



**OFFICE OF SPONSORED PROGRAMS**

**NATIONAL SCIENCE FOUNDATION (NSF)  
2024 PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE (PAPPG)  
FULL RESEARCH PROPOSAL CHECKLIST**

The [NSF PAPPG \(NSF 24-1\)](#) provides general proposal preparation guidelines covering all required sections of full research proposals submitted to NSF. Please note, when applying to a specific program solicitation, the proposal preparation instructions provided in the solicitation may deviate and will supersede the guidance outlined in the PAPPG. This checklist highlights, not replaces, the submission guidelines of the PAPPG. *Please consult the guidelines for complete instructions.*

**PORTAL**

The Office of Sponsored Programs submits NSF proposals strictly through [Research.gov](#). Research.gov provides additional compliance checks and is an intuitive and easy to learn portal. For more information, resources, and FAQs, please visit the [Research.gov About Proposal Preparation and Submission webpage](#). Should you have a technical question regarding the system, the Research.gov Help Desk can be reached at **1-800-381-1532**.

**REQUIRED FORMATTING**

- Font: Arial (not Arial Narrow), Courier New or Palatino Linotype @ 10pts or larger; Times New Roman @ 11 pts or larger; Computer Modern family of fonts @ 11 pts or larger (Note: A font size of less than 10 can be used for equations, figures/table captions, special characters or symbols-- must be readable) - No more than 6 lines of text per 1 inch of vertical space
- Pagination: Do NOT include page numbers. Research.gov automatically paginates the proposal upon submission.
- Margins must be at least one inch in all directions

<b><i>Proposal Element</i></b>	<b><i>Instructions</i></b>
<b><i>Cover Page</i></b>	<ul style="list-style-type: none"> <li>• PI/Co-PIs all need NSF IDs</li> <li>• All subcontractors and Non-Leads must have their organizations registered in Research.gov</li> <li>• Collaborative Proposal titles must start with “Collaborative Research: Title” unless specified otherwise in the guidelines</li> <li>• Start date at least six months from deadline date and must start on the 1<sup>st</sup> or 15<sup>th</sup> of the month</li> <li>• Add Other Federal Agency information (as applicable) and check relevant box(es) in the Other Information section. <ul style="list-style-type: none"> <li>○ If International Activities are included, note the applicable country/countries. If the specific location is not known, enter “Worldwide”.</li> </ul> </li> </ul>
<b><i>Project Summary</i></b>	<ul style="list-style-type: none"> <li>• Limited to 1 Page</li> <li>• <b>MUST</b> include three separate section headers specifically <b><u>LABELED</u></b>: <ul style="list-style-type: none"> <li>○ <b>Overview</b></li> <li>○ <b>Intellectual Merit</b></li> <li>○ <b>Broader Impacts</b></li> </ul> </li> </ul> <p><i>To be valid, a heading must be on its own line with no other text on that line.</i></p>



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<p><b>Project Description</b></p>	<ul style="list-style-type: none"> <li>• 15 page limit (Max file size: 10 MB)</li> <li>• URLs are not permitted</li> <li>• <b>MUST include a separate section header <u>LABELED</u> Broader Impacts</b>  <i>To be valid, a heading must be on its own line with no other text on that line.</i></li> <li>• <b>MUST include a separate section <u>LABELED</u> Results from Prior NSF Support</b>  <i>To be valid, a heading must be on its own line with no other text on that line.</i>          This applies to the PI and Co-PIs. If there is no Prior NSF Support (with an end date in the past 5 years – including NCE) to report, there must be a statement indicating so. If a PI or Co-PI has multiple prior NSF awards, report on the one award most closely related to the proposal with an award end date within the past 5 years or an award that is currently active.          The following information must be provided in this section:         <ul style="list-style-type: none"> <li>▪ NSF award number, amount of award, and period of support;</li> <li>▪ Title of the project;</li> <li>▪ Summary of the results of the completed work, including accomplishments, separately described under two distinct headings, related to and <u>LABELED</u> Intellectual Merit and Broader Impacts and include activities supported by the award;</li> <li>▪ List of all publications resulting from the NSF award. A complete bibliographic citation for each publication is required either in this section or in References Cited. If no publications, state, “No publications were produced under this award.”</li> <li>▪ Evidence of research products and their availability, including, but not limited to: data, publications, samples, physical collections, software, and models, as described in any Data Management and Sharing Plan</li> <li>▪ If renewal, description of the relation of the completed work to the proposed work.</li> </ul> </li> </ul>
<p><b>References</b></p>	<ul style="list-style-type: none"> <li>• No page limit – FULL REFERENCES, “<b>et al</b>” is <b>NOT to be used</b></li> </ul>
<p><b>Budget</b></p>	<ul style="list-style-type: none"> <li>• Must draft budget using <a href="#">OSP Internal Budget Template</a> which you will data enter in portal once OSP approves. Always download a new template to ensure correct rates are used.</li> <li>• Split IDC rates must be entered on separate lines, as applicable. Should you require assistance with this step, please refer to the <a href="#">How to Enter Multiple IDC Rates in Research.gov</a> section or contact your College Research Administrator for support.</li> <li>• Important Reminders - Check the solicitation carefully for budget requirements       <ul style="list-style-type: none"> <li>○ There is an NSF funding 2-month limit per year for Senior Personnel</li> <li>○ Full-time Academic RAs require associated tuition and fees. (\$10K per 9 academic months)</li> <li>○ UML’s equipment acquisition threshold is \$5K</li> <li>○ Confirm whether there is required travel for conferences or meetings</li> <li>○ Absolutely no cost share unless solicitation requires</li> </ul> </li> </ul>
<p><b>Budget Justification</b></p>	<ul style="list-style-type: none"> <li>• No more than 5 pages for the lead plus up to 5 additional pages per subcontract, if applicable</li> <li>• Do not include unfunded personnel - Describe unfunded personnel role(s) in the Facilities, Equipment and Other Resources section of the proposal and provide a corresponding letter of collaboration.</li> <li>• NSF Specific Budget Justification Template is available <a href="#">HERE</a></li> </ul>
<p><b>Facilities, Equipment, &amp; Other Resources</b></p>	<ul style="list-style-type: none"> <li>• No page limit</li> <li>• Describe the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded.</li> <li>• Include only resources directly applicable to the proposal.</li> <li>• Description of unfunded collaborations. Corresponding Letters of Collaboration must be included in Other Supplementary Documents section.</li> </ul>
<p><b>Biographical Sketches</b></p>	<ul style="list-style-type: none"> <li>• Provide for PI, Co-PIs, and Senior Personnel</li> <li>• Must generate NSF-approved Biosketch using <a href="#">SciENCv</a></li> <li>• Appointments should include any titled academic, professional, or institutional position, whether or not remuneration is received. (Reference the <a href="#">NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support</a>)</li> </ul>



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	<ul style="list-style-type: none"> <li>Senior/key personnel are required to certify that the information is current, accurate, and complete in SciENcv. The file downloaded from SciENcv should not be edited after downloading. If changes are needed, the Senior Personnel must update SciENcv and re-certify.</li> </ul>
<b>Current and Pending</b>	<ul style="list-style-type: none"> <li>Provide for PI, Co-PIs, and Senior Personnel</li> <li>Must generate NSF-approved Current &amp; Pending using <a href="#">SciENcv</a></li> <li>Proposed and active NSF support should not exceed 2 months, NSF policy limits senior personnel to 2 months support.</li> <li>Must include “this proposal” in the pending section Include all resources available to an individual in support of his/her/their research endeavors (Reference the <a href="#">NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support</a>)</li> <li>Disclose ALL in-kind contributions with an estimated dollar value of \$5K or more and that require a commitment of the individual’s time. In-kind contributions with an estimated value of less than \$5K need not be reported.</li> <li>Senior/key personnel are required to certify that the information is current, accurate, and complete in SciENcv. The file downloaded from SciENcv should not be edited after downloading. If changes are needed, the Senior Personnel must update SciENcv and re-certify.</li> <li>FAQs can be found <a href="#">HERE</a></li> </ul>
<b>Collaborators and Other Affiliations</b>	<ul style="list-style-type: none"> <li>Must use the <a href="#">NSF template</a> which must be saved and uploaded as a .xlsx file</li> <li>Rows may be inserted as needed to provide additional names – all other formatting must remain the same</li> <li>Names should be in <i>LastName, FirstName Middle</i> format and dates must be in a <i>mm/dd/yyyy</i> or <i>m/d/yyyy</i> format</li> </ul>
<b>Synergistic Activities</b>	<ul style="list-style-type: none"> <li>There is no specific template for this document. Please use NSF’s standard formatting requirements.</li> <li>List of up to five <a href="#">DISTINCT</a> examples – Cannot use categories with multiple examples listed.</li> </ul>
<b>Mentoring Plan</b>	<ul style="list-style-type: none"> <li>1 page – <b>Only include if budgeting for Post Docs or Graduate Students</b></li> <li>One combined Mentoring Plan for collaborative proposals and proposals that include subawards.</li> </ul>
<b>Data Management and Sharing Plan</b>	<ul style="list-style-type: none"> <li>2 page limit</li> <li>Data Management Plan Tool (DMPTool) available <a href="#">HERE</a></li> <li>Data Management and Sharing Requirements and plans specific to the Directorate, Office, Division, Program, or other NSF unit, relevant to a proposal are available on the NSF website.</li> <li>A valid Data Management Plan may include only the statement that no detailed plan is needed with a clear justification</li> <li>One combined Data Management Plan for collaborative proposals and proposals that include subawards.</li> </ul>
<b>Letters of Collaboration</b>	<ul style="list-style-type: none"> <li>If applicable, letters should <u>only</u> state the following:          “If the proposal submitted by Dr. <i>(Insert full name of the PI)</i> entitled <i>(Insert the proposal title)</i> is selected for funding by the NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment or Other Resources section of the proposal.”  <i>*Departure from this format may result in the proposal being returned without review</i>  <i>**There can be solicitation specific updates to this letter. Be sure to review the solicitation.</i></li> </ul>
<b>List if Suggested Reviewers (optional)</b>	<ul style="list-style-type: none"> <li>May include a list of suggested reviewers (including email address and organizational affiliation)</li> <li>May designate persons they would prefer not to review the proposal</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>Appendices are not permitted unless specifically required by the solicitation</li> <li>BIO directorate classification form and DUE classification form to be included (if applicable)</li> </ul>



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**NSF COLLABORATIVE PROPOSALS**

There are two ways to fund an NSF collaborative proposal. The project team can either have a collaborative proposal submitted by one institution or a collaborative proposal submitted by multiple institutions. ***It is up to the PI to determine which route is appropriate.***

**IMPORTANT:** *Non-Lead and Sub organizations must be registered in [research.gov](https://www.research.gov)- PI & Co-PIs must have individual NSF accounts with PI role associated with their institution.*

A **collaborative submitted by one institution** is another name for a subaward. In this case, UML would submit all documents (including the partnering institution's documents) and if awarded, the NSF funding would be issued to UML. UML would then issue a subaward agreement to the subrecipient and be responsible for subaward monitoring. The budget implication for having a subaward is that UML would charge IDC on the first \$25K of the subaward to cover the burden of subrecipient monitoring. Typically, OSP only sees subawards used in NSF when required by the solicitation or if the PI has a strong justification to do so.

***Collaborative Proposal from One Organization: Subcontract Organization(s) – Required Documents***

- [Subrecipient Commitment Form](#)
- Statement of Work
- Budget (NSF format) and Justification
- [Biographical Sketches](#) (for all Senior Personnel)
- [Current and Pending Support](#) (for all Senior Personnel)
- [Collaborators & Other Affiliations](#) (for all Senior Personnel)
- Synergistic Activities (for all Senior Personnel)
- Facilities, Equipment and Other Resources (to be appended to the Lead's Facilities doc and uploaded as one file)
- Mentoring Plan (if applicable - to be combined with Lead Mentoring Plan and uploaded as one file)
- Letters of Collaboration (if applicable)
- BIO directorate classification form, DUE classification form, etc. (if applicable)

A **collaborative proposal submitted by multiple institutions** is the most common collaborative proposal. If awarded each institution would receive their own award directly from NSF. For these applications, the Lead submits the bulk of the proposal including the technical documents. The non-lead is responsible for submitting the documents listed below.

***Collaborative Proposal from Multiple Organizations: Non-Lead Organization(s) – Required Documents***

- Cover Sheet
- Table of Contents (automatically generated)
- [Biographical Sketches](#) (for all Senior Personnel)
- [Current and Pending Support](#) (for all Senior Personnel)
- [Collaborators & Other Affiliations](#) (for all Senior Personnel)
- Synergistic Activities (for all Senior Personnel)
- Budget and Justification
- Facilities, Equipment and Other Resources
- Mentoring Plan (if applicable - To be combined with Lead Mentoring Plan and uploaded as one file)
- BIO directorate classification form, DUE classification form, etc. (if applicable)
- Letters of Collaboration (if applicable) should be emailed to Lead for upload

*Non-Lead must upload all required documents to their Non-Lead proposal in [Research.gov](https://www.research.gov)*



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**How do I link a proposal?**

The non-lead organization should work offline with the lead organization to provide its Temporary ID Number. The lead organization can then click the Link/View Collaborative Proposals button on its in-progress lead proposal form to enter the non-lead proposal's Temporary ID Number to send the link request to the non-lead organization. The link request must be accepted by the non-lead organization. The PI, co-PI, OAU, SPO and AOR for the non-lead organization proposal will receive a notification in Research.gov and an email notifying them that they have received a proposal link request.

**HOW TO ENTER MULTIPLE INDIRECT COST (IDC) RATES IN RESEARCH.GOV**

UML's Negotiated Indirect Cost (IDC) Rate Agreement has different yearly rates in the coming years. Multiple rates may apply to a single budget period due to how the fiscal year falls within the period of performance. The split rates must be detailed out on proposal budgets. To split the rates, follow the steps below:

- 1. Confirm the correct dates for the applicable budget period are entered in row 3 of the budget template.

3	Start Date:	10/1/2026	End Date:	9/30/2027
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- 2. Calculate the IDC bases.

- ▶ Go to the IDC section of your internal budget and locate the rate information on Row 76. This will tell you how many days of the year apply to each rate.

75	Indirect Cost Type	Indirect Cost Rate	Rate Information	Indirect Cost Base (\$)
76	Modified Total Direct Costs (MTDC)	On Campus - Research	273d at 57.5%   92d at 58%	142,268

- ▶ Using that information, calculate what percentage of the year is applicable to each rate by dividing the number of days by 365.

Rate Information
273d at 57.5%   92d at 58%

273 days at 57.5%      273/365 = 0.7479452054794521  
92 days at 58%        92/365 = 0.2520547945205479

- ▶ Take each *value* calculated above and multiply by the Indirect Cost Base (\$) provided in the temple:



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Rate Information	Indirect Cost Base (\$)
273d at 57.5%   92d at 58%	142,268

$273/365 = 0.7479452054794521 * \$142,268 = \$106,408.67 = \text{MTDC for 273 days at 57.5\%}$   
 $92/365 = 0.2520547945205479 * \$142,268 = \$35,859.33 = \text{MTDC for 92 days at 58\%}$

The IDC info for this budget can be entered into Research.gov as follows:

Indirect Costs		
Section	Year 1 Rate x Base	
<b>I. Indirect Costs</b>		<b>\$81,983</b>
1. MTDC (07/01/2025 - 06/30/2027)	57.5 % x \$	106,409 \$61,185 funds
2. MTDC (07/01/2027 - 06/30/2028)	58 % x \$	35,859 \$20,798 funds
<b>+ Add Indirect Cost Item</b>		
<b>J. Total Amount Requested (H + I)</b>	<b>Year 1 (H + I)</b>	<b>\$81,983</b>

You can add as many Indirect Cost Rates as needed using the highlighted “+Add Indirect Cost Item.”

NSF’s Budget page will calculate the actual IDC for you.

Other sponsor portals you may need to calculate the IDC by multiplying each portion of the MTDC by the applicable rate.