Foundation Buddhism: Public Scholars.</td>
<td>On behalf of The Robert H. N. Ho Family Foundation Global, the American Council of Learned Societies announces a new initiative to place recent recipients of the PhD in professional positions at museums, libraries, and publications that present and interpret knowledge of Buddhist traditions. The selected Buddhism Public Scholars will use their academic knowledge and professional expertise to bolster the capacity of host organizations in the area of Buddhist art and thought in all traditions and locations in which Buddhism is practiced. Completed applications must be submitted through the ACLS Online Fellowship and Grant Administration (OFA) System (ofa.acls.org) by the deadline. Applicants must: Have a PhD in the humanities or humanistic social sciences conferred after January 1, 2019 and by April 15, 2023. See website for more information: <a href="https://www.acls.org/competitions/the-robert-h-n-ho-family-foundation-buddhism-public-scholars/">https://www.acls.org/competitions/the-robert-h-n-ho-family-foundation-buddhism-public-scholars/</a></td>
</tr>
<tr>
<td>1/11/23 ACLS The Robert H. N. Ho Family Foundation New Institutions of higher education worldwide are eligible to apply for grants in support of teaching positions in Buddhist studies. The proposed position should be a new position. If the proposed position is a replacement for a retirement or otherwise vacated position where Buddhist Studies at the institution would be significantly affected without award funds, the proposal should make that case. The establishment of the position must contribute</td>
<td></td>
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</table>
### Professorships in Buddhist Studies.

Significantly to the institution. This has been taken to mean establishing a curriculum in Buddhist Studies where none has existed or where such a curriculum was in clear and urgent need of support. The period after the expiration of grant funding and must provide a description of how this commitment fits its contractual practices. **The heart of the application is a statement outlining the proposed position—its responsibilities, departmental location, its rank, the fit with the institution’s mission and curricular plans, and the qualifications sought in potential appointees.** The statement should describe the process of identifying the appointee.

Completed applications must be submitted through the ACLS Online Fellowship and Grant Administration (OFA) System (ofa.acls.org) by the deadline. [https://www.acls.org/competitions/the-robert-h-n-ho-family-foundation-new-professorships-in-buddhist-studies/](https://www.acls.org/competitions/the-robert-h-n-ho-family-foundation-new-professorships-in-buddhist-studies/)

### 1/15/23 American Antiquarian Society/NEH. Long-Term Visiting Academic Research Fellowships

These fellowships are tenable for four to twelve months each year. (For short-term fellowships, see below.) All awards are for a period of residence to use the AAS library’s resources for research and writing. AAS-NEH fellows are expected to be in regular and continuous residence at the Society. They must devote full time to their study and may not accept teaching assignments or undertake any other major activities during the tenure of their award. Fellows may hold other major fellowships or grants during fellowship tenure, in addition to sabbaticals and supplemental grants. Other NEH-funded grants may be held serially, but not concurrently. Please contact Nan Wolverton at nwolverton@mwa.org or 508-471-2119 with questions. [https://www.americanantiquarian.org/nehfellowship](https://www.americanantiquarian.org/nehfellowship)

### 1/15/23 American Antiquarian Society/NEH Short-Term Visiting Academic Research Fellowships.

These fellowships are tenable for one to two months. Eighteen named fellowships, each with its own research focus, are offered in the category of short-term awards. Please contact Nan Wolverton at nwolverton@mwa.org or 508-471-2119 with questions. Review all eighteen at: [https://www.americanantiquarian.org/short-term-fellowships](https://www.americanantiquarian.org/short-term-fellowships)

### 1/15/23 (Full proposal) NSF Cultural Anthropology Program Senior Research Awards (CA/SR)

This program primarily supports fundamental, systematic anthropological research and training to increase understanding of the causes, consequences, and complexities of human social and cultural variability. The Cultural Anthropology Program welcomes proposals from all sub-fields of cultural anthropology and research at any temporal and spatial scale. Methodologies and approaches employed may include ethnographic field research, surveys, remote sensing, the collection of bio-markers, experimental research inside or outside of laboratory settings, archival research, the analysis of materials collections and extant data bases, mathematical and computational modeling, and other research tools as appropriate for the research proposed. The overarching research goals...
should be to produce empirically grounded findings generalizable beyond particular case studies and contribute to building a more robust anthropological science of human society and culture. 
https://beta.nsf.gov/funding/opportunities/cultural-anthropology-program-senior-research

1/17/23 NEA Seeking Producer and Administrator for the three-day 2024 Poetry Out Loud (POL) National Finals competition to take place in Spring 2024 in Washington, DC.

The National Finals are the culmination of the nationwide Poetry Out Loud program that encourages hundreds of thousands of high school students each year to learn about classic and contemporary poetry through memorization and performance. Students select, memorize, and recite poems from an anthology and compete for the title of National Poetry Out Loud Champion. The program starts at the local level. Local winners advance to a state and/or regional competition, and ultimately to the National Finals, where one student from every state and territory will compete for the national championship. Applications must be submitted electronically through Grants.gov, the federal government’s online application system. Submit your application early to give yourself ample time to resolve any problems that you might encounter. https://www.arts.gov/sites/default/files/FY23-POL-Program-Solicitation.pdf

1/20/23 American Philosophical Society Long-Term Residential Research Fellowships.

- APH/NEH Sabbatical Fellowship supports mid-career or senior scholars in all fields seeking sabbatical support for the completion of a book project. These opportunities are funded by The National Endowment for the Humanities and provide six or twelve months of research support in the Society’s collections for persons who have already completed their formal professional training.
- Mellon Foundation Native American Scholars Initiative (NASI) Postdoctoral Fellowship. This 12-month fellowship is intended for a recent doctoral graduate, a professor at any level seeking sabbatical support for a research project, or an independent postdoctoral scholar working closely with an Indigenous community on a project.
- Mellon Foundation Native American Scholars Initiative (NASI) Predoctoral Fellowship. This 12-month fellowship is intended for an advanced doctoral degree student working toward the completion of the dissertation.
- David Center for the American Revolution Postdoctoral Fellowship. This 24-month fellowship is offered to a recent Ph.D., professor at any level seeking sabbatical support for a research project, or an independent scholar working on a project about the American Revolution and Founding Era.
- David Center for the American Revolution Predoctoral Fellowship. This yearlong fellowship is offered to advanced Ph.D. students working on a project about the American Revolution and Founding Era.
- Friends of the APS Predoctoral Fellowship. This yearlong fellowship is offered to advanced Ph.D. students in all fields working on dissertation topics reflected in the Library & Museum’s collections.
- John C. Slater Predoctoral Fellowship in the History of Science, Technology, and Medicine. This yearlong fellowship is offered to advanced Ph.D. students working on topics related to
the history of science, technology, and medicine. 
https://www.amphilsoc.org/grants/fellowships#paragraph-2226

2/1/23 NEH Landmarks Workshops for K-12 and Higher Ed Faculty (for organizations).

The Landmarks of American History and Culture program supports a series of one-week residential, virtual, and combined format workshops across the nation that enhance and strengthen how K-12 educators, higher education faculty, and humanities professionals study sites, areas, or regions of historic and cultural significance and incorporate place-based teaching and learning in the humanities. **New for 2023:** *Previously awarded projects are no longer required to change the focus of their program to apply in successive years.* 
*Landmarks now offers two grant program options: One for K-12 educators and one for higher education faculty and humanities professionals.*

2/1/23 NEH Institutes (for organizations).

NEH-funded institutes are professional development programs that convene higher education faculty or K-12 educators from across the nation to deepen their understanding of significant topics in the humanities and enrich their capacity for effective scholarship and teaching. Institutes allow immersive study of humanities topics; foster new fields of study and/or revitalize existing areas of inquiry. **New for 2023:** *Funding Levels: Level II funding has been eliminated from the Institutes program.* *All projects will have a 15-month period of performance, and no white paper will be required.* *Previously funded projects must wait a year before reapplying; must submit all participant evaluations without modifications (such as data cleaning or analysis charts), *will be subject to existing project development review criteria. Reserved Participant Spaces: *Institutes for K-12 Educators must reserve 20% of available spaces for early career educators; *Institutes for Higher Education Faculty must reserve 20% of available spaces for non-tenured/non-tenure track faculty and 10% of available spaces for advanced graduate students.*
https://www.neh.gov/divisions/education/summer-programs. **NB: Applicants may apply to two NEH professional development programs (any combination of Landmarks and Institutes) but may participate in only one.**

2/15/23 Luce/ACLS Program in Religion, Journalism & International Affairs Collaborative Programming Grants.

These awards are intended to deepen public understanding of religion by advancing innovative scholarship and increasing scholars’ and institutions’ capacities to connect with journalism and the media. Who may apply: Project’s principal investigator must be a scholar in a field of the humanities or social sciences or journalism. Proposed grant activities must connect humanities and social science programs with journalism departments, schools, or initiatives on the same campus, or with the work of an external media organization. Projects must be hosted by a US-based accredited institution of higher education. https://www.acls.org/competitions/luce-acls.
This fund provides grants for research in Native American linguistics, ethnohistory, and the history of studies of Native Americans in the continental United States and Canada. The grants are intended for such costs as travel, audio and video recordings, and consultants' fees. Grants are not made for projects in archaeology, ethnography, or psycholinguistics; for the purchase of permanent equipment; or for the preparation of pedagogical materials. The committee distinguishes ethnohistory from contemporary ethnography as the study of cultures and cultural change through time.

https://www.amphilsoc.org/grants/phillips-fund-native-american-research

● Digital Humanities Fellowships. The American Philosophical Society offers fellowships to scholars working to interpret archival materials through emerging technologies.

● David Center for the American Revolution Short-Term Resident Research Fellowships. These one-month fellowships are open to scholars in all fields working on projects about the American Revolution and Founding Era that require using the collections of the APS’s Library & Museum.

● Short-Term Resident Research Fellowships. One- to three-month fellowships are available for Ph.D. candidates, holders of the Ph.D., and degreed independent scholars, within any field of study that requires using the collections of the APS’s Library & Museum.

https://www.amphilsoc.org/grants/fellowships#paragraph-2226

ACLS Announces Informational Webinars for 2022-23 Fellowships

The American Council of Learned Societies (ACLS) is pleased to offer information sessions for potential applicants to our fellowship and grant programs, hosted by ACLS program officers. Register for upcoming webinars focusing on programs with September and October deadlines below.

New/ongoing NEH Calls for Proposals related to the “American Tapestry” Initiative

Shelly C. Lowe (Navajo), new director of the NEH, has announced a special initiative designed to address some of the big challenges facing our country: how to sustain our democratic institutions, how to build a more just and equitable society, and how to prepare for and protect our cultural inheritance from the effects of climate change. “American Tapestry: Weaving Together Past, Present, and Future” calls for humanities and humanities-related social science researchers to submit proposals addressing these three themes. A series of such proposals is listed below in order of their due dates.

Call for Proposals: NEH Cultural and Community Resilience. Deadline: 12 January 2023. The Cultural and Community Resilience program (offered to organizations under the NEH Division of Preservation and Access) supports community-based efforts to mitigate climate change and COVID-19 pandemic impacts, safeguard cultural resources, and foster cultural resilience through identifying, documenting, and/or collecting cultural heritage and community experience. The program prioritizes projects from disadvantaged communities in the United States or its jurisdictions, and NEH encourages applications that employ inclusive methodologies. [https://www.neh.gov/program/cultural-and-community-resilience](https://www.neh.gov/program/cultural-and-community-resilience)

View a pre-recorded webinar about this award: [https://www.youtube.com/watch?v=a85hpckmUrw](https://www.youtube.com/watch?v=a85hpckmUrw)

Call for Proposals: NEH Climate Smart Humanities Organizations (New). Deadline: 17 January 2023. Another new program, this one devoted to climate, has been developed to further the goals of the “American Tapestry” initiative. “As energy costs rise and natural disasters become more frequent, humanities organizations - such as museums, libraries, archives, historic sites, and colleges and universities (must) . . . anticipate operational, physical, and financial impacts of climate-related events on their institutions, while also reducing their own impact on the environment. Climate Smart Humanities Organizations supports these efforts by offering federal matching funds for comprehensive organizational assessments that lead to strategic climate action and adaptation plans (italics added).

“(This) program (will enable) your humanities organization to undertake activities such as energy audits, risk assessments, and meetings with consultants. The resulting climate smart plan helps you establish goals and prioritize actions that reduce your organization’s impacts on the environment through mitigation and vulnerability from extreme events through adaptation. Together, mitigation and adaptation can inform a robust road map that addresses climate challenges, protects assets, and facilitates collaboration between internal and external stakeholders. Strategic planning for climate change is an essential part of sustaining humanities organizations’ operations and activities.

“Individual organizations can apply for themselves or lead a consortium of organizations collaborating on strategic climate smart planning.

“Awards in this program are made with federal matching funds and require fundraising of third-party, non-federal gifts at a ratio of one to one. (Italics added).” A 59-minute Climate Smart Humanities

Dangers and Opportunities of Technology: Perspectives from the Humanities (New). Deadline: 2 February 2023. Several existing projects already address one or more of these goals, such as building capacity at museums and other cultural sites; supporting minority-serving institutions; and promoting climate resilience. These will continue; however, the new initiative, “Dangers & Opportunities of Technology: Perspectives from the Humanities” will expand these earlier efforts to “examine the relationship between technology and society.” As NEH states, “Now, more than ever, technology affects how we work, communicate, learn, and live. Many of today’s global challenges, such as climate change, pandemics, wealth inequality, and artificial intelligence, are driven in part by the complex relationship between rapidly evolving technology and the people and institutions it affects. This program asks researchers to tackle these key societal challenges through the lens of the humanities to help gain a better understanding of not only the promises of technology but its dangers as well. NEH is particularly interested in projects that examine current social and cultural issues that are significantly shaped by technology (italics added). The program supports projects led by individual researchers (up to $75K) and by collaborative teams (up to $150K).”

For the purposes of a proposal addressing this theme, NEH encourages the applicants to define “technology” broadly. It is acceptable to address topics like climate change, artificial intelligence, and racial justice in relation to this topic; however, applicants may not use funds from this award to promote a “particular political, religious, or ideological point of view”; to “advocate for a particular program of social or political action; or to “support specific public policies or legislation.” If you are wondering whether your potential proposal should be submitted to the “Dangers and Opportunities” program or to an already existing program, such as a Digital Humanities Advancement Grant, visit the “Frequently Asked Questions” page related to this new opportunity, https://www.neh.gov/sites/default/files/inline-files/Dangers%20and%20Opportunities%20of%20Technology%20FAQ%202023.pdf.

Overall, this particular project is calling for humanities-centered, evaluative analyses of how technology (digital and/or other types) has proven to help and/or harm social life in the culture at large. To prepare for writing a proposal for this project, be sure to closely read the NEH pages related to the call for proposals together with the Frequently Asked Questions: https://www.neh.gov/program/dangers-and-opportunities-technology-perspectives-humanities

Public Impact Projects at Smaller Organizations (New) Deadline: Summer 2023. This forthcoming new program aims to support small and mid-size cultural organizations that are working on humanities interpretation and public programming for their communities. This program is designed to increase the accessibility of NEH funds to small organizations, particularly those from underserved communities. Across the United States, these organizations serve their communities as keepers of history and culture, sources of informal education, and gathering places for their community. To assist them in expanding the impact, reach, and excellence of their public programs, these awards support a variety of activities that focus on either strengthening interpretive approaches for future programming or enhancing community engagement with public programs. Additional information is forthcoming. (Deadline: Summer 2023)
Spotlight on Humanities in Higher Education, has an **October 2023 deadline** and will be described in a later issue of this Newsletter. For a preview, go to: [https://www.neh.gov/program/spotlight-humanities-higher-education?utm_medium=email&utm_source=govdelivery](https://www.neh.gov/program/spotlight-humanities-higher-education?utm_medium=email&utm_source=govdelivery)
NSF Opportunities for Selected Social Science and Humanities Research

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By Katherine E. Kelly, PhD

Target dates* January 15 and July 15 2023  https://beta.nsf.gov/funding/opportunities/social-psychology

A posting on NSF’s website describes the Social Psychology Program at NSF as follows: it “supports research and research infrastructure to advance basic knowledge in social psychology. Projects funded by the Social Psychology Program support the NSF mission to promote the progress of science; to advance the national health, prosperity and welfare; and to secure the national defense. Proposals considered by the Social Psychology Program must communicate both the intellectual merit of the science and its broader societal impacts**.”

NSF sets a high bar for the quality of the proposed research (emphases added): “(It) should carry strong potential for creating transformative advances in the basic understanding of human social behavior. Among the many research topics supported are social cognition, attitudes, social and cultural influence (a potential humanities focus), stereotypes, motivation, decision making, group dynamics, aggression, close relationships, social and affective neuroscience, social psychophysiology, emotions, prosocial behavior, health-related behavior, and personality and individual differences. Proposals that develop new theories or methods for understanding social behavior are highly encouraged. Research samples should represent substantial ranges of ethnicities, socioeconomic backgrounds, cultures and other dimensions of human populations.”

Humanities and Social Science researchers could collaborate on a proposal to this program: “Interdisciplinary, multidisciplinary and convergent research approaches are encouraged. Proposals involving non-human animals are considered only if the research offers clear and direct contributions to understanding human social behavior. The program does not fund research that seeks to improve clinical practice as its primary outcome, nor does it consider proposals with disease-related goals, including work on the etiology, diagnosis or treatment of physical or mental disease, abnormality or malfunction in human beings or animals.”

As appears from the above, this program especially values new theoretical studies in the area of social psychology. “In assessing intellectual merit, the Social Psychology Program places highest priority on research that is theoretically grounded, based on empirical observation and validation, and with designs appropriate to the questions asked. In assessing broader impacts, the Social Psychology Program places highest priority on proposals that offer strong potential to benefit society, strengthen our national security interests, improve the quality of life, broaden participation in science, enhance infrastructure for research and education, and include a plan for sharing the results with a wide variety of audiences.”

And NSF has particular expectations for how research in this program will be shared and disseminated: “The Social Psychology Program expects the methods, measures and data that result from NSF support to be openly shared with other researchers and the public. For further guidance
proposers should consult Data Management for NSF SBE Directorate Proposals and Awards. The Data Management Plan should articulate how the proposed research will engage with best practices of open science. Researchers are expected to engage in open science practices, and deviations from that should be well-justified.”

“The Social Psychology Program accepts regular research proposals, including Faculty Early Career Development (CAREER) proposals, proposals for research in undergraduate institutions (RUI), rapid response research proposals (RAPID) and early-concept grants for exploratory research (EAGER). The program also accepts small conference proposals for events (including workshops) being planned one year or more after submission. The Social Psychology Program does not accept proposals for doctoral dissertation improvement awards.”

Researchers should contact a Social Psychology program director before submitting a proposal to confirm its fit with the scope and priorities of the Social Psychology Program. NSF prefers this contact in the form of a one-page (maximum) summary with an overview of the planned proposal, which includes a description of intellectual merit and broader impacts.

Humanities scholars may already be conducting research that could benefit from and give benefit to social scientists addressing elements of social psychology within the limits of a single discipline. The humanities focus on theories of making meaning and interpretation would seem to intersect with research on affect, on social and cultural influences on behavior, on prosocial behavior, and on the formation and interpretation of human personality.

*Target Date:* One of four types of NSF Deadlines. A **Target Date** is a soft cut-off date; a submission after this date may get reviewed with on-time proposals or may be held by the program until the next cycle of review. A **Deadline** is a hard cut-off date for submission to an opportunity; requires a specific waiver or extension to get around in extenuating circumstances (like natural disasters). A **Submission Window** ranges from ~2 weeks to ~2 months for submission; combines a deadline with a restriction on early submission. **No Due Date- Rolling submissions:** proposals are reviewed as received which either requires ad hoc (individual reviews) review only for timely turnaround (and first-come, first-served funding) or variable decision times to collect enough submissions for a review panel.

**By “broader societal impacts,” NSF encourages generating new scientific opportunities in proposals for groups of people beyond the academy: “These opportunities for exploration, learning, and broadening participation can take the form of holding a summer workshop for high school students, creating a new course (based on the project), bringing in industry or nonprofit partners, broadening participation in scientific activities for previously underrepresented communities, helping school districts make better use of newly-available data, conducting a citizen-science project, and many more.” [https://beta.nsf.gov/funding/opportunities/broader-impacts-framework-proposals-submitted-nsfs](https://beta.nsf.gov/funding/opportunities/broader-impacts-framework-proposals-submitted-nsfs)
NSF Observations on Plagiarism

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By Mike Cronan, PE, co-publisher

It is a basic legal principle in law that ignorance of the law is no defense (ignorantia juris non excusat). Similarly, it is made very clear by NSF that ignorance of what constitutes plagiarism in a proposal will not get you off the hook of being investigated by NSF’s OIG for research misconduct and severely sanctioned, if appropriate. The recently released Semiannual Report to Congress (April 1, 2022 – September 30, 2022) by the NSF Office of Inspector General, as well as the 67 prior reports, consistently demonstrate the havoc plagiarism can cause to a researcher’s career (See NIH: Test Your Knowledge – Interactive Video of Research Misconduct Case Studies).

For example, in the recent OIG Report, a case was cited (PI Plagiarized and Manipulated Records During the Investigation) noting (emphasis/comment added) “We sent inquiry letters to a PI and co-PI about a plagiarism allegation in a proposal submitted to NSF. Their joint response did not dispel the allegation, so we referred the investigation to their university. Based on the evidence, the university found that the PI was responsible for the plagiarism, and it identified a pattern of plagiarism.”

“During the investigation, the PI altered a draft of the proposal and provided it to the university as if it was original. The PI suggested that graduate research assistants might be responsible for the plagiarism [a fairly common excuse for plagiarism raised to OIG but always dismissed].”

“The university made a finding of research misconduct and required the PI to complete RCR training, recertify all internal training requirements before resuming research activities, and consent to unannounced spontaneous classroom observations. The university also imposed the following sanctions: The PI cannot--

- submit internal or external funding proposals for 2 years,
- receive merit salary increases for 5 years,
- mentor students for 5 years,
- teach extra-contractually for 5 years,
- or receive emeritus status upon retirement.”

“We concurred with the university that the PI intentionally plagiarized into the proposal. We also found that the PI’s manipulation of records was a serious aggravating factor, which we referred to DOJ. DOJ declined prosecution in lieu of administrative action. We recommended that NSF require compliance with the requirements imposed by the university and debar the PI for 2 years. We also recommended that for 3 years (concurrent with the debarment, and for 1 year thereafter), NSF require the PI to submit contemporaneous certifications that any proposals or reports he submits to NSF do not contain plagiarized, falsified, or fabricated material (certifications); submit contemporaneous assurances by a responsible official of his employer that any proposals or reports he submits to NSF do not contain plagiarized, falsified, or fabricated material (assurances); and prohibit the PI from participation as an NSF peer reviewer, advisor, or consultant.”
To say it looks like a research and academic career in shambles would not be an overstatement. So what to do if you are a research office and want to inoculate against this happening at your institution? One excellent place to begin is “Observations from NSF Plagiarism Investigations and Strategies to Prevent Plagiarism (Report No. OIG I-18-0002-PR March 4, 2022), specifically the following quotes (emphasis added).

“WHY WE DID THIS REVIEW Plagiarism – defined by federal policy as the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit – is a global problem within the research community. Although the need to prevent plagiarism is widely recognized, how best to do so remains a question. We conducted this review to provide insight into plagiarism as it relates to National Science Foundation-funded research and offer plagiarism prevention strategies to educational institutions based on our experience investigating plagiarism allegations.”

“What WE FOUND. We analyzed 134 plagiarism cases involving 137 researchers against whom NSF made findings of research misconduct and whose cases closed during fiscal years 2007-2017. These researchers often were employed in junior academic positions, recent degree recipients, educated in non-U.S. institutions, and/or committed plagiarism in multiple NSF proposals. The most common reasons researchers gave for their plagiarism suggested they:

- did not know what constitutes appropriate citation;
- thought they used appropriate citation when they did not;
- did not understand what kinds of text require citation;
- considered appropriate citation less important in certain document sections;
- recklessly incorporated sources into drafts; and/or
- rushed through document preparation.”

“What WE RECOMMEND [ATTN RESEARCH OFFICES]. Based on our analysis and investigative experience, we suggest institutions foster a culture of research integrity, develop targeted and descriptive faculty and student training, better support grant writers, and consider more substantive pre-submission requirements for proposals.”

“NSF’s policy (45 CFR 689) defines research misconduct as ‘fabrication, falsification, or plagiarism in proposing or performing research funded by NSF, reviewing research proposals submitted to NSF, or in reporting research results funded by NSF.’ A finding of research misconduct requires proof by a preponderance of evidence that the act is a significant departure from accepted practices of the relevant research community and that the act be committed intentionally, knowingly, or recklessly. Honest error is not considered plagiarism. Our office considers three factors as relevant when assessing ‘appropriate credit’: 1) quotation – whether the copied text is quoted; 2) citation – whether a citation to the source appears in the text with the copied text; and 3) reference – whether the citation directs the reader to a source listed in the document’s reference bibliography. From FYs 2007 to 2017, NSF made 170 research misconduct findings, of which 137 (81%) were plagiarism
related. For this review, we examined data contained in the investigation records of these 137 subjects.

“NSF ultimately decides whether to make a research misconduct finding and impose consequences. **Such consequences may include:**

- An official finding of research misconduct against the subject and a letter of reprimand;
- Taking Responsible Conduct of Research (RCR) training, which generally must occur within 1 year;
- Submission of certifications, which are contemporaneous documents in which subjects state proposals or reports they are submitting to NSF do not contain plagiarized, falsified, or fabricated material;
- Submission of assurances, which are contemporaneous documents in which a responsible official of the subjects’ employers state that proposals or reports the subjects are submitting to NSF do not contain plagiarized, falsified, or fabricated material;
- Prohibition from service as a reviewer, consultant, or advisor to NSF; and
- Debarment from participation in federal programs.”

In conclusion, NSF suggests that institutional research offices “**design a proposal writing course for inexperienced grant writers that teaches both successful proposal writing skills and research integrity, and require that those new to proposal writing enroll.**”

Finally, research offices would benefit enormously by a very close reading of these two reports and by **incorporating this information into grant writing workshops for faculty** and in the day-to-day advising of faculty on research and educational proposal development to NSF and other federal research agencies.
The New NSF Major Research Instrumentation Solicitation

The impacts of the CHIPS and Science Act, signed into law in this fall, continue to ripple through NSF. These include significant changes in NSF’s long-standing Major Research Instrumentation (MRI) program. Below, we highlight major changes in the solicitation, as well as additional information provided by Program Officers in an MRI Town Hall webinar held Dec. 7, 2022.

• **No cost share requirement for the next 5 years!** The elimination of cost share is one of the most significant changes. In the past, PhD-granting and non-degree-granting institutions were required to fund 20% of the cost of the proposed MRI project. This requirement has been eliminated for the next 5 years, and no committed cost share is allowed. Since the maximum funding amount is still $4M, that means that the maximum project cost is now limited to $4M (i.e., you cannot request an instrument costing more than $4M, with your institution funding the difference). In response to questions in the Town Hall, the P.O.s explained that proposers can still describe additional resources (e.g., existing infrastructure, lab staffing, etc.) that will be provided to the project in the Equipment, Facilities, and Other Resources document, but no dollar amounts should be attached.

• **Submission window dates have been changed, and there will be two competitions in 2023.** Going forward, NSF is planning to shift the annual submission dates to mid-October to mid-November, rather than late-January to early-February. To make that shift, they will hold the expected early-2023 competition, which will have a Jan. 16 - Feb. 21, 2023 window. In addition, the subsequent competition will also be held in 2023, with a submission window of Oct. 15 - Nov. 15, 2023. Going forward, the submission window will be mid-Oct - mid-Nov. annually (see the solicitation for exact dates). This is great news, as we will no longer have to work on our MRI proposals over the winter holiday break!

• **Track 1 and 2 amounts have been modified.** Track 1 is now for requested funding amounts less than $1.4M, and Track 2 is for amounts from $1.4M to $4M. (Minimum Track 1 amounts remain the same, depending on the type of institution.)

• **A new Track 3 related to helium use has been added.** Track 3 proposals are for proposals to purchase, install, operate and maintain equipment and instrumentation to conserve or reduce the consumption of helium. The funding amounts may be from $100K (with exceptions for non-PhD-granting institutions and certain disciplines as described in the solicitation) to $4M. In response to questions during the Town Hall, the P.O.s explained that this track is not appropriate for a new instrument that just happens to use less helium than a current instrument of the same type, but is rather for equipment whose purpose is to reduce/conserve helium. When further questioned about some of these distinctions, a P.O. made the point that there is a difference between what is allowed by the solicitation and what will be competitive. Clearly, a proposal that promises a very modest impact on helium use/conservation would not be expected to be competitive. If in doubt, talk to your disciplinary P.O.

• **The number of proposals allowed per institution has been adjusted.** As previously, up to two Track 1 proposals and one Track 2 proposal are allowed per lead institution. In addition
one Track 3 proposal is now allowed per institution. Therefore, an institution may now submit up to four proposals if they use all three tracks.

- In line with one of the stated priorities of the CHIPS and Science Act, proposals that will facilitate U.S. leadership in microelectronics research and training are expressly encouraged.

In addition, the P.O.s discussed some interesting aspects of what happens behind the scenes at NSF regarding MRI budgeting and review:

- The Office of Integrative Activities controls the MRI budget, but they generally do not conduct reviews or make funding decisions. Instead, they distribute funding to the Directorates and Divisions based on proposal pressure, and oversee the portfolio. This means that there is an effort to ensure that funding rates are comparable across directorates and divisions. (Some Directorates do sometimes kick in some of their own funds to fund particular projects, so that can complicate this a bit.)
- Within Divisions, funds are siloed by percentage of proposals that are from: a) non-PhD and Minority Serving Institutions (MSIs) vs. b) those from PhD-granting and non-degree-granting institutions, so that the success rates are comparable for these two categories of institutions. This means that, contrary to the common perception, non-PhD-granting/MSIs have the same chance of being funded as PhD-granting institutions.
- EPSCoR also contributes funding, so that means that if you’re in an EPSCoR state or region, your chances of being funded are a bit better. (Also note that the CHIPS Act puts considerable pressure on NSF to increase the proportion of research funding that goes to EPSCoR states and regions. We’ll discuss that in another article.)
- When submitting an MRI proposal, you must indicate your “Division(s) preference.” Think about who should review your proposal. Who would be excited by the science to be enabled? Remember that the science (not the need - everyone needs funding to buy instruments!) should drive your proposal. Level 1 proposals will be reviewed at the Division level, but more expensive proposals will be reviewed at the Directorate level, so they should address Directorate-level priorities. Keep your audience in mind when writing your proposal.
- A P.O. emphasized that you don’t have to have received NSF funding before to be competitive. NSF wants to help under-resourced institutions to develop the capacity for research, and that includes MSIs, predominantly undergraduate institutions, and institutions in rural and/or EPSCoR regions.
- In response to a question about what kinds of expenses were allowed related to installation of the instrument, the P.O. said to remember that the MRI is an instrumentation program, not an infrastructure program. Imagine that you were able to take the lab building and turn it upside down. Whatever doesn’t fall out (e.g., power outlets, sewer improvements) is not eligible for MRI funding. (A fun as well as useful intellectual exercise!)

Below are a list of proposal tips mentioned by the P.O.s

- Look at recent MRI awards to see what has been funded. An easy way to do that is to go to the Advanced Awards Search and enter the Element code “1189” (for the MRI program) along with a key word related to your project (e.g., “NMR Spectrometer”).
- Identify the right disciplinary program and talk to the Program Officer about your MRI proposal.
- Volunteer to serve as an MRI panelist if you’re not submitting this round.
• What story would a reviewer want to hear? A need is not enough. What makes you unique?
• The science drives the request. For example, NSF gets a lot of proposals to fund 500 MHz NMRs; what distinguishes your proposal? It has to be the science. Are you best able/positioned to do this work?
• Anticipate concerns that reviewers may have and address them head-on.
• Avoid "buy it/build it and they will come" proposals.
• If you don’t have strong publications in the topic related to the instrument, show commitment from the institution to build capacity to produce publications (especially for PUIs, MSIs, EPSCoR).
• Being a good research scientist is one thing; being a good manager is quite another. Be sure you have a strong management plan.
• Research training is about generating the next generation of research scientists (not just education and outreach).
• Integrating diversity – it’s not enough to just say you will do it; you need a plan. Try to broaden participation at all levels (faculty, graduate students, undergraduates).
• The science drives the request - bells and whistles must be justified by the science.
• Submit the proposal early and print out the proposal received by NSF. That way, you can catch problems with the file, and you can revise to fix those problems and resubmit before the deadline.
• Any request for an instrument that uses helium must address that in the proposal (see solicitation).
Do You Speak Your Funding Agency’s Language?

The key to writing successful grants is to understand the language and lexicon of terms and definitions used by an agency in the funding solicitation. Funding success requires that you describe the goals and objectives of your project using the funder’s language when it differs from yours. Do not expect reviewers to translate for you. When drafting the research narrative, there should be no daylight between the ideas you describe and how reviewers understand and evaluate those ideas in the context of the funding agency’s language.

For example, NSF describes a recent program in this way (emphasis added to highlight key terms in the NSF lexicon): “The Convergence Accelerator (next due August 23, 2023) program addresses national-scale societal challenges through use-inspired convergence research. Using a convergence approach and innovation processes like human-centered design, user discovery, and team science and integration of multidisciplinary research, the Convergence Accelerator program seeks to transition basic research and discovery into practice – to solve high-impact societal challenges aligned with specific research themes (tracks). . . . A key aspect of Convergence Accelerator projects is the innovation curriculum that requires a significant time investment and frequent participation of all partners.”

A competitive response to this solicitation requires that the highlighted terms above be fully understood before drafting your project description. Drilling down on these terms will likely require a deep dive into NSF’s programmatic language and lexicon evidenced in reports, workshops, solicitations, and other documents referenced in the solicitation as motivating the current funding opportunity.

The core task of those drafting the research narrative is to describe the proposed research clearly within the context of the language used by NSF in this solicitation. Language, terms, and definitions are the essential descriptive building blocks used for writing a successful project description. How this works will differ by agency, but in most cases, the language, terms, and definitions used by funding agencies evolve over time to reflect the agency’s mission funding priorities.

It will come as no surprise that the poster child for a rapid evolution of language, terms, and definitions is NSF. NSF’s development of a unique agency language began decades ago as the agency defined its core vision using language describing the integration of research and education. Over the years, this language has spawned a whole new linguistic ecosystem at the agency from “Broader Impacts”, to “diversity and inclusion”, to “convergence research”. However, the key point here is to understand agency language, terms, and definitions as an agency lexicon encompassing the descriptive details and specifics by which the agency's vision is translated into practice.

Grounding your proposal in an agency’s language is key to a compelling and convincing research narrative. However, it is never sufficient merely to echo an agency’s language in a research narrative without tethering it to specifics and details (the how’s and the why’s) unique to the proposed research and its significance. That said, one of the best ways to gain a deeper, more nuanced, and more grounded understanding of the underlying meaning of an agency’s language is to read program

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solicitations, regardless whether you will be submitting to the solicitation, and abstracts of funded projects where you can see the agency language translated into practice.

NSF often mentions the key role of language, vocabulary, and communications as an integral part of convergence research (emphases added): “A distinct characteristic of convergence research, in contrast to other forms of multidisciplinary research, is that from the inception, the convergence paradigm intentionally brings together intellectually diverse researchers and stakeholders to frame the research questions, develop effective ways of communicating across disciplines and sectors, adopt common frameworks for their solution, and, when appropriate, develop a new scientific vocabulary. Research teams practicing convergence aim at developing sustainable relationships that may not only create solutions to the problem that engendered the collaboration but also develop novel ways of framing related research questions and open new research vistas.”

Finally, understanding agency language becomes critical at transition points in a researcher’s career. Principal investigators transitioning from focused, single-PI research grants to larger transdisciplinary/convergence research proposals will need to be able to use agency language to persuasively describe and define their new, overarching research agenda. Research offices are an excellent source for faculty seeking a deeper understanding of how best to effectively describe their proposed research in the context of a funding agency’s language.
We often emphasize that when a PI is pursuing funding, it’s critically important to understand the funder’s mission, culture, organization, procedures, and the role of the Program Officer (PO). In this article, we’ll delve a bit deeper into this last item on that list. Often, if a researcher has pursued funding from one agency such as NIH or NSF, they may not realize how widely the roles and responsibilities of POs vary across different funders, shaping the relationship between the PO and grant applicants.

Below are some aspects to keep in mind, with examples from different funders. (Note that various funders use different terms: Program Officer, Program Director, Program Staff, etc. For simplicity, we will use “Program Officer” or “PO” here.)

**The PO’s Role in the Review Process**

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

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

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

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

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

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

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

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

**Interacting with the PO**

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

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

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

NSF strongly encourages PIs to contact POs to discuss their projects and the fit with the program. However, the level of engagement can vary significantly depending on the program as well as the personality of the PO. While most POs are happy to meet with you in person or schedule a phone conversation, POs in the Social and Economic Sciences division are so overwhelmed with requests that they resist in-person meetings and may even request that you send a white paper describing your idea instead of scheduling a phone conversation. It’s important to be sensitive to the PO’s constraints and the different cultures within NSF.
Even in cases where the POs have little or no involvement in the proposal review process, they can be of tremendous help. In fact, in some cases that lack of involvement frees them up to provide much more specific advice and mentoring. POs at NEH and IES often consent to read and critique entire proposal drafts. (If you’d like to get this kind of feedback, be sure to talk to the PO about this well in advance of the deadline.) NIH POs will often review and critique drafts of your Specific Aims page. Even though these POs will not be the involved in reviewing your proposal, they know their program’s priorities and can help you to avoid common mistakes, so this advice can be invaluable.

Conclusion

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

The peer review process underlies most systems of reward and punishment within colleges and universities as well as the institutions offering competitive funding to academic individuals and groups. It can be simply defined as a system of evaluation by which a selected group of academic area experts assign worth to the written products and/or professional achievements of related area experts.

Given its foundational presence throughout practices of academic publishing, promotion, and tenure, peer review has earned the sustained scrutiny of scholars as a social and often secretive process with its own rules and customs. Michele Lamont’s 2009 How Professors Think: Inside the Curious World of Academic Judgment offers a detailed and rich analysis of how academic members of review panels (often more senior in rank) assign worth to other academics in the same or related fields. She pays particular attention to the twin goals of supporting academic excellence and encouraging academic diversity, noting that different disciplines define these qualities differently. A successful competitor for grants herself, Lamont arrives at her conclusions after paying attention to her own experiences, attending several live evaluation sessions, interviewing panelists who served on five different national funding competitions, and reading a large sample of finalist proposals.

How might knowing more about peer review benefit graduate students and faculty applying for grants? For one thing, it dispels myths about how panels work. Lamont’s book makes the claim that granting institutions work hard to ensure that panels are not stacked with senior academics from culturally homogeneous religious, ethnic, and class elites. During the evaluation process, program officers will sometimes encourage panelists to consider various kinds of diversity in distributing awards. Secondly, panelists are on guard against practicing homophily (favoring work that most closely resembles one’s own or that contains extended quotations from one’s work), or cronyism (favoring one’s own graduate students or junior professors, or promoting a candidate recommended by friends or studying at one’s graduate program). It’s a customary rule that panelists should respond to conflicts of interest by recusing themselves from discussion when appropriate. Thirdly, panelists largely accept that “methodological equality be recognized as a matter of principle.” That is, panelists attempt to assess proposals pragmatically—through the frameworks distinctive to the applicant’s field rather than to their own. And significantly, Lamont describes what she calls the “emotion work” performed by panelists as they try to preserve collegiality, ensuring, for example, that overruled panelists can save face and continue to feel comfortable within the group.

These customs should help to dispel conspiracy theories and myths about how peer review operates in the context of national grantmaking panels. Lamont’s book also reinforces the fundamentals of grantsmanship: study the program objectives of the agencies to whom you apply. Put yourself in the agency’s place: does your proposal help them satisfy their objectives? Have you pointed this out in your proposal? The objectives may well influence a panel’s deliberations, so read them closely and signal to the reviewers that you have kept them in mind by using the language of the objectives in the text of the proposal. Similarly, read their criteria closely and read samples of successful proposals,
when posted on their websites, to ensure that you understand clearly what the agency wants to see in a proposal and why.

Lamont’s book also explains the vital role the program officer plays in the peer review process at various agencies. When discussing the evaluation process used by the American Council of Learned Societies (ACLS), she describes the program officer as “the most important actor in the evaluation process.” They usually hold a Ph.D. and work as full-time agency employees, responsible for operating funding competitions. Their position involves selecting screeners (typically well-regarded associate or assistant professors recommended to the program officers) who weed out inappropriate or otherwise non-competitive proposals. The Program Officer also selects panelists and ensures that panelists and screeners communicate successfully during the evaluation process. They also answer applicant questions, occasionally review early drafts of proposals, organize the distribution of proposals, and preside over panel deliberations. The Program Officer sets the tone for panels, ensuring that they observe collegiality, as well as agency customs and rules. The application instructions to various awards often encourage applicants to ask Program Officers questions about the process. When it appears, this is advice well taken.

Peer review lies at the heart of academic culture. This form of self-governance by which academics monitor and modify the standards and conduct of their profession, is not perfect, but it continues to adapt to the norms of evolving disciplines. To grasp what it is and how it works is to become more successful in understanding the landscape of grantsmanship and to navigate it successfully.
What’s the Problem? What’s Your Solution?

The first page of a competitive proposal quickly addresses in brief some key questions to capture the interest of the reviewers, including: what you propose to do (e.g., goals and objectives), why you propose to do it (e.g., address a problem, answer a question), how you will do it, your rationale, your expertise and qualifications (e.g., preliminary data, results of prior support), and outcomes. These questions may be answered in the preceding order or some other order that better fits the logic of the research narrative. Of course, the overarching objective of this first narrative page is to provide reviewers a synopsis of the journey you will take them on in the next 15, 20 or more pages of the project description.

Your goal on page one is to convince reviewers that you are taking them on a narrative journey worth taking. Unlike a mystery novel, where the author waits until the end to reveal who did it and why, the proposal author reveals on page one both the outcome and the “mystery”: how you will do it. This “how it will be done” description is at the heart of all successful proposals and is revealed to those who read the research narrative. In short, a mystery novel can be referred to as a “whodunit” and a proposal might be referred to as a “howdunit.” The best mystery novels are often referred to as “page turners.” That is certainly a worthy aspiration for a research narrative as well, although in a more dignified way, of course. Bad mystery novels are often referred to as “sleep aids.” This is not something you want to offer reviewers reading your proposal.

That said, many decisions need to be made while writing the first page of the research narrative to ensure that the reviewers’ interest is captured. In many proposals, this will occur on the first page by stating a problem and outlining a solution in an internally consistent and logical order. However, in other cases, the problem may be stated in the funding solicitation itself. In this case, it may make more sense to address the solution by beginning with the goals and objectives, since the program officers and reviewers alike already know the nature of the problem that needs to be addressed since the problem is the sole purpose of the solicitation. In still other cases, some authors may feel more comfortable structuring the first page of the proposal using a generalized version of the scientific method as the guiding template, e.g., presenting a problem statement, hypothesis, solution, research context, relevance, etc..

Whichever approach you choose, the problem and the solutions must be defined before you can address outcomes with any specificity. However, it is not uncommon on certain types of proposals, particularly those for some type of institutional transformation such as NSF’s AGEP or ADVANCE, for the desired general outcomes to be defined by the agency in the funding solicitation. It is understood that your proposed project is designed to achieve these outcomes. In these cases, a “reverse engineering” process may be used to identify and define the specific project activities designed to achieve the desired outcomes as defined by the funding agency. Moreover, for many technical proposals, the funding agency lists the desired outcomes in the solicitation, e.g., reduce the transmission of vector-borne diseases such as Zika, and it is then up to the applicant to present solutions, activities, etc. that lead to the desired outcome.
In many cases, logic models (W.K. Kellogg Foundation Logic Model Development Guide) may be helpful for this “reverse engineering” process, or they may even be required as part of the research narrative. Regardless of whether or not a logic model is required, it can often be a helpful tool to complement the initial development of the organizational outline of the proposal’s first narrative draft.

While beginning the research narrative with a statement of the problem followed by the solution may not grab the reviewers’ attention, it nonetheless plays an important part in planning the order in which the proposal is written. Establishing a compelling order to the statement of the problem and the solution should intrigue reviewers sufficiently that they will read the rest of the proposal with enthusiasm.

After all, in the movie Apollo 13 (1995) with Tom Hanks playing Commander Jim Lovell, everyone knew the ending, but it was the dramatic telling of the solution to the problem that resulted in nine academy award nominations, including Best Film Editing, something that should not be lost on those writing and editing a proposal that begins with a problem and describes its solution.
Research Grant Writing Web Resources

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How to Apply - NIH Application Guide

Use the application instructions found on this page along with the guidance in the funding opportunity announcement to submit grant applications to NIH, the Centers for Disease Control and Prevention, the Food and Drug Administration, and the Agency for Healthcare Research and Quality.

Prepare to Apply

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Write Application

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Submit

- How to Submit, Track, and View
- How We Check for Completeness
- Changed/Corrected Applications
- Standard Due Dates
- Submission Policies
- Dealing with System Issues

Parent Announcements (For NIH Unsolicited or Investigator-Initiated Applications)

Parent announcements are broad funding opportunity announcements allowing applicants to submit investigator-initiated applications for specific activity codes. They are open for up to 3 years and use standard due dates. Not all NIH Institutes and Centers participate on all parent announcements. Before submitting your application, make sure the NIH Institute or Center that might be interested in your research is listed as a participating organization in the announcement. https://grants.nih.gov/grants/guide/parent_announcements.htm

We Want to Hear from You about NIFA's Grants Modernization Initiative

As part of NIFA's Grants Modernization Initiative, we are examining NIFA's current external facing grants management system capabilities and exploring two new grants management solutions - eRA and GrantSolutions. As part of our process, we are considering a number of factors such as what advantages our current systems have in meeting our customers’ needs; what are the “gaps” in our
current systems’ capabilities; how familiar our external stakeholders are with the eRA (Commons) and GrantSolutions systems; and what grants management features are most important to our customers’ experience. We welcome your feedback on NIFA’s Grants Modernization Initiative. If you have any comments, questions or concerns about NIFA’s current grants management systems or the grants management systems NIFA is considering adopting in the future (eRA or GrantSolutions), please send them to NIFAGrantsMod@usda.gov.

NIAID/NIH Centers for Medical Counter Measures Against Radiation Consortium (CMCRC)

Call for Pilot Project Applications

The Centers for Medical Countermeasures against Radiation Consortium (CMCRC) is now accepting applications for pilot projects. Application forms and descriptions of the current CMCRs can be found at: https://cmcrcniaid.org/content/instructions. **Application due date: March 1, 2023; Anticipated project start date: August 1, 2023**

Pilot project funding is intended to do the following:

- Foster novel/early ideas within and outside awarded CMCRCs
- Develop or incorporate new technologies as they become available
- Encourage collaborations among members of different centers and between CMCRC and outside investigators (although research collaborations with existing centers are not required)
- Allow maximum flexibility for the advancement of exciting high-risk, high-reward projects

Principal Investigators (PIs) of pilot projects funded through the CMCRC program since 2021 are not eligible as PIs of new projects but may be included as collaborators. Junior investigators are especially encouraged to apply. Pilot projects must be within the scope of the original CMCRC request for applications (RFA) (https://grants.nih.gov/grants/guide/rfa-files/rfa-ai-19-012.html).

**Proposals should be sent by 3/1/23** to Margaret Zhu at mz2171@cumc.columbia.edu.
Dear Colleague:

We are writing today (December 6, 2022) to provide updates to a letter released on January 18, 2017, regarding how Federal funds can support science, technology, engineering, and mathematics (STEM) education. The COVID-19 pandemic has presented an immense set of challenges for educating our students. Despite the tireless efforts of educators and education leaders across the country, early indications suggest many students, especially those who already faced existing structural inequalities, fell behind in their academic achievement, including in STEM subjects.

A National Academies of Science, Engineering, and Medicine (NASEM) study on educational equity [PDF, 284KB] found that learning opportunities and enrollment patterns in STEM affect long-term learning trajectories and post-secondary education major choices, especially for students from low-income background. Moreover, STEM education can also provide relevant, problem-, place-, and project-based learning experiences that support students in learning new content and concepts and re-engage them in their learning. Research on student motivation has consistently found content relevance to be an effective way to drive student engagement. Moreover, by integrating multiple disciplines when learning a new topic, students may learn more content in less time through deeper engagement.

The purpose of this letter is to help State educational agencies (SEAs), local educational agencies (LEAs), and their partners better understand how to use Federal funds to support innovative, equity-focused pre-kindergarten through grade 12 (Pre-K–12) STEM education strategies. This letter provides examples of how funds from the American Rescue Plan (ARP) Act of 2021; Titles I, II, III, and IV of the Elementary and Secondary Education Act of 1965 (ESEA [PDF, 1.2MB]); the Individuals with Disabilities Education Act (IDEA); and the Carl D. Perkins Career and Technical Education Act of 2006, as amended by the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), can support efforts to improve Pre-K–12 instruction and student outcomes in STEM fields.² Funds from the Elementary and Secondary School Emergency Relief (ESSER) Fund under the ARP Act, the Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, 2021, and the Coronavirus Aid, Relief, and Economic Security (CARES) Act, and funds from the Governor’s Emergency Education Relief (GEER) Fund under the CRRSA and CARES Acts, may be used by States and districts responding to and recovering from COVID-19 for any activity authorized under the ESEA, IDEA, and Perkins V, in addition to the activities enumerated in those authorities. The U.S. Department of Education (Department) has released several resources about these programs, including guidance [PDF, 877KB] on the uses of funds under ESSER and GEER.

Now more than ever, it is critical we invest in STEM education to help our students get back on track and prepare for an ever-changing world. The COVID-19 pandemic has demonstrated the importance of scientific discovery and advancement. It has also accelerated the digital and data-driven transformation of our economy and shined a spotlight on the digital divide and the importance of closing that divide. Strengthening STEM skills is critical for both short-term innovation as we overcome
the impacts of COVID-19, and for preparing students to address future challenges in a complex, interconnected world.

Research further suggests that when community and family role models emphasize the importance of STEM and STEM careers, students are more likely to enroll in STEM courses, improve academic performance, and pursue STEM-related careers. Well-designed STEM programs can help prepare students for a variety of exciting in-demand careers, including space exploration, renewable energy and climate adaptation, and emerging technologies, such as artificial intelligence (AI), data science, quantum computing, and blockchain.

A critical component of learning recovery is ensuring access to high-quality equitable STEM education. Federal agencies, SEAs, LEAs, and private sector partners must coordinate their efforts and use evidence-based methods to best meet students' needs. These methods should include strategies for effectively engaging girls and young women in math and science [PDF, 1.3MB], assisting students in elementary mathematics and middle to high school mathematics, providing relevant and career-linked learning [PDF, 1.6MB] to help prevent students from dropping out, and STEM-linked pedagogies including experiential learning and computational thinking.

The following examples and resources fall into five categories:

1. Implement STEM learning acceleration programs that support students who have been disproportionately impacted by COVID-19.

2. Redesign STEM courses and learning experiences to promote diversity, equity, and inclusion in STEM.

3. Increase students’ equitable access to STEM courses and experiences, including out-of-school time (OST) programs, dual enrollment, STEM-themed schools, and career pathways.

4. Recruit, prepare, and support a diverse STEM educator workforce, increase educators’ knowledge and expertise in STEM, and equip educators to meet the diverse needs of all students.

5. Improve student access to materials and equipment needed to support inquiry-based pedagogy and active learning.

Enhancing the impact of STEM education programs and maximizing the impact of available Federal resources necessitates leveraging various sources of support. For example, while being sure that Federal funds are used consistent with all applicable requirements, including the requirement that they supplement, and not supplant, other funds, an SEA or LEA may consider using funds under the following ESEA programs:

- Title I, Part A or Title IV, Part A funds may be used in innovative, supplementary ways to purchase or reconfigure STEM materials, devices, or STEM-focused digital learning resources or spaces.

- Title II, Part A funds may be used to provide professional development to educators on how to teach new STEM concepts and approaches, including those in computer science, data science, AI, or other emerging STEM disciplines.
• Title III, Part A funds may be used to provide access to supplemental STEM resources and STEM teacher professional development specifically designed or adapted for English learners. Title IV, Part A funds may be used to provide students with access to well-rounded educational opportunities, including by increasing student access to and improving student engagement and achievement in high-quality STEM courses.

• Title IV, Part B funds may provide students at 21st Century Community Learning Centers with the opportunity to engage in authentic STEM content that aligns to their school day and focuses on hands-on, experiential, STEM-rich experiences.

Similarly, Perkins V funds may be used to develop comprehensive STEM career pathways and programs of study, including career guidance and counseling, instructor compensation, professional development, career and technical student organization advisor costs, equipment, and technical skill assessments. IDEA Part B section 611 funds set aside for other State-level activities may be used to provide professional development for STEM educators to support the needs of children with disabilities, to improve the use of technology in the classroom by children with disabilities to enhance their STEM learning, or to support the use of technology in STEM programs to maximize accessibility to the general education curriculum for children with disabilities. ARP ESSER funds include specific set-asides for evidence-based summer, comprehensive afterschool, and other programs that address the academic impact of lost instructional time - each of these can include a focus on STEM programming.

All uses of Federal resources must comply with applicable laws and requirements for each funding source, including the nondiscrimination requirements in Federal civil rights laws. Please visit the Department’s STEM webpage (www.ed.gov/stem) for additional information and resources.

We hope the examples and other information provided in this letter will be helpful in your efforts to provide access to high-quality STEM programs and resources as well as improve learning and achievement for all students.
Top 10 Problems Reviewers Cite in NIH Applications

As you prepare your grant application, avoid these common pitfalls! Here is a list of the most frequent problems reviewers in the NIH Center for Scientific Review (CSR) cite when they critique grant applications:

- Lack of new or original ideas
- Absence of an acceptable scientific rationale
- Lack of experience in the essential methodology
- Questionable reasoning in experimental approach
- Uncritical approach
- Diffuse, superficial, or unfocused research plan
- Lack of sufficient experimental detail
- Lack of knowledge of published relevant work
- Unrealistically large amount of work proposed
- Uncertainty concerning future directions

NIH launches Bridge2AI program to expand the use of artificial intelligence in biomedical and behavioral research

The National Institutes of Health will invest $130 million over four years, pending the availability of funds, to accelerate the widespread use of artificial intelligence (AI) by the biomedical and behavioral research communities. The NIH Common Fund’s Bridge to Artificial Intelligence (Bridge2AI) program is assembling team members from diverse disciplines and backgrounds to generate tools, resources, and richly detailed data that are responsive to AI approaches. At the same time, the program will ensure its tools and data do not perpetuate inequities or ethical problems that may occur during data collection and analysis. Through extensive collaboration across projects, Bridge2AI researchers will create guidance and standards for the development of ethically sourced, state-of-the-art, AI-ready data sets that have the potential to help solve some of the most pressing challenges in human health – such as uncovering how genetic, behavioral, and environmental factors influence a person's physical condition throughout their life.

NSF’s Convergence Accelerator is funding a use-inspired training opportunity to tackle climate challenges with AI

NSF’s Convergence Accelerator is excited to announce a collaborative convergence research opportunity to address climate-related issues. The CORE Institute or Convergence Research Institute, part of the Convergence Accelerator’s Track D: AI-Driven Data Sharing and Modeling, provides graduate student, early-career and mid-career researchers and practitioners with the opportunity to gain convergent skills to identify use-inspired solutions to societal challenges through a six-week training program. The Institute’s theme for the 2023 CORE Fellows is “Tackling Climate-Induced Challenges with AI” and the call for applicants is now open.

The topic was selected for being complex, requiring a multidisciplinary approach and strategies for climate change, adaptation, resilience, and mitigation. In Spring 2023, selected applicants will
participate in the virtual program, designed to gain use-inspired skills and to develop new solutions to address the related topic focus.

“National-scale societal problems, such as climate change, are best solved through a convergence approach, to include a wide range of experts and stakeholders,” said Mike Pozmantier, Program Director for the Convergence Accelerator’s Track D. “Convergence isn’t easy. It requires work to form cohesive teams with diverse expertise and backgrounds. The CORE Institute is the Track D’s track integration project, designed to provide participants the skills and networks to collaborate effectively, while also providing collaboration opportunities for not only traditional researchers, but policymakers, nonprofit and industry members, independent technology experts, and more.”

Track integration is a Convergence Accelerator program aspect that provides phase 2 teams, within a convergence research track, the opportunity to develop and collaborate on a unified project together. The CORE Institute is guided by a leadership council composed of members from Track D’s six Phase 2 projects, and is being coordinated at the University of California, San Diego.

The Institute is receiving applications to the training program through January 8, 2023.

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NSF is currently seeking feedback, ideas, and interest from the innovation community on the proposed Builder Platform model to help shape its vision and future growth. To express interest as a lead organization for the Builder Platform, NSF invites submission of a two-page Vision and Capability Statement by January 20, 2023. NSF also welcomes feedback about the Builder Platform without expressions of interest in leading the effort. Please review the Description section of the NSF Engines Builder Platform Market Intelligence for details on how to respond in these ways.

NSF invites interested organizations to register to attend a webinar about the Builder Platform on Monday, December 19, 2022, from 3:00 p.m. to 4:00 p.m. ET.

To learn more about the Builder Platform effort, review the Builder Platform Statement of Objective (SOO).

Media Advisory | December 9, 2022

Universities, manufacturing companies, and relevant federal agencies should take steps to better prepare the next generation of engineers for potential careers in advanced manufacturing, says a new report from the National Academies of Sciences, Engineering, and Medicine. The report emphasizes the critical need for engineers with knowledge and skills in advanced manufacturing to enable a strong defense industrial base.

Advanced manufacturing includes newly developed techniques and technologies — such as additive manufacturing or 3D printing — that offer increased customizability and the possibility to manufacture parts and products that cannot easily be created using traditional methods. Advanced manufacturing represents a transformative change that could bring significant productivity and cost benefits to a wide variety of areas, including the defense industry.

The report recommends actions that universities, federal agencies, and manufacturing companies can take to fulfill the potential of advanced manufacturing in U.S. industry, particularly for the purposes of national defense. These recommendations range from the development of specialized curricula and additional paths through engineering education, for example at community colleges, to the creation of National Science Foundation- and Department of Defense-sponsored research programs, fellowships, and placements within manufacturing companies.

DETAILS: Infusing Advanced Manufacturing into Undergraduate Engineering Education is available for immediate release. Media inquiries should be directed to the Office of News and Public Information at tel. 202-334-2138 or e-mail news@nas.edu.
New Funding Opportunities

Content Order
New Funding Posted Since November 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 September 15 Newsletter

Integrative Computational Tools For Systems Biology Research
The DOE Office of Science (SC) program in Biological and Environmental Research (BER) hereby announces its interest in receiving applications to support research on the development of bioinformatics and computational applications within the Biological Systems Science Division’s (BSSD) Genomic Science Program (GSP) (http://genomicscience.energy.gov) mission-space. For this FOA, BSSD solicits applications for the development of novel and innovative computational approaches or applications that have the potential to transform or advance systems biology research of plant and microbial systems relevant to DOE missions in energy security and resilience. Preapplication due January 10.

NCI Small Grants Program for Cancer Research for Years 2023, 2024, and 2025 (NCI Omnibus) (R03 Clinical Trial Optional)
This funding opportunity announcement (FOA) supports small research projects on cancer that can be carried out in a short period of time with limited resources. The R03 grant mechanism supports different types of projects including pilot and feasibility studies; secondary analysis of existing data; small, self-contained research projects; development of research methodology; and development of new research technology. Due O/A January 22, 2023

Training-based Workforce Development for Advanced Cyberinfrastructure (CyberTraining)
This program seeks to prepare, nurture, and grow the national scientific research workforce for creating, utilizing, and supporting advanced cyberinfrastructure (CI) to enable and potentially transform fundamental science and engineering (S&E) research and education and contribute to the Nation’s overall economic competitiveness and security. The goals of this solicitation are to (i) ensure broad adoption of CI tools, methods, and resources by the research community in order to catalyze major research advances and to enhance researchers’ abilities to lead the development of new CI, and (ii) integrate core literacy and discipline-appropriate advanced skills in advanced CI as well as computational and data-driven methods for advancing fundamental research, into the Nation’s undergraduate and graduate educational curriculum/instructional materials. Proposals responding to this solicitation may target one or both of the two solicitation goals. For the purpose of this solicitation, advanced CI is broadly defined as the set of resources, tools, methods, and services for advanced
computation, large-scale data handling and analytics, and networking and security for large-scale systems that collectively enable potentially transformative fundamental S&E research and education.

This solicitation calls for innovative, scalable training, education, and curriculum/instructional materials—targeting one or more of the solicitation goals—to address emerging needs and unresolved bottlenecks in the S&E research workforce development, from the postsecondary level to active researchers to CI professionals. The funded activities, spanning targeted, multidisciplinary communities, should lead to transformative changes in the state of research workforce preparedness for advanced CI-enabled research in the short- and long-term. This solicitation also seeks to broaden CI access and adoption by (i) increasing the adoption of advanced CI and computational and data-driven methods to a broader range of S&E disciplines and institutions and (ii) effectively utilizing the capabilities of individuals from a diverse set of underrepresented groups. Proposals from, and in partnership with, the aforementioned communities are especially encouraged. Due February 23.

**NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)**

The NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program solicitation has been revised for the FY2023 competition. Prospective Principal Investigators are encouraged to read the solicitation carefully. The solicitation has been updated to align with the CHIPS and Science Act of 2022 (Public Law. 117-167). Section 10393 of this Act authorizes the Director to make changes in the maximum scholarship amount and length of scholarship support for low-income students in STEM fields. The Intel Corporation has been added as a collaborating partner in this program. For additional information, please refer to Dear Colleague Letter: Enhancing Engineering Technology and Advanced Semiconductor Manufacturing Technician Education (NSF 22-120). The main goal of the S-STEM program is to enable low-income students with academic ability, talent or potential to pursue successful careers in promising STEM fields. Ultimately, the S-STEM program seeks to increase the number of academically promising low-income students who graduate with a S-STEM eligible degree and contribute to the American innovation economy with their STEM knowledge. Recognizing that financial aid alone cannot increase retention and graduation in STEM, the program provides awards to institutions of higher education (IHEs) not only to fund scholarships, but also to adapt, implement, and study evidence-based curricular and co-curricular activities that have been shown to be effective supporting recruitment, retention, transfer (if appropriate), student success, academic/career pathways, and graduation in STEM. Due March 2 and 29 depending on track.

**Agriculture Innovation Center Program**

The purpose of this program is to establish and operate Agriculture Innovation Centers (Centers) that provide technical and business development assistance to Agricultural Producers seeking to engage in developing and marketing of Value-Added Agricultural Products. Due March 6.

**Solicitations Remaining Open from Last Newsletter**

**Formal Methods in the Field (FMitF)**

The Formal Methods in the Field (FMitF) program aims to bring together researchers in formal methods with researchers in other areas of computer and information science and engineering to jointly develop rigorous and reproducible methodologies for designing and implementing correct-by-
construction systems and applications with provable guarantees. FMitF encourages close collaboration between two groups of researchers. The first group consists of researchers in the area of formal methods, which, for the purposes of this solicitation, is broadly defined as principled approaches based on mathematics and logic to system modeling, specification, design, analysis, verification, and synthesis. The second group consists of researchers in the "field," which, for the purposes of this solicitation, is defined as any area within computer and information science and engineering that currently does not benefit from having established communities already developing and applying formal methods in their research. All proposals must make a strong case for why formal methods is appropriate for the field area, and why it is one that does not currently benefit from formal methods. Due February 15.

Research and Mentoring for Postbaccalaureates in Biological Sciences

The Research and Mentoring for Postbaccalaureates (RaMP) in Biological Sciences program invites the submission of proposals to establish networks to support full-time research, mentoring, and training for recent college graduates who have had few or no research or training opportunities during college in research fields typically supported by the Directorate of Biological Sciences (BIO). A strategic focus of the National Science Foundation is to foster the growth of a globally-competitive and diverse research workforce. To that end, proposals submitted to this program are expected to create strong evidence-based, inclusive and culturally-aware mentorship programs that will advance the goal of creating a competitive and highly representative science, technology, engineering and mathematics (STEM) workforce in the U.S. with a focus on the biological sciences. Projects are expected to train individuals for a range of potential career pathways in the biological sciences including: research-focused M.S. or Ph.D. graduate programs; entry-level positions in industry, federal, tribal, or state agencies, education and research centers, or not-for-profit science-based organizations; or other STEM careers. Individuals from groups underrepresented in STEM, first generation college students, and students at under-resourced institutions frequently have limited opportunities to participate in the undergraduate research experiences that are necessary to be competitive for graduate programs or other STEM career pathways. This program will provide postbaccalaureate research experiences for cohorts of trainees, either in ongoing research programs, existing research networks, or in new research projects designed specifically for the RaMP networks. Studies of capacity-building and training across diverse disciplines have emphasized the importance of inclusive training via cohort mentoring and networks of individuals working together towards a common purpose. Due Feb. 16.

FOA-AFRL-AFOSR-2022-0007 FY22 DEFENSE ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (DEPSCoR) - CAPACITY BUILDING (CB) Department of Defense Air Force Office of Scientific Research

The Department of Defense (DoD) announces the fiscal year 2022 (FY22) Defense Established Program to Stimulate Competitive Research (DEPSCoR) - Capacity Building. The program is sponsored and managed by the Basic Research Office, Office of the Under Secretary of Defense for Research and Engineering (OUSD [R&E]), awarded by the Air Force Office of Scientific Research (AFOSR), and administered through the Office of Naval Research (ONR). The DoD plans to award FY22 DEPSCoR appropriations through this announcement. DEPSCoR’s objectives are to:

(1) increase the number of university researchers in eligible States/Territories capable of performing science and engineering (S&E) research responsive to the needs of the DoD; and
(2) enhance the capabilities of institutions of higher education (IHE) in eligible States/Territories (listed below) to develop, plan, and execute S&E research that is relevant to the mission of the DoD, and competitive under the peer-review systems used for awarding Federal research assistance;

(3) increase the probability of long-term growth in the competitively awarded financial assistance that IHE in eligible States/Territories receive from the Federal Government for S&E research.

Consistent with these long-term objectives of building research infrastructure, the DoD intends to competitively make, and fund from fiscal year 2022 appropriations, multiyear awards for capacity building in IHEs with research areas relevant to the DoD’s mission and which are important to national security. The Basic Research Office anticipates up to $4 million in total funding will be made available for this program to fully fund and award between one to four grants up to $1 million (total cost) each. Each grant award will be funded up to $500,000 (total cost) per year for two (2) years. The award is subject to funding availability. The Basic Research Office reserves the right to select and fund for award all, some, part, or none of the proposals received. There is no guarantee of an award. **Closing Date for Applications: Feb 21, 2023**

**Global Emergency Response and Recovery Partner Engagement: Expanding Efforts and Strategies to Improve Rapid Response to Public Health Emergencies Globally**

This NOFO supports the implementation of programs and activities targeted at increasing the capacity of public health emergency partners to rapidly respond to support populations affected by humanitarian emergencies and conflict settings. Its purpose is to improve the ability to detect and respond to threats early and develop long-term, sustainable programs to rebuild resilience during and after an emergency. This NOFO will establish an Approved-But-Unfunded (ABU) list of recipients, providing a portfolio of partners that can work anywhere in the world. CDC will fund partners to respond to emergencies that require federal support to effectively respond to, manage, and address identified public health threats. **Due March 4.**

**Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0002779 - Bipartisan Infrastructure Law: Additional Clean Hydrogen Programs (Section 40314): Regional Clean Hydrogen Hubs Department of Energy Golden Field Office Closing Date for Applications**

Close **March 10, 2023; Estimated Total Program Funding: $8,000,000,000**

The Department of Energy (DOE) Office of Clean Energy Demonstrations (OCED) intends to issue a Funding Opportunity Announcement (FOA) entitled “Regional Clean Hydrogen Hubs” (H2Hubs) in collaboration with the Energy Efficiency and Renewable Energy’s (EERE) Hydrogen and Fuel Cell Technologies Office (HFTO) and the DOE Hydrogen Program, which includes multiple offices engaged in hydrogen related technologies across DOE. OCED anticipates issuing the FOA in the September/October 2022 timeframe, and the FOA will be funded by the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL). The specific provisions for regional clean hydrogen hubs are set forth in Section 40314 of the BIL, which amends Title VIII EPAct 2005 by adding a new “Section 813 - Regional Clean Hydrogen Hubs.” Section 813(a) defines the term “regional clean hydrogen hub” as “a network of clean hydrogen producers, potential clean hydrogen consumers, and connective infrastructure located in close proximity.” Investment in building out the hydrogen (H2) economy is a significant portion of the BIL funding at DOE. The BIL authorizes and appropriates $8.0 billion over the five-year period encompassing fiscal years 2022 through 2026 to support the development of at least four H2Hubs that: - Demonstrably aid achievement of the clean
hydrogen production standard developed under section 822(a) of Energy Policy Act of 2005 (EPAct 2005); - Demonstrate the production, processing, delivery, storage, and end use of clean hydrogen; and - Can be developed into a national clean hydrogen network to facilitate a clean hydrogen economy. The FOA will incorporate a range of equity considerations including energy and environmental justice, labor and community engagement, consent-based siting, quality jobs, and inclusive workforce development to support the Biden Administration’s decarbonization goals of a 50-52% reduction in greenhouse gas (GHG) emissions from 2005 levels by 2030, a carbon-pollution-free power sector by 2035, and a net-zero GHG emissions economy by 2050. The H2Hubs will be a key part of the National Clean Hydrogen Strategy and Roadmap, also required in the BIL, and will be instrumental in meeting national decarbonization goals, including the development and deployment of clean hydrogen technologies. Close March 10, 2023.

**Strengthening Global Capacity for Molecular Surveillance and Outbreak Response for Foodborne, Waterborne, and Fungal Diseases**

The purpose of this NOFO is to strengthen global capacity for molecular surveillance and outbreak response for foodborne, waterborne, and fungal diseases. The Surveillance and Outbreak Response strategy will include the following activities: 1) Waterborne Disease Surveillance Strengthening and Outbreak Response; 2) Genomic surveillance, data systems and outbreak response for fungal diseases; 3) Enteric disease surveillance strengthening, including case confirmation. The Capacity Building strategy will include the following activities: 1) Country-level Water, Sanitation, and Hygiene (WASH) programs capacity building; 2) Wastewater and Environmental Surveillance capacity building; 3) Regional capacity building for Whole Genome Sequencing (WGS), bioinformatics, lab diagnosis and outbreak preparedness; 4) Country-level WGS and lab diagnosis capacity building and 5) Epidemiology and Laboratory Workforce development for foodborne, waterborne, and fungal diseases. Locations of activities will vary, based on CDC priority, but will include multiple regional and country-level locations. Due April 2.

**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.]

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

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

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

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

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

Those contemplating 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.**

**ARMED FORCES PEST MANAGEMENT BOARD (AFPMB)**

The Armed Forces Pest Management Board (AFPMB), an agency of the Department of Defense (DoD), is soliciting pre-proposals for original and innovative research designed to develop new interventions for protection of deployed military personnel from diseases caused by arthropod-borne pathogens and to improve control of bed bugs and filth flies. Diseases of significant concern include Lyme disease, malaria, dengue fever and other arboviruses. The program supports development of: (1) new toxicants or the adaptation of existing toxicants to medically relevant pests; (2) new insecticide application techniques; (3) new personal protection tools that prevent human-vector contact; (4) decision support tools and (5) novel vector surveillance tools that focus on improved control outcomes. Ideally the research would support **Advanced Technology Development** (see DoD Financial Management Regulation Volume 2B, Chapter 5, DoD RDT&E Budget Activity 3) of new insecticides or improved formulations of existing insecticides for vector control, new technology or enhanced modalities of personal protection from biting arthropods, or improved efficacy and sustainability of equipment for vector surveillance and application of pesticides for vector control in a military operational environment. Research should be product-oriented, consisting of advanced research related to a particular technology or new capability, evaluation of experimental products for
Research should include semi-field or field evaluation of prototype products. Research should not include testing and evaluation of commercial products. Any pesticide end use products described in the proposed research should be destined for registration by the U. S. Environmental Protection Agency (EPA). The research must be primarily applicable to the military, products should be transferable to civilian uses. The program consists of competitive grants open to principal investigators (PIs) from academia, industry, and local or state government agencies. Federal Agencies (including DoD) may apply subject to appropriate regulations. This BAA is intended to solicit pre-proposals for AFPMB for those parts of development not related to a specific system or hardware procurement in accordance with Title 2, Subtitle A, Chapter II, Part 200 CFR. The purpose of this BAA is to identify the best available science, and as such, there are no set-asides associated with any awards resulting from this BAA. Specific areas of interest are described in the “Areas of Interest” section of this BAA. This Announcement provides a general description of project areas, including specific areas of interest, general information, evaluation and selection criteria, and proposal preparation instructions. All documentation and or attachments that are required with the submission of a full proposal, if requested, are described in the Mandatory Proposal Forms section of this announcement. Awards are typically made under grants; however, other funding opportunities may be considered. **Open to Oct. 31, 2024**
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** - Online and in-person workshops, self-paced online courses, and proposal development retreats and bootcamps on how to find and compete for research funding from NSF, NIH, DoE and other government agencies as well as foundations.

- **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, DOE Early Career and other junior investigator programs.

- **Graphics and design assistance** - assistance with proposal graphics, book and presentation design, and more.

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

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

- **Online and In-Person Seminars** - training for postdocs, students, and staff on a wide range of topics related to pursuing external fundings

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

See **our website** for more information

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