Department of Energy
FY21 DE-FOA-0002414
FULL RESEARCH PROPOSAL CHECKLIST

DE-FOA-0002414 is the annual, broad, open solicitation that covers all research areas in DOE's Office of Science (SC). This FOA provides general proposal preparation guidelines covering all required sections of full research proposals submitted to DOE. Please note, when applying to a specific program solicitation, the proposal preparation instructions provided in the specific funding announcement may deviate and will supersede the guidance outlined in the broad open solicitation. This checklist highlights, not replaces, the submission guidelines of DE-FOA-0002414. *Please consult the FOA for complete instructions.*

REQUIRED FORMATTING
- Page size: 8.5" by 11" paper
- Margins: must be one inch on all sides
- Font size must be 11 point or larger
- Do not include any URLs that provide supplementary information that constitutes a part of the application.

Proposal Element	*Instructions*
SF-424 R&R Form	• See sample attached • Maximum project period is 5 years (most common project period is 3 years) • Supplemental Applications of an existing award should be marked as "Revision." • Applications requesting additional funding for a period of time following a current award should be marked as "Renewal." • SC does not make use of the Resubmission or Continuation options.
R&R Other Project Information Form	• Complete the questions in Fields 1 through 6. • Attach the Project Summary to Field 7. • Attach the Project Narrative to Field 8. • Do **not** attach any other documents.

Project Summary	• **Limited to one page.**
	• Must contain the following:
	   o Name of the applicant
	   o Project title
	   o PI and the PI's institutional affiliation
	   o Co-investigators and their institutional affiliations
	   o Objectives of the project
	   o Description of the project, including methods to be used and potential impact

Project Narrative	The Narrative is **ONE document** that contains a cover page and the appendices below. Check the specific solicitation for page limits and content requirements.
Project Narrative – Cover Page	• Project title • Applicant/Institution • Street Address/City/State/Zip • Postal Address • Lead PI name, telephone number, email • Administrative Point of Contact name, telephone number, email • FOA Number • DOE/SC Program Office • Topic Area Program Manager (see Section I of the FOA) • DOE Award number (if renewal or supplemental application)

	• PAMS pre-proposal tracking number (if applicable) • *Collaborative Proposals: please see the instructions for Collaborative Proposals at the end of this Checklist.*
Project Narrative - Technical Information	• Check specific solicitation for page limit. • Background/Introduction should contain enough material, including review of the relevant literature, to demonstrate sufficient knowledge of the state of the science. • Proposed Research and Methods: The major part of the narrative should be devoted to a description and justification of the proposed project, including details of the method to be used. • Project Objectives: Include a timeline for the major activities of the proposed project and indicate which project personnel will be responsible for which activities. There should be no ambiguity about which personnel will perform particular parts of the project, and the time at which these activities will take place.
Project Narrative -Appendices	**Do NOT attach any of the appendices below as files for fields 9, 10, 11, and 12. Follow the instructions below to include the information as appendices in the SINGLE bundled project narrative file. If you attach the appendices to fields 9, 10, etc., these additional attachments will not become part of the application.**

Appendix 1: Biosketches	**Two page limit** for each key personnel (PI and key/senior personnel, including Subawardees). No required format but should contain the following:
	• Education and Training: undergraduate, graduate and postdoctoral training, provide institution, major/area, degree and year.
	• Research and Professional Experience: beginning with current position list, in chronological order, professional/academic positions with a brief description.
	• Publications – up to 10 publications, patents, copyrights and/or software systems (list all authors -- the use of et al is not allowed).
	• Synergistic activities – list up to 5 activities related to the proposed project.
	• Potential Conflicts of Interest (this section does ***not*** count toward the 2 page limit)
	    ○ Collaborators & co-authors (past 48 months)
	    ○ Co-editors (past 24 months)
	    ○ Graduate and postdoctoral advisors, graduate and postdoctoral advisees
	Include in the Project Narrative. Do not attach as a separate file.

Appendix 2: Current and Pending Support	All key personnel must provide a list of all current and pending support (Federal and non-Federal). For each activity, list the following information (no page limit): • Sponsor or source of funding • Award number or other identifying number • Title • Total amount (direct and indirect costs) • Project start date and end date • Person-months of effort per year • Briefly describe the research being performed and identify any overlaps with the proposed project. *Include in the Project Narrative. Do not attach as a separate file.*
Appendix 3: Bibliography	• Provide a bibliography of any references cited in the Project Narrative. • Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers and year of publication. • For research areas where there are routinely more than ten coauthors of archival publications, an abbreviated style such as the Physical Review Letters (PRL) convention for citations (listing only the first author) may be used. • Include only bibliographic citations. Applicants should be especially careful to follow scholarly practices in providing citations for source materials relied upon

	when preparing any section of the application. *Include in the Project Narrative. Do not attach as a separate file.*
Appendix 4: Facilities & Other Resources	• Address the capability of the organizational resources, including subawardee resources, available to perform the proposed project (Laboratory, Animal, Computer, Office, Clinical and Other). • If the project requires the use of facilities maintained by other institutions, provide documentation from the facility manager stating that project personnel will have access. *Include in the Project Narrative. Do not attach as a separate file.*
Appendix 5: Equipment	• List major equipment available and, if applicable, identify the location and relevant capabilities. *Include in the Project Narrative. Do not attach as a separate file.*
Appendix 6: Data Management Plan	**Two page limit.** • Describe whether and how data generated from the proposed research will be shared and preserved. • Describe how sharing/preservation will enable validation of results, or how results could be validated if data are not shared or preserved. • DMP is required for all new, renewal, and supplemental applications. Supplemental DMPs should address the products of the expanded, supplemental research scope. • DMP is not required for conference or workshop applications. • Guidance on structuring a DMP and additional guidance provided by SC program offices available through https://science.osti.gov/funding-opportunities/digital-data-management/ • DMPs that explicitly or implicitly commit data management resources at a facility beyond what is conventionally made available to approved users should be accompanied by written approval from that facility. • A valid Data Management Plan may include only the statement that no detailed plan is needed with a clear justification for the basis of the decision. *Include in the Project Narrative. Do not attach as a separate file.*
Appendix 7: Other Attachment	• Use only to elaborate on responses to questions in fields 1-6 of this form. • Do not use to circumvent the page limitations of the application. *Include in the Project Narrative. Do not attach as a separate file.*
R&R Budget Form	• Check the solicitation for requirements related to use of a specific Directorate's budget form, budget caps, and/or unallowable costs.
Budget	• Must draft budget using ORA Internal Budget Template. After ORA approves your budget, enter the data from the budget template into the R&R Budget Form. • Cognizant Federal Agency Field - DHHS, Ryan McCarthy, 212-264-2069.
Budget Justification	**Attach the justification to Field L of the R&R Budget Form.** • Organize the justification by listing items in the same order as the budget. • Listed below are some of the requirements for the justification as DOE requires a greater level of detail than other sponsors for certain costs. This is not an exhaustive list. Please see the specific program solicitation for the full list of requirements. Personnel • Include the name, role, and number of person-months devoted to this project for every person on the project. Indicate the need for the requested personnel. Travel • List the destination of each trip, dates, estimated costs including transportation and subsistence, number of staff traveling, purpose of the travel and how it relates to the project.

	• Indicate the basis for the cost estimate. • Domestic travel needs to be justified separately from foreign travel. • Travel to Canada or Mexico is considered domestic travel. Materials & Supplies • Enter the total amount requested for materials & supplies in the appropriate fields. • In the justification, indicate general categories. Not required to itemize categories totaling less than $1,000. • Indicate the basis for the cost estimate.
Subaward Budgets	• You must provide a separate R&R budget for each subawardee. • Subawardee must download the R&R Budget form from the R&R SUBAWARD BUDGET ATTACHMENT(S) FORM. • Use up to 10 letters of the subawardee's name as the file name (e.g., ucla.pdf). • If an application includes subawards to a DOE National Laboratory, a Federal agency, or another Federal agency's FFRDC, the value of such proposed subawards will be deducted from any resulting award: Those orgs must be paid directly by SC. A list of FFRDCs can be found here: https://www.nsf.gov/statistics/ffrdclist/
Project/Performance Site Locations	• Include all project/performance site location(s), including Subawardees. • Generally the applicant organization is the primary location.
SF-LLL Disclosure of Lobbying Activities	• Include if applicable for primary and subaward institutions and/or consultants/contractors. • Download from grants.gov: https://www.grants.gov/web/grants/forms/r-r-family.html

Collaborative Proposal from Multiple Organizations

Collaborative applications submitted from different institutions must clearly indicate they are part of a collaborative project. Only one lead institution is allowed. Every partner institution must submit an application through its own sponsored research office. Each application within the collaborative group, including the narrative and all required appendices and attachments, must be identical with the following exceptions:

• SF-424 R&R form
• Budget
• Budget justification

Each application must have the same title in Block 11 of the SF 424 (R&R) form.

Project Narrative - Cover Page Supplement

If the project is a collaboration, provide the following information on a separate page as a supplement to the Narrative cover page.

• List all collaborating institutions by name with each institution's PI on the same line.
• Indicate lead PI who will be the point of contact and coordinator for combined research activity.
• Statement explaining the leadership structure of the collaboration.
• Description of each institution's facilities, equipment, and resources available to the collaborative group.
• If applicable, explain how students and junior researchers will be trained and mentored by the collaborators.
• Include a table similar to the chart below providing summary budget information from all collaborating institutions. Provide the total costs of the budget in each year for each institution and totals for all rows and columns.

Collaborative Application Information								
	Names	**Institution**	**Year 1 Budget**	**Year 2 Budget**	**Year 3 Budget**	**Year 4 Budget**	**Year 5 Budget**	**Total Budget**
Lead PI								
Co-PI								
Co-PI								
Co-PI								

Example budget table ($ in thousands)

Project Narrative - Technical Information:

Each collaborating institution must submit an identical common narrative. The common narrative must identify which tasks and activities will be performed by which of the collaborating institutions in every budget period of the proposed project. The budget and the budget justification—which are unique to each collaborating institution—may refer to parts of the common narrative to further identify each collaborating institution's activities in the joint project. There should be no ambiguity about each institution's role and participation in the collaborative group.

Subcontract Organization(s) – Required Documents

- Subrecipient Commitment Form (with 3b1 and 3b2-if applicable) or FDP Letter of Intent (if organization is registered in the FDP Clearing House)
- Statement of Work
- Project/Performance Site Location(s)
- Research & Related Senior/Key Person Profile
- Research & Related Budget
- Budget Justification
- Facilities & Other Resources
- Equipment
- Letters of Support