NSF PROPOSAL ROUTE/REVIEW/SUBMISSION CHECKLIST

Solicitation-specific instructions may supplement or deviate from these instructions.
Always read the solicitation carefully.   See RAS website for additional guidance relating to
[REU Supplement](#), [GOALI](#), and [CAREER](#).

This checklist is intended to be used primarily for "Research – Not EAGER or RAPID" proposal types.
The NSF PAPPG [Chapter II.E "Types of Proposals"](#) provides additional guidance related to: [RAPID](#), [EAGER](#), [RAISE](#),
[GOALI](#), [Ideas Lab](#), [FASED](#), [Conference](#), [Equipment](#), [Travel](#), [Center](#), or [Research Infrastructure](#) type proposals.

Proposals may be submitted via Fastlane or Research.gov.

Official NSF Guidance effective for proposals with deadlines June 1, 2020 and later:
   [Proposal & Award Policies & Procedures Guide (PAPPG), 20-1](#)

NEW WITH PAPPG 20-1: Biggest changes to proposal preparation guidance are as follows:
   1. **Biographical Sketches and Current and Pending Support** now must be submitted in one of two formats. The two approved formats are SciENcv or the NSF Fillable PDF. See below for more information.
   2. **The Project Description** has been revised to remove the requirement to contain a separate section within the narrative labeled "Intellectual Merit".

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

Lead Organization	Non-Lead Organization(s)
NSF REQUIRES Cover Sheet Project Summary Table of Contents (automatically generated) Project Description References Cited Biographical Sketches Budget and Justification Current and Pending Support Facilities, Equipment and Other Resources Data Management Plan Collaborators & Other Affiliations document(s) Postdoctoral Mentoring Plan (if applicable) Other Supplementary documents (if applicable) BIO directorate classification form (if applicable) DUE classification form (if applicable)	**MIT REQUIRES**: 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 <u>must</u> provide a description of MIT's role in the project for internal review. **NSF REQUIRES** Cover Sheet Table of Contents (automatically generated) Biographical Sketches Budget and Justification Current and Pending Support Facilities, Equipment and Other resources Collaborators & Other Affiliations document(s) BIO directorate classification form (if applicable) DUE classification form (if applicable)
Dates and Deadlines [PAPPG I.F](#) & [Exhibit III-1](#)	☐ 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 [PAPPG I.D](#) *(Continues)* *(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 in FastLane

| | o   PI certification is not required |
	o Subawardee/Collaborator certification letters not required
System Validations: Auto-compliance	☐ Has Sponsored Projects Office (SPO = RAS) Submit Access been allowed? ☐ Please use the CHECK button to reveal any errors or warnings *Note: these functions are only available to PIs & Co-PIs from the FastLane "Proposal Actions" screen. Other Authorized Users logged into a specific proposal using the temporary proposal number and a PIN cannot allow SPO access or "Check" for errors*

Personnel, Project Roles	☐ MIT PI status is required for PIs, Co-PIs, and all other Senior Personnel for NSF proposals
	 ☐ All faculty funded by a 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 FastLane/Research.gov ID #s authorized for PI submission by MIT.
	      o Research.gov/Fastlane registration is now self-service. RAS can no longer create new Research.gov/Fastlane 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. A template letter is available on the RAS website. Upload as Other Institutional Attachments. ☐ MIT requires a letter quoting any named consultant's role, expertise, and established consultant rate. See RAS: Proposal Preparation Basics ☐ Be sure to enter correct Activity Type in KC Proposal details.
Format of the Proposal PAPPG II.B	☐ All attachments must be paginated (including supplementary documents) ☐ Margins 1" in all directions, ☐ See PAPPG II.B.2 for a list of acceptable typefaces and sizes (see footnote if using a Mac)
Locations	☐ Enter any subawardee or other performance sites in KC under Proposal > Basics > Organization and Location. If Organization does not already exist in KC, request it be added at KC: Request New Subawardee Organization ☐ For Research.gov/FastLane, add Other organizations (subawards) in the Budget section only.
PI/Co-PI Info	☐ In Research.gov/FastLane, this feeds from PI information associated with each PI/Co-PI's Research.gov/FastLane ID#. Does not print as part of the proposal.

Cover Sheet
 PAPPG Chapter II.C.2.a.
	☐ Program Announcement/Solicitation completed in Research.gov/FastLane & KC
	 ☐ For consideration by NSF Organization Unit(s) – see PAPPG ChII.C.2.a(3)
	 ☐ FastLane Cover: Complete checkboxes and info regarding:
	      o Previous award number if a renewal
	      o Other Federal agency(s) applying to
	      o Is this a Preliminary Proposal?
	      o Has MIT received a Special Deadline Exception (PAPPG Ch. I.F)
	 ☐ Title Prefix: (e.g. "Collaborative Research", "GOALI" or per solicitation.)
	 ☐ Review the PI/Co-PI's certification answers for consistency with the Project Description. Especially watch for items requiring Compliance (aka "Special reviews") for KC tab and NSF cover page
	      o Human subjects: Enter "pending". FWA # is 00004881
	      o Animals: Enter "pending" Enter Assurance# D-16-00078
	      o 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")
	 ☐ Select Funding Mechanism
	 ☐ Select Collaborative Status (II.D.3)
	      o Note: Unfunded, parallel funded international, or MIT-internal collaborations should be marked "not a collaborative proposal."

(Continues) *(Continued)*	o For collaborative proposals from multiple organizations where MIT is <u>not </u>the lead, and MIT's role unclear from documents in Research.gov/FastLane (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. ☐ Budget total $ correctly stated in the "Total" box on Research.gov/FastLane cover page ☐ ***Check solicitation for other special requirements***
Project Summary [PAPPG Chapter II.C.2.b.](#)	☐ One page maximum ☐ For Research.gov/FastLane: Three text boxes must be completed (do not copy-paste formatted text) 　　o Overview 　　o Intellectual Merit 　　o Broader Impacts ☐ The Special Characters checkbox and uploaded summary should <u>only</u> be used when Special Characters are required. [(additional detail)](#) ☐ All three headings must be used in an uploaded summary.
Project Description [PAPPG Chapter II.C.2.d.](#)	☐ Usually 15 Page Max – URLs must not be used [(ii)](#) **Required Sections** 　**A)** separate section labeled "Broader Impacts" is required 　**B)** separate section labeled "Results from Prior NSF Support" is required [(iii)](#)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. Up to 5 pages is allowed for all PIs combined. The following information is required for <u>each</u> 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 [PAPPG Ch. V](#) 　　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 requirements apply to [special proposal types](#), see list at top of page 1 ☐ Other Criteria may be listed in solicitation & may impact NSF funding decision ☐ Full proposal resulting from preliminary proposal to reference preliminary proposal #. ☐ 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 [PAPPG Chapter II.C.2.e.](#)	☐ **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 [PAPPG Chapter II.C.2.f.](#)	☐ **Required to be separately uploaded for all named senior personnel** ☐ 2 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.**

(Continues)
(Continued)
Biographical
Sketch
PAPPG Chapter
II.C.2.f.
	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)
	      (May be titled "publications" if only publications are included)
	      (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 (ii)
	☐ Brief sketches required for auxiliary users on equipment proposals should also be uploaded in a single Other Supplementary Doc with other biographical information (iii)

Budget
(Including
Justification)
PAPPG Chapter
II.C.2.g.
	BUDGET FORMS:
	Salaries and Wages (i)
	☐ 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/FastLane 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:
	    o Include S&W allocation under B.6 ("Other Personnel")
	    o Include M&S allocation under G.6 ("Other direct costs")
	    o 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.

(Continues) *(Continued)* Budget (Including Justification) PAPPG Chapter II.C.2.g.	**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. o 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 (iv) (a,b,c) ☐ Conference attendance costs are only allowable if justified in terms of proposal objectives and/or dissemination of results. **Participant Support (v)** ☐ 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: o "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." o 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 PAPPG Chapter II.C.2.h.	☐ **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** and **FAQs** ☐ Additional guidance on Current & Pending

	-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.
	-Include at minimum for each award/proposal: Title, Dates, Total award amount, Sponsor, Budgeted Person-months of support *NOTE: Only _budgeted_ support should be listed. List 0 months for any award on which there is no budget commitment!*
	-Be sure "<u>THIS</u>" proposal is included, with the correct budget amount
	-Proposed and active NSF support should not exceed 2 months without additional justification. NSF policy limits senior personnel to 2 months support.
	-Total active support may not exceed 100% (for example, more than 3 months summer salary).
	-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.
Facilities, Equipment, and Other Resources PAPPG Chapter II.C.2.i. *(Continued)*	☐ **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. o 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". o 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 (see PAPPG Chapter II.C.2.j.)	☐ **REQUIRED for all proposals:** Data management Plan (2 page limit)
	 o 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
	 o additional guidance is available at
	  MIT Libraries: Data Management Plans and
	  https://dmptool.org/
	 o Where a plan is not needed, a page is still needed asserting the absence of the need for such plans.

Postdoctoral Mentoring Plan (see PAPPG Chapter II.C.2.j.)	☐ **REQUIRED if budgeted:** Postdoc mentoring plan (1 page limit) o required for any proposals requesting support for postdoctoral researchers, see PAPPG Chapter II.C.2.j.

Project Summary with Special Characters (see [PAPPG Chapter II.C.2.j.)](#)	☐ Project summary with Special Characters
	o In Research.gov/FastLane, only allowed as attachment when including special characters: the "Special character" checkbox must be checked to include this. [(additional detail)](#)
Other Supplementary Documents [PAPPG Chapter II.C.2.j.](#)	☐ **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 (see [PAPPG Chapter II.C.2.j](#) for the difference between Letters of Support & Collaboration)
	o Letter quote from consultants if budgeted (**Note: Also required by MIT**)
	o Rationale for performance of project off-campus
	o Documentation regarding human subjects [(Ch XI.B.1)](#), hazardous materials, vertebrate animals ([Ch XI.B.3](#)), or endangered species.
	o Exceptional qualifications of Other Personnel if relevant -- see [(Ch II.C.2.f(ii))](#)
	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.
Appendices [PAPPG Chapter II.C.2.k.](#)	☐ Do not include unless specifically authorized (See Solicitation requirements)
Collaborators & Other Affiliations Information: [PAPPG Chapter II.C.1(e)](#)	☐ **Collaborators & Other Affiliations (COA) document required for all named senior personnel**
	o See the required COA template available at [NSF Policy Website](#)
	o [Also, see NSF's "Frequently Asked Questions" (05/18/2018) on the COA template](#)
	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
Single Copy Documents (excluding COA) [PAPPG Ch II.C.1](#)	☐ [Deviation Authorization](#), Do not include unless specifically instructed by NSF.
	☐ List of [Suggested Reviewers/Reviewers not to include](#), optional, include email and affiliation.
	☐ Additional Single Copy Documents: do not include unless specifically instructed by NSF or solicitation Nature of [Natural or Anthropogenic Event](#): Contact RAS to discuss if you plan to request deadline flexibility due to a natural or anthropogenic disaster.