

FY 2025 Continuation of Solicitation for the Office of Science Financial Assistance Program (Open Call)

DE-FOA-0003432

October 1, 2024

<https://science.osti.gov/-/media/grants/pdf/foas/2024/DE-FOA-0003432.pdf>

Disclaimer : *This presentation summarizes the contents of the Notice of Funding Opportunity (NOFO). Nothing in this webinar is intended to add to, take away from, or contradict any of the requirements of the NOFO. If there are any inconsistencies between the NOFO and this presentation or statements from DOE personnel, the NOFO is the controlling document.*



U.S. DEPARTMENT OF
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[Energy.gov/science](https://energy.gov/science)



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SC Mission:

Delivery of scientific discoveries and major scientific tools to transform our understanding of nature and advance the energy, economic, and national security of the United States.



Over 29,000 Researchers Supported; at >300 Institutions and 16 DOE Labs



Steward 10 of the 17 DOE National labs



Nearly 40,000 Users of 28 SC Scientific Facilities



\$8.6B
(FY 2025 Request)

The Office of Science Research Portfolio

Advanced Scientific Computing Research

- ◆ Delivering world-leading computational and networking capabilities to extend the frontiers of science and technology

Basic Energy Sciences

- ◆ Understanding, predicting, and ultimately controlling matter and energy flow at the electronic, atomic, and molecular levels

Biological and Environmental Research

- ◆ Understanding complex biological, earth, and environmental systems

Fusion Energy Sciences

- ◆ Building the scientific foundations for a fusion energy source

High Energy Physics

- ◆ Understanding how the universe works at its most fundamental level

Nuclear Physics

- ◆ Discovering, exploring, and understanding all forms of nuclear matter

Isotope R&D and Production

- ◆ Supporting National Preparedness for isotope production and distribution

Accelerator R&D and Production

- ◆ Supporting new technologies for use in SC's scientific facilities and in commercial products



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Solicitation Context

- Overview
 - SC's annual, broad, open solicitation for support of work in all SC research program areas.
 - Open throughout the fiscal year.
 - Supports new, renewal, and supplemental awards.
 - Supports technical conferences.
- History
 - On September 3, 1992, DOE published in the Federal Register the Office of Energy Research Financial Assistance Programs (now called the Office of Science Financial Assistance Program), 10 CFR 605, as a Final Rule, which contained a solicitation for this program.
 - 10 CFR 605 provides the requirements for application submission, eligibility, limitations, and the evaluation and selection process (e.g. requiring merit review).
 - This SC open solicitation has existed in one form or another since 1992.

Solicitation Overview

- Open to universities, industry, other federal agencies, non-profit entities, and non-domestic institutions.
- Applications are received, peer reviewed, and recommended for selection or declined throughout the year. The eligible topic areas are updated each year and are adjusted to align with the President's Budget Request and DOE priorities.
- Programs may request/require a white paper or pre-application before a full application is submitted.
- Some topics have submission dates to be considered for a panel review. Applications received after that date will be held for future decision.
- Each program will detail how they use the open call in the breakout session.

Promoting Inclusive and Equitable Research (PIER) Plans

- Renewal applications must briefly discuss how the PIER Plan builds on or expands upon actions and accomplishments of the relevant efforts (e.g., PIER Plan or related activities) of the currently supported research.
- Page limit may be increased from 3 to 5 pages based on the complexity of the proposed work. Reach out to the subprogram contact to discuss an exception.
- Budget justification should provide the total funding requested across all budget fields to support the implementation of the project PIER Plan.
- September Office Hour covered PIER Plans. Slides and recording available at: <https://science.osti.gov/officehours>
- Updated information, things to consider posted at <https://science.osti.gov/grants/Applicant-and-Awardee-Resources/PIER-Plans>.

Conferences

- For applications requesting SC funds for the purpose of supporting (hosting) a conference, symposium, or workshop, the meeting must have a **policy or code of conduct** in place that addresses discrimination and harassment, including sexual harassment, other forms of harassment, and sexual assault, and that includes processes for reporting complaints and addressing complaints. The policy or code-of-conduct must be shared with all participants prior to the conference, symposium, or workshop (hereinafter the 'meeting') and made easily available.
- Conference applications must include:
 - An online link to the current code of conduct of the host organization for the meeting, or the link to where the code of conduct will be posted. If a code of conduct has not yet been established by the meeting organizers, the application must describe the process and timeline by which a code of conduct will be written, approved, and endorsed.
 - **A recruitment and accessibility plan** for speakers and attendees that includes discussion of recruitment of individuals from groups underrepresented in the research/professional community associated with the technical focus of the meeting, and discussion on plans to address possible barriers for attendees, including but not limited to physical barriers.
- Related review question under merit review criterion 2. Appropriateness of the Proposed Method or Approach.

Award Budget Periods

SC is committed to distributing workloads (internally and externally) across as much of the calendar as is practical. Accordingly, awards made under this NOFO will generally be made with budget periods that end between December 1 and June 30. New awards will generally be made with a first budget period of more than 12 months. Renewal awards will be made with first budget periods that may be longer or shorter than 12 months. Applicants should prepare budgets with 12-month budget periods. Actual start dates and cycle dates will be negotiated if an application is recommended for award. Budget periods will generally not be made for less than 9 months or more than 18 months.

Synergistic Activities (Optional)

In addition to biographical sketches in the Common Format, each senior/key person may provide a one-page list of no more than five distinct examples of synergistic activities that demonstrate the individual's professional and scholarly activities that focus on the integration, transfer, and creation of knowledge as related to the application.

- Do not attach a separate file to Field 12 of the Research and Related Other Project Information form.
- This appendix may not exceed a limit of the same number of pages as the number of senior/key personnel when printed using standard letter-size (8.5-inch x 11-inch) paper with 1-inch margins (top, bottom, left, and right).

Questions?

- Administrative questions (budget, eligibility,...): sc.opencall@science.doe.gov
- Technical questions: Subprogram Contact listed in the solicitation

Advanced Scientific Computing Research



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[Energy.gov/science](https://www.energy.gov/science)

ASCR's Use of the Open Call

- ASCR's use of the open call is generally limited to:
 - Communicating a broad set of topics in which ASCR generally has interest.
 - Receiving proposal submissions from existing PIs to facilitate, for example, making an award to a new institution when the PI has changed institutions.
 - Receiving proposal submissions for topics such as conference support and participation in international standardization activities.
 - Very few *de novo* research proposals are funded by ASCR through the open call. Instead, ASCR strongly prioritizes using targeted funding solicitations, see: <https://science.osti.gov/ascr/Funding-Opportunities>
 - The exception to this is when specific review panels are announced in the open call.

Specific review panels announced in the FY25 open call (more information in <https://science.osti.gov/ascr/-/media/grants/pdf/foas/2024/DE-FOA-0003432.pdf>)

- Randomized Algorithms for Combinatorial Scientific Computing:
 - This topic area is highlighted in Section 3.3 of the ASCR report "Randomized Algorithms for Scientific Computing", <https://doi.org/10.2172/1807223>.
 - ASCR expects to convene a merit-review panel in February 2025 for applications submitted on randomized algorithms for combinatorial scientific computing. To be considered by the panel, a pre-application must be submitted by November 14, 2024.
 - To be reviewed by the panel, applications associated with encouraged pre-applications must be submitted by January 16, 2025. The award ceiling is \$1,000,000 per year in total across all institutions for a three-year award.
 - ASCR expects to make at most three awards.
- The intersection of quantum thermodynamics and computing, including aspects of energy-efficient quantum computation:
 - ASCR expects to convene a merit-review panel in February 2025 for applications submitted in this area. To be considered by the panel, a pre-application must be submitted by November 14, 2024.
 - To be reviewed by the panel, applications associated with encouraged pre-applications must be submitted by January 7, 2025. The award ceiling is \$500,000 in total for a two-year award.
 - ASCR expects to make at most three awards.

Basic Energy Sciences



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ENERGY

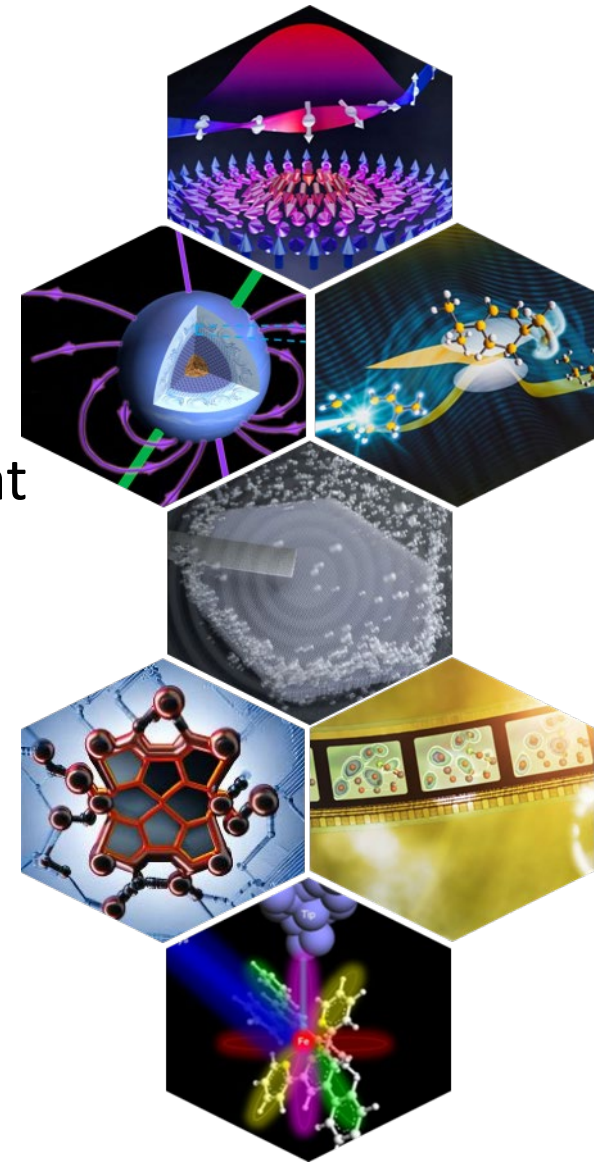
Office of
Science

[Energy.gov/science](https://www.energy.gov/science)

Basic Energy Sciences: Understanding Matter and Energy at Electronic, Atomic, and Molecular Levels

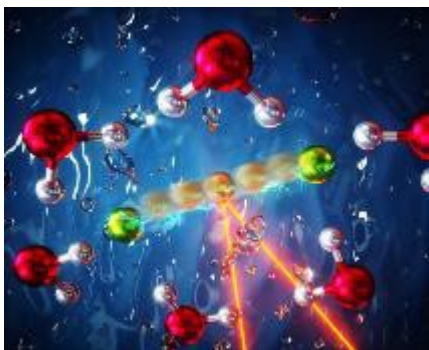
BES fulfills its mission through:

- Supporting **basic research**
 - “Grand Challenge” science
 - Discovery and design of materials and chemical processes that underpin a broad range of energy technologies
- Ensuring **broad participation** in the research portfolio
- Operating **world-class scientific user facilities** in X-ray, neutron, and nanoscale science
- Managing **construction and upgrade projects** to maintain **world-leading** scientific user facilities



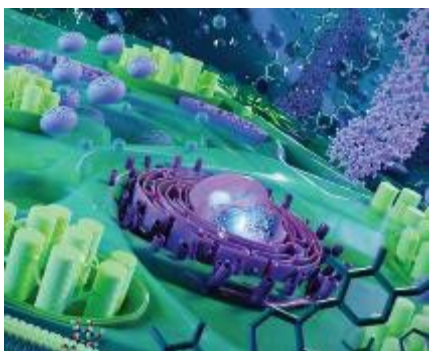
Chemical Sciences, Geosciences & Biosciences Research

Broad Portfolio of Grand Challenge and Energy Use-Inspired Fundamental Research



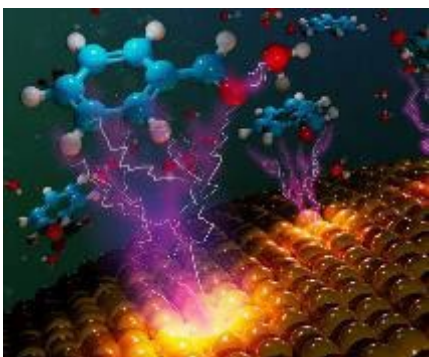
Fundamental Interactions

Control chemical reactivity and dynamics in gas and condensed phases and at interfaces



Photochemistry and Biochemistry

Molecular mechanisms of light energy capture and its conversion into chemical and electrical energy



Chemical Transformations

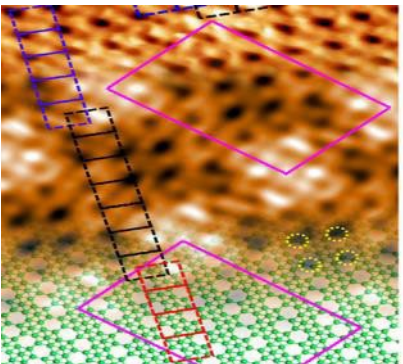
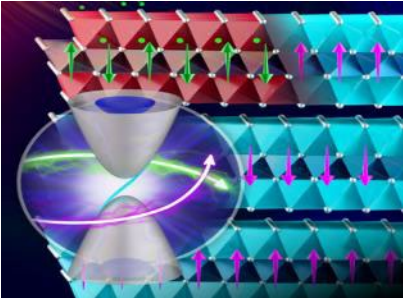
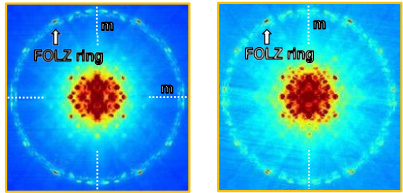
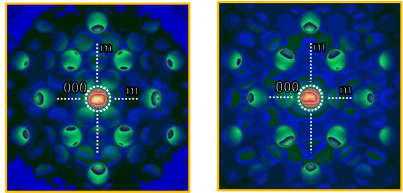
Chemical catalysis, synthesis, separation, stabilization, and transport processes, from atomic to geologic scales.

Crosscutting Research Themes:

Chemical Mechanisms for Clean Energy; Ultrafast Chemistry; Chemistry at Complex Interfaces; Charge Transport and Reactivity; Reaction Pathways in Diverse Environments; Chemistry in Aqueous Environments

Materials Sciences and Engineering Research

Broad Portfolio of Grand Challenge and Energy Use-Inspired Fundamental Research



Scattering and Instrumentation Sciences

Investigation of photon, neutron, and electron interactions with matter to characterize structures, dynamics, and functionality

Condensed Matter and Materials Physics

Exploration of phenomena in condensed matter, such as quantum behavior and response to environmental stimuli

Materials Discovery, Design, and Synthesis

Understanding synthesis and dynamics to discover/design new materials via innovative physical, chemical, and bio-molecular routes

Division-wide Themes

- Clean energy materials research
- Quantum materials
- Theory, computation and data science
- Materials synthesis
- Science across length and time scales
- Non-equilibrium dynamics
- In-situ, operando, and multi-modal characterization

BES Core Programs By Research Division Teams

Fundamental Interactions – Atomic, Molecular and Optical Sciences; Gas Phase Chemical Physics; Condensed Phase and Interfacial Molecular Science; Computational and Theoretical Chemistry; Quantum Information Science

Photochemistry and Biochemistry – Solar Photochemistry; Photosynthetic Systems; Physical Biosciences

Chemical Transformations – Catalysis Science; Separation Science; Heavy Element Chemistry; Geosciences

Materials Discovery, Design, and Synthesis – Materials Chemistry; Biomolecular Materials; Synthesis and Processing Science

Condensed Matter and Materials Physics – Experimental Condensed Matter Physics, Theoretical Condensed Matter Physics, Physical Behavior of Materials, Mechanical Behavior and Radiation Effects, Quantum Information Science

Scattering and Instrumentation Sciences – X-ray Scattering; Neutron Scattering, Electron and Scanning Probe Microscopies; Established Program to Stimulate Competitive Research (DOE EPSCoR)

Continuation of Solicitation for the Office of Science Financial Assistance Program (annual “Open Call”)

The annual, broad, open solicitation that covers all research areas in the Office of Science and is open throughout the Fiscal Year

For BES, the solicitation includes brief descriptions of the core research areas, with current priorities/areas of interest and contact information for program managers (contacting program managers is encouraged).

BES identifies the following “**overarching research priorities**” relevant to multiple core research areas for the Open Call:

- Fundamental Science to Enable Clean Energy
- Critical Materials/Minerals
- Fundamental Science to Transform Processing and Fabrication
- Artificial Intelligence and Machine Learning (AI/ML)

Department of Energy (DOE)
Office of Science (SC)



FY 2025 Continuation of Solicitation for the Office of Science Financial Assistance Program

Notice of Funding Opportunity (NOFO) Number:
DE-FOA-0003432

NOFO Type: Initial
CFDA Number: 81.049

NOFO Issue Date:	September 30, 2024
Submission Deadline for Pre-Applications:	A Pre-Application is optional/encouraged. Pre-Applications may be required for consideration by certain review panels.
Submission Deadline for Applications:	This NOFO will remain open until September 30, 2025, or until replaced by a successor NOFO. Applications may be submitted any time during that period. Individual topics in this NOFO may have scheduled review panels. Applications may be submitted before the deadline, but applications submitted after the panel's acceptance date may be held until the next review panel.

Open Call – BES Notes to Applicants

- Applications submitted to BES through this **NOFO typically have Project Narratives that are 15 – 20 pages long**. If applicants feel that additional pages are needed for the Project Narrative, prior to submission they should discuss the requested increase with the relevant Subprogram Contact listed in this NOFO.
- Prior to submission, applicants are encouraged to contact program managers (Subprogram Contacts, listed below) to discuss research ideas. While white papers/pre-proposals are encouraged, they are not required.
- Resources about PIER plans are available at <https://science.osti.gov/grants/Applicant-and-Awardee-Resources/PIER-Plans>.
- Resources about Data Management Plans are available at <https://science.osti.gov/funding-opportunities/digital-data-management>.

Strategic Directions are Reflected in BES Program Descriptions in the Open Call

- Annual funding opportunity announcement (“open call”) is updated to reflect programmatic emphasis and topical areas that will not be supported or that are being de-emphasized.
- Examples:
 - **Synthesis and Processing Science:** Topics targeted for increased emphasis are emerging areas of research that examine (1) fundamental processes to reduce energy consumption for physical deposition processes, (2) meta-stable intermediates for phase and composition transformations, (3) the role of localized external fields in directing growth processes, and (4) the direct conversion of natural minerals or end-of-life materials into new functional alternatives.
 - **Physical Behavior of Materials:** Areas targeted for decreased emphasis in this program include conventional semiconductor physics, and research focused on theory and modeling of defects in crystals and their influence on the structural properties of materials (topics covered by the Mechanical Behavior and Radiation Effects program).
 - **Condensed Phase and Interfacial Molecular Science (CPIMS):** The CPIMS program seeks increased emphasis in Systems Chemistry, for which energy is provided to dissipative systems at the molecular level, seeking to understand how interacting molecular networks can lead to emergent reactive behavior.
 - **Catalysis Science:** This program does not support: (1) the study of transformations appropriate for pharmaceutical applications; (2) non-catalytic stoichiometric reactions; (3) whole cell or organismal catalysis; (4) studies where the primary focus is photochemistry or photophysics; and (5) studies primarily focused on process or reactor design and optimization.
- Additional information is included in the annual budget submission and on the BES web page for each program

If you want to submit a proposal to a BES core program:

- BES uses the “open call” to solicit proposals for its core programs
 - Open call is a continuous process (no fixed deadline for submission) although some programs encourage proposal submission by a specific date to ensure funding with current fiscal year funds
 - Single PI and multiple PI teams are allowed
 - Reviews take 4–6 months to complete; proposals may be held up to a year for consideration for funding
 - Awards are made based on strength of the merit review and available resources
- Proposal/Review Process
 - Contact program manager, preferably by email, to discuss research ideas
 - White papers/pre-proposals are encouraged but not required for academic research
 - All proposals are peer reviewed
 - Anonymous reviewer comments are available to the PI once funding recommendations are made
 - Review process is not a consensus review meaning there is no review/panel summary
- Funding levels
 - Single investigators (~ \$180K+/year) & small groups (\$500K-\$2M/yr, 3-yr)
 - Typical academic awards support 1 summer month for the PI plus students/postdoc
- Delineation from other grants
 - Separate research proposals that can “stand alone” with respect to research output

Topical solicitations, such as Early Career, use proposal deadlines but dates are not available until the NOFO is released

Office of Science Early Career Research Program

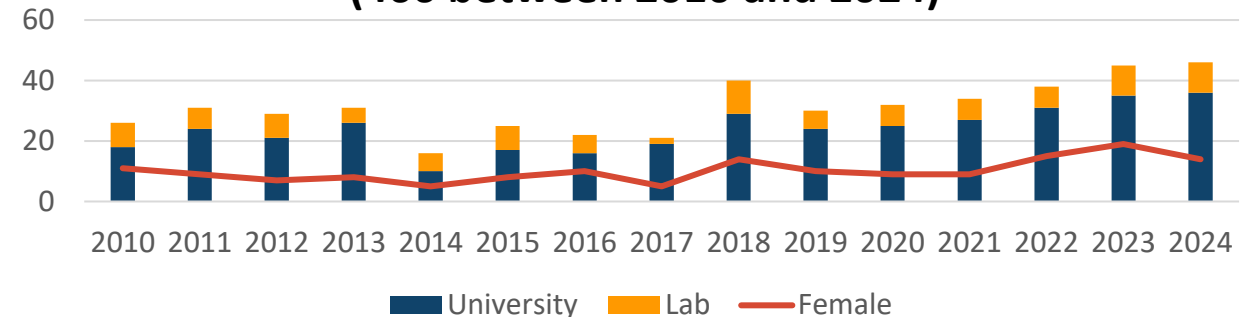
- University and National labs eligible:

Eligibility: Within 10 years of receiving a Ph.D., either untenured academic assistant or associate professors on the tenure track or full-time DOE national lab employees

- No co-PIs.
- A PI can submit one proposal per competition.
- A PI cannot participate more than three times.
- 5-Yr Awards: University grants \$175,000/yr min., National lab awards \$550,000/yr min. (typical requests)

<https://science.osti.gov/early-career>

Early Career Awards
(466 between 2010 and 2024)



Proposal submission encouraged or not encouraged after internal **review of required pre-applications:**

- Conducted by individual PMs or by 3 PMs chosen for their topical knowledge and diversity of perspective;
- Comparative reviews compare pre-applications within a topical field with priority given to scientifically innovative and forward-looking basic research with the highest likelihood of success as a full application

BES Notices of Funding Opportunity (NOFO)



About

Research

Facilities

Science Highlights

Benefits of BES

Funding Opportunities

Closed Funding Opportunity Announcements (FOAs)

Closed Lab Announcements

Topical Funding Opportunity Awards

Award Search / Public Abstracts

Additional Requirements and Guidance for Digital Data Management

Peer Review Policies

Applications from Universities and Other Research Institutions

Construction Review

EPSCoR

Early Career Research Program

Basic Energy Sciences Advisory Committee (BESAC)

Community Resources

Office Hours

Funding Opportunities

- New Grant Applications from Universities and Other Research Institutions

Office of Science Guidance [on Accommodating Interruptions to Applications and Awardees due to COVID-19](#)

Funding Opportunity Announcements (FOAs)

May be open to one or more institution types. For assistance with the Office of Science's Portfolio Analysis and Management System (PAMS) at <https://pamspublic.science.energy.gov>, please contact the Helpdesk at (855) 818-1846 (toll-free), (301) 903-9610, or sc.pams-helpdesk@science.doe.gov.

Additional Funding Opportunity Announcements

Reminder: Submit letters of intent, preapplications, and applications well ahead of stated deadlines.

Note: Department of Energy National Laboratories and other Federal Agencies should read Funding Opportunity Announcements carefully to see if they are eligible to apply to a particular solicitation. DOE National Laboratories may wish to respond to the program announcements listed under Open National Laboratory Announcements.

FY 2025 Continuation of Solicitation for the Office of Science Financial Assistance Program

Announcement Number: DE-FOA-0003432
Post Date: Monday, September 30, 2024
Close Date: Tuesday, September 30, 2025

- A Pre-Application is optional/encouraged.
- Pre-Applications may be required for consideration by certain review panels.

Established Program to Stimulate Competitive Research (DOE-EPSCoR) Implementation Grants

Announcement Number: DE-FOA-0003444
Post Date: Thursday, September 12, 2024
Close Date: Wednesday, January 29, 2025

- Submission Deadline for Pre-Applications: October 30, 2024 at 5:00 PM, Eastern Time
- A Pre-Application is required.
- Pre-Applications must be submitted by an authorized institutional representative

“The Open Call”

- Supports single investigators & small groups
- Also supports conference proposals (~\$5-\$10 K)
- No proposal due dates

<https://science.osti.gov/bes/Funding-Opportunities>

Check BES Research Division Webpages



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[Home](#)[About](#)[Laboratories](#)[Science Features](#)[Universities](#)[User Facilities](#)[Funding](#)[Initiatives](#)[Programs](#)

[Home](#) | [Programs](#) | [Basic Energy Sciences \(BES\)](#) | [Chemical Sciences, Geosciences, & Biosciences \(CSGB\) Division](#)

[About](#)[Research Areas](#)[Reports and Activities](#)[Science Highlights](#)[Principal Investigators'
Meetings](#)

Chemical Sciences, Geosciences, & Biosciences (CSGB) Division

- Descriptions of all core research areas (funding programs)
- Abstract books from Principal Investigator Meetings
- Contact information for Program Managers

<https://science.osti.gov/BES/CSGB> OR <https://science.osti.gov/BES/MSE>




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Basic Energy Sciences Advisory Committee (BESAC)

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Search

Home Programs Laboratories User Facilities Universities Funding Initiatives Science Features About

Home | Programs | [Basic Energy Sciences \(BES\)](#) | Basic Energy Sciences Advisory Committee (BESAC)

Basic Energy Sciences Advisory Committee (BESAC)

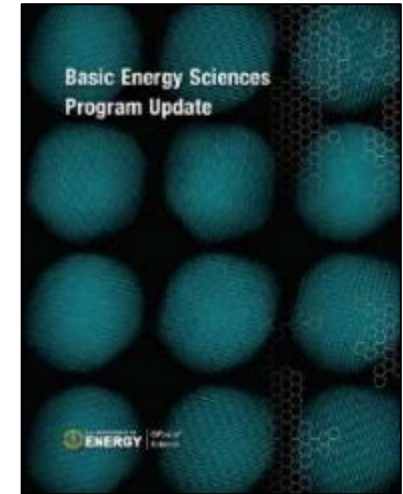
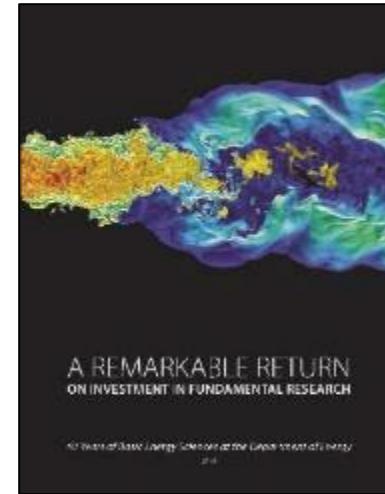
- Meetings  Meeting Notices and Presentations Available
- BESAC Membership
- Charges/Reports
- Charter 
- BES Committees of Visitors
- Federal Advisory Committees

Basic Energy Sciences Advisory Committee (BESAC)

<https://science.osti.gov/bes/besac>

Other Online Resources

- BES at 40
 - Highlights on the impact of BES
- BRN Workshop and Roundtable Reports
 - Topical Reports identifying priority research directions and opportunities



<https://science.osti.gov/bes/Community-Resources>



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Biological and Environmental Research



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[Energy.gov/science](https://www.energy.gov/science)

Office of Science Research Portfolio

Advanced Scientific Computing Research

- Delivering world leading computational and networking capabilities to extend the frontiers of science and technology

Basic Energy Sciences

- Understanding, predicting, and ultimately controlling matter and energy flow at the electronic, atomic, and molecular levels

Biological and Environmental Research

- Understanding complex biological, earth, and environmental systems

Fusion Energy Sciences

- Supporting the development of a fusion energy source and supporting research in plasma science

High Energy Physics

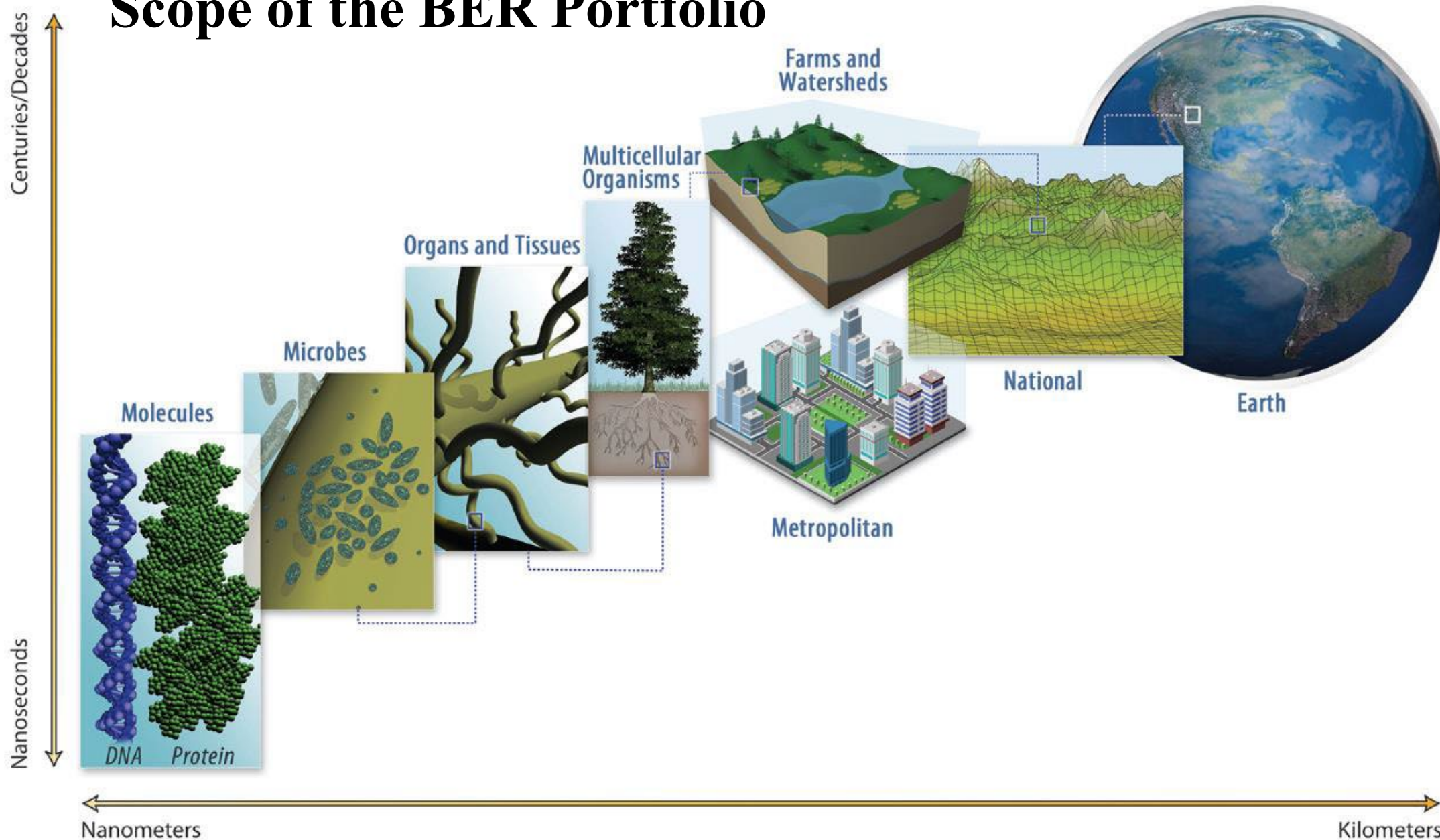
- Understanding how the universe works at its most fundamental level

Nuclear Physics

- Discovering, exploring, and understanding all forms of nuclear matter



Scope of the BER Portfolio



BER Organization Chart

DOE Office of Science
Harriet Kung, Acting Director

Advanced
Scientific
Computing
Research

Basic Energy
Sciences

Fusion
Energy

**Biological and Environmental
Research**

High Energy
Physics

Nuclear
Physics

Dorothy Koch, Associate Director

Biological Systems Science

Todd Anderson, Director

- Genomic Science
 - Bioenergy Research Centers
- Biomolecular Characterization & Imaging Science
- Facilities & Infrastructure
 - Joint Genome Institute

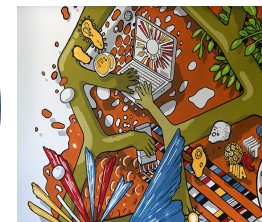
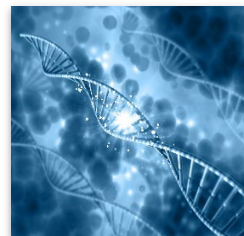
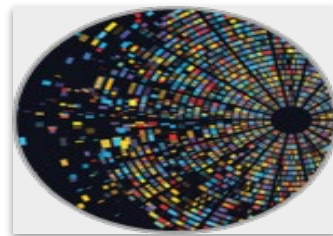
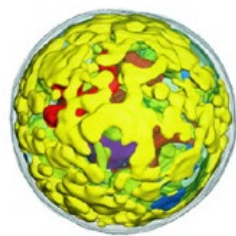
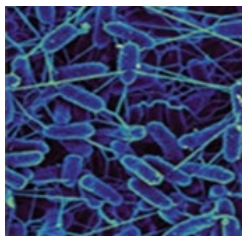
Earth & Environmental Systems Sciences

Gary Geernaert, Director

- Atmospheric System Research
- Environmental System Science
- Earth and Environmental Systems Modeling
- Facilities & Infrastructure
 - Environmental Molecular Sciences Laboratory (EMSL)
 - Atmospheric Radiation Measurement (ARM)
 - Data Management

Biological Systems Science Division (BSSD)

Mission: Provide the necessary fundamental science to understand, predict, manipulate, and design biological processes that underpin innovations for bioenergy and bioproduct production and enhance understanding of natural, environmental processes relevant to DOE.



Genomic Science

- Bioenergy
 - Sustainable Bioenergy
 - Plant Genomics
 - Microbial Genomics
- Biosystems Design
 - Secure Biosystems Design
- Environmental Microbiome

Biomolecular Characterization and Imaging Science

- Bioimaging Technologies
 - Quantum Imaging
- Structural Biology
- Cryo-EM Resources

Computational Biology

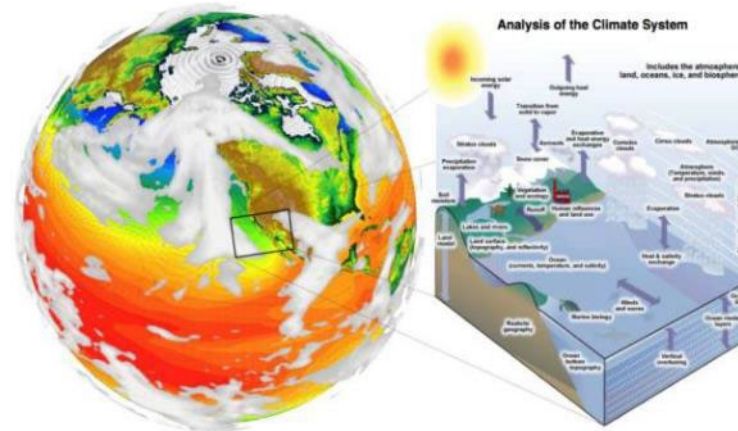
- Systems Biology Knowledgebase (KBase)
- National Microbiome Data Collaborative (NMDC)

Scientific User Facilities

- Joint Genome Institute (JGI)

<https://science.osti.gov/ber/Research/bssd>

Earth and Environmental Systems Sciences Division (EESSD)



Atmospheric System Research

- Atmospheric Process Science
- Atmospheric Radiation Measurement (ARM) facility

Earth and Environmental Systems Modeling

- Climate and Earth System Model Development and Analysis

Environmental System Science

- Ecosystem and Watershed Sciences
- Environmental Molecular Sciences Laboratory (EMSL)

Data Management for Earth and Environmental Sciences

<https://science.osti.gov/ber/Research/eessd>

BER Mechanisms for Requesting Proposals & Applications

- **Academic Research**

- Targeted Funding Opportunities (FOAs/NOFOs*)
- Continuation of Solicitation

- **National Labs**

- Science Focus Areas
- Lab Announcements
- Other Projects

- **SBIR/STTR**

- **User Facilities**

- **Crosscutting activities**

*FOA: Funding Opportunity Announcement

*NOFO: Notice of Funding Opportunity



How BER Solicits Proposals for Research

The “Open Call” is generally not used for Research Proposals

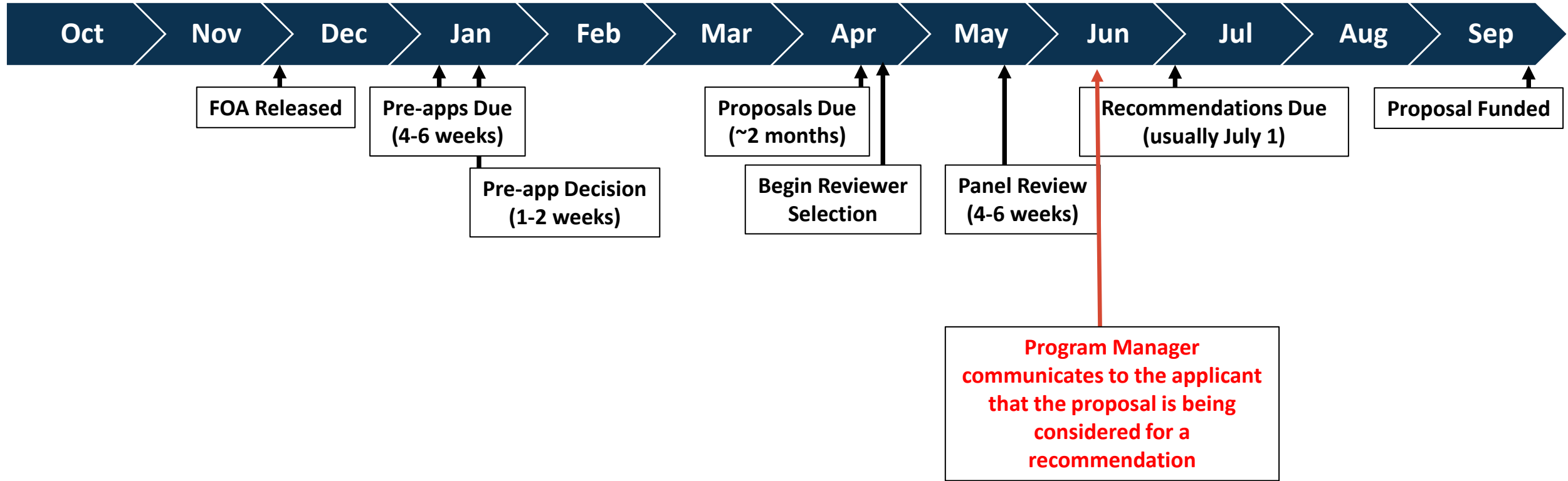
- primarily used for conference/workshops grants on an *ad hoc* basis
- submission mechanism for single purpose use i.e. PI moving to a new institution



BER Solicits Research via Targeted Funding Opportunities

- Opportunities issued annually across the BER portfolio
- Allows for tailored topics across programmatic areas
- Organizes the research community around specific science topics at defined time intervals (3 or 5 years)
- Regularizes the submission and review process around coherent topics

Typical FOA Timeline



Funding Modalities Within the Office of Science

Funding Opportunities to:

- DOE National Laboratories
 - Academic Community
 - SBIR/STTR Funding Opportunities
- ## User Facility Support

IMPORTANT!

- Set up an automatic email alert for newly posted FOAs within [Grants.gov](https://www.grants.gov)
- BER Posts annually each Fall
- FY2025 FOAs will post over the next few months

The screenshot shows the Grants.gov search results page. The search criteria are: Keyword(s): Grant Opportunities, Opportunity Number: (empty), CFDA: (empty). The search results are sorted by Posted Date (Descending) and show 1 - 25 of 2511 matching results. The table below lists the first 10 results.

Opportunity Number	Opportunity Title	Agency	Opportunity Status	Posted Date ↓	Close Date
PD-24-1340	Research in the Formation of Engineers	NSF	Posted	09/17/2023	
FR-6700-N-11	Fiscal Year (FY) 2023 Housing Opportunities for Persons With AIDS (HOPWA) Competitive Grant: Housing Interventions (HINT) to End the HIV Epidemic	HUD	Posted	09/15/2023	01/31/2024
EPA-R3-CBP-23-18	Modeling, Monitoring, and Data Analysis Support for the Chesapeake Bay Program Partnership	EPA	Posted	09/15/2023	10/30/2023
NNH23ZDA001N-PSI	ROSES 2023: E.8 Physical Sciences Informatics	NASA-HQ	Posted	09/15/2023	01/10/2024
SFOP0010050	23.PMWRA.16November2023.Unsolicited.RFI	DOS-PMWRA	Posted	09/15/2023	11/16/2023
HHS-2024-IHS-SDPI-0001	Special Diabetes Program for Indians	HHS-IHS	Forecasted	09/15/2023	
FR-6700-N-15	Lead and Healthy Homes Technical Studies (LHHTS) Grant Program	HUD	Posted	09/15/2023	10/30/2023
FR-6700-N-44	Healthy Homes Production Grant Program	HUD	Posted	09/15/2023	11/16/2023
FR-6700-N-69	Older Adults Home Modification Grant Program	HUD	Posted	09/15/2023	10/30/2023
O-SMART-2023-171880	SMART FY 2023 Maintenance and Operation of the Dru Sjodin National Sex Offender Public Website (NSOPW) (Continuation)	USDOJ-OJP	Posted	09/15/2023	09/18/2023

[Tab] Department of Energy – Office of Science

High Energy Physics



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HEP and the Open Call

- Overview

- The Open Call is available for any sort of grant activity that HEP participates in.
- New and Renewal proposals for research grants may be submitted at any time to the Open Call and, if responsive to the HEP research programs, will be considered for funding.
 - Note that priority for research funding is often given to proposals submitted to dedicated NOFOs or to dedicated reviews announced within the Open Call (see below)
- The Open Call is the correct NOFO for:
 - Supplemental proposals to add funding and (perhaps) research scope to active awards;
 - Proposals to support conference activities.

Dedicated Reviews within the Open Call

- In recent years, HEP has made use of dedicated reviews within the Open Call.
- A dedicated review identifies a particular time-frame (due date) and (sometimes) particular research topics for proposals that will be reviewed together, competing for designated research funds.
- In the FY 2025 Open Call, HEP identifies 3 dedicated reviews:
 - The HEP Comparative Review for research funding;
 - Artificial Intelligence for HEP Theory and Data Analysis;
 - Supplemental support for HEP traineeships for additional research topics that include relevant use of Artificial Intelligence and Machine Learning.

HEP Comparative Review

- The HEP Comparative Review is HEP's preferred method of supporting its university research program. Before FY 2024, this program was implemented through a dedicated Funding Opportunity Announcement (FOA).
- Starting in FY 2024, the HEP Comparative Review was implemented as a dedicated review within the Open Call:

Applications submitted for the annual HEP comparative review process:

FY 2026 HEP Comparative Review: HEP expects to convene merit review panels in November 2025 for research areas (a) through (g) below. Research applications, as described above, that are aligned with one or more of those research areas and are received **no later than September 4, 2025, will be considered for merit review by those panels. Applicants are strongly encouraged to submit pre-applications no later than July 31, 2025.**

Artificial Intelligence for HEP Theory and Data Analysis

- In FY 2025, the Computational HEP program will conduct a dedicated review focused on the use of Artificial Intelligence in HEP Theory and in Data Analysis.
- A companion call for DOE National Laboratories will be issued later in FY 2025 and proposals from both universities and national laboratories will be considered together.

This program intends to hold a merit review of applications for Artificial Intelligence Research for HEP Theory and Data Analysis in 2025. These applications should be for ambitious projects with the potential to significantly improve or automate theoretical calculations and simulation of HEP relevant problems, as well as gain new insights from HEP experimental datasets. Research into topics related to symbolic calculation, AI-assisted simulation, physics informed Machine Learning, uncertainty quantification, differentiable simulation, and inverse problems are especially sought. For full consideration, applications should be submitted on or before April 18, 2025.

- A similar review was implemented in the FY 2024 Open Call for “Hardware-Aware” Artificial Intelligence.

Nuclear Physics



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FY2025 Open Call

NOFO Number: DE-FOA-0003432

NP-specific changes in this NOFO:

- *Quantum Horizons: QIS Research and Innovation for Nuclear Science* included.
- New program manager for Nuclear Structure and Nuclear Astrophysics subprogram.
- Guidance for AI/ML scope in submissions.
- Guidance for addressing living wages.

FY2025 Open Call

NOFO Number: DE-FOA-0003432

Full proposals to the following programs are due by midnight on **November 15, 2024**:

- Heavy Ions
- Theory
- Nuclear Structure and Nuclear Astrophysics
- Fundamental Symmetries

Full proposals to the following programs are due by midnight on **November 30, 2024** to *Quantum Horizons: QIS Research and Innovation for Nuclear Science*

Isotope R&D and Production



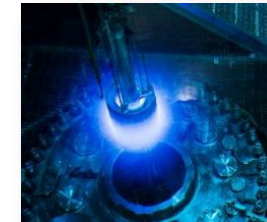
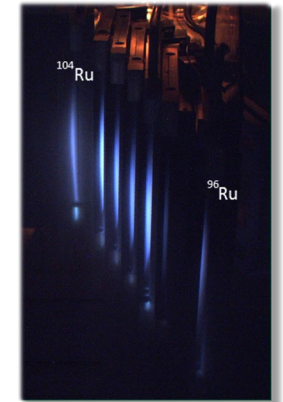
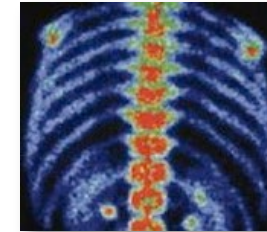
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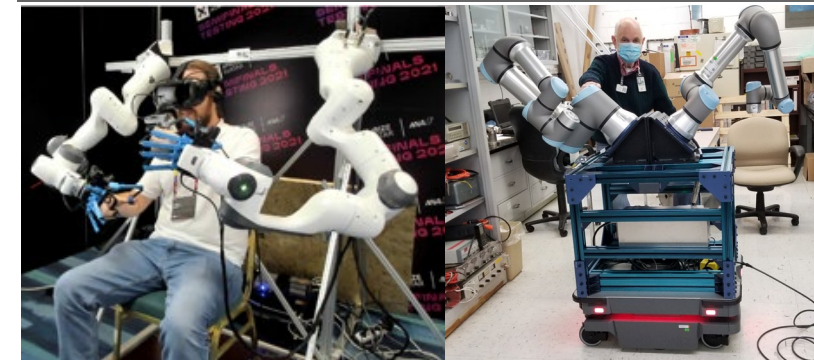
[Energy.gov/science](https://www.energy.gov/science)

Isotope R&D and Production (DOE IP)

- **Isotopes**, elements having the same number of protons, electrons, and same chemical properties but **differing in the number of neutrons**, have unique properties that make them useful in medicine, nuclear batteries, clean energy, basic research, and national security.
 - Stable and very long-lived unstable isotopes exist in nature and can be **enriched or extracted** and purified based on their mass. **Unstable (or radioactive) isotopes are created** in nuclear reactors and particle accelerators.
- DOE IP **researches, develops and optimizes isotope production and processing techniques** for radioactive and stable isotopes critical to the nation.
 - Radioactive and stable isotopes are required for **advancement in basic research** (including quantum information science or QIS and artificial intelligence - AI and machine learning - ML), **medical applications** (diagnostic imaging, cancer therapies, infectious diseases), **commercial applications** (energy exploration), **national security** (threat detection, nuclear forensics), **space exploration** (long lived power sources), and other applications.
 - Active areas where DOE IP makes research investments are: 1) **targetry and isotope production**; 2) **nuclear and radiochemical separation, purification and radiochemical synthesis**; 3) **biological tracers, imaging and therapeutics**; and 4) **isotope enrichment technologies**.
- Part of DOE IP's mission is to ensure robust domestic isotope supply chains to reduce U.S. dependency on foreign supply to maintain national preparedness.



(Clockwise from upper-left) medical imaging, isotope separation/enrichment, radiochemical processing, irradiation/isotope production.



Development of remotely operated hot cell equipment with the goal of autonomy.