Department of Energy/ Office of Science

FY 2015 Continuation of Solicitation for the Office of Science Financial Assistance Program
Funding Opportunity Number: DE-FOA-0001204

This announcement will remain open until September 30, 2015 or until replaced by a successor announcement. Applications may be submitted any time during this period. DOE will accept new, renewal and supplemental applications under this FOA.

Applications must be submitted through Grants.gov to be considered for award.
The CFDA No. for this FOA is 81.049

PROPOSAL ROUTE/REVIEW/SUBMISSION CHECKLIST

Is RAS to submit via Kuali Coeus____**OR** Adobe Grants.gov package_____

RAS Rep:

PI Name:

Department:

PLEASE read the FOA in order to comply with the instructions. The FOA is posted in FedConnect at: https://www.fedconnect.net/FedConnect/

Application for Federal Assistance SF424 Form	☐ Type of Submission
	☐ Type of Application
	☐ Applicant Information
	☐ EIN number 042103594
	☐ DUNS Number 001425594
	☐ Address
	☐ Organizational Unit- Department
	☐ Contact Information
	☐ Type of Applicant - O: Private Institution of Higher Education
	☐ Areas Effected by Project
	☐ Descriptive Title of Applicant's Project
	☐ Congressional Districts
	☐ Proposal start date- should match budget start date
	☐ Estimated funding- should match budget
	☐ Applicant Delinquent on any Federal Debt- should be checked "no"

	☐ Authorized Rep information filled out
Project Summary	☐ A summary of the proposed activity suitable for dissemination to the public and sufficient to permit potential reviewers to identify conflicts of interest. Include the applicant name (MIT); the name of Principal Investigator(s) and their institutional affiliation and any Co-Investigators and their institutional affiliations; the project title, the objectives of the project, a description of the project including methods to be employed, the potential impact of the project (i.e., benefits, outcomes) and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as DOE may use the abstract to prepare public reports about supported research. Must not exceed **1 (one)** page when printed using standard 8.5" by 11" paper with 1" margin (top, bottom, left and right) with font not smaller than 11 point. ☐ Attach the Project Summary to Field 7.
Project Narrative	☐ Use standard 8.5" by 11" paper with 1" margin (top, bottom, left and right). The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. Merit reviewers are not required to access Internet sites. See Part VIII.D for instructions on how to mark proprietary application information. Narrative should be in a single PDF file. Narrative should begin with a cover page that will not count toward the project narrative page limitation. Cover page must include the following: ☐ The project title ☐ Applicant/Institution (MIT) ☐ Street Address/City/State/Zip ☐ Postal Address ☐ Lead Principal Investigator name, telephone number and email ☐ Administrative Point of contact name, telephone number and email ☐ Funding Opportunity Number: DE-FOA-0001204 ☐ DOE/Office of Science Program Office ☐ DOE/Office of Science Program Office Technical Contact

	□ DOE Award number (if renewal or supplemental application) □ PAMS Preproposal tracking # (if applicable) □ Research area or areas (as identified in Section I of the FOA) □ Project Narrative should contain enough background material in the Introduction, including review of the relevant literature, to demonstrate sufficient knowledge of the state of the science. □ The major part of the Project Narrative should be devoted to a description and justification of the proposed project, including details of the methods to be used. It should 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. □ For Collaborative Proposals Only: please refer to the Cover Page Supplement for Collaborations which is at the end of this Checklist. □ Attach the Project Narrative to Field 8.
Appendix 1 Biographical Sketches	□ Include a bio for the PI and each senior/key person listed in Section A on the R&R budget form. □ Do not exceed 2 pages for each person when printed on 8.5" by 11" paper with 1" margins (top, bottom, left and right) with font not smaller than 11 point. The bio must not include any Personally Identifiable Information such as Social Security number, date of birth, or city of birth. Do not include information that a merit reviewer should not make use of. □ The bio must include: □ Education & Training: Undergraduate, graduate and postdoctoral. Provide institution, major/area, degree and year. □ Research & Professional Experience. Beginning with current position list in chronological order, professional/academic positions with a brief description. □ Publications – provide a list of up to 10 publications most closely related to the proposed project. For each publication identify the names of all authors in the same sequence in which they appear in the publication; the article title, book or

	journal title, volume number, page numbers, year of publication and website address if available electronically. Patents, copyrights and software systems developed may be provided in addition to or substituted for publications. ☐ Synergistic Activities – list no more than 5 professional and scholarly activities related to the effort proposed. ☐ Identification of Potential Conflicts of Interest or Bias in Selection of Reviewers – Collaborators & Co-editors – provide a list in alphabetical order of all persons, including their current organizational affiliation, who are, or who have been, collaborators or co-authors with you on a research project, book or book article, report, abstract, or paper during the 48 months preceding the submission of this application. For publications or collaborations with more than 10 authors or participants, only list those individuals in the core group with whom the PI interacted on a regular basis while the research was being done. Also, list any individuals who are currently, or have been, co-editors with you on a special issue of a journal, compendium or conference proceeding during the 24 months preceding the submission of the application. If there are no collaborators, or co-editors, state "None." ☐ Graduate & Postdoctoral Advisors & Advisees – list the names and current organizational affiliations or your graduate advisor(s) and principal postdoctoral sponsors(s). Also, list the names and current organizational affiliations of your graduate students and postdoctoral associates. ☐ Include the biosketch(es) as Appendix 1 to your project narrative. Do not attach it as a separate file.
Appendix 2 – Current & Pending Support	☐ Provide a list of all current and pending support (both Federal and non-Federal) for the Principal Investigator(s) and senior/key persons, including subawardees, for ongoing projects and pending applications. For each organization providing support, show the total award amount for the entire award period (including F&A) and the number of person-months per year to be devoted to the project by the senior/key person.

	☐ Include the current & pending support as Appendix 2 to your project narrative. Do not attach it as a separate file.
Appendix 3 – Bibliography & References Cited	☐ 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 co-authors of archival publications, an abbreviated style such as the Physical Review Letters 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 the Bibliography & References Cited as Appendix 3 to the project narrative. Do not attach it as a separate file.
Appendix 4 – Facilities & Other Resources	☐ This information will be used to assess the capability of the organizational resources, including subawardee resources, available to perform the proposed effort. ☐ Identify the facilities to be used (laboratory, animal, computer, office, clinical and other). If appropriate, indicate their capacities, pertinent capabilities, relative proximity and extent of availability to the project. Describe only those resources that are directly applicable to the proposed work. Describe other resources available to the project (e.g., machine shop, electronic shop) and the extent to which they would be available to the project. ☐ Include the facilities & other resources as Appendix 4 to the project narrative. Do not attach it as a separate file.
Appendix 5 – Equipment	☐ List major items of equipment already available for the project and, if appropriate identify location and pertinent capabilities. ☐ Include Equipment as Appendix 5 to the project narrative. Do not attach it as a separate file.

Appendix 6 – Data Management Plan	☐ DMPs should describe whether and how data generated in the course of the proposed research will be shared and preserved. If the plan is not to share and/or preserve certain data, the plan must explain the basis of the decision. At t minimum, DMPs must describe how data sharing and preservation will enable validation of results, or how results could be validated id data are not shared or preserved. ☐ DMPs are not required for conference or workshop application. ☐ DMPs are required for all new and renewal applications. ☐ DMPs are required for supplemental applications that expand the scope of work beyond that of the originally funded project. Supplemental application DMPs should address the research projects of the supplemental research scope. ☐ This Appendix should not exceed 2 pages including charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5" by 11" paper with 1" margins. ☐ Include this as Appendix 6 to the project narrative. Do not attach it as a separate file. This Appendix will not count in the project narrative page limitation. ☐ For more details, go to: http://science.energy.gov/funding-opportunities/digital-data-management/ ☐ FAQs can be found at: http://science.energy.gov/funding-opportunities/digital-data-management/faqs/ ☐ DOE reserves the right to reject, without merit review, any proposal that does not include a DMP.
Appendix 7 – Other Attachments	☐ If you need to elaborate on your responses to questions 1-6 on the "other project information" document, provide the information as Appendix 7 to your project narrative. Information not easily accessible to a reviewer may be included in this Appendix. But do not use this Appendix to circumvent page limitations of the application.

	Reviewers are not required to consider information in this Appendix. ☐ Include this as Appendix 7 to the Narrative. Do not attach it as a separate file.
Research & Related Budget	☐ A separate budget for each year of proposed support requested must be completed. A cumulate budget for the total project period will be generated. ☐ Budget Fields: Section A – Senior/Key Person: List personnel, base salary, number of months the person will be allocated to the project, requested salary and fringe benefits and the total funds requested for each person. The requested salary must be the product of the base salary and the effort. Include a written explanation in the budget justification that justifies the need for requested personnel. ☐ Section B – Other Personnel: List personnel, the number of months that person will be allocated to the project, requested salary and fringe benefits, and the total funds requested for each person. Include a written explanation in the budget justification that fully justifies the need for requested personnel. ☐ Section C – Equipment: List **each** item of equipment that has an acquisition cost of $5,000 or more and an expected service life of more than one year. Justify each item in the budget justification. Do not aggregate items of equipment. General-purpose office equipment is not eligible for support unless primarily or exclusively used in the actual conduct of scientific research. ☐ Section D – Travel: Travel to Canada or Mexico is considered domestic travel. In the budget justification 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 (quotes from vendors or suppliers, past experience of similar items, or some other basis). Attendance at meetings or conferences must enhance the Investigator's capability to perform the research, plan extensions of it, or disseminate its results. Domestic travel is to be justified separately from

	foreign travel.
	☐ Section E – Participant/Trainee Support Costs: Educational projects that intend to support trainees must list each trainee cost that includes stipend levels and amounts, cost of tuition for each trainee, cost of any travel and costs for any related training expenses. Participant costs are those costs associated with conferences, workshops, symposia or institutes and breakout items should indicate the number of participants, cost for each participant, purpose of the conference, dates and places of meetings and any related administrative expenses. Indicate the basis for the cost estimate (quotes from vendors or suppliers, past experience of similar items, or some other basis).
	☐ Section F – Other Direct Costs: M&S: Enter total funds requested for materials and supplies in the appropriate fields. In the budget justification, indicate general categories. Categories less than $1,000 are not required to be itemized. Indicate the basis for the cost estimate (quotes from vendors or suppliers, past experience of similar items, or some other basis).
	☐ Publication Costs: budget may request funds for the costs of documenting, preparing, publishing the findings of the work conducted under the award. The budget justification should indicate the basis for the cost estimate (quotes from vendors or suppliers, past experience of similar items, or some other basis).
	☐ Consultants: In the budget justification, identify each consultant, the services he/she will perform, the total number of days, travel costs and total estimated costs. Indicate the basis for the cost estimate.
	☐ ADP Services: In the budget justification, include the established computer service rates at the proposing organization if applicable. Indicate the basis for the cost estimate.
	☐ Subawards: In the budget justification, justify the details.
	☐ Alterations & Renovations: In the budget justification, itemize by category and justify the costs.
	☐ Other: Add text to describe any other direct costs

	not requested in above categories. Use the budget justification to further itemize and justify. ☐ Section H: Enter indirect cost information for each field. Include the cognizant Federal agency and contact information. ☐ Budget justification (Field K on the form) – provide the required supporting information for the following costs; equipment; domestic & foreign travel; participant/trainees; materials & supplies; publication; consultant services; ADP/ computer services, subawards, equipment or facility rental/user fees; alterations and renovations; and F&A. Provide any other information you wish to submit to justify your budget request.
R&R Subaward Budget (other than DOE FFRDC Contractors)	☐ You must provide a separate cumulative R&R budget for each subawardee Use up to 10 letters of the subawardee's name (plus.pdf) as the file name. If the project involves more subawardees that there are places in the Subaward Budget Attachments forms, the additional subaward budgets may be saved as PDF files and appended to the budget justification in Field K. ☐ Ensure that any files received from subawardees are the PDF files extracted from the Subaward Budget Attachments from. Errors will occur if a subawardee sends a prime applicant a budget form that was not extracted from the application package.

COVER PAGE SUPPLEMENT FOR COLLABORATIONS
(PART OF PROJECT NARRATIVE attached to field 8 ON THE FORM)
Collaborative applications submitted from different institutions must clearly indicate they are part of a collaborative project/group. Every partner institution must submit an application through its own sponsored research office. Each collaborative group can have only one lead institution. Each application within the collaborative group, including the narrative, and all required appendices and attachments, must be identical with following exceptions:

Each application must contain a correct SF-424 (R&R) cover page for the submitting institution only.

Each application must contain a unique budget and budget justification corresponding to the expenditures for that application's submitting institution only.

Each application belonging to a collaborative group should have the same title in Block 11 of the SF 424 (R&R) form.

The Office of Science will use the multiple applications associated with a collaborative group to create one consolidated document for merit review that consists of the common, identical application materials combined with a set of detailed budgets from the partner institutions. It is very important that every application in the collaborative group be identical (including the title) with the exception of the budget and budget justification pages.

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

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

Collaborative Application Information

	Name	Institution	Year 1 Budget	…..	Year N Budget	Total Budget
Lead PI						
Co-PI						
Co-PI						
Co-PI						

Example budget table ($ in thousands)

* Note that collaborating applications must be submitted separately.