





eXchange Services Notes, Tips and Validations For Grants.gov Components

July 14, 2006 Version 1.92

Table of Contents

Filling Out an Application for NIH Grants	3
SF424 (R&R)	7
R&R Personal Data Component	19
Research & Related: Project/Performance Site Location(s)	19
Research & Related: Other Project Information	21
Research & Related: Senior/Key Person Profile	24
Research & Related Budget: Section A & B, Budget Period 1	30
Research & Related Budget: Section C, D, & E, Budget Period 1	35
Research & Related Budget: Section F–K, Budget Period 1	37
Research & Related Budget: Cumulative Budget	42
SBIR/STTR Information	46
PHS 398 Cover Page Supplement	49
PHS 398: Modular Budget	53
PHS 398 Modular Budget: Period 5 and Cumulative	57
PHS 398 Checklist	59
PHS 398 Research Plan	61
PHS 398 Cover Letter	67

Filling Out an Application for NIH Grants

How applicant institutions submit a grant application to the National Institutes of Health (NIH) is changing from mailing in a paper PHS 398 application to submitting the application electronically through Grants.gov using the new SF424 (R&R) application. For information about the timetable for each mechanism's conversion to electronic submission and other information, go to http://era.nih.gov/ElectronicReceipt/.

For electronic submission, applicant institutions can submit applications on PureEdgeTM forms downloaded from Grants.gov, build a system-to-system interface with Grants.gov or work with a commercial service provider. Regardless of submission method, Grants.gov electronically performs a simple validation against the application. If it passes inspection, the application is put in a queue, which the National Institutes of Health (NIH) then pulls into its system.

The NIH performs a more specific and detailed electronic check of the application against the instructions in the application guide and funding opportunity announcements. If the application passes the validation check without errors, the NIH sends an email to the Authorized Organization Representative (AOR)/ Signing Official (SO) and Project Director (PD)/Principal Investigator (PI). The email includes the NIH application tracking number and notification that both the SO and PI have two days to view the application image on the eRA Commons before the application automatically moves to Receipt and Referral.

If the application doesn't pass the validation check—usually because NIH instructions are not being followed—NIH sends the AOR/SO and PD/PI an email saying there are error messages and/or warnings:

- **Error message:** All errors must be fixed to complete the submission process. Once all errors are addressed, the applicant organization must submit the entire corrected application through Grants.gov as a changed/corrected application.
- Warning: Warnings do not stop the application from being accepted by the eRA System; however, each warning should be looked at carefully to avoid delays or issues later on in the peer review process.

The AOR/SO and PD/PI can log onto the eRA Commons to view the error codes and warnings. **Note:** since email can be unreliable, it is the applicant's responsibility to periodically check the eRA Commons for the status of the application after notification is received that NIH has pulled it from the Grants.gov queue.

So how can one be sure that the application passes all validation checks and results in no error messages or warnings? Carefully read and follow the application guide and announcement-specific instructions. Be sure that you fill out all sections to the best of your ability and that you include all attachments. NIH requires that all text attachments be in PDF format. Be clear about what is required for the type of application you are submitting. Make sure you observe the page limits for the different attachments as defined in the application and announcement. Confirm that you haven't exceeded direct cost limitations. Don't take shortcuts.

Here are some tips for filling out each section of the application. The NIH requires that applications be submitted using the SF424 (R&R) package, as well as supplemental, agency-specific forms identified as Public Health Service (PHS) application forms. Note that included in each funding opportunity announcement is the complete application forms package and guide.

After the application package is submitted, the eRA system will assemble the grant image, generate a table of contents and include headers (PI's name) and footers (page numbers) on all pages.

The following notes, tips, validations and errors/warnings address SF424 Research & Related (R&R) and PHS 398 specific components of an NIH application package.

Revision Summary

Version Number	Revision Date	Summary of Changes
1.92	May 5, 2006	Changes for 200604-02 release
		Remove Validation on Commons account for non-PI Key Persons
		Remove validation that compares consortium costs on project budgets to subaward budgets
		• Remove validation if project title exceeds 81 characters; if contact name exceeds 30 characters; if any address line exceeds 50 characters; if zip code has more than 9 digits
		Change text of various error/warning messages
		• Added text for messages if Commons role not for just PI. The error is already in the code, but was never in the requirements document; the text has been modified.
		Added row for Project Congressional District attachment
		Mapping for external org WIP flag
		Map type of application to database column
		• Validation for budget months (non-zero value for calendar months, academic months, <i>or</i> summer months is required for each senior/key person) allows a zero value for R13 submissions
		• 500k validation on direct cost does not apply to RFAs.
		• 250k validation changed from mechanisms to which it <i>doesn't</i> apply to mechanisms to which it <i>does</i> apply
	May 16, 2006	Accommodate new Research Plan Component for new schema
		Provide error for specific mechanisms submitted with detailed budget instead of modular budget
		• Exempt Fogarty R03 from \$250K validation
	May 19, 2006	Removed Fogarty exemptions from two budget validations
	May 23, 2006	Remove validation on provinces for Canadian address fields, all addresses
	June 6, 2006	Added processing and validations for new Province data element (Applicant Information, Authorized Representative, Project/Performance Site, Senior/Key person, Applicant Organization)
		Provide error if HESC Involved (Y/N) not provided
		Change warning to error for invalid Commons ID on multiple PI

Key

		Green cell shading indicates "not accepted at this time"		
Red text indicates new information since the last version.				
		Strike-through red text indicates deleted information.		

Truncated Items: Where items are truncated, grant image should display value as submitted through Grants.gov, unless otherwise indicated.

Validations at Schema Level—The implementation of some validation requirements may be done at the schema level rather than at the application validation level. The validation requirement does not change; however, in some cases, the error message may be different. The error messages in this table apply only in those cases where the validation is done at the application validation level.

Attachment Validations—A validation needs to be done on all attachments (including appendices) to make sure they are in .pdf format. If an attachment is not in .pdf format, the following error should be returned: "The <attachment> attachment is not in PDF format, or the filename is invalid. All attachments must be provided to NIH in PDF format; filenames must be included with no spaces or special characters, and a .pdf extension must be used."

If an attachment is empty (0 bytes), the following error should be returned: "The <attachment> attachment was empty. PDF attachments cannot be empty attachments. Please submit a changed/corrected application with the correct PDF attachment."

If editable PDFs are included, the following error should be returned: "The <attachment> attachment has editable fields. PDF attachments must not include editable fields. Help with PDF attachments can be found at http://era.nih.gov/ElectronicReceipt/pdf_guidelines.htm."

Trimming Spaces—For all validations where a comparison is being made on text entry (or dropdown) fields against the eRA database, trim spaces at the end before making the comparison.

Limited Validations and Opting Out—For some mechanisms, there is a set of limited validations that will apply to all PAs and PASs, and to any PARs and RFAs that don't 'opt out'. Limited validations have been indicated where applicable below by 'LV'.

The 'opt out' indicator will need to be added for each announcement stored in the database, defaulting to 'opt in'. For now, data will be updated manually to set the indicator for specific records to 'opt out'; eventually, this will become part of the Receipt and Referral RFA/PA Maintenance screen.

If an announcement is 'opt out', *none* of the limited validations for the corresponding mechanism will be performed for applications submitted in response to that announcement. However, PARs and RFAs that opt out of the limited validations will get a generic warning message if they exceed the threshold for the corresponding validation. In each case, the specific generic message is included in the table below.

PARs and RFAs that opt out of the limited validations are still subject to the validations that have not been identified as limited validations.

Identifying a Combined Mechanism—A Combined Mechanism identifier needs to be added to the information for each announcement stored in the database. This will be used to identify any allowable pairs of mechanisms for an announcement. The identifier can be used in conjunction with the activity code to indicate which combined mechanism is being represented. For now, the only allowable pair that will be identified with the identifier is R21/R33; an activity code of R21 plus this indicator will indicate a combined R21/R33.

Identifying Small Business Type—An indica business announcement stored in the database.	ent is an SBIR or an STTR need	ls to be added to the information	for each small

SF424 (R&R)

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Type of Submission (Pre-App, App,	For non-X02 submissions, do not accept 'Pre-application' as submission type	'Pre-application' is not a recognized submission type for NIH applications	NIH is not accepting "pre-applications" unless specifically noted in the Funding Opportunity Announcement.
	Changed App)	For X02 submissions, do not accept 'Application' as submission type	'Application' is not a recognized submission type for X02 applications. Please select 'pre- Application' as the type of submission on the SF 424 RR Cover page.	
		Do not accept 'Application' submission type if there is an associated prior submission. Find associated prior submission by matching on PI Commons account, institution, and project title for the same council round.	This application is a duplicate of a previous submission for the same council round. Please submit again using the 'Changed/Corrected Application' submission type.	Don't submit duplicate applications for the same council round. If you are submitting corrections to a previously-submitted application, submit it as a "Changed/ Corrected Application."
		Do not accept X02 pre-application submission type if there is an associated prior submission. Find associated prior submission by matching on PI Commons account, institution, and project title for the same council round.	This application is a duplicate of a previous submission for the same council round. Please resubmit using the 'Changed/Corrected Application' submission type.	
SF424 (R&R)	Date Submitted	If Phase II SBIR/STTR, and Phase I identified as NIH grant, provide warning if date submitted is more than 2 years after Phase I project period end date	Phase II SBIR/STTR applications should be submitted within 6 receipt dates after the expiration of the Phase I budget.	
SF424 (R&R)	Applicant Indentifier			
SF424 (R&R)	Date Received by State			
SF424 (R&R)	State Application Identifier			
SF424 (R&R)	Date Received by Grants.gov			

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Federal	If a resubmission, revision, or	For resubmissions (amended applications) and	You must include the prior grant number
	Identifier	renewal, this component is	renewals (competing continuations), the	here if you are submitting a revised
		mandatory	Federal Identifier must be included. Please	application (resubmission), a competing
			include the IC and serial number of the prior	continuation (renewal), or a new Phase II
			grant number in the Federal Identifier field on	SBIR/STTR. The IC and serial number of
			the S 424 RR Cover page (e.g., CA123456).	the prior grant number will be checked for accuracy.
			For revisions, the Federal Identifier must be	
			included. Please include the IC and serial	Schema must parse out the components of
			number of the parent grant number in the	the grant number.
			Federal Identifier field on the SF242 (R&R)	
			Cover page (e.g., CA123456).	
		If a new Phase II SBIR/STTR, this	For Phase II SBIR/STTR submissions, the	
		component is mandatory	Federal Identifier must be included. Please	
			include the IC and serial number of the prior	
			grant number in the Federal Identifier field on	
			the SF424 RR Cover page (e.g., CA123456).	
		If a renewal Phase II SBIR/STTR,	For Phase II SBIR/STTR submissions, the	
		this component is mandatory	Federal Identifier must be included. Please	
			include the IC and serial number of the prior	
			grant number in the Federal Identifier field on	
			the SF424 RR Cover page (e.g., CA123456).	
		If Phase II SBIR/STTR, and Phase	Phase II SBIR/STTR applications may be	
		I grant number is found in NIH	submitted only if the Phase I grant has been	
		database, provide warning if Phase	awarded.	
		I grant has not been awarded.		

Component	Field	Validation	Error Message	Notes & Tips
Component	rielū	If a resubmission, revision, or renewal, or a new Phase II SBIR/STTR, components of grant number must be 'parsable'. Components are <application_type> <mechanism> <institute> <serial number="">- <support year=""> <suffix 'a'="" 's'.="" (example:="" (ic)="" (must="" -application="" -at="" -institute="" -mechanism="" -serial="" -suffix="" -support="" 1="" 1r01gm072828-01a1)="" 99.="" a="" an="" and="" anywhere="" assigned="" be="" been="" by="" characters.="" code="" code)="" consists="" dash).="" followed="" from="" has="" ic="" is="" least="" letter="" number="" number.="" number<="" of="" one-digit="" or="" sequentially="" serial="" start="" td="" that="" the="" to="" two="" two-digit="" type="" will="" with="" within="" year=""><td>Federal Identifier format is not valid. Please provide the IC and serial number of the prior grant (e.g., CA123456).</td><td>ivotes & Tips</td></suffix></support></serial></institute></mechanism></application_type>	Federal Identifier format is not valid. Please provide the IC and serial number of the prior grant (e.g., CA123456).	ivotes & Tips
		must be included. If a resubmission, revision, or renewal, or a new Phase II SBIR/STTR, the prior grant number must exist in the NIH system. Matching is performed against NIH Institute/ Center and Serial Number. If a resubmission, revision, or renewal, or a new Phase II SBIR/STTR, mandatory components are IC and serial number.	The Federal Identifier that you have entered is not a grant number that has been previously assigned. You must include the <missing component=""> of the prior grant in the Federal Identifier.</missing>	

Component	Field	Validation	Error Message	Notes & Tips
		If PIChangeIndicator not set, check if PI on this submission has same Commons Account as PI assigned to the prior grant. If not, provide warning if last name of PI on prior grant matches last name for PI on current application.	The prior grant entered as the Federal Identifier is not associated with the Commons account for this PI. If this application involves a change of PI, please indicate 'Change of PI' on the PHS 398 Checklist page. If this is not a change of PI, this application will be received by NIH, but may be returned after internal processing.	
		Provide error if Commons Account doesn't match and last name of PI on prior grant doesn't match last name for PI on current application. Ignore case, spaces, and	The prior grant that has been entered as the Federal Identifier is not associated with this PI.	
		punctuation on match. For a resubmission, a summary statement must have been mailed for the prior grant	A resubmission (an amended application) cannot be submitted until the Summary Statement for the previous application has been released by NIH.	
		For a resubmission, the prior grant must not have been awarded, unless it has been identified as interim funding.	A resubmission (an amended application) cannot be submitted if a prior version in the same support year has been awarded.	
		For a resubmission, if the prior grant suffix code = 'A2', display a warning (default for mechanisms not otherwise defined)	NIH normally limits the number of resubmissions for an application to two. This application will be received by NIH, but may be returned after internal processing.	
		For a resubmission, of an R36 application (activity code on funding opportunity = 'R36'), prior grant suffix code must not = 'A2'.	This application has exceeded the number of resubmissions permitted by NIH and cannot be accepted.	
		For a resubmission, prior grant suffix code must not = 'A3'.	This application has exceeded the number of resubmissions permitted by NIH and cannot be accepted.	
		For a revision, the parent grant must be awarded.	The parent grant for a revision must be awarded. The parent grant for this submission is not a funded grant.	

Component	Field	Validation	Error Message	Notes & Tips
		For a 'Phase II' SBIR/STTR, validations on parsing Federal Identifier, requiring IC and serial number, and identifying the number as existing in the NIH system are <i>warnings</i> only.	Error message text is the same as the items above.	These need to be warnings, since it is possible to submit a phase II application where the phase I was funded externally (or funded as an NIH contract, not a grant).
SF424 (R&R)	Applicant Information, Organization al DUNS	Must match DUNS recorded for IPF in Commons. Validate the leftmost 9 characters only, discarding any characters submitted in places 10-13.	The DUNS number you have provided does not match the number NIH has in the Commons profile for your organization. The SO should make sure the correct DUNS number has been entered in the NIH Commons. Instructions on editing institutional profiles are available at https://commons.era.nih.gov/commons-help/189.htm.	If application is from domestic institution of higher education, set appls_t.external_org_WIP_flag='Y'; if not, set appls_t.external_org_WIP_flag='N'. Domestic institution is country_seq_num in external_org_addresses_t =231 (for the external_org_id where addr_type_code='MLG'). Higher education is external_orgs_t.org_type_code=10.
		For a revision, provide a warning if it doesn't represent the same organization as the parent grant.	The parent grant may be associated with a different organization. Revisions should only be submitted for the same organization as the parent grant. This application will be accepted by NIH, but may be delayed in the peer review process.	
SF424 (R&R)	Applicant Information, Legal Name	None	•	Display in grant image as submitted; store in database as reflected in IPF associated with PI Commons account and org. DUNS. Long-term, change length in eRA db to 120 characters.
SF424 (R&R)	Applicant Information, Department	None		
SF424 (R&R)	Applicant Information, Division	None		
SF424 (R&R)	Applicant Information, Street 1 and 2	If either line>50 characters, truncate-and display warning.	Street <n> of the Applicant Information exceeds the limit of 50 characters. The grant image will display the address as submitted; NIH will store the first 50 characters only.</n>	Long-term, change eRA db to 55 chars.
SF424 (R&R)	Applicant Information, City	None		
SF424 (R&R)	Applicant Information, County	None		

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Applicant Information, State	Required if country is US-or Canada.	The Applicant Information State must be supplied for US and Canadian addresses.	
		If country not US or Canada must be blank.	The Applicant Information State should be blank for all countries other than the United States-and Canada.	
		Transform to 2-char abbreviation before validating and storing. If state name can't be transformed, give error.	The Applicant Information State is not a valid state name.	
SF424 (R&R)	Applicant Information,	Required if country is Canada.	The Applicant Information province must be supplied for Canadian addresses	Province should be mapped into the same database location as state.
	Province	If country not Canada, must be blank.	The Applicant Information Province should be blank for all countries other than Canada	
		Transform to 2-char abbreviation before validating and storing. If province name can't be transformed, give error.	The Applicant Information Province is not a valid province name.	
SF424 (R&R)	Applicant Information,	Required if country is US.	The Zip Code was not entered in the Applicant Information section.	Long-term, change in eRA db to 13 characters.
	Zip Code	Must be 5 or 9 numeric digits if country is US.	The Applicant Information Zip Code must be entered in 5-digit or 9 digit format.	
		If >9 characters, truncate and display warning (remove any dashes before truncating).	The Applicant Information Zip Code has more than 9 digits. The grant image will display the zip code as submitted; NIH will store the first 9 digits only.	
SF424 (R&R)	Applicant Information, Country	For an R13 application (activity code on funding opportunity = 'R13' or 'U13'), provide a warning if country is not US	The Applicant Organization for a Conference Grant should be located in the US. This application will be accepted by NIH, but may be delayed in the peer review process.	
		For an R15 application (activity code on funding opportunity = 'R15') return an error if country is not US	The Applicant Organization for an AREA Grant must be located in the US.	
		For an S10 application, return an error if country is not US	The Applicant Organization for an S10 application must be located in the US.	
		Must be a valid ISO 3166-1 alpha-3 country code.	The Applicant Information country code provided (<country>) is not a valid ISO 3166-1 alpha-3 country code.</country>	

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Person to be Contacted	If the combination of all items in this component is more than 30 characters, truncate and display warning. Display in grant image as submitted.	The grant image will display the Person to Be Contacted as submitted; NIH will store the first 30 characters only.	Long-term, change in eRA db for Contact Name to accommodate the way it is submitted through Grants.gov.
SF424 (R&R)	Person to be Contacted, Phone Number	None		
SF424 (R&R)	Person to be Contacted, Fax Number	None		
SF424 (R&R)	Person to be Contacted, e- mail	e-mail is required Must contain a '@', with at least 1 and at most 64 chars preceding and following the '@'. Control characters (ASCII 0 through 31 and 127), spaces and special chars <>()[];: are not valid.	The e-mail address for the Person to Be Contacted, listed on the SF 424 RR Cover page, is required. The submitted e-mail address for the Person to Be Contacted, (listed on the SF 424 RR Cover page,) <email>, is invalid. Please enter e-mail addresses in the format username@domainname.com</email>	
SF424 (R&R)	Employer Identification	If >12 characters, truncate (no warning).		
SF424 (R&R)	Type of Applicant (other, woman owned, disadvantage d)	For an SBIR/STTR application, must be 'Small Business'.	For an SBIR/STTR application, the Type of Applicant must be 'Small Business'.	Design/mapping note: when the applicant type is "O - Small Business", set small_business_code to 'N', but do not supersede any value that is the result of mapping the women-owned or socially-economically-disadvantaged qualifiers. In other words, default when applicant type is "O" should be 'N" instead of "null". This should be overwritten if the women-owned and socially-economically-disadvantaged indicators need to record either a W, M, or B in this field.
SF424 (R&R)	Type of Application (New, Resub, Renewal, Contin,	Must be either New, Revision, Resubmission, or Renewal	<type application="" of=""> is an invalid Type. The Type must be New, Revision, (for supplements), Resubmission (for revisions/amended applications), or Renewal (for competing continuations).</type>	You must select one of the following: New, Amended, Resubmission (for revisions/amendments) or Renewal (for competing continuations). Note: Renewal

Component	Field	Validation	Error Message	Notes & Tips
	Revision)	Renewal is not a valid type for a Phase I SBIR/STTR, X01, X02, R03, R21, or R34 application. Provide warning if renewal is submitted for an R21/R33 combination. Revision is not a valid type for an	A renewal (competing continuation) cannot be submitted for this application. Renewal (competing continuation) applications are accepted if specifically allowed in the Funding Opportunity Announcement (FOA). If the FOA does not explicitly allow renewals, this application may be delayed in the review process or rejected. A revision (supplement) cannot be submitted	 is not valid for Phase I SBIR/STTR applications. A Continuation is equivalent to a Progress Report. However, NIH and other PHS agencies will not use the Continuation box. A Amended is somewhat equivalent to a Competing Supplement.
		Revision is not a valid type for an S10, X01, or an X02 application.	A revision (supplement) cannot be submitted for this application.	 If you are submitting an SBIR/STTR application, select "Small Business." For a revision, define parent grant by finding the most recent type 1, type 2, or type 9 that matches on the IC and serial number provided in the Federal Identifier, where the Project Start Date on the parent is earlier than or equal to the revision's Project Start Date, and the Project End Date on the parent is later than or equal to the revision's Project End Date. Subprojects and other revisions should be excluded from consideration as parent grants. Map type of application to database.
SF424 (R&R)	If revision, increase award, decrease, etc.	None		
SF424 (R&R)	Name of Federal Agency			
SF424 (R&R)	Catalog of Federal Domestic Assistance Number			The CFDA number and title are filled in based on the specific announcement.
SF424 (R&R)	Submitted to other agencies?			

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Descriptive Title	Truncate if >81 characters, and provide warning	The Descriptive Title exceeds the limit for NIH. It will be displayed in the grant image as submitted; NIH will store the first 81 characters only in the eRA database.	Long-term, expand eRA db to 200 chars
		For a revision, must be the same as the project title on the parent grant. Do not include leading or trailing spaces or any punctuation in the comparison.	The project title for this revision is not the same as the project title on the parent grant.	
SF424 (R&R)	Areas Affected by Project			
SF424 (R&R)	Proposed project start date	Must be later than current date	The Proposed Project Start Date must be later than the Proposed Project Start Date.	
SF424 (R&R)	Proposed project	Must be later than ProjectStartDate	The Proposed Project Ending Date must be later than the Proposed Project Start Date	
	ending date	For an R03 (LV), R21 (LV), or R36 application, return warning if project period is more than two	The project period for this application is limited to two years. Warning message for 'opt out'	
		years long. Define project period by time span between project	announcements: Be sure that you have complied with the allowable project period	
		period start date and project period end date as entered on the SF424 (R&R) Face Page.	limitations for this FOA. Otherwise, your application may be delayed and rejected in the review process.	
		For an R15, R33 (LV), or R34 (LV) application, return warning if project period is more than three years long. Define project period	The project period for this application is limited to three years. The application will be accepted, but may be delayed in the peer review process.	
		by time span between project period start date and project period end date as entered on the SF424 (R&R) Face Page.	Warning message for 'opt out' announcements: Be sure that you have complied with the allowable project period limitations for this FOA. Otherwise, your application may be delayed and rejected in the review process.	
		For an R21/R33 pair (LV) application, return warning if project period is more than five years long. Define project period	The project period for this application is limited to five years. The application will be accepted, but may be delayed in the peer review process.	

Component	Field	Validation	Error Message	Notes & Tips
		by time span between project period start date and project period end date as entered on the SF424 (R&R) Face Page.	Warning message for 'opt out' announcements: Be sure that you have complied with the allowable project period limitations for this FOA. Otherwise, your application may be delayed and rejected in the review process.	
SF424 (R&R)	Congressional districts of applicant	Must be a valid congressional district code (after truncating). Truncation logic: Parse from left to right, and take the first two digits encountered, skipping leading zeroes (return error if no digits are encountered, but no error if only zeroes are encountered). Before validating, pad out with a leading zero if less than 2 digits are extracted in this way. Display in grant image as truncated.	Congressional district < Congressional District> is invalid. If the applicant organization is a foreign institution, enter all zeros. To locate your district visit http://congress.org/congressorg/dbq/officials/?lvl=L.	Long-term, expand eRA database to 30 6 chars.
	Congressional districts of project			
SF424 (R&R)	PD/PI Contact Information	Pulled from R&R Key Person Form (for PD/PI)		
SF424 (R&R)	Total estimated project funding	For an S10 application, display a warning if this is greater than 500k	The direct cost request is greater than 500k. The application will be processed, but a concern may be raised during review.	Design note: mapping for S10s and X02 for budget figures should come from this element instead of from budget components. It should be mapped to appl_periods_t and to the following columns in appls_t: direct_cost_requested_amt, total_cost_requested_yearl_amt, total_cost_requested_amt. (indirect_cost_requested_amt should be 0). For X02, all values will be zero.
		For an X01 or X02 application, provide an error if non-zero values are entered.	Total Estimated Project Funding must be zero.	

and	otal federal		Error Message	Notes & Tips
	otal lederal	For an X01 or X02 application,	Total Federal and non-Federal Funds must be	·
e. J	nd non-	provide an error if non-zero values	zero.	
	deral funds	are entered.		
, ,	stimated	For an X01 or X02 application,	Total Estimated Program Income must be	
	ogram	provide an error if non-zero values	zero.	
	come	are entered.		
	ıbject to			
stat				
	ecutive			
	der review?			
	greement			
and				
	rtification			
'	uthorized	Truncate if first or last name>30	The Authorized Representative <element< td=""><td>Long-term, change in eRA db to 60 chars</td></element<>	Long-term, change in eRA db to 60 chars
-	presentative	chars, or if suffix>5 chars. Display	name> exceeds the NIH limit. The grant	for last name, 35 for first name, 10 for
nar	ıme	warning.	image will display the name as submitted;	suffix (all names in db)
			NIH will store the first <database length=""></database>	
GE 40 4 (P 0 P)		T	characters in the eRA database.	T 1 1 DA 11 45 1
, ,	uthorized	Truncate if >30 chars. Display	The Authorized Representative position/title	Long-term, change in eRA db to 45 chars
	presentative	warning.	exceeds the NIH limit. The grant image will	
pos	osition/title		display the name as submitted; NIH will store the first 30 characters in the eRA database.	
CE424 (D 0 D) A	uthorized		the first 30 characters in the exA database.	
` /	presentative			
	ganization			
	uthorized			
	presentative			
	epartment			
	uthorized			
, , ,	presentative			
	vision			
	uthorized	If either line 1 or 2 >50 characters,	Street < <i>n</i> > of the Authorized Representative	Long-term, change in eRA db for zip code
	presentative	truncate and display warning.	address exceeds the limit of 50 characters. The	to 13 characters
	reet 1 & 2,	a another und display warming.	grant image will display the address as	to 15 characters
	ty, state,		submitted: NIH will store the first 50	Province should be mapped into same
	ovince, zip		characters only.	database location as state.
	de, country,	Transform state to 2 char.	The Authorized Representative State is not a	
	none	abbreviation for US or Canada	valid state name.	
	ımber, fax,	before validating and storing. If		
	mail	state name can't be transformed,		
	-	give error.		

Component	Field	Validation	Error Message	Notes & Tips
-		If zip>9 characters, truncate and	The Authorized Representative Zip Code has	
		display warning. Remove dashes	more than 9 digits. The grant image will	
		before truncating and/or storing	display the zip code as submitted; NIH will	
			store the first 9 digits in the eRA database.	
SF424 (R&R)	Authorized			
	representative			
	county			
SF424 (R&R)	Authorized			
	representative			
	signature and			
	date			
SF424 (R&R)	Pre-application	Not accepted at this time		
	attachment			
SF424 (R&R)	Project			
	Congressional			
	District			
	Attachment			

R&R Personal Data Component

Not used by NIH. Information is pulled from PD/PI Commons contact information.

Research & Related: Project/Performance Site Location(s)

Component	Field	Validation	Error Message	Notes & Tips
Project/	Primary			
Performance	Location,			
Site $(R\&R)$	Organization			
	Name			
Project/	Primary			
Performance	Location,			
Site (R&R)	Street 1 and 2			
Project/	Primary			
Performance	Location, City			
<i>Site</i> (<i>R&R</i>)				
Project/	Primary			
Performance	Location,			
Site (R&R)	County			
Project/	Primary			
Performance	Location,			
Site $(R\&R)$	State			
Project/	Primary			Province should be mapped into same
Performance	Location,			database location as state.
Site (R&R)	Province			
Project/Perform	Primary			
ance Site (R&R)	Location, Zip			
, ,	code			
Project/Perform	Primary			
ance Site (R&R)	Location,			
	Country			
Project/	Location 1,			
Performance	Organization			
Site (R&R)	Name			
Project/	Location 1,			
Performance	Street 1 and 2			
Site $(R\&R)$				

Component	Field	Validation	Error Message	Notes & Tips
Project/	Location 1,			
Performance	City			
<i>Site</i> (<i>R&R</i>)				
Project/	Location 1,			
Performance	County			
<i>Site</i> (<i>R&R</i>)				
Project/Perform	Location 1,			
ance Site (R&R)	State			
Project/Perform	Location 1,			Province should be mapped into same
ance Site (R&R)	Province			database location as state.
Project/Perform				
ance Site (R&R)	Zip code			
Project/Perform	Location 1,			
ance Site (R&R)	Country			
Project/Perform	Additional			
ance Site (R&R)	Location(s)			

Research & Related: Other Project Information

Component	Field	Validation	Error Message	Notes & Tips
Other Project	Human	Either ExemptionNumber or	Either Exemption Number or Assurance	• If you click Yes that human subjects are
Info $(R\&R)$	Subjects	AssuranceNumber must be	Number must be provided if Human Subjects	involved, you must provide either an
	Involved?	specified if	is "Yes".	exemption number or assurance number.
		HumanSubjectsUsedQuestion is true.		• If you click Yes that vertebrate animals
		tide.		are involved, you must provide one of the
				following:
				 Assurance number AND IACUC
				approval date
				 Assurance number AND IACUC approval pending
				- IACUC approval pending
		If HumanSubjectsUsedQuestion is	When Human Subjects is "No," Exemption	
		false, ExemptionNumber must not	Number must not be specified.	
		be specified		
		If HumanSubjectsUsedQuestion is false, provide a warning if	When Human Subjects is "No," Assurance Number does not apply.	
		AssuranceNumber is specified.	Number does not appry.	
		Must be true if Human Subjects	The 'Human Subjects Involved' question must	
		Clinical Trial question is true.	be "Yes" if the Human Subjects Clinical Trial question is "Yes".	
		For S10 application, display a	The answer to the Human Subjects involved	
		warning if this is true.	question should be 'No'. The application will be processed, but a concern may be raised	
			during review.	
Other Project	IRB review			
Info (R&R)	pending?			
Other Project	IRB approval	Date can't be in the future (but can	The IRB approval date cannot be in the future.	
Info (R&R)	date	be blank)	The Engagetion Number must be within the	
Other Project Info (R&R)	Exemption number	Must be "E1" through "E6"	The Exemption Number must be within the range of E1 to E6.	
mjo (K&K)	number		range of LT to Lo.	

Component	Field	Validation	Error Message	Notes & Tips
Other Project	Human	Provide warning if it doesn't match	The human subject assurance number entered	
Info $(R\&R)$	subject	IPF human subject assurance	in the application does not match what is in	
	assurance	number for this organization.	the Commons profile for your organization.	
	number	Match should be on the last 11	There are rare cases where this is permissible.	
		characters of the IPF assurance	Please make sure that the correct number is	
		number. If the Assurance Number	entered on the Other Project Information page.	
		that is receive is exactly eight	If not, correct and resubmit.	
		characters long and consists of all		
		numeric digits, prefix the string		
		with 'FWA' before validating and		
		storing in the database.		
Other Project	Vertebrate	If this is 'Y', then ONE of the	When Vertebrate Animals is "Yes," you must	
Info (R&R)	animals used?	following must be provided:	provide either (1) animal welfare assurance	
		• Assurance Number + IACUC	number + IACUC approval date, (2) animal	
		Approval Date	welfare assurance number + an indication that	
		• Assurance Number + IACUC	IACUC approval is pending OR (3) the word	
		Approval Pending	'None'.	
		• The word 'None' (case		
		insensitive, don't validate on		
		punctuation)		
		For S10 application, display a	The answer to the Vertebrate Animals Used	
		warning if this is true.	question should be 'No'. The application will	
			be processed, but a concern may be raised	
0.1 D	TACTIC	D :1 : 'CV .1 .	during review.	
Other Project	IACUC review	Provide a warning if Vertebrate Animals Used is 'N'	When Vertebrate Animals is "No," IACUC Approval Pending indicator does not apply.	
Info (R&R)	pending?	Animais Used is IN	Approval Fending indicator does not appry.	
Other Project	IACUC	Provide a warning if	When Vertebrate Animals is "No," IACUC	
Info (R&R)	approval date	VertebrateAnimalsUsedQuestion is	Approval Date does not apply.	
	approvin dute	false	Tapped out account approximation	
		The date can't be in the future	The IACUC Approval Date cannot be in the	
			future.	
Other Project	Animal	Provide a warning if	When Vertebrate Animals is "No," Assurance	
Info $(R\&R)$	Welfare	VertebrateAnimalsUsedQuestion is	Number does not apply.	
	Assurance #	false		

Component	Field	Validation	Error Message	Notes & Tips
		If an animal welfare assurance number is entered, provide a warning if it doesn't match animal welfare assurance number for this organization. Match needs to be on the last 9 characters of the IPF assurance number. This validation should not be done if the field is left blank or if the word 'None' is	The Animal Welfare Assurance Number entered in the application does not match what is in the Commons profile for your organization. There are rare cases where this is permissible. Please make sure that the correct number is entered on the Other Project Information page. If not, correct and resubmit.	
Other Busines	Duonistana	entered.		
Other Project Info (R&R)	Proprietary or privileged info?			
Other Project Info (R&R)	Impact on environment?			
Other Project Info (R&R)	Activities outside US?			
Other Project Info (R&R)	Project Summary	Limited to one page	The Project Summary/Abstract is limited to 30 lines of text.	
Other Project Info (R&R)	Project Narrative	For non-S10 applications, limit to 1 page	The Public Health Relevance Statement (labeled 'Project Narrative' on the Other Project Information page) should be no longer than 2 or 3 sentences.	The project narrative should be used for the Public Health Relevance Statement and should be no longer than 2 or 3 sentences.
Other Project Info (R&R)	Bibliography and References			
Other Project Info (R&R)	Facilities and other resources			
Other Project Info (R&R)	Equipment	Required for S10 applications.	The Equipment Attachment is required for S10 applications.	
Other Project Info (R&R)	Other attachments	For S10 applications, provide warning if at least one attachment has not been included for this.	At least one attachment should be provided as an 'Other Attachment' on the Other Project Information page. Please consult the funding opportunity announcement to which you are responding, for the type(s) of information to be attached. The application will be processed if you have not included an 'Other Attachment', but a concern may be raised during review.	Note that multiple attachments may be received with Other Attachments. They should all be processed.

Research & Related: Senior/Key Person Profile

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key	PD/PI Profile	Required.		Note: Identify this Senior/Key Person as the
Person (R&R)	Information,			contact PI if multiple PI roles are defined.
	name (prefix,	If only a Commons Account is	No name was provided for the PD/PI, with	
	first name,	supplied, display a warning to pay	Commons Username: <credential>. The name</credential>	
	middle name,	attention to the name that is	listed on this person's Commons account,	
	last name, suffix)	generated in the grant image, since this will appear exactly as it is represented in the Commons.	<commons components="" name="" profile="">, will be used for this submission.</commons>	
		If this and Commons Account provided, provide warning if last name or first name on account doesn't match provided last name or first name, and/or if the first initial of the middle name on the account doesn't match the first initial of the middle name that has been provided. Comparison to ignore case and embedded spaces, but not embedded punctuation.	The name provided for the PD/PI, <first initial,="" last="" middle="" name="" name,="">, listed on the Senior/Key Person Page, does not match the name listed on the Commons account: <first initial,="" last="" middle="" name="" name,="">. The grant image will display the name as submitted here. If the name listed in the Commons is not current, please update it in the Commons. Instructions on updating profile information are available at https://commons.era.nih.gov/commons-</first></first>	Post-testing solution: If validation fails, provide warning that the Commons name (or position title) is xxxx and the name submitted through Grants.gov is yyyy and we will be displaying the Commons data. Provide ability for the submitter to update their Commons account and to regenerate the image to display the updated information from the Commons account. Be sure to match the PD/PI's position and
Senior/Key Person (R&R)	PD/PI Profile Information, Position/Title	If title doesn't appear on an employment record for this person and organization in Commons, provide warning message and display the submitted position/title in the grant image. Truncate if greater than 40	help/216.htm. The PD/PI position/title, <position title="">, listed on the Senior/Key Person page, does not match those listed on the Commons account: <position by="" commas="" separated="" titles,="">. The grant image will display the position/title as submitted here. If the position/title on the Commons account is not current, please update it in the Commons. Instructions on updating profile information are available at https://commons.era.nih.gov/commons-help/216.htm.</position></position>	title with those listed in the eRA Commons account. Note that the grant image will display the position and title that you submit on this page.
		characters, before comparing to title stored in database. No warning message is needed to the submitter.		
Senior/Key Person (R&R)	PD/PI Profile Information, Organization Name			

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key Person (R&R)	PD/PI Profile Information, Department	Provide a warning if not entered.	If appropriate for your organization, please supply a department for the PD/PI.	
Senior/Key Person (R&R)	PD/PI Profile Information, Division	Provide a warning if not entered.	If appropriate for your organization, please supply a division for the PD/PI.	
Senior/Key Person (R&R)	PD/PI Profile Information, Street 1 and 2, city, state, province, zip, country, phone number, fax number, e- mail	Transform state name to 2 char. abbreviation before storing. If state name can't be transformed, give an error.	The PD/PI Profile State is not a valid state name.	Long-term, change in eRA db for zip code to 13 characters
Senior/Key Person (R&R)	PD/PI Profile Information, County			
Senior/Key Person (R&R)	PD/PI Profile, credential	Must be specified for the PD/PI	The Commons Username must be submitted for the PD/PI in the PD/PI Credential field on the Senior/Key Person page.	
		Truncate if greater than 30 characters, before comparing to account stored in database. No warning message is needed to the submitter.		
		If specified, must be a valid Commons account.	The Commons Username < Credential> is not a recognized Commons account.	
		For the PD/PI, this account must be affiliated with the organization submitting the application and have the PI role	The Commons account indicated for the PD/PI in the Credential field on the Senior/Key Person page, is not affiliated with the applicant organization. Check with your Commons Account Administrator to make sure you have been affiliated with the applicant organization.	

Component	Field	Validation	Error Message	Notes & Tips
-		For a revision, the PI should be	Warning: The Commons account for the PI	
		assigned to the parent grant. If the	does not include the parent grant of this	
		person profile for this Commons	submission in its NIH support history.	
		account is not the same person		
		profile assigned as the PI to the	Error: The parent grant that has been entered	
		parent grant, and the last name of	is not associated with this PI	
		the PI assigned to the parent grant		
		matches the last name that is submitted for the PI on the current		
		application, provide the indicated		
		warning. This match must not be		
		case-sensitive, and should compare		
		only the non-blank, non-		
		punctuation characters that appear		
		in the last name. If neither the		
		profile nor the last name match,		
		provide the indicated error.		
		Provide a warning if there is both	The Commons account has SO and PI roles.	
		an SO and a PI role associated with	Please create a separate Commons account for	
		the Commons account.	the SO, then delete the SO role from the	
			account included in the submission. You do	
			not need to send a changed/corrected	
		B 11 1 101 1 1	application.	
		Provide a warning if the single role	The Commons account is for an SO. Please	
		associated with the Commons account is an SO role.	add a PI role to this account, create a separate Commons account for the SO, and delete the	
		account is an SO role.	SO role from the original account. You do not	
			need to send a changed/corrected application.	
Senior/Key	PD/PI Profile,		need to send a changed/corrected application.	
Person (R&R)	other project			
, ,	role category			
Senior/Key	Biosketch	Limited to four pages	The Biosketch for the PD/PID, <first name<="" td=""><td></td></first>	
Person (R&R)			last name>, is longer than four pages.	
Senior/Key	Current and			
Person (R&R)	Pending			
G 1 077	Support	T		T
Senior/Key	Profile, senior	Truncate if first or last name>30	The Senior/Key Person <element name=""> for</element>	Long-term, change in eRA db to 60 chars
Person (R&R)	& key person	chars, or suffix>5 chars. Display	<pre><first last="" name=""> exceeds the NIH limit. The grant image will display the name as</first></pre>	for last name, 35 for first name, 10 for suffix (all names in db)
	x, name	warning.	submitted; NIH will store the first <database< td=""><td>("nth" indicates the relative order of this</td></database<>	("nth" indicates the relative order of this
			length> characters only.	(nin indicates the relative order of this KeyPerson element)
			ionguis characters omy.	Keyl erson etement)
		Į.		

Component	Field	Validation	Error Message	Notes & Tips
		If this and Commons Account provided, provide warning if any component of name on account doesn't match provided name. Comparison to ignore case and embedded spaces, but not embedded punctuation.	The name provided for Key Person <submitted components="" name=""> does not match the Commons account name (<commons components="" name="" profile="">). The grant image will display the name as submitted.</commons></submitted>	Post-testing solution: If validation fails, provide warning that Commons name is xxxx and name submitted through grants.gov is yyyy and we will be displaying the Commons data. Provide ability for the submitter to update their Commons account and to regenerate the image to display the updated information from the Commons account.
		For S10 applications, provide warning if there are not at least two senior/key persons (other than the PD/PI), with project role of 'Other (specify)'.	Less than 2 senior/key person entries have been included with a project role of 'Other (specify)', to represent the major user group cohort. The application will be processed, but a concern may be raised during review.	
Senior/Key Person (R&R)	Profile, senior & key person x, position title	Truncate if greater than 40 characters. No warning message is needed to the submitter.		
Senior/Key Person (R&R)	Profile, senior & key person x, organization name	Needs to be enforced as mandatory.	The organization name for Key Person < Key Person First Name Last Name > must be provided.	
Senior/Key Person (R&R)	Profile, senior & key person x, department			
Senior/Key Person (R&R)	Profile, senior & key person x, division			
Senior/Key Person (R&R)	Profile, senior & key person x, street 1 and 2			
Senior/Key Person (R&R)	Profile, senior & key person x, city			
Senior/Key Person (R&R)	Profile, senior & key person x, county			
Senior/Key Person (R&R)	Profile, senior & key person x, state			

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key	Profile, senior			•
Person (R&R)	& key person			
	x, province			
Senior/Key	Profile, senior			Long-term, change in eRA db to 13
Person (R&R)	& key person			characters.
	x, zip code			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, country			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, phone			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, fax			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, e-mail			
Senior/Key	Profile, senior	If specified, provide warning if this	The Commons Username < Credential>,	
Person (R&R)	& key person	is not for a key person with a	specified for key person on the Senior/Key	
	x, credential	PD/PI role, must be a valid	Person page for PD/PI <first last<="" name="" td=""><td></td></first>	
		Commons account.	Name>, is not a recognized Commons	
			account. The application will be accepted for	
			processing.	
		Truncate if greater than 30		
		characters, before comparing to		
		account stored in database. No		
		warning message is needed to the		
		submitter.		
		Must be specified if project role is	The Commons Username has not been	
		'PD/PI'.	specified in the 'Credential' field on the	
			Senior/Key Person page for PD/PI <first< td=""><td></td></first<>	
			Name Last Name>	
Senior/Key	Profile, senior	For an R36 application (activity	A mentor must be identified for an R36	
Person(R&R)	& key person	code on funding opportunity =	application. List the mentor as a key person on	
	x, project role	'R36'), there must be at least one	the Senior Key Person page.	
		key person included in addition to		
		the PD/PI identified in the PD/PI		
		component.		

Component	Field	Validation	Error Message	Notes & Tips
		If project role is 'PD/PI', identify in database as Multiple PI.		Need to create role record for multiple PIs. Also need to set multi_pi_indicator_code in appls_t. Should be indicated in mapping document.
Senior/Key Person (R&R)	Profile, senior & key person x, other project role category	Accept "Other Project Role Category" only when "Project Role" is "Other" or "Other Professional"	For key person <first last="" name="">, an 'Other Project Role Category' was submitted for a project role of <pre><pre></pre></pre></first>	
Senior/Key Person (R&R)	Senior & key person x, Biosketch	Limited to four pages	The Biosketch for Senior/Key Person <first last="" name=""> is longer than four pages.</first>	
Senior/Key Person (R&R)	Senior & key person x, Current and Pending Support	For S10 applications, provide warning if no attachment is provided for any three senior/key persons with project role of 'Other (specify)' or with project role of 'PD/PI'.	Less than 3 Current and Pending Support attachments have been included for the major user group cohort. The application will be processed, but a concern may be raised during review.	This attachment can be received for a PD/PI, or for a senior/key person with a role of 'Other (specify)'. We need to make sure that at least 3 of these attachments are submitted, whether 1 is submitted for the PD/PI and 2 for the senior/key person (with role of 'Other (specify)'), or 3 are submitted for the senior key person (with role of 'Other (specify)').
Senior/Key Person (R&R)	Additional Senior/Key Person Profiles	For version 1.0 of Key Person component, accept only if eight key personnel have been submitted on the Senior/Key Person page. For version 1.1 of Key Person component, accept only if 40 key personnel have been submitted on the Senior/Key Person page.	An Additional Senior/Key Person Profiles attachment may be submitted only if eight senior/key person profiles have been submitted on the Senior/Key Person page. An Additional Senior/Key Person Profiles attachment may be submitted only if 40 senior/key person profiles have been submitted on the Senior/Key Person page.	Additional Senior/Key Person profiles can be submitted only if you've submitted eight key personnel in the Senior/Key Person Profile section.
Senior/Key Person (R&R)	Additional Senior/Key Person Biosketch	Accept only if an Additional Senior/Key Person Profiles attachment has been submitted and accepted.	An Additional Senior/Key Person Biosketch attachment may be submitted only if an Additional Senior/Key Person Profiles attachment has been submitted and accepted.	
Senior/Key Person (R&R)	Additional Senior/Key Person Current and Pending Support	Accept only if an Additional Senior/Key Person Profiles attachment has been submitted and accepted.	An Additional Senior/Key Person Current and Pending Support attachment may be submitted only if an Additional Senior/Key Person Profiles attachment has been submitted and accepted.	

Research & Related Budget: Section A & B, Budget Period 1

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B, Year x (R&R)		Accept submission of modular budget or detailed budget, but not both Allow a submission with neither a modular budget nor a detailed budget component.	Both a modular and a detailed budget have been included with this submission. One or the other may be submitted.	Budget information is necessary for all applications. Some applications will list both the modular and detailed budget components as "optional". This is to allow the appropriate component to be chosen. Choose one or the other, but not both.
		An application in response to an R03, R15, R21, or R34 opportunity (but not R21/R33) must be submitted with a modular budget. Opdivs and 'opt out' announcements are exempt from this validation.	R03, R15, R21, and R34 applications must use the PHS 398 Modular Budget Form and not the R&R Budget Form.	In mapping, assign a budget period ID based on the year of the budget. If you are submitting an STTR application, you must include a Research Institution Budget page for each year of the project
		For a revision, if the parent grant budget is modular, only a modular budget component may be submitted.	The parent grant for this revision uses the modular format; therefore, this application may include a modular budget only.	(submitted using the Subaward budget type on the budget page).
		For an STTR submission, there must be at least one budget included with budget type of subaward/ consortium for each year of the STTR (project) budget.	A Research Institution Budget page must be included for each year of an STTR submission	
Budget, A&B, Year x (R&R)	Organization al DUNS	Required for budget type 'Subaward/Consortium'	The Organizational DUNS has not been included for Sections A&B for <name of="" organization=""></name>	
		One and only one budget should contain the DUNS of the applicant organization.	The Project budget must contain the DUNS number for the applicant organization.	
		This must be a budget that has been identified as 'Project'	A Subaward budget has been identified for the applicant organization. Budgets for the applicant organization should have the 'Project' budget type.	
Budget, A&B, Year x (R&R)	Budget type (project, subaward/ consortium)	If a detailed budget is included, there must be one and only one occurrence with a value of 'Project'.	Only one budget with a budget type of 'Project' for Sections A&B may be submitted.	You can submit only one budget with the budget type "Project" for Sections A&B.

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B, Year x (R&R)	Name of organization (for subaward/ consortium)	If multiple detailed budgets have been included in the submission, all budget and warning messages should include the name of the organization for which the budget		Since there is a limit of 250 characters for the error message, put the organization name at the end of the message, and truncate if necessary.
Budget, A&B, Year x (R&R)	Start Date	validation has failed. For budget year 1, for Budget Type 'Project', for new applications and resubmissions, must be the same as the Proposed Project Start Date listed on the SF 424 RR Face Page.	For new applications and resubmissions, the start date for the first budget year on the 424 RR Budget page for Sections A&B must be the same as the proposed project start date listed on the SF424 RR Cover page	Remember to check start and end dates. For new applications and revisions/amendments to new applications, the start date for the first budget year on the 424 RR Budget page for Sections A&B must be the same as the proposed project start date listed on the SF424 (R&R) Cover page.
Budget, A&B, Year x (R&R)	End Date			, , ,
Budget, A&B, Year x (R&R)	Senior/Key Person Name (prefix, first name, middle name, last name, suffix)	Truncate if first or last name>30 chars, or if suffix>5 chars. Display warning.	The <order (first,="" in="" list="" second)=""> Senior/Key Person <element name=""> for budget year dudget year> exceeds the NIH limit. The grant image will display the name as submitted; NIH will store the first <database length=""> characters in the eRA database.</database></element></order>	Long-term, change in eRA db to 60 chars for last name, 35 for first name, 10 for suffix (all names in db)
		For Project Role of PD/PI, must match Senior/Key Person form name elements.	The <element name=""> given for the PD/PI for budget year <budget year=""> does not match the name given for the PD/PI on the Senior/Key Person form.</budget></element>	
Budget, A&B, Year x (R&R)	Senior/Key Person Project Role	For budgets of type 'Project', there must be at least one record for the budget year with a project role of PD/PI. Validation does not apply to STTR submissions.	There must be a Personnel entry listed for the PI or PD on the Detailed Budget Page for budget year budget year >.	For an STTR submission, the PI/PD could be on the Research Institution Budget.
Budget, A&B, Year x (R&R)	Senior/Key Person Base Salary			
Budget, A&B, Year x (R&R)	Senior/Key Person Cal. Mos	For non-R13 submissions, a non-zero value for calendar months, academic months, or summer months is required for each senior/key person.	Senior/Key Person <first last="" name="">, listed on the Detailed Budget Page for budget year <budy> budget year>, must have the number of calendar months, academic months, or summer months provided. must include effort of a value greater than zero in calendar months, academic months, or summer months. Note: use either calendar months or a combination of academic and summer months.</budy></first>	

Component	Field	Validation	Error Message	Notes & Tips
		For an R13 submission, a value for calendar months, academic	Senior/Key Person <first last="" name="">, listed on the Detailed Budget Page for budget</first>	Need to confirm that a zero is treated differently from a null value, also that a
		months, or summer months is required for each senior/key	year <budget year="">, must include effort (zero or greater) in calendar months, academic</budget>	system to system submission with an empty tag will not result in a zero value being
		person. The value may be zero.	months, or summer months. Note: use either	inserted in that element
			calendar months or a combination of academic and summer months	
Budget, A&B,	Senior/Key	Provide warning if both academic	Both academic and calendar months have	
Year x (R&R)	Person acad.	and calendar months have been	been included for <senior first<="" key="" person="" td=""><td></td></senior>	
	mos	provided for a person for a budget year.	Name Last Name>, for budget year <budget year="">. Please use either calendar months or a</budget>	
		year.	combination of academic and summer months.	
			If effort does not change throughout the year,	
			use the calendar months column. If effort varies between academic and summer months,	
			leave the calendar months column blank and	
			use only the academic and summer months' columns.	
Budget, A&B,	Senior/Key		Columns.	
Year x (R&R)	Person			
Budget, A&B,	summer mos Senior/Key			
Year x ($R&R$)	Person			
	Requested Salary			
Budget, A&B,	Senior/Key			
<i>Year x (R&R)</i>	Person Fringe benefits			
Budget, A&B,	Senior/Key	Must be equal to the sum of	The Funds Requested for <senior key="" person<="" td=""><td></td></senior>	
Year x (R&R)	Person Funds Requested	Requested Salary and Fringe Benefits for the Senior/Key Person	First Name Last Name>for Budget Year < Budget Year> does not equal the sum of the	
	Requesteu	for the budget year.	Requested Salary and the Fringe Benefits for	
Budget, A&B,	Total funds	Required if Additional Senior Key	the corresponding budget year. If the Additional Senior Key Persons	
Year x (R&R)	requested for	Persons Attachment is included.	Attachment is included, the total funds that are	
	Senior Key		requested in the attachment must be provided	
	Persons in attachment		on the 424 RR Budget Page.	
Budget, A&B,	Total Funds	Must be equal to the sum of Funds	The Total Funds Requested for Budget Year	
Year x (R&R)	requested for all senior/key	Requested for the budget year.	<budget year=""> does not equal the sum of Funds Requested for all Senior/Key Persons</budget>	
	persons		for the corresponding budget year.	

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B,	Additional	Accept only if eight key personnel	An Additional Senior/Key Person attachment	•
Year x (R&R)	Senior Key	have been submitted on the budget	may be submitted for budget year <budget< td=""><td></td></budget<>	
	Persons	page for this year.	year> only if eight senior/key persons have	
	attachment		been submitted on the budget page.	
Budget, A&B,	Other			
$Year \ x \ (R\&R)$	Personnel,			
	(number of			
	personnel)			
Budget, A&B,	Other			
$Year \ x \ (R\&R)$	Personnel			
	(Project Role)			
Budget, A&B,	Other			
$Year \ x \ (R\&R)$	Personnel			
	(Cal. Mos)			
Budget, A&B,	Other			
Year x (R&R)	Personnel			
	(acad.mos)			
Budget, A&B,	Other			
Year x (R&R)	Personnel			
	(summer			
	mos)			
Budget, A&B,	Other			
$Year \ x \ (R\&R)$	Personnel			
	(Requested			
	salary)			
Budget, A&B,	Other			
$Year \ x \ (R\&R)$	Personnel			
	(Fringe			
	benefits)			
Budget, A&B,	Other	Must be equal to the sum of	The Funds Requested for Other Personnel	
$Year \ x \ (R\&R)$	Personnel	Requested Salary and Fringe	Project Role < Project Role > for Budget Year	
	(Funds	Benefits for the project role for the	Sudget Year does not equal the sum of the	
	Requested)	budget year.	Requested Salary and the Fringe Benefits for	
D 1	TD 4.1. 3	M	the corresponding budget year.	
Budget, A&B,	Total number	Must equal the sum of number of	The total number of Other Personnel does not	
Year x (R&R)	other	personnel for all project roles	equal the sum of the number of other	
D. J. A. O.D.	personnel	under Other Personnel.	personnel for all project roles.	
Budget, A&B,	Total Funds	Must be equal to the sum of Funds	The Total Funds Requested for Other	
Year x (R&R)	Requested	Requested for Other Personnel for	Personnel for Budget Year < Budget Year >	
	other	the budget year.	does not equal the sum of Funds Requested	
	personnel		for all Other Personnel for the corresponding	
	ļ		budget year.	

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B,	Total salary,	Must equal the sum of Total Funds	The Total Salary, Wages and Fringe Benefits	
Year x (R&R)	wages and	requested for all senior/key persons	for Budget Year <budget year=""> does not</budget>	
	fringe	and Total Funds Requested other	equal the sum of Total Funds requested for all	
	benefits	personnel	senior/key persons and Total Funds Requested	
			for other personnel	

Research & Related Budget: Section C, D, & E, Budget Period 1

Component	Field	Validation	Error Message	Notes & Tips
Budget, C, D, E,	Equipment			
Year x (R&R)	description,			
	equipment			
	item			
Budget, C, D, E,	Equipment			
Year x (R&R)	description,			
	funds req			
Budget, C, D, E,	Equipment			
Year x (R&R)	description,			
	total funds			
	requested in			
	attachment			
Budget, C, D, E,		Must be equal to the sum of Funds	The Total Funds Requested for Equipment for	
Year x (R&R)	description,	Requested for equipment for the	Budget Year < Budget Year> does not equal	
	total	budget year.	the sum of Funds Requested for all Equipment	
D. I. C. D. E.	equipment		Items for the corresponding budget year.	
Budget, C, D, E,	Additional			
Year x (R&R)	equipment			
Budget, C, D, E,	attachment			
Year x (R&R)	Travel, domestic			
Tear x (K&K)	travel costs			
Budget, C, D, E,				
Year x ($R\&R$)	foreign travel			
Tear x (Rext)	costs			
Budget, C, D, E,	Total travel	Must be equal to the sum of	The Total Travel Cost for Budget Year <	
Year x (R&R)	cost	domestic travel costs and foreign	Budget Year > does not equal the sum of	
, ,		travel costs for the budget year.	Domestic Travel Costs and Foreign Travel	
			Costs for the corresponding budget year.	
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	tuition			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	stipends			

Component	Field	Validation	Error Message	Notes & Tips
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	travel			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	subsistence			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	other			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	description of			
	other			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	number of			
	Participants/			
	Trainees			
Budget, C, D, E,	Participant/	Must be equal to the sum of	The Total Participant/Trainee Support Costs	
Year x (R&R)	trainee	participant/trainee support costs for	for Budget Year < Budget Year > does not	
	support costs:	the budget year.	equal the sum of Participant/trainee support	
	Total		costs for the corresponding budget year.	
	Participant/			
	Trainee			
	Support Costs			

Research & Related Budget: Section F-K, Budget Period 1

Component	Field	Validation	Error Message	Notes & Tips
Budget, F-K,	Other Direct			
Year x (R&R)	Costs			
	(materials &			
	supplies)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs			
	(Publication			
	Costs)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs			
	(Consultant			
	Services)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs (ADP/			
	Computer			
	Services			
Budget, F-K,	Other Direct	If specified for budget type	The Applicant Organization Other Direct	
Year x (R&R)	Costs	'Project', provide warning if not	Costs (Subawards/Consortium/Contractual	
	(Subawards/	equal to the sum of Total Direct	Costs) is not equal to the sum of Total Direct	
	Consortium/	and Indirect Costs for all	and Indirect Costs for all	
	Contractual	eonsortium/eontractual budgets.	consortium/contractual organizations.	
	Costs)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs			
	(Equipment			
	or Facility			
	Rental/User			
D. J. of E.V.	Fees)			
Budget, F-K,	Other Direct Costs			
Year x (R&R)	(Alterations			
	and			
	Renovations)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs (other			
Tear x (Nan)	description 1)			
	uescription 1)			

Component	Field	Validation	Error Message	Notes & Tips
Budget, F-K,	Other Direct			•
Year x (R&R)	Costs (other1			
	funds			
	requested)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs (other			
	description 2)			
Budget, F-K,	(other2 funds			
Year x (R&R)	requested)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs (other			
	description 3)			
Budget, F-K,	(other3 funds			
Year x (R&R)	requested)			
Budget, F-K,	Other Direct	Must be equal to the sum of other	The Total Other Direct Costs for Budget Year	
Year x (R&R)	Costs, Total	direct costs for the budget year.	<budget year=""> does not equal the sum of</budget>	
	Other Direct		other direct costs for all categories for the	
	Costs		corresponding budget year.	
Budget, F-K,	Total Direct	Required.	The Total Direct Costs Funds Requested for	
Year x (R&R)	Costs (A-F)		Year x is required.	
		Must be equal to the sum of total	The Total Direct Costs for A-F for Budget	
		salary, wages and fringe benefits,	Year <budget year=""> does not equal the sum</budget>	
		total funds requested for	of direct costs for Sections A-F.	
		equipment, total travel cost, total		
		participant/trainee support costs,		
		and total other direct costs		
		For non SBIR/STTR, non R13 and	R01, R03, R15, R21and R34 direct cost	
		non-U13, non-R36, and non-Opdiv	requests of \$250K or less each year must be in	
		R01, R03, R15, R21, and R34	modules of \$25K, using the PHS 398 Modular	
		submissions, provide warning if	Budget Form and not the R&R Budget Form.	
		subtotal direct costs for every	Incorrect applications may be delayed in the	
		budget year is \leq = \$250K.	peer review process or rejected.	
		Calculate subtotal direct costs as		
		follows: Total Direct Costs (A-F)		
		minus the sum of Total Indirect		
		Costs for all budgets for the		
		corresponding year with budget		
		type 'subaward/consortium'.		

Component	Field	Validation	Error Message	Notes & Tips
•		For non-SBIR/STTR submissions and for submissions that are not in response to an RFA, provide warning if subtotal direct costs for any budget year is >= 500K. Calculate subtotal direct costs as follows: Total Direct Costs (A-F) minus the sum of Total Indirect Costs for all budgets for the corresponding year with budget type 'subaward/consortium'.	Direct cost requests >=\$500k a year need agreement from ICs, except for RFAs or PAs with budgetary limits. Applications without such approval may be delayed in the peer review process or rejected.	Notes & Tips Design note: RFA announcements have rfa_pa_notices_t.notice_type_code='R'
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Type	Allow submissions to come in with no indirect costs.		
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Rate	Provide warning if less than 1.	The Indirect Cost Rate is less than 1 for budget Year <budget year="">. Please note that this figure represents a percentage (e.g., '25.5', not '.255').</budget>	
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Base			
Budget, F-K, Year x (R&R)	Indirect Costs, Funds Requested			
Budget, F-K, Year x (R&R)	Indirect Costs, Cognizant Federal Agency			
Budget, F-K, Year x (R&R)	Total Indirect Costs	Must be equal to funds requested for all indirect cost types	The Total Indirect Costs for Budget Year <budget year=""> does not equal the sum of indirect costs for each indirect cost type.</budget>	
Budget, F-K, Year x (R&R)	Total Direct and Indirect Costs	Required Must be equal to the sum of Total Direct Costs and Total Indirect Costs	The Total Direct and Indirect Costs Funds Requested for Year <i>x</i> is required. The Total Direct and Indirect Institutional Costs is not equal to the sum of Total Other Direct Costs and Total Indirect Costs.	

Component	Field	Validation	Error Message	Notes & Tips
Budget, F-K, Year x (R&R)	Fee	A fee cannot be entered for a subaward/consortium budget.	A fee has been entered for year <x> of the budget for <organization name="">. Fees are not allowed for subaward/consortium budgets.</organization></x>	
Budget, F-K, Year x (R&R)	Budget Justification	If fee is requested, must not be blank or null If SBIR/STTR Phase I cost limitation is exceeded, must not be blank or null. Cost limitation is 100k, calculated as total cost (direct cost, indirect cost, and fee).	A fee has been entered for year <x> of the Project budget. A Budget Justification must be included if a fee has been entered. The Phase I cost limitation of 100k has been exceeded. Please explain the deviation in the Budget Justification.</x>	
		If SBIR/STTR Phase II cost limitation is exceeded, must not be blank or null. Cost limitation is 750k, calculated as total cost (direct cost, indirect cost, and fee).	The Phase II cost limitation of 750k has been exceeded. Please explain the deviation in the Budget Justification.	
		If Fast-Track cost limitation is exceeded, must not be blank or null. Cost limitation is 850k, calculated as total cost (direct cost, indirect cost, and fee).	The Fast-Track cost limitation of 850k has been exceeded. Please explain the deviation in the Budget Justification.	
		If Phase I SBIR time limitation is exceeded, must not be blank or null. Time limitation is six months, calculated as the time between the start date of the first budget period and the end date of the last budget period.	The Phase I SBIR time limitation of six months has been exceeded. Please explain the deviation in the Budget Justification.	Since there is no cumulative budget justification, this validation will look at the Budget Justification for the first budget period. Instructions should include this.
		If Phase I STTR time limitation is exceeded, must not be blank or null. Time limitation is one year, calculated as the time between the start date of the first budget period and the end date of the last budget period.	The Phase I STTR time limitation of one year has been exceeded. Please explain the deviation in the Budget Justification.	Since there is no cumulative budget justification, this validation will look at the Budget Justification for the first budget period. Instructions should include this.

Component	Field	Validation	Error Message	Notes & Tips
		If Phase II SBIR/STTR time	The Phase II SBIR/STTR time limitation of	Since there is no cumulative budget
		limitation is exceeded, must not be	two years has been exceeded. Please explain	justification, this validation will look at the
		blank or null. Time limitation is	the deviation in the Budget Justification.	Budget Justification for the first budget
		two years, calculated as the time		period. Instructions should include this.
		between the start date of the first		
		budget period and the end date of		
		the last budget period.		

Research & Related Budget: Cumulative Budget

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Section A,	Must be equal to the sum of Total	The Cumulative Budget Senior/Key Person	
Budget (R&R)	Senior/Key	Funds Requested for all senior/key	Total does not equal the sum of Total Funds	
	Person Total	persons for every budget year for	Requested for all senior/key persons for all	
		this budget.	budget years.	
Cumulative	Section B,	Must be equal to the sum of Total	The Cumulative Budget Other Personnel Total	
Budget (R&R)	Other	Funds Requested for Other	does not equal the sum of Total Funds	
	Personnel	Personnel for every budget year for	Requested for Other Personnel for all budget	
	Total	this budget.	years.	
Cumulative	Total Number	Must be equal to the sum of Total	The Cumulative Budget Total Number Other	
Budget (R&R)	other	Number Other Personnel for every	Personnel does not equal the sum of Total	
	personnel	budget year for this budget.	Number Other Personnel for all budget years.	
Cumulative	Total Salary,	Must be equal to the sum of Total	The Cumulative Budget Total Salary, Wages,	
Budget (R&R)	Wages, and	Salary, Wages, and Fringe Benefits	and Fringe Benefits do not equal the sum of	
	Fringe	for every budget year for this	Total Salary, Wages, and Fringe Benefits for	
	Benefits	budget.	all budget years.	
Cumulative	Section C,	Must be equal to the sum of Total	The Cumulative Budget Total Funds	
Budget (R&R)	Equipment	Funds Requested For Equipment	Requested For Equipment does not equal the	
	Totals	for every budget year for this	sum of Total Funds Requested For Equipment	
		budget.	for all budget years.	
Cumulative	Section D,	Must be equal to the sum of Total	The Cumulative Budget Total Travel Cost	
Budget (R&R)	Travel, Total	Travel Cost for every budget year	does not equal the sum of Total Travel Costs	
		for this budget.	for all budget years.	
Cumulative	Section D,	Must be equal to the sum of	The Cumulative Budget Domestic Travel Cost	
Budget (R&R)	Travel,	Domestic Travel Cost for every	does not equal the sum of Domestic Travel	
	Domestic	budget year for this budget.	Costs for all budget years.	
Cumulative	Section D,	Must be equal to the sum of	The Cumulative Budget Foreign Travel Cost	
Budget (R&R)	Travel,	Foreign Travel Cost for every	does not equal the sum of Foreign Travel	
	Foreign	budget year for this budget.	Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of Total	The Cumulative Budget Total	
Budget (R&R)	Participant/	Participant/Trainee Support Costs	Participant/Trainee Support Costs does not	
· /	Trainee, Total	for every budget year for this	equal the sum of Total Participant/Trainee	
	ĺ	budget.	Support Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of	The Cumulative Budget Participant/Trainee,	
Budget (R&R)	Participant/	Participant/Trainee, Tuition, Fees,	Tuition, Fees, Health Insurance Costs does not	
· · · /	Trainee,	Health Insurance Costs for every	equal the sum of Participant/Trainee, Tuition,	
	Tuition, Fees,	budget year for this budget.	Fees, Health Insurance Costs for all budget	
	Health		years.	
	Insurance		_	

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Section E,	Must be equal to the sum of	The Cumulative Budget Participant/Trainee,	
Budget (R&R)	Participant/	Participant/Trainee, Stipends Costs	Stipends Costs does not equal the sum of	
	Trainee,	for every budget year for this	Participant/Trainee, Stipends Costs for all	
	Stipends	budget.	budget years.	
Cumulative	Section E,	Must be equal to the sum of	The Cumulative Budget Participant/Trainee,	
Budget (R&R)	Participant/	Participant/Trainee, Travel Costs	Travel Costs does not equal the sum of	
	Trainee,	for every budget year for this	Participant/Trainee, Travel Costs for all	
	Travel	budget.	budget years.	
Cumulative	Section E,	Must be equal to the sum of	The Cumulative Budget Participant/Trainee,	
Budget (R&R)	Participant/	Participant/Trainee, Subsistence	Subsistence Costs does not equal the sum of	
	Trainee,	Costs for every budget year for this	Participant/Trainee, Subsistence Costs for all	
	Subsistence	budget.	budget years.	
Cumulative	Section E,	Must be equal to the sum of	The Cumulative Budget Participant/Trainee,	
Budget (R&R)	Participant/	Participant/Trainee, Other Costs	Other Costs does not equal the sum of	
	Trainee,	for every budget year for this	Participant/Trainee, Other Costs for all budget	
	Other	budget.	years.	
Cumulative	Section E,	Must be equal to the sum of the	The Cumulative Budget Number of	
Budget (R&R)	Participant/	Number of Participants/Trainees	Participants/Trainees does not equal the sum	
	Trainee,	for every budget year for this	of the Number of Participants/Trainees for all	
	Number	budget.	budget years.	
Cumulative	Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs	
Budget (R&R)	Other Direct	Direct Costs for every budget year	does not equal the sum of Other Direct Costs	
	Costs, Total	for this budget.	for all budget years.	
Cumulative	Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs,	
Budget (R&R)	Other Direct	Direct Costs, Materials and	Materials and Supplies, does not equal the	
	Costs,	Supplies, for every budget year for	sum of Other Direct Costs, Materials and	
	Materials and	this budget.	Supplies, for all budget years.	
	Supplies			
Cumulative	Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs,	
Budget (R&R)	Other Direct	Direct Costs, Publication Costs, for	Publication Costs, does not equal the sum of	
	Costs,	every budget year for this budget.	Publication Costs for all budget years.	
	Publication			
	Costs			
Cumulative	Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs,	
Budget (R&R)	Other Direct	Direct Costs, Consultant Services,	Consultant Services, does not equal the sum of	
	Costs,	for every budget year for this	Consultant Services for all budget years.	
	Consultant	budget.		
	Services			

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs,	·
Budget (R&R)	Other Direct	Direct Costs, ADP/Computer	ADP/Computer Services, does not equal the	
	Costs, ADP/	Services, for every budget year for	sum of ADP/Computer Services for all budget	
	Computer	this budget.	years.	
	Services			
Cumulative	Section F,	Must equal the sum of Other Direct	The Cumulative Budget Section F, Other	
Budget (R&R)	Other Direct	Costs, Subawards/Consortium/	Direct Costs, Subaward/Consortium/	
	Costs, sub,	Contractual Costs, for every	Contractual, does not equal the sum of Other	
	consortium,	budget year for this budget.	Direct Costs, Subawards/Consortium/	
	contractual		Contractual Costs for all budget years.	
Cumulative	Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs,	
Budget (R&R)	Other Direct	Direct Costs, Equipment or	Equipment or Facility Rental, does not equal	
	Costs, Equip	Facility Rental, for every budget	the sum of Equipment or Facility Rental for	
	or facility	year for this budget.	all budget years.	
	rental			
Cumulative	Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs,	
Budget (R&R)	Other Direct	Direct Costs, Alterations and	Alterations and Renovations, does not equal	
	Costs,	Renovations, for every budget year	the sum of Alterations and Renovations for all	
	Alterations	for this budget.	budget years.	
	and			
Cumulative	Renovations Section F,	Must be equal to the sum of Other	The Cumulative Budget Other Direct Costs,	
	Other Direct	Direct Costs, Other, for every	Other, does not equal the sum of Other Direct	
Budget (R&R)	Costs, other	budget year for this budget.	Costs, Other for all budget years.	
Cumulative	Section G,	Required.	The Cumulative Budget Direct Costs is	
Budget (R&R)	Direct Costs	Required.	required.	
Buaget (K&K)	(A-F), total	Must be equal to the sum of Total	The Cumulative Budget Total Direct Costs	
	(A-F), total	Direct Costs for every budget year	does not equal the sum of Total Direct Costs	
		for this budget.	for all budget years.	
Cumulative	Section H,	Must be equal to the sum of Total	The Cumulative Budget Total Indirect Costs	
Budget (R&R)	Indirect Costs	Indirect Costs for every budget	does not equal the sum of Total Indirect Costs	
Buaget (K&K)	mun ect Costs	year for this budget.	for all budget years.	
Cumulative	Section I,	Required	The Cumulative Budget Total Direct and	
Budget (R&R)	Total Direct	required	Indirect Costs are required.	
Bunger (Ran)	and Indirect	Must be equal to the sum of Total	The Cumulative Budget Total Direct and	
	Costs	Direct and Indirect Costs for every	Indirect Costs do not equal the sum of Total	
	20000	budget year for this budget.	Direct and Indirect Costs for all budget years.	
Cumulative	Section J, Fee	Must be equal to the sum of Fee	The Cumulative Budget Fee does not equal	
Budget (R&R)	Section 6, Fee	for every budget year for this	the sum of the Fee for all budget years.	
Danger (Man)		budget.	and bann of the receipt an ouaget years.	

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Budget			
Budget (R&R)	Justification			
	(attachment)			

SBIR/STTR Information

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR (NIH)	Program Type (SBIR,	One and only one choice may be made.	Please select one Program Type: SBIR or STTR.	•
	STTR, Both)	Choice must be consistent with the information stored for the announcement: if the announcement is indicated as 'SBIR', 'SBIR' must be selected; if announcement is indicated as 'STTR', 'STTR' must be selected.	You have selected a Program Type of <program type=""> on the SBIR/STTR component. That is not the correct program type for this announcement. Please refer to the FOA for the correct program type for this application.</program>	
		'Both' is not a valid choice.	For NIH submissions, 'Both' is not an acceptable value for the 'Program Type' field on the SBIR/STTR Information Component.	
SBIR/STTR (NIH)	SBIR/STTR Type (Phase I, Phase II, Fast-Track)	One and only one choice may be made.	Please select one SBIR/STTR Type: Phase I, Phase II, or Fast-Track.	
SBIR/STTR (NIH)	Question 1. Small Business Eligibility (Y/N)	Required.		
SBIR/STTR (NIH)	Question 2. Are Subcontracts Included? (Y/N)	Required.		
SBIR/STTR (NIH)	Name of Labs/ Agencies For Subcontracts	Required entry if response to 'Are Subcontracts Included?' is 'Yes'.	If Question 2 on the SBIR/STTR form indicates that subcontracts are included, the name(s) of labs or agencies for subcontracts must be included.	
		Cannot be included if response to 'Are Subcontracts Included?' is 'No'.	If Question 2 on the SBIR/STTR form indicates that subcontracts are not included, the name(s) of labs or agencies for subcontracts cannot be included.	
SBIR/STTR (NIH)	Question 3. Located in HUBZone (Y/N)	Required.		

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR (NIH)	Question 4. Research to be Performed in US? (Y/N)	Required.		
SBIR/STTR (NIH)	Explanation of Foreign Performance	Must be included if answer to 'work to be performed in US' question is 'no'. Cannot be included if answer to	If Question 4 on the SBIR/STTR form indicates that research is not to be performed in the US, an explanation attachment must be provided.	
		'work to be performed in US' question is 'yes'.	If Question 4 on the SBIR/STTR form indicates that research is to be performed in the US, an explanation attachment cannot be provided.	
SBIR/STTR (NIH)	Question 5. Equivalent Submissions (Y/N)	Required.		
SBIR/STTR (NIH)	Names of other Federal agencies for equivalent work	Required entry if answer to 'submittal of equivalent work to other agencies' question is 'yes'. Cannot be included if answer to 'submittal of equivalent work to other agencies' question is 'no'.		
SBIR/STTR (NIH)	Question 6. Disclosure Permission Statement (Y/N)	Required		
SBIR/STTR (NIH)	Commercializ ation Plan Attachment	Required for Phase II and Fast Track submissions Cannot be submitted for anything other than Phase II or Fast Track submissions Limited to 15 pages.	The Commercialization Plan is required for Phase II and Fast Track submissions A Commercialization Plan can only be submitted for Phase II and Fast Track submissions The Commercialization Plan is limited to 15 pages	
SBIR/STTR (NIH)	Question 8. Receipt of Phase II SBIR Awards (Y/N)	Required for SBIR		
SBIR/STTR (NIH)	Company Commercializ ation History Attachment			

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR	Question 9.	Required for SBIR		
(NIH)	SBIR PD/PI			
	Primary			
	Employment			
	(Y/N)			
SBIR/STTR	Question 10.	Required for STTR		
(NIH)	STTR PD/PI			
	Commitment			
	(Y/N)			
SBIR/STTR	Question 11.	Required for STTR		
(NIH)	STTR work			
	percentages			
	(Y/N)			

PHS 398 Cover Page Supplement

Component	Field	Validation	Error Message	Notes & Tips
Cover Page (NIH)	PD/PI Information (prefix, first, middle, last, suffix)	Read only, pulled from R&R		
Cover Page (NIH)	PD/PI New Investigator Question			
Cover Page (NIH)	PD/PI Degrees	Match against 4 character degree codes in PI's Commons account (ignore case, spaces, or punctuation). If it does not match anything on list, compare against any 'other degree text' degrees on Commons account. If degree not found on the degree list or on 'other degree text' entries for the PI, display a warning to the PI that the degrees did not match the Commons account, and that the submitted degrees will be displayed on the grant image. "The degrees that will be displayed on the grant image are x, y, and z". In db, save the top three Commons degrees instead of the submitted degrees in the role.	The PD/PI degree: <degree>, listed on the PHS 398 Cover Page, is not one of the degrees listed for the NIH eRA Commons account: <credential>. The grant image will display the degrees as submitted. If the degrees listed in the Commons are not current, please update them in the Commons. Instructions on updating profile information are available at https://commons.era.nih.gov/commons-help/216.htm.</credential></degree>	Be sure to include your educational degrees (by code) as listed in the eRA Commons. The system will compare your application with the information in the eRA Commons profile. If the degrees don't match, the degrees you submit in the application will be displayed in the grant image but the top 3 degrees listed in the Commons account will be saved in the database. Post-testing solution: Provide warning that Commons degrees are xxxx and degrees submitted through grants.gov are yyyy and we will be displaying the top three Commons degrees. Provide ability for submitter to update the Commons account and to regenerate the image to display the updated information from the Commons account.
		Provide a warning if no degrees have been included.	No degrees have been submitted for the PD/PI. If you want the degrees to be displayed on the face page of the grant image, you should include them on the PHS 398 Cover Page Supplement.	
Cover Page (NIH)	Human Subjects Clinical Trial (Y/N)	An answer is required if the answer to 'Human Subjects Involved' is "Yes". If Human Subjects NIH-Defined Phase III Clinical Trial is true, must be true.	The Human Subjects Clinical Trial question must be answered if the answer to 'Human Subjects Involved' is "Yes". The Human Subjects Clinical Trial question must be "Yes" if the answer to Human Subjects NIH-Defined Phase III Clinical Trial is "Yes".	

Component	Field	Validation	Error Message	Notes & Tips
		For S10 application, provide a warning if this is true.	The answer to the Human Subjects Clinical Trial question should not be 'Yes'. The application will be processed, but a concern may be raised during review.	
Cover Page (NIH)	Human Subjects NIH-Defined Phase III	An answer is required if the answer to 'Human Subjects Clinical Trial' is "Yes".	The Human Subjects NIH-Defined Phase III Clinical Trial question must be answered if the answer to the Human Subjects Clinical Trial question is "Yes".	
	Clinical Trial (Y/N)	If Human Subjects Clinical Trial is false, must be false	The Human Subjects NIH-Defined Phase III Clinical Trial must be "No" if the answer to the Human Subjects Clinical Trial question is "No".	
Cover Page (NIH)	Applicant Organization Contact Information	Read only, pulled from R&R		
Cover Page (NIH)	Applicant Organization Contact Title			
Cover Page (NIH)	Applicant Organization Contact Street Address (1 and 2)	If either line>50 characters, truncate and display warning.	Street <n> of the Applicant Organization exceeds the NIH limit of 50 characters. The grant image will display the address as submitted; NIH will store the first 50 characters only.</n>	
Cover Page (NIH)	Applicant Organization Contact City			
Cover Page (NIH)	Applicant Organization Contact County			
Cover Page (NIH)	Applicant Organization Contact State	Required if country is US-or Canada. If country is not US-or Canada must be blank.	The Applicant Organization State must be supplied for US and Canadian addresses. The Applicant Organization State should be blank for all countries other than the United States and Canada.	
		Transform state name to 2-char abbreviation before validating and storing. If state name can't be transformed, give error.	The Applicant Organization State is not a valid state name.	

Component	Field	Validation	Error Message	Notes & Tips
Cover Page (NIH)	Applicant Organization	Required if country is Canada.	The Applicant Organization Province must be supplied for Canadian addresses.	Province should be mapped into same database location as state.
	Contact Province	If country is not Canada must be blank.	The Applicant Organization Province should be blank for all countries other than Canada.	
		Transform province name to 2 char. abbreviation before validating and storing. If province name can't be transformed, give error.	The Applicant Organization Province is not a valid state name.	
Cover Page (NIH)	Applicant Organization Contact Zip	Required if country is US.	The Applicant Organization Zip Code must be entered for US addresses.	Long-term, change in eRA db to 13 characters.
	Code	Must be 5 or 9 numeric digits if country is US.	The Applicant Organization Zip Code must be entered in 5-digit or 9-digit format.	
		If >9 characters, truncate and display warning (remove any dashes before truncating).	The Applicant Organization Zip Code has more than 9 digits. The grant image will display the zip code as submitted; NIH will store the first 9 digits in the eRA database.	
Cover Page (NIH)	Applicant Organization Contact Country	Must be a valid ISO 3166-1 alpha-3 country code.	The Applicant Organization country code provided (<country>) is not a valid ISO 3166-1 alpha-3 country code.</country>	
Cover Page (NIH)	HESC Involved (Y/N)	For S10 application, display a warning if this is true.	The answer to the HESC Involved question should be 'No'. The application will be processed, but a concern may be raised during review.	Change mapping: set Special Topic code to 13 if HESC Involved is 'yes'. This code is set in appl_special_topics_t.
		A response is required for this element.	A response of 'Yes' or 'No' is required for the HESC Involved (Y/N) element on the PHS 398 Cover Page.	Although the element is required by the PureEdge form, the schema does not currently require it for system to system submissions.
Cover Page (NIH)	HESC Cell Lines	If HESC involved='Y', must include this or 'Can't be Referenced'	If the answer to 'HESC involved' is "Yes", HESC Cell Lines must be included or the 'Can't be Referenced' checkbox must be checked.	For the Human Embryonic Stem Cells (HESC) section, if you answer Yes, you must list the cell lines in the boxes provided or check the box "Specific stem cell line cannot be referenced at this time. One from the registry will be used."
		If HESC involved='N', can't include this or 'Can't be Referenced'	If the answer to 'HESC involved' is "No", HESC Cell Lines may not be included and the 'Can't be Referenced' checkbox must not be checked.	

Component	Field	Validation	Error Message	Notes & Tips
		If specific stem cell line is	Stem cell line <cell line="" number=""> is not a</cell>	
		included, must be a valid stem cell	valid stem cell line number.	
		line in eRA database. Comparison		
		should not be case-sensitive.		
		If 'Can't Be Referenced' is	If the 'Can't be Referenced' checkbox is	
		checked, no other cell lines may be	checked, no other stem cell lines may be	
		entered.	entered.	
Cover Page	HESC 'can't	If HESC involved='Y', must	If the answer to 'HESC involved' is "Yes",	
(NIH)	be	include this or 'HESC Cell Lines'	HESC Cell Lines must be included or the	
	referenced'		'Can't be Referenced' checkbox must be	
	checkbox		checked.	
		If HESC involved='N', can't	If the answer to 'HESC involved' is "No",	
		include this or 'HESC Cell Lines'	HESC Cell Lines may not be included and the	
			'Can't be Referenced' checkbox must not be	
			checked.	

PHS 398: Modular Budget

Component	Field	Validation	Error Message	Notes & Tips
Modular Budget, Years 1-5 (NIH)		Accept submission of modular budget or detailed budget, but not both	Both a modular and a detailed budget have been included with this submission. One or the other may be submitted.	
		Do not accept a modular budget for R13 applications (activity code on funding opportunity = 'R13' or 'U13')	Modular budgets may not be submitted for Conference Grant applications.	
		For a revision, if the parent grant budget is non-modular, only a detailed budget component may be submitted.	The parent grant for this revision uses the non-modular format; therefore, this application may include a detailed R&R budget component only.	
		For an R15 application (activity code on funding opportunity = 'R15'), return warning if more than one budget period has been included.	An AREA grant should be submitted for one budget period only. This may delay the peer review process.	
		Do not accept a modular budget for SBIR/STTR applications	Modular budgets may not be submitted for SBIR/STTR submissions.	
Modular Budget, Years 1-5 (NIH)	Start Date	For budget period 1, for new applications and revisions resubmissions to new applications, must be the same as the Project Start Date listed on the SF 424 RR Face Page	For new applications and resubmissions, the modular budget year 1 start date must be the same as the proposed project start date listed on the SF 424 RR-Face Cover Page.	
Modular Budget, Years 1-5 (NIH)	End Date	Budget period end date must be greater than budget period start date.	The modular budget year <budget year=""> end date must be later than the modular budget year <budget year=""> start date.</budget></budget>	
Modular Budget, Years 1-5 (NIH)	Direct Costs, Direct Cost Less	Must be <= 250K, must be a multiple of 25K for each budget year	The total direct costs for modular budget year 	
	Consortium, F&A	For R15 submissions, provide warning if this value for <i>any</i> budget year is >= 150K.	Direct cost requests are limited to \$150k a year for AREA grants. Applications that exceed this limit may be delayed in the peer review process or rejected.	

Component	Field	Validation	Error Message	Notes & Tips
		For R03 submissions, provide	Direct cost requests are limited to \$50k a year	
		warning if this value for any	for this application. Applications that exceed	
		budget year is >50K (LV).	this limit may be delayed in the peer review	
			process or rejected.	
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable direct cost	
			limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
		For R21 submissions, provide	Direct cost requests are limited to \$200k a	
		warning if this value for any	year for this application. Applications that	
		budget year is >200K (LV).	exceed this limit may be delayed in the peer	
			review process or rejected.	
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable direct cost	
			limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
		For R34 submissions, provide	Direct cost requests are limited to \$225k a	
		warning if this value for any	year for this application. Applications that	
		budget year is >225K (LV).	exceed this limit may be delayed in the peer	
			review process or rejected.	
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable direct cost	
			limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
Modular	Direct Costs,	Must be less than 10,000,000,000	For NIH processing, the Consortium F&A	Grants.gov accepts up to 14 bytes
Budget, Years	Consortium,		amount must be less than 10,000,000,000.	(including 2 decimal places); NIH accepts
1-5 (NIH)	F&A			no more than 10. Long-term db change is
				recommended.
Modular	Direct Costs,	Must equal sum of Direct Cost	The total direct costs for modular budget year	
Budget, Years	Total Direct	Less Consortium, F&A and	<budy> description </budy>	
1-5 (NIH)	Costs	Consortium, F&A for the	Cost Less Consortium, F&A and Consortium,	
		corresponding budget year (if both	F&A	
		are submitted). If only Direct Cost		
		Less Consortium, F&A is		
		submitted for that budget year,		
		must equal that.		

Component	Field	Validation	Error Message	Notes & Tips
		Must be less than 10,000,000,000	For NIH processing, the Total Direct Costs amount must be less than 10,000,000,000.	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Indirect Cost Type 1-4			
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Indirect Cost Rate 1-4	Provide warning if greater than 0 and less than 1.	Indirect Cost Rate is less than 1 for budget year <budget year="">. Please note that this figure represents a percentage.</budget>	
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Indirect Cost Base 1-4	Must be less than 10,000,000,000	For NIH processing, the Indirect Cost Base amount for budget year budget year> must be less than 10,000,000,000.	Grants.gov accepts up to 14 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Funds Requested 1-4	Must be less than 10,000,000,000	For NIH processing, the Funds Requested amount must be less than 10,000,000,000.	Grants.gov accepts up to 14 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Cognizant Agency			
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Indirect Cost Rate Agreement Date			
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Total Indirect Costs	Must equal sum of Indirect Costs, Funds Requested 1-4 for the corresponding budget year, if any Indirect Costs were entered.	The Total Indirect Costs do not equal the sum of Funds Requested for budget year <budy></budy>	
		Must be less than 10,000,000,000	For NIH processing, the Total Indirect Costs amount must be less than 10,000,000,000.	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years	Total Direct and Indirect	Must be greater than 0 for first budget period.	For Modular Budget Year 1, Total Direct and Indirect Costs must be greater than zero	

Component	Field	Validation	Error Message	Notes & Tips
		Must be equal to the sum of Total	For Modular Budget Year <budget year="">, the</budget>	
		Direct Costs and Total Indirect	Total Direct and Indirect Costs must be equal	
		Costs for the corresponding budget	to Total Direct Costs plus Total Indirect Costs	
		period.	requested for that budget year.	
		Must be less than 10,000,000,000	For NIH processing, the Total Direct and	Grants.gov accepts up to 15 bytes
			Indirect Costs amount must be less than	(including 2 decimal places); NIH accepts
			10,000,000,000.	no more than 10. Long-term db change is
				recommended.

PHS 398 Modular Budget: Period 5 and Cumulative

Component	Field	Validation	Error Message	Notes & Tips
Modular	Total Direct	Must be equal to the sum of all	The Total Direct Cost less Consortium F&A	
Budget,	Cost less	Total Direct Cost less Consortium	for Entire Project Period must be equal to the	
Cumulative	Consortium	F&A values for all budget years	sum of Total Direct Cost Less Consortium	
(NIH)	F&A for		F&A values for all budget years	
	Entire Project	For R03 submissions, provide	Cumulative direct cost requests are limited to	
	Period	warning if this value is >100K	a total of \$100k for this application.	
	!	(LV).	Applications that exceed this limit may be	
	!		delayed in the peer review process or rejected.	
	!		Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable cumulative direct	
	!		cost limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
	!	For R21 submissions, provide	Cumulative direct cost requests are limited to	
		warning if this value is >275K	a total of \$275k for this application.	
		(LV).	Applications that exceed this limit may be	
	!		delayed in the peer review process or rejected.	
	!		Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable cumulative direct	
			cost limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
	!	For R34 submissions, provide	Cumulative direct cost requests are limited to	
		warning if this value is >450K	a total of \$450k for this application.	
	!	(LV).	Applications that exceed this limit may be	
	!		delayed in the peer review process or rejected.	
			Warning message for 'opt out'	
	1		announcements: Be sure that you have	
	!		complied with the allowable cumulative direct	
	!		cost limitations for this FOA. Otherwise, your	
	1		application may be delayed and rejected in the	
Modular	Total	Must be equal to the same of all	review process.	
	Consortium	Must be equal to the sum of all Consortium F&A values for all	The Total Consortium F&A for Entire Project Period must be equal to the sum of	
Budget,				
Cumulative	F&A for	budget years	Consortium F&A values for all budget years	

Component	Field	Validation	Error Message	Notes & Tips
(NIH)	Entire Project Period	Must be less than 10,000,000,000	For NIH processing, the Total Consortium F&A for Entire Project Period amount must be less than 10,000,000,000.	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Cumulative	Total Costs, Total Direct Costs for	Must be equal to the sum of Total Direct Costs for all budget years	The Total Direct Costs for the Entire Proposed Project Period must be equal to the sum of the Total Direct Costs for all budget years	
(NIH)	Entire Project Period	Must be less than 10,000,000,000	For NIH processing, the Total Direct Costs for Entire Project Period amount must be less than 10,000,000,000.	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Cumulative	Total Costs, Total Indirect Costs for	Must be equal to the sum of Total Indirect Costs for all budget years	The Total Indirect Costs Requested for Entire Project Period must be equal to the sum of Total Indirect Costs for all budget years.	
(NIH)	Entire Project Period	Must be less than 10,000,000,000	For NIH processing, the Total Indirect Costs for Entire Project Period amount must be less than 10,000,000,000.	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Cumulative (NIH)	Total Costs, Total Direct and Indirect Costs for	Must be equal to the sum of all Total Direct and Indirect Costs values for all budget years	The Total Direct and Indirect Costs for Entire Project Period must be equal to the sum of all Total Direct and Indirect Costs values for all budget years	
	Entire Project Period	Must be less than 10,000,000,000	For NIH processing, the Total Direct and Indirect Costs for Entire Project Period amount must be less than 10,000,000,000.	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Cumulative (NIH)	Budget Justifications, Personnel Justification			
Modular Budget, Cumulative (NIH)	Budget Justifications, Consortium Justification			
Modular Budget, Cumulative (NIH)	Budget Justifications, Additional Narrative			
(11111)	Justification			

PHS 398 Checklist

Component	Field	Validation	Error Message	Notes & Tips
Checklist (NIH)	Type of	Read only, pulled from R&R		
	Application	Allow a submission with no		
		Checklist component.		
Checklist (NIH)	Federal	Read only, pulled from R&R		
	Identifier			
Checklist (NIH)	Change of	Not accepted for revisions.	A revision may not be submitted with a	
	Investigator/		Change of PI. Revisions must have the same	
	Change of		PI as the parent grant.	
	Inst.; Change of PI			
Checklist (NIH)	Change of	Must be included if application is	The name of the former PI must be included if	If there has been a change in the Principal
Checkiisi (MIII)	Investigator/	for change of PI	there has been a Change of PI for the grant.	Investigator, you must include the name of
	Change of	for change of 11	there has been a change of 11 for the grant.	the former PI so that the grant can be
	Inst.: Name of			matched correctly.
	former PI			
	(Prefix, First			
	Name, Middle			
	Name, Last			
	Name, Suffix)			
Checklist (NIH)	Change of	Will not be accepted for the		
	Investigator/	Grants.gov submission		
	Change of			
	Inst.: change			
	of grantee inst.			
Checklist (NIH)	Change of	If >40 characters, truncate.		Grants.gov length is 120, our db length is
Circoniisi (11111)	Investigator/	11 To characters, transcate.		40. Consider long-term db change.
	Change of			To constant long term to entange.
	Inst.: name of			
	former inst.			
Checklist (NIH)	Inventions			
	and Patents,			
	Yes			
Checklist (NIH)	Inventions			
	and Patents,			
	No			

Component	Field	Validation	Error Message	Notes & Tips
Checklist (NIH)	Inventions and Patents, Previously	Must be answered if response to Inventions and Patents is 'Yes'	Inventions and Patents, Previously Reported must be answered if the answer to Inventions and Patents is 'Yes'	
	Reported (Yes or No)	Should not be answered if response to Inventions and Patents is 'No'	Inventions and Patents, Previously Reported should not be answered if the answer to Inventions and Patents is 'No'	
Checklist (NIH)	Program Income Anticipated (Y/N)			
Checklist (NIH)	Program Income, Budget Period 1-5	Should only be completed if answer to Program Income Anticipated question was 'Y'. Provide error if provided for S10 application. The number of program income budget periods must be less than or equal to the number of budgets provided in the budget component.	If answer to Program Income Anticipated question is 'N', no program income detail may be entered. No program income may be included for S10 applications. Anticipated amount for program income has been provided for <x> budget years. Only <y> years of budgets were provided with this application.</y></x>	
Checklist (NIH)	Program Income, Anticipated Amount 1-5	Must be less than 10,000,000,000	For NIH processing, the Program Income Anticipated Amount for budget period budget period> must be less than 10,000,000,000.	Grants.gov accepts up to 14 bytes (including 2 decimal places); NIH accepts no more than 10, with 2 decimal places. Long-term db change is recommended.
Checklist (NIH)	Program Income, Sources 1-5			
Checklist (NIH)	Assurances/ Certification: Explanation			

PHS 398 Research Plan

Component	Field	Validation	Error Message	Notes & Tips
Research Plan	Type of	Read only, pulled from R&R		·
(NIH)	Application	Allow applications to come in		
		without this component.		
Research Plan	Research	Required for resubmission for non-	An Introduction must be included for	
(NIH)	Plan	S10 applications.	resubmissions.	
	Attachments:	Required for revisions.	An Introduction must be included for	
	Introduction		revisions.	
		Limited to 1 page for revisions.	The Introduction for a revision is limited to	
			one page.	
		Limited to 3 pages for non-	The Introduction is limited to three pages.	
		SBIR/STTR and non-R36		
		submissions.	The Lutus dustion is limited to any mass for this	
		Introduction limited to 1 page for Phase I SBIR/STTR, R03 (LV),	The Introduction is limited to one page for this submission.	
		R21 (LV), and R36	Warning message for 'opt out'	
		K21 (LV), and K50	announcements: Be sure that you have	
			complied with the allowable page limitations	
			for the Introduction for this FOA. Otherwise,	
			your application may be delayed and rejected	
			in the review process.	
		Introduction limited to 3 pages for	The Introduction is limited to three pages for	
		Phase II and Fast Track	this submission.	
		SBIR/STTR, R33 (LV), R21/R33	Warning message for 'opt out'	
		(LV), and R34 (LV) applications	announcements: Be sure that you have	
			complied with the allowable page limitations	
			for the Introduction for this FOA. Otherwise,	
			your application may be delayed and rejected	
			in the review process.	
		D 11 1 10D 1 D1	THE DESCRIPTION OF THE PROPERTY OF THE PROPERT	
		Provide warning if Research Plan	The Research Plan is limited to 25 pages. This	
		Attachments 2-5 together are	may span 28 pages due to page breaks but the	
		greater than 25 pages and less than or equal to 28 pages (applies to all	total space occupied by text should not exceed	
		applications not specifically listed	25 pages.	
		below including Fast Track) ((LV)		
		for R33, R21/R33, and R34).		
	l	101 K55, K21/K55, and K54).		

Component	Field	Validation	Error Message	Notes & Tips
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable page limitations	
			for the Research Plan for this FOA.	
			Otherwise, your application may be delayed	
			and rejected in the review process.	
Research Plan	Research	Provide warning if Research Plan	The Research Plan is limited to 25 pages. This	
(NIH)	Plan	Attachments 2-5 together are	may span 28 pages due to page breaks but the	
	Attachments:	greater than 25 pages and less than	total space occupied by text should not exceed	
	Specific Aims	or equal to 28 pages (applies to all	25 pages.	
		applications not specifically listed	Warning message for 'opt out'	
		below, including Fast Track) ((LV)	announcements: Be sure that you have	
		for R33, R21/R33, and R34).	complied with the allowable page limitations	
			for the Research Plan for this FOA.	
			Otherwise, your application may be delayed	
			and rejected in the review process.	
		Research Plan Attachments 2-5	The Research Plan is limited to 25 pages. This	
		together must be less than or equal	may span 28 pages due to page breaks but the	
		to 28 pages (applies to all	total space occupied by text should not exceed	
		applications not specifically listed	25 pages.	
		below, including Fast Track) ((LV)	Warning message for 'opt out'	
		for R33, R21/R33, and R34)	announcements: Be sure that you have	
			complied with the allowable page limitations	
			for the Research Plan for this FOA.	
			Otherwise, your application may be delayed	
		E ODID OTTO DI LI IDOI	and rejected in the review process.	
		For SBIR/STTR Phase I and R21	The Research Plan is limited to 15 pages. This	
		(LV), provide warning if Research	may span 18 pages due to page breaks but the	
		Plan Attachments 2-5 together are	total space occupied by text should not exceed	
		greater than 15 pages and less than	15 pages.	
		or equal to 18 pages	Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable page limitations	
			for the Research Plan for this FOA.	
			Otherwise, your application may be delayed	
		For SBIR/STTR Phase I and R21	and rejected in the review process. The Research Plan f is limited to 15 pages.	
		(LV), Attachments 2-5 together	This may span 18 pages due to page breaks	
		must be less than or equal to 18	but the total space occupied by text should not	
		pages	exceed 15 pages.	

Component	Field	Validation	Error Message	Notes & Tips
			Warning message for 'opt out' announcements: Be sure that you have complied with the allowable page limitations for the Research Plan for this FOA. Otherwise, your application may be delayed and rejected in the review process.	
		For conference grant applications (activity code on funding opportunity = 'R13' or 'U13'), Research Plan Attachments 2-5 together must be less than or equal to 10 pages.	The Conference Plan for a Conference Grant application is limited to 10 pages	Applicants will be instructed to submit one attachment only, in the Research Design and Methods attachment.
		For R13 or U13 applications submitted to AHRQ, Research Plan Attachments 2-5 together must be less than or equal to 15 pages	The Conference Plan for an AHRQ Conference Grant application is limited to 15 pages.	AHRQ applications can be identified by a value of 'HS' in rfa_pa_notices_t.phs_org_code.
		For R36, X01, and R03 (LV) applications, provide warning if Research Plan Attachments 2-5 together are greater than 10 pages and less than or equal to 13 pages.	The Research Plan is limited to 10 pages. This may span 12 pages due to page breaks but the total space occupied by text should not exceed 10 pages.	
			Warning message for 'opt out' announcements: Be sure that you have complied with the allowable page limitations for the Research Plan for this FOA. Otherwise, your application may be delayed and rejected in the review process.	
		For R36, X01, and R03 (LV) applications, Research Plan Attachments 2-5 together must be less than or equal to 13 pages.	The Research Plan is limited to 10 pages. This may span 13 pages due to page breaks but the total space occupied by text should not exceed 10 pages.	
			Warning message for 'opt out' announcements: Be sure that you have complied with the allowable page limitations for the Research Plan for this FOA. Otherwise, your application may be delayed and rejected in the review process.	

Component	Field	Validation	Error Message	Notes & Tips
Research Plan	Research			
(NIH)	Plan			
1	Attachments:			
1	Background			
1	and			
	Significance			
Research Plan	Research	Must be included for renewals,	A Progress Report attachment must be	For grant image, bookmark should be set
(NIH)	Plan	revisions, and Phase II SBIR.	included for renewals (competing	based on whether this is a new (should
1	Attachments:	Exceptions to this validation are	continuations), revisions (supplements), and	show Preliminary Studies) or a
1	Preliminary	S10 and R13.	Phase II SBIR/STTR applications	resubmission, revision, or renewal (should
1	Studies/			show Progress Report)
1	Progress			
Research Plan	Report Research	Required for all submissions	The Research Design and Methods section of	
(NIH)	Plan	except S10.	the Research Plan must be attached to the	
(14111)	Attachments:	except 310.	application.	
1	Research		аррисаноп.	
1	Design and			
1	Methods			
Research Plan	Research			Will only be included in Research Plan for
(NIH)	Plan			versions 1.1 and forward
1	Attachments:			
1	Inclusion			
1	Enrollment			
	Report			
Research Plan	Research			Will only be included in Research Plan for
(NIH)	Plan			versions 1.1 and forward
1	Attachments:			
1	Progress			
1	Report			
1	Publication List			
Research Plan	Research	Required for non-S10 applications,	A Protection of Human Subjects attachment	
(NIH)	Plan	if Human Subjects is 'yes'.	must be included if human subjects are	
(11111)	Attachments:	ii iianan baojeets is yes.	involved. on the Research Plan page if the	
	Protection of		response to the Human Subjects question on	
	Human		the Other Project Information page is 'Yes'.	
	Subjects		r a construction of the co	

Component	Field	Validation	Error Message	Notes & Tips
Research Plan	Research	Required for non-S10 applications	The Inclusion of Women and Minorities	•
(NIH)	Plan	if Human Subjects is true and	Attachment must be included on the Research	
	Attachments:	Exemption is not E4	Plan page if the response to the Human	
	Inclusion of	_	Subjects question on the Other Project	
	Women and		Information Page is 'Yes' and if the	
	Minorities		Exemption Number is not 4.	
Research Plan	Research	Required for non-S10 applications	The Targeted/Planned Enrollment Table	
(NIH)	Plan	if Human Subjects is true and	Attachment must be included on the Research	
	Attachments:	Exemption is not E4	Plan page if the response to the Human	
	Targeted/		Subjects question on the Other Project	
	Planned		Information Page is 'Yes' and if the	
	Enrollment		Exemption Number is not 4.	
	Table			
Research Plan	Research	Required for non-S10 applications	The Inclusion of Children Attachment must be	
(NIH)	Plan	if Human Subjects is true and	included on the Research Plan page if the	
	Attachments:	Exemption is not E4	response to the Human Subjects question on	
	Inclusion of		the Other Project Information Page is 'Yes'	
	Children		and if the Exemption Number is not 4.	
Research Plan	Research	For schema version 1.0, required	The Data and Safety Monitoring Plan	Will not be included in Research Plan
(NIH)	Plan	for non-S10 applications if Human	Attachment must be included if the response	component for versions later than 1.0
	Attachments:	Subjects is true and Clinical Trial	to the Human Subjects question is 'Yes' and	
	Data and	question is true.	the response to the Clinical Trial question is	
	Safety		'Yes'	
	Monitoring			
	Plan			
Research Plan	Research	Required for non-S10 applications	A Vertebrate Animals attachment must be	
(NIH)	Plan	if VertebrateAnimalsUsedQuestion	included on the Research Plan page if the	
	Attachments:	is Y	response to the Vertebrate/Animals Subject	
	Vertebrate		Used Question on the Other Project	
D 1 D1	Animals		Information page is 'Yes'	Will and a land of the December Discovery
Research Plan	Research			Will only be included in Research Plan for versions 1.1 and forward
(NIH)	Plan			versions 1.1 and forward
	Attachments:			
	Select Agent Research			
Research Plan	Research Research			Will only be included in Research Plan for
(NIH)	Research Plan			versions 1.1 and forward
(1 V1 17)	Attachments:			versions 1.1 and forward
	Multiple PI			
	Leadership			
	Plan			
	rian			

Component	Field	Validation	Error Message	Notes & Tips
Research Plan (NIH)	Research Plan Attachments: Consortium/ Contractual Arrangement s			
Research Plan (NIH)	Research Plan Attachments: Letters of Support	Required for an R36 application (activity code on funding opportunity = 'R36')	An R36 application must include a Letters of Support attachment. Certification Letters should be included in this attachment.	
Research Plan (NIH)	Research Plan Attachments: Resource Sharing Plan	Limited to 10 appendixes	You have submitted more than 10 appendixes. There is a limit of 10 appendix attachments allowed.	
Research Plan (NIH)	Research Plan Attachments:	Limited to 10 appendixes	You have submitted more than 10 appendixes. There is a limit of 10 appendix attachments allowed.	
	Appendix	At least one appendix is required for an R36 application (activity code on funding opportunity = 'R36').	An R36 application must include at least one Appendix attachment. Transcripts should be included in this attachment.	
		Appendixes are not allowed for SBIR or STTR Phase I applications	Appendixes may not be submitted for a Phase I SBIR or STTR application.	

PHS 398 Cover Letter

Component	Field	Validation	Error Message	Notes & Tips
Cover Letter	Cover Letter	For an R13 application (activity	For NIH applications only, a cover letter	
(NIH)	attachment	code on funding opportunity =	should be attached indicating NIH institute	
		'R13' or 'U13'), provide warning	approval for a Conference Grant application.	
		if the cover letter is not attached.		