NSF Proposal Route/Review/Submission Checklist

Solicitation-specific instructions may supplement or deviate from these instructions.
Always read the solicitation carefully.

This checklist is intended to be used primarily for “Research” proposal types in Research.gov. This does not address NSF’s use of the Broad Agency Announcement (BAA) and the associated Broad Agency Announcement Management System (BAAM).

Proposals must be submitted via Research.gov.

**PLEASE NOTE, once a proposal is created in Research.gov, the title CANNOT be changed**


New with PAPPG 23-1:
- A new certification requiring senior personnel to certify that the information provided in their Biographical Sketch and Current and Pending Support documents are accurate, current, and complete. This certification will be included in both SciENcv and the NSF fillable format for proposals submitted or due on or after January 30, 2023. This section also has been revised to require the use of SciENcv for the preparation of this document effective in October 2023.
- A new checkbox on the NSF Cover Sheet: Off-Campus or Off-Site Research. A supplemental field has also been added to KC for NSF Proposals that requires a Yes or No answer. Off-Campus or Off-Site does not include Haystack or Lincoln Lab.

Required Components for Lead vs. Non-Lead organizations in simultaneously submitted Collaborative Research proposals (must be linked online prior to RAS review).

<table>
<thead>
<tr>
<th>Lead Organization</th>
<th>Non-Lead Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NSF REQUIRES</strong></td>
<td><strong>MIT REQUIRES</strong></td>
</tr>
<tr>
<td>Cover Sheet</td>
<td>All MIT proposals must include a SOW. If MIT is non-lead, and Lead has not yet provided a full and complete project description, MIT PI must provide a description of MIT’s role in the project for internal review.</td>
</tr>
<tr>
<td>Project Summary</td>
<td></td>
</tr>
<tr>
<td>Table of Contents (automatically generated)</td>
<td>NSF REQUIRES</td>
</tr>
<tr>
<td>Project Description</td>
<td>Table of Contents (automatically generated)</td>
</tr>
<tr>
<td>References Cited</td>
<td>Biographical Sketches</td>
</tr>
<tr>
<td>Biographical Sketches</td>
<td>Budget and Justification</td>
</tr>
<tr>
<td>Budget and Justification</td>
<td>Current and Pending Support</td>
</tr>
<tr>
<td>Current and Pending Support</td>
<td>Facilities, Equipment and Other Resources</td>
</tr>
<tr>
<td>Facilities, Equipment and Other Resources</td>
<td>Data Management Plan</td>
</tr>
<tr>
<td>Data Management Plan</td>
<td>Collaborators &amp; Other Affiliations document(s)</td>
</tr>
<tr>
<td>Collaborators &amp; Other Affiliations document(s)</td>
<td>Postdoctoral Mentoring Plan (if applicable)</td>
</tr>
<tr>
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<td>Other Supplementary documents (if applicable)</td>
</tr>
</tbody>
</table>
SUBAWARDS UNDER MIT
Need added as Organization in KC
Must obtain a UEI when named in proposal
Signed Letter of Commitment from Authorized Representative
SOW
Budget and Justification
Biographical Sketches, C&P, and Collaborators
& Other Affiliations documents for any subaward personnel named as Senior Personnel
Facilities, Equipment and Other Resources

Dates and Deadlines
☐ If a NSF deadline date falls on a Federal Holiday or weekend, the deadline is extended to the following business day.
☐ Requested start date should be at least 7 months after the deadline (See PAPPG Exh III-1)

Letters of Intent/Pre-proposals (Continued)
☐ Letters of Intent do not need to be routed to RAS in KC for approval unless specified in the solicitation that AOR approval is required and the Letter of Intent is binding. If a proposal in KC is not required, be sure to email your CA that the LOI needs to be processed.
☐ Preliminary proposals must be routed to RAS
  o KC proposal type “Pre-proposal” for submission
  o PI certification is not required
  o Subawardee/Collaborator certification letters not required

System Validations
☐ Has Sponsored Projects Office (SPO = RAS) Submit Access been allowed? PLEASE NOTE, ONLY PI can give SPO access, OAU cannot
☐ Please use the CHECK button to reveal any system errors or warnings

Personnel, Project Roles
☐ MIT PI status is required for PIs, Co-PIs, and all other Senior Personnel for NSF proposals
☐ All faculty funded by an NSF proposal must be listed as either a PI/Co-PI, or as Senior Personnel
☐ All PIs/Co-PIs/Senior Personnel must have completed KC Proposal certification/COI screening
  o set COI Discl. Req to include Key Persons if any are listed
☐ All PIs and Co-PIs must have a Research.gov ID #s authorized for PI submission by MIT.
  o Research.gov registration is now self-service. RAS can no longer create new Research.gov accounts. If individual needs to request a role, they will need MIT’s DUN’s # 001425594. RAS will be notified of the request and will review it.

Certifications & MIT Internal Attachment Requirements
☐ When a subaward is budgeted, MIT requires Institutionally Authorized subawardee assurances and certifications regarding NSF policy. This letter does not need to be submitted to the NSF unless specified in the solicitation.
☐ MIT requires a letter quoting any named consultant’s role, expertise, and established consultant rate. See RAS: Proposal Preparation Basics
Format of the Proposal

- Research.gov submissions are paginated automatically
- Margins 1" in all directions,
- Approved Fonts:
  - Arial6 (not Arial Narrow), Courier New, or Palatino Linotype at a font size of 10 points or larger;
  - Times New Roman at a font size of 11 points or larger; or
  - Computer Modern family of fonts at a font size of 11 points or larger

Locations

- Enter any subawardee or other performance sites in KC under Proposal > Basics > Organization and Location.
- For Research.gov, add Other organizations (subawards) in the Budget section only.

PI/Co-PI Info

- In Research.gov, this feeds from PI information associated with each PI/Co-PI’s Research.gov ID#. Does not print as part of the proposal.

Cover Sheet

- Program Announcement/Solicitation completed in Research.gov & KC
- For consideration by NSF Organization Unit(s)
- Cover: Complete checkboxes and info regarding:
  - Previous award number if a renewal
  - Other Federal agency(s) applying to
  - Is this a Preliminary Proposal?
  - Has MIT received a Special Deadline Exception
- Title Prefix: (per solicitation.)
- Watch for items requiring Compliance (aka “Special reviews”) for KC tab and NSF cover page
  - Human subjects: Enter “pending”.
  - Animals: Enter “pending” Enter Assurance# D-16-00078
  - International activities or any budgeted international travel (including conferences)
    - Up to five (5) countries may be selected.
    - If international destination unknown, enter Worldwide (displays as “XX”)

Additional Items to check if Foreign Involvement:

- New Box for Off campus or Off-Site Research
- Funding of Foreign Organization or Individual
- Funding of an International Branch Campus of a U.S. IHE

- Select Funding Mechanism
- Select Collaborative Status
  - Note: Unfunded, parallel funded international, or MIT-internal collaborations should be marked “not a collaborative proposal.”
  - For collaborative proposals from multiple organizations where MIT is not the lead, and MIT’s role unclear from documents in Research.gov (or if the lead has not yet uploaded a complete proposal), please include an “internal use SOW” as Other Institutional Document in KC to allow review.
  - Once collaborative status of a proposal is selected, it cannot be changed. The proposal record will need to be restarted in order to change the status.
- Budget total $ correctly stated in the “Total” box on Research.gov cover page

NSF 23-1 proposal preparation checklist
MIT-specific guidance updated 3/27/2024
☐ Check solicitation for other special requirements

Project Summary
☐ One page maximum
☐ For Research.gov: File upload must contain the following 3 headers:
  o Overview
  o Intellectual Merit
  o Broader Impacts

Project Description
☐ Usually 15 Page Max – URLs must not be used

Required Sections
A) separate section labeled “Broader Impacts” is required
B) separate section labeled “Results from Prior NSF Support” is required for all PI’s and Co PI’s who have received NSF support with an end date in the past 5 years including active awards: includes conference, travel, and NSF fellowship awards. The NSF policy is tied to the time period of the award, not to when the individual worked on the award. The Results from Prior NSF Support requires reporting on an award with an end date in the past five years

Up to 5 pages is allowed for all PIs combined. The following information is required for each PI’s most relevant award.
  o Award number (including program prefix), amount, and period of support, the title of the project
  o Summary of the results, separated into two distinct subheadings “Intellectual Merit” and “Broader Impacts”
  o List of publications (include full citations or refer to References Cited) If none, state “No publications were produced under this award”
  o Evidence of other research products and their availability, as described in the Data Management Plan of the prior award
  o If proposal is for renewed support, describe relationship to current project and include information on human-resources development per
  o If recently awarded and no results exist, describe major goals of project

☐ Check this section for references to human subjects, animals, collaborations, etc. that may need to be addressed in other sections.
☐ Other Criteria may be listed in solicitation & may impact NSF funding decision
☐ If the proposal has any sub-awards, this section must include a description of the work to be performed by the sub-award(s) if applicable.

References Cited
☐ REQUIRED for all proposals: if N/A, upload a document stating N/A
☐ 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 -- “et al” not allowed.
☐ If the document is available electronically, the website address (URL) should be identified (if readily available)

Biographical Sketch
☐ Required to be separately uploaded for all named senior personnel
☐ 3 Page Limit – usually (check solicitation)
Use of an NSF approved format for the biographical sketch is required. The two approved formats are SciENcv or the NSF Fillable PDF. NSF will not accept any other versions.

For more information, please see Approved Formats

No personal info: marital status, citizenship, home address/phone/email

The following sections are required. Inclusion of information beyond that specified may result in return without review.

A. Professional Preparation (oldest to newest, include Institution(s), location, major/area, and year for undergrad thru postdoc)
B. Appointments (newest to oldest, starting with current). Appointments should include any titled academic, professional, or institutional position, whether or not remuneration is received.
C. Products (includes publications, data sets, software, patents, or copyrights – not unpublished papers or invited lectures)
   i. Up to 5 most closely related to proposed project
   ii. Up to 5 other significant products
D. Synergistic Activities – has been revised to specify that a list should include up to 5 distinct examples that demonstrate the broader impact of the individual’s professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation. Examples with multiple components are not permitted.

EX: PI is a proposal reviewer for NIH. This is one distinct example and is allowable
EX: PI is a proposal reviewer for NIH, NSF, DOD, and NASA. This example includes multiple components and is not allowed.

Information on exceptional qualifications of Postdocs, Other professionals, or student research assistants may be included. Clearly mark as “Other Personnel” and upload as a single Other Supplementary Document

This section also has been updated to include reference to a new table entitled NSF Pre-award and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending Support. The table has been developed to assist users in completion of these sections of the proposal.

Budget (Including Justification)

Salaries and Wages

Senior Personnel who are not budgeted for any effort must be removed from the budget pages

Project Role for all Sr./Key must be completed on each page of the Research.gov budget (recommended roles: “PI”, “CoPI” or “Faculty Associate”)

Other Personnel: Budget detail for postdoctoral associates and other professionals must include the total number of persons for each position, with full-time equivalent person-months, and total salaries requested.

For students, secretarial/clerical/technical positions, the total number of persons and amount of salary requested in each category is required.

Other Costs

Equipment should include only major equipment (over $5,000) and each item of equipment must be specified in the budget detail.

Domestic and foreign travel costs should be budgeted separately
Participant Support Costs separately budgeted and includes number of supported participants
Other Costs (line G6) should be used for RA Tuition, Human Subjects incentive payments, and any other costs that do not fall in another category. Itemize in budget justification
NSF has clarified that costs related to a service agreement/contract are NOT participant support costs and should be under Other Direct Costs.

**Calculated and Indirect Costs:**
- MIT Allocation costs:
  - Include S&W allocation under B.6 (“Other Personnel”)
  - Include M&S allocation under G.6 (“Other direct costs”)
  - Justify thoroughly, including rates and bases used.
- MIT’s F&A rate is only applicable to Organized Research. If no federally negotiated indirect rate exists, a de minimis rate of 10% MTDC should be budgeted for indirect costs (including foreign subawardees) unless there is a specific exception in the solicitation. MIT policy for all non-research funded by federal sponsors (see: de minimis). Required to list the amount of total indirect costs, along with the current negotiated indirect cost rate(s) applicable per year.

**Budget Justification**

**General**
- For additional guidance and template language, see [RAS: Budget Justification Templates](#)
- 5 Page Limit to each Budget Justification (lead and subaward budgets)
- Separate budget detail & justification required for each known subawardee organization.
- Justification(s) should be clearly labeled, follow each line item in the budget, and accurately describe purpose of costs and basis of estimates.

**Personnel**
- “MIT fully supports…” statement is prohibited in the budget justification for NSF proposals. NSF considers this cost sharing. Do not include.
  - If no effort/salary is committed for any personnel, their role should be included under Facilities, Equipment, and Other Resources instead.
- Any senior personnel at more than 2 months/year? If so must be disclosed in the justification.
- Rate of pay for senior personnel, postdoctoral associates, and other professionals must be included in the budget justification.
- Need to define and apply the term “year”. Example-MIT’s Fiscal Year goes from July 1 to June 30.

**Travel**
- Domestic and foreign travel costs should be justified separately. Trips must be specified by destination and cost. Include dates of visit if known
- Conference attendance costs are only allowable if justified in terms of proposal objectives and/or dissemination of results.

**Subawards**
NSF does not negotiate rates for organizations that are not direct recipients of NSF funding (e.g., subrecipients). Consistent with 2 CFR §200.332, NSF grantees must use the domestic subrecipient’s applicable U.S. Federally negotiated indirect cost rate(s). If no such rate exists, the NSF grantee must determine the appropriate rate in collaboration with the subrecipient. The appropriate rate will be: a negotiated rate between the NSF grantee and the subrecipient; a prior rate negotiated between a different pass-through entity and the same subrecipient, or the de minimis indirect cost recovery rate of 10% of modified total direct costs.

**Participant Support**
Participant support should be separately justified and described adequately in the justification to determine allowability. Number of participants to be supported must be entered.
- Usually only allowed in “Conference Grants” or for educational/training.
- Stipends should not be paid as payroll expenses: contact RAS for details
- No direct support for MIT employees, including students, is allowed; MIT persons may participate in provided conference meals and coffee breaks
- Participant support costs are exempt from indirect cost
- NSF has clarified that speakers and trainers are not considered participants and should not be included under Participant Support Costs.

**Indirect Cost**
- For non-research proposals, include this statement in place of the standard F&A justification:
  - “This proposal supports non-research related activities at MIT. MIT does not have a federally negotiated indirect cost rate for non-research sponsored activities; therefore, indirect costs are requested at a de minimis rate of 10% MTDC per 2 CFR 200.”
  - Need to list the amount of total indirect costs, along with the current negotiated indirect cost rate(s) applicable per year.

**Related Validations**
- If Postdoctoral researchers are budgeted, a mentoring plan is required
- If Foreign travel is budgeted, the International Activities field on the NSF cover page should indicate the relevant countries. If international destinations are TBD, select “Worldwide” on the cover sheet. (displays as “XX”)

**Current & Pending**
- **Required to be separately uploaded for all named senior personnel**
- Use of an NSF approved format for the current and pending is required. The two approved formats are SciENcv or the NSF Fillable PDF. NSF will not accept any other versions.
- For more information, please see [Approved Formats](#)
- Additional guidance on Current & Pending
- This document has been updated to require that information on objectives and overlap with other projects be provided, to help NSF and reviewers assess overlap/duplication
  - If PI has more than 15 projects to list, MUST use SciENcv template.
  - If an individual PI did not request salary on a prior submission, but will be expending effort on the project (i.e., will be spending time working on the project), then a number greater than zero must be entered in current and pending support, please enter .01 annual effort for these projects.
  - NSF has clarified that Pre-Proposals, regardless of the sponsor, should also be included
  - All support dedicated to a particular project, regardless whether the source is internal or external to MIT, must be listed.
  - An item or service given with the expectation of an associated time commitment and is an in-kind contribution and must be reported to NSF. If the in-kind contribution is not intended for use on the project/proposal being proposed to NSF but has an associated time commitment, the information must be included as part of the Current and Pending Support section of the proposal. If the in-kind contribution is intended for use on the project/proposal being proposed to NSF, the information must be included as part of the Facilities, Equipment and Other Resources section of the proposal and need not be replicated in the individual’s Current and Pending Support submission.
  - Do not need to report gifts or start-up packages.
  - Be sure “THIS” proposal is included, with the correct budget amount
- Total active support may not exceed 100% (for example, more than 3 months summer salary). Please note, editing the completed SciEEncv or the NSF Fillable PDF will cause an error. Therefore, no statement with regards to adjusting effort to avoid being overcommitted should all planned research be funded cannot be included here. Such a statement is not required by NSF policy.
- If this project was previously supported by a source other than the NSF, this support must be listed for the most recent period of funding even if expired.
- This section also has been updated to include reference to a new table entitled NSF Pre-award and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending Support. The table has been developed to assist users in completion of these sections of the proposal.

Facilities, Equipment, and Other Resources

☐ **Required for all proposals:** If N/A, upload a document stating N/A

☐ This section should include an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded.

☐ If any participating MIT employees are unbudgeted, list them in this section. Describe their role in the project.
  - For unbudgeted faculty, include the statement “MIT fully supports the academic year salary of Professors, Associate Professors and Assistant Professors, but makes no specific commitment of academic year time or salary to this particular research project”.
  - For unbudgeted non-faculty staff, state that they are “supported by other sources” and provide MIT Internal documentation that these other sources do not represent a conflict of commitment.

☐ Any substantial collaboration with (non-employee) individuals not included in the budget should be described in the Facilities, Equipment and Other Resources, and documented in a letter of commitment from each collaborator in the Supplementary Documents.

☐ If PI or Senior Personnel have in-kind contributions and it’s intended for use on the project/proposal being proposed to NSF, the information must be included as part of the Facilities, Equipment and Other Resources section of the proposal.

Data Management Plan

☐ **REQUIRED for all proposals:** Data management Plan (2 page limit)
  - Each NSF directorate has different requirements for the Data Management Plan. Be sure to determine which directorate applies and consult DMP guidance by NSF Unit
  - Additional guidance is available at
    - [MIT Libraries: Data Management Plans](https://dmptool.org/)
  - Where a plan is not needed, a page is still needed asserting the absence of the need for such plans.

Postdoctoral Mentoring Plan

☐ **REQUIRED if budgeted:** Postdoc mentoring plan (1 page limit)
  - required for any proposals requesting support for postdoctoral researchers

Other Supplementary Documents

☐ **Other** supplementary documents types allowed:
o Letters of Collaboration permitted, but should be limited to stating the intent to collaborate and should not contain endorsements or evaluation of the proposed project. Detail of collaboration should be documented elsewhere in the proposal. See RAS Website for a recommended template for these letters.
 o Letters of Support allowed only when required by the solicitation
 o Letter quote from consultants if budgeted (Note: Also required by MIT in KC)
 o Any Solicitation-specific documents, such as department head or advisor letter, list of participants, etc. Be sure to review solicitation for any special requirements.

Collaborators & Other Affiliations Information

☐ Collaborators & Other Affiliations (COA) document required for all named senior personnel
   o See the required COA template available at NSF Policy Website
   o This document is now required for all Equipment proposals and Conference Proposals over $50,000
   o Instructions at top of template may be deleted and rows may be inserted as needed to provide additional names

Additional Document Uploads

☐ List of Suggested Reviewers or Reviewers Not to Include optional, include email and affiliation.
☐ Other Personnel Biographical Information