Step by Step Tips to Avoid Errors and Warnings

- Full instructions can be found at: [http://grants1.nih.gov/grants/funding/424/index.htm](http://grants1.nih.gov/grants/funding/424/index.htm).
- This document is intended to assist you in preparing the Grants.gov application for submission. It is in no way intended to replace the full instructions for the application.
- The causes for Errors and Warnings documented here are mostly a result of trial and error.
- Updates will occur periodically.

**NOTE:**
- The government has many different forms and all the various fields may be different. Note there are fields that are mandatory to NIH but do not appear in yellow. Please keep in mind that many of the forms are used by all federal agencies. The fields may request information a little differently than what the name of the field states.
- All attachments must be in PDF format. – ERRORS will appear if they are not PDF files. There should be no Headers/Footers or page numbers.
- The system adds these when the application is assembled.

**What You Will See:** Upon opening the .xfd file, you will see a page with 3 sections.

1. The top section is pre-filled and the information should not be changed.
   - Always check to be sure that you have downloaded the correct application package for the solicitation that you want to submit to. The CFDA information may be pre-filled or blank. This information is not used by NIH at this time. NIH awards many types of projects under a single CFDA number.

2. The second section is where all of the work will be done.
   - The first yellow field appears here. Application Filing Name is not used by NIH, but it does have to have something typed in it. Some applicants use the title of the project; however the field has a limit on the number of characters allowed. You may simply enter the PI’s name.
   - You will then find the forms for the application. There are Mandatory Documents and Optional Documents to use. To open the documents, highlight the form and click on the Open Form button below the box. Within the .xfd file double clicking and using the scroll wheel on the mouse does not work. You may work from either side of the boxes. Once you complete a form you must be sure that it is in the right side Completed Box. Forms not on the right side will not be submitted.

3. The third section is a general set of instructions for Grants.gov. The same instructions appear on every package.

**Mandatory Forms**

**SF 424 (Cover Page)**

1. For NIH Application select Application. If a package needs to be resubmitted because of an error, SPS will update this field.
2. N/A
3. N/A
4. If you are submitting a resubmission from a prior proposal include the NIH assigned reference number from the Summary Statement here. (1 R01 CA123345-01) If not a resubmission leave blank.
5. DUNS # 072051394
   Legal Name – Purdue University
   Department – Your Dept. – Leaving this blank will result in a Warning.
   Division – If applicable – Leaving this blank will result in a Warning.
   Street 1 – 302 Wood Street
   Street 2 – N/A
   City – West Lafayette
   County – N/A
   State – IN, select from drop down if there.
   Province – N/A
   Country – US
   ZIP – 47907-2108 – incorrect input will result in an ERROR as it compares this to all valid zip codes.
   Person to be contacted on matters involving this application:
   Allison K Harris
   Phone: 765-494-6204 Fax: 765-494-1360 email: proposal@purdue.edu
6. 356002041 – do not use hyphens
7. For Version 2 – H. State/Public Controlled Institute of Higher Education
8. Select appropriate – New (new), Resubmission (revision of previous application), Renewal (competing continuation), Continuation (NCR – currently N/A), Revision (supplement) if you select Revision you need to select the appropriate box below. If the application is being submitted to other federal agencies select yes.
9. Pre-filled, do not change.
10. Pre-filled, do not change – may also be blank.
11. Title of Project
12. List any areas affected by this application. It may be as broad as USA.
13. Enter project period.
14. Congressional district of applicant is always 4. District of project is 4 unless the project is taking place off campus or at a Regional campus. Only the number 4 can be typed here. 4th, Fourth etc. will result in an error. This may be a drop down box depending on the Version. If a drop down select IN-004.
15. This information is the PI’s information and address. Position/Title must be filled or will result in a Warning. Once the application reaches the eRA Commons validation check this information will be compared to the Personal Profile in the Commons. If information does not match it will result in a Warning. The most Common Warnings are that the name does not match and the position/title does not match.
16. Total Estimated Project Funding – total amount of funding being requested from NIH. This must match the Total Request from the budget forms.
   Total Federal & Non-Federal Funds – total amount of funding being requested from NIH plus all cost sharing.
   Estimated Program Income – should be $0.00 in most situations. There are some situations that we do have program income but it is very rare.
17. Always click b. NO – Program is not covered by E.O. 12372
18. This box is for SPS to agree to which we always will. You may click the box to clear the yellow required color and to keep the error from appearing when you check for errors.

19. This information may change depending on who is available to approve in SPS on the day of submission. You may type in the following information and it will be changed by SPS if needed. Some information may pre-fill based on the information provided above.

Robert J. Dimmitt
Assistant Director, Pre-Award, Purdue University
Sponsored Program Administration
302 Wood Street, West Lafayette, IN 47907
765-494-6204, 765-494-1360, proposal@purdue.edu

20. Leave blank

21. Attach only if needed.

Research and Related Senior/Key Person Profile
Profile – Project Director/Principal Investigator

- The information for the Project director/Principal Investigator will pre-fill from the cover page. Check to make sure the information is correct, if the information does not match the Commons account a Warning will appear.
- Credential, e.g., agency login – The PI's Commons username MUST appear here. If the login is not entered, the proposal will not reach the Commons for validation.
- Project Role for the PI is pre-filled.
- Other Project Role Category – N/A for PI.
- Attach Biographical Sketch – use the PI biosketch limited to 4 pages. Including more than 4 pages will result in an error. A template for Grants.gov submission is available here. Headers and footers and page numbers should be deleted. http://grants1.nih.gov/grants/funding/424/SF424R-R_biosketch.doc
- Attach Current and Pending Support – do not add an attachment unless the solicitation specifically requests one. Other Support information will continue to be requested as a part of the JIT Initiative.

Profile – Senior/Key Person

- Information for up to 40 Senior/Key Persons may be added depending on the Version of the forms being submitted. If you do not have enough blanks for all of the Senior/Key Persons use the format page at this link. http://grants1.nih.gov/grants/funding/424/SF424R-R_AdditionalProfiles.doc
- The credential, e.g., agency login field is not mandatory here. It may be filled in if known.
- Project Role – NIH does recognize a Co-PI. If this is selected a Warning will appear in the Commons. Select an option that is applicable, Faculty may be the best choice for other professors.
- Biographical Sketch is Mandatory.
- Current & Pending is not unless stated.
- To enter more Senior/Key Persons click on Next Person in the bottom right corner. If all information is not filled for the current persons you will not be allowed to go to the next person.

Research and Related Other Project Information
1-5 are Yes/No questions. If you answer Yes to 1, 2, 4 and 5 there are other fields within the form or application package which will become mandatory. The fields within the Research and Related Other Project Information that are mandatory based on your answer will appear in Yellow. The fields in the Research Plan will not.

1. Are Human Subjects Involved? – Yes
   1a. Is the review Pending? Yes - leave the Approval date blank and enter the Human Subject Assurance Number 00001548.
   1a. Is the review Pending? No - enter the approval date from your IRB approval documents. If an exemption applies, mark the appropriate box. Enter the Human Subject Assurance Number.

   **If you answer yes to Human Subjects, sections 8-11 of the PHS 398 Research Plan form MUST be completed.**

   Are Human Subjects Involved – No
   No other fields are required.

2. Are Vertebrate Animals Used? – Yes
   2a. Is the IACUC review Pending? Yes – leave the approval date blank and enter the Animal Welfare Assurance Number A3231-01.
   2a. Is the IACUC review Pending? No – enter the approval date from your IACUC approval documents. Enter the Animal Welfare Assurance Number A3231-01.

   **If you answer yes to Animals, section 12 of the PHS 398 Research Plan forms MUST be completed.**

   Are Vertebrate Animals Used? – No
   No other fields are required.

3. Is proprietary/privileged information included in the application? Yes/No
   4a. Does this project have an actual or potential impact on the environment? Unless a specific solicitation states that NEPA applies, mark NO.
   4b. If yes explain – type in the field
   4c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (IES) been performed? Yes/No
   4d. If yes, explain.

   5a. Does this project involve activities outside the U.S. or partnership with International Collaborators? Yes/No
   5b. If Yes, identify countries.
   5c. Optional - Explanation if desired.

4. Project Summary/Abstract – for the NIH applications this is the abstract that was previously Form Page 2.

5. Project Narrative – this is for the Public Health Relevance section of the Abstract. Should only be 2-3 sentences.


7. Facilities and Other Resources – best if typed on a plain document. You can follow the outline from the PHS 398 Resources Page but DO NOT use this form.

8. Equipment – same as above. This will be a separate attachment from #9.

9. Other Attachments – not usually used. Appendix material, Consortium Information and Letters of Support can be attached in the Research Plan form.

**Research and Related Project/Performance Site Location**

Fill in the information for all Performance Sites with the Primary Location listed first. Unless this is an off campus or Regional campus application the primary will always be your lab address.
PHS 398 Cover Page Supplement

1. PD/PI pre-fills from the Cover Page
   New Investigator? Yes/No – If no previous NIH support answer Yes.
   Degrees – This is the only location to enter the degrees earned by the PI. This information will be compared to the Commons Personal Profile. If they do not match a Warning will appear.

2. If the answer was Yes to the Human Subjects question on the Other Project Information form you must answer Yes/No. If Yes, answer the next question.

3. Applicant Organization Contact – this information pre-fills from the Cover Page. The title and address must be filled out below.
   Title – Senior Account Manager
   Street 1 – 302 Wood Street
   City – West Lafayette
   County – Tippecanoe
   State – select IN from the drop down
   Province – N/A
   Country – pre-filled, Zip/Postal Code – 47907-2108
   Click Next at the top of the form to get to the remainder of the form.

4. Human Embryonic Stem Cells – Yes/No. If yes insert the cell lines below.

PHS 398 Research Plan

1. Application Type pre-fills from the Cover Page.

2. Research Plan Attachments – in this section upload the Research Plan in the separate placeholders. Each attachment should follow the NIH requirements for margins, font type and size. No headers/footers or page numbers should be used. Typing the Research Plan section as a single Word document following page limitations then separating each section is recommended. The page limitations in the solicitation apply to this Research Plan section.
   1. Introduction to application should only be used for Resubmissions of prior applications. This section does not apply to the page limitation but should be limited to 1-3 pages depending on the type of submission. **If this attachment is included without having the Resubmission button checked, it will result in an Error. Not following the page limits for this section will also result in an Error.**
   2-5. These four attachments must be included even if a section does not apply to this application. If a section does not apply simply add a page the states Not Applicable to this application. **If an attachment is not included it will result in an Error.**
   6. If this is a Renewal (Competing Continuation) or Revision (Supplement) that involves clinical research you must include this attachment.
   7. If this is a Renewal or Revision, you must include this attachment. It should be a list only, the actual materials can be included in the Appendix. Be sure to follow the guidelines for including Appendix material.

Human Subjects Sections
8-11. These four attachments must be included if you have marked Yes for Human Subjects on the Research and Related Other Project Information form. **If all four attachments are not included it will result in an Error.**

Other Research Plan Sections

12. Vertebrate Animals - This attachment must be included if you have marked Yes for Vertebrate Animals on the Research and Related Other Project Information form. **If it is not included it will result in an Error.**

13. Select Agent Research – This attachment will be included only if Select Agents are involved in the research.

14. Multiple PI Leadership Plan - This section will only be used for applications utilizing Multiple PI’s. If you are not submitting this format do not include this information. **Including an attachment here without the Multiple PI designation for the key personnel will result in an Error.**

15. Consortium/Contractual Arrangements – If the application has a subcontract, include this attachment. It is intended for a single typed document, not the scanned documents from the subcontracts themselves.

16. Letters of Support – Attach appropriate letters from all individuals confirming their role in the project.

17. Resource Sharing Plan - This section is for the Data Sharing Plan and Sharing Model Organisms is applicable. The Data Sharing Plan is for applications seeking more than $500,000 in direct costs in any year. Limit 1 paragraph. The Sharing Model Organisms is for applications anticipating the development of model organisms.

18. Appendix - If you are submitting Appendix material be sure that your follow the guidelines. The Appendix section is limited to 10 PDF attachments.

**PHS 398 Checklist**
1. Application Type – pre-fills from the Cover Page.
2. Change of Investigator/Change of Institution Questions – fill out if applicable.
3. Inventions and Patents – fill out if this is a Renewal (Competing) application.
4. Program Income – fill out this section if applicable. Usually this is NO but if YES fill out the remaining items.
5. Assurances/Certification – Purdue University has reviewed and approved all Assurances and Certifications. This section will be left blank.

**Optional Forms**
There are forms in the Optional Forms section that are actually mandatory forms. Of the two budget forms, one MUST be selected based on the type of application being submitted.

**PHS 398 Cover Letter File**
This form is intended for a cover letter if you choose to write one. Some applications will include a cover letter stating where they feel an application should be reviewed or if there are certain people that should not be involved in the review. Also check the solicitation as a Cover Letter may be required.
PHS 398 Modular Budget
- required for applications with $250,000 or less in Direct costs each year.

Budget Period: 1-5
The form provides budget fields for up to 5 years. If less than 5 years is being requested, complete only those years and leave the others blank.

Budget Period – enter the start and end date for each of the budget periods. Usually one year at a time. **If the first start date and last end date don’t match the dates on the Cover Page an Error will result.**

A. Direct Costs
Direct Cost less Consortium F&A – select the appropriate number from the drop down box.
Consortium F&A – if there is a subcontract, enter only the subs F&A amount for that year.
Total Direct Costs – the form will calculate this for you. The amount should match the Total Direct Costs from the Coeus budget.

B. Indirect Costs
1-4. If more that one F&A rate applies to this application you will use a line for each rate. Once you start entering this information the other fields will become yellow, showing that they are now mandatory.
Indirect Cost Type – enter MTDC, TDC, etc.
Indirect Cost Rate % - enter the percent
Indirect Cost Base $ - enter the base for the calculations. This will match the base listed on your Coeus budgets.
Funds Requested – enter the total F&A for the year. This will also match the Coeus budgets.
Cognizant Agency – type DHHS
Indirect Cost Rate Agreement Date – enter the appropriate date in the listed format.
West Lafayette Campus – 11/17/2005
Fort Wayne Campus – 03/01/2005
Calumet Campus – 03/01/2005
North Central Campus – 02/28/2005
Total Indirect Costs – the form will calculate this for you.

C. Total Direct and Indirect Costs – the form will calculate this for you.

Cumulative Budget Information
1. Total costs, Entire Project Period – all fields here will be calculated for you. Verify that they are correct.
2. Budget Justifications – each section of the budget justification will be attached as separate PDF documents.
   Personnel Justification – Include the personnel justification only. **If there is no attachment in this section an Error will result.**
   Consortium Justification – Include the justification for subcontracts if applicable.
   Additional Narrative Justification – Include additional justification if needed. Any variation in the modules will need to be justified.

Research and Related Budget
- required for applications with over $250,000 in Direct costs each year. If the application has any number of years over $500,000 in Direct costs approval must be obtained from NIH prior to submission.
Organizational Duns: pre-fills from Cover Page
Budget Type – click Project
Enter name of Organization – pre-fills from Cover Page
Start Date – pre-fills from Cover Page
End Date – fill end the end date of Budget Period

A. Senior/Key Person
1-8. Information for up to 8 people can be listed here. Line 1 will always be
the PI listed on the Cover Page. All persons listed on the Research and
Related Senior/Key Person Profile form should be listed here. As you
enter additional people; the mandatory fields in that line will appear
in yellow. **The Base Salary and the appropriate Person Months
must be entered for each person. If they are not entered, an Error
will result.** Enter the Requested Salary and Fringe Benefits in whole
dollars. The Funds Requested will calculate for you.
9. If there are more than 8 Senior Key Persons, enter the total Funds for
everyone after the first 8. You must then include an attachment in the
Additional Senior Key Persons section with all pertinent information
about those people.
Total Senior/Key Person – the form will calculate this for you.

B. Other Personnel
Enter the total number of persons for each project role. If needed you may
add addition project roles below the four listed. The **appropriate Person
Months must be entered for each person. If they are not entered, an
Error will result.** Enter the Requested Salary and Fringe Benefits (Grad
Student Insurance is always included in with Fringe Benefits) in whole
dollars. The funds Requested will calculate for you.
Total Other Personnel – the form will calculate this for you.
Total Salary, Wages and Fringe Benefits – the form will calculate this for you.
Click on Next at the top of the Form.

C. Equipment Description
List equipment items separately with a short description in each line. The form states
that equipment is each item over $5,000. The Purdue threshold for equipment is
$2,500. If more than 10 lines are needed, place the total for every item above 10 in
line11. Additional equipment will then need to be listed in an attachment in the
Additional Equipment field. Total Equipment will be calculated by the form.

D. Travel
Enter the amounts for domestic and foreign travel on the appropriate line.
Total Travel will be calculated by the form.

E. Participant/Trainee Support Costs – Unless specifically stated in the
solicitation, NIH applicants should leave section E. blank.
Click on Next at the top of the Form.

F. Other Direct Costs
Enter the amounts in whole dollars for the applicable items. Lines 8-10 will
be used to describe any other direct costs not listed above. Grad Fee
Remissions will be listed here.
Total Other Direct Costs will be calculated by the form.

G. Direct Costs
Total Directs Costs will be calculated by the form.

H. Indirect Costs
1-4. If more that one F&A rate applies to this application you will use a line for each rate. Once you start entering this information the other fields will become yellow, showing that they are now mandatory.
Indirect Cost Type – enter MTDC, TDC, etc.
Indirect Cost Rate % - enter the percent
Indirect Cost Base $ - enter the base for the calculations. This will match the base listed on your Coeus budgets.
Funds Requested – enter the total F&A for the year. This will also match the Coeus budgets.
Total Indirect Costs – the form will calculate this for you.
Cognizant Agency – type DHHS

I. Total Direct and Indirect Costs
Total Direct and Indirect Institutional Costs – the form will calculate this for you.

J. Fee – always 0. Purdue is a non-profit institution

K. Budget Justification – Attach the full budget justification here. Include all years. The name of the file will then appear in the additional years.

Once you have completed all required fields for the year, click on the Next Budget Period at the top of the final page.
- A new budget period will appear and need to be filled out following the same instructions.
- To navigate back and forth you will use the Previous Budget Period on the first form page for the budget period you are in and the Next Budget Period on the last form page for the budget period you are in.
- By clicking Next at the very top of the forms, you will skip to the Cumulative Budget which the form has calculated for you.
- Check the total on the Cumulative Budget to be sure that it matches the Total Estimated Project Funding on page 2 of the Cover Page.

NOTE:
If you begin work on a Next Budget Period and then decide you do not need the additional budget period, close the form and save the file.
Reopen the Budget Form and go into the period that you do not need.
Make sure you are in the correct period on click on the Reset Entries button on the first page.
Next, click on the Previous Period button to take you to the last period of the project.
Close the form and Save.
Following these steps is the easiest way to remove the unneeded period.
R&R Sub Award Budget Attachment Form (only required for detailed budgets with subcontracts)

If submitting the Research and Related Budget form and there is a subcontract in the budget this form is required. This form is not required for Modular applications.

- To fill out this form, click on the button to extract the SubAward Budget Attachment. This will cause another window to open in which you will specify where to save the form. Rename the form and save.
- To fill the form out you will use much of the same instruction as the Research and Related Budget form.
- You may email this form to the subcontract or fill it out yourself based on the information provided to you by the sub.
- Once the form is complete, go back to the Grants.gov package, and insert the completed attachment. There will be one .xfd attachment for each sub.
- **This is the only place where an attachment will not be in PDF format.**

How to Save and Check Package for Errors

- After you have completed all of the forms, save the package one last time. Use the Check Package for Errors button. The file will run through a general Grants.gov validation. This validation will look for incomplete fields and some basic formatting of the information in the fields. **NOTE:** The package DOES NOT run a validation as stringent as the eRA Commons will.

- If there are any errors, a window will pop up indicating there are x number of errors. It will then list the first error. Only one error will be shown at a time! The one listed must be corrected before others can be viewed.

How to Print and Route - **All forms and attached files must be submitted to SPS for review.**

**NOTE:** The Print button on the top of the package will print all forms, and is currently not very useful. The budget forms will not print correctly. You will get about 6 pages of junk for each single page needed.

1. We recommend opening each form and printing it individually with the Print Form button at the top of the page.
2. Each PDF attachment will also need to be printed.
3. The hard copy of the application will be routed for signatures and sent to SPS for review and submission.
4. The electronic version of the file should be labeled with the PI last name and emailed to proposal@purdue.edu.