National Institutes of Health/Office of Extramural Research





Exchange Services Notes, Tips and Validations (with changes tracked) for Grants.gov Components

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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		
2.2	September 7, 2006	• Set default size for PDFs to 8.5x11		
		• Return an error on any introduction over 3 pages, even for opt-out application		
		Validation on New Investigator question		
	September 22, 2006	Remove requirement on New Investigator (deferred to later release)		

Key

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 the agency in PDF format; filenames must be included with no spaces or special characters (including brackets), 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 Exchange software should 'flatten' the PDF so that it can be processed. If Exchange Services detects that the flattening process did not work, the following error should be returned: "The <attachment> attachment contained formatting or features not currently supported by NIH. Help with PDF attachments can be found at http://era.nih.gov/ElectronicReceipt/pdf_guidelines.htm."

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

If there is a processing error on an attachment (other than errors listed here), the following error should be returned: "There was a processing error on page page number> of the <attachment> attachment. This prevented successful processing of the application. Please contact the eRA Help Desk for assistance."

For attachments, the software should detect the page width and height. If the page size is greater than 11×11 inches or less than 8.5×8.5 inches, the software should change the page size from the actual size to 8.5×11 I inches.

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 indicator for whether an announcement is an SBIR or an STTR needs to be added to the information for each small business announcement stored in the database.

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' (SF 424 RR cover page, Type of Submission) is not a recognized submission type for these 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' Type of sSubmission on the SF 424 RR cover page.	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' Type of Submission on the SF 424 RR cover page.	
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 mandatory	renewals (competing continuations), the Federal Identifier must be included. Please	here if you are submitting a revised 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
		If a resubmission, revision, or	Federal Identifier format (SF 424 RR Cover	
		renewal, or a new Phase II	page) is not valid. Please include the IC and	
		SBIR/STTR, components of grant	serial number of the prior grant (e.g.,	
		number must be 'parsable'.	CA123456).	
		Components are		
		<application_type> <mechanism></mechanism></application_type>		
		<institute> <serial number="">-</serial></institute>		
		<support year=""><suffix code)<="" td=""><td></td><td></td></suffix></support>		
		(example: 1R01GM072828-01A1)		
		-Application Type is a one-digit		
		number.		
		–Mechanism is a letter followed		
		by a two-digit number.		
		-Institute (IC) consists of two		
		characters.		
		–Serial number is a number that		
		has been assigned sequentially		
		within an IC (must be followed by		
		a dash). -Support year is anywhere from 1		
		to 99.		
		-Suffix code will start with an 'A'		
		or an 'S'.		
		-At least the IC and serial number		
		must be included.		
		If a resubmission, revision, or	The Federal Identifier that you have entered	
		renewal, or a new Phase II	(SF 424 RR Cover page) is not a grant number	
		SBIR/STTR, the prior grant	that has been previously assigned.	
		number must exist in the NIH	that has seen previously assigned.	
		system. Matching is performed		
		against NIH Institute/ Center and		
		Serial Number.		
		If a resubmission, revision, or	You must include the <missing component=""></missing>	
		renewal, or a new Phase II	of the prior grant in the Federal Identifier field	
		SBIR/STTR, mandatory	on the SF 424 RR Cover Page.	
		components are IC and serial	C C	
		number.		

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. 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.	The prior grant entered as the Federal Identifier (SF 424 RR Cover page) is not associated with the eRA 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 the agency, but may be returned after internal processing.	
		Ignore case, spaces, and punctuation on match.	The prior grant that has been entered as the Federal Identifier (SF 424 RR Cover page) is not associated with this PI.	
		For a resubmission, a summary statement must have been mailed for the prior grant, unless the prior grant has been withdrawn.	A resubmission (an amended application) cannot be submitted until the Summary Statement for the previous application has been released by the agency.	
		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). For a resubmission, of an R36 application (activity code on	The number of resubmissions for an application is normally limited to two. This application will be received by the agency, but may be returned after internal processing. This application has exceeded the number of resubmissions permitted and cannot be	
		application (activity code on funding opportunity = 'R36'), prior grant suffix code must not = 'A2'. For a resubmission, prior grant	resubmissions permitted and cannot be accepted. This application has exceeded the number of	
		suffix code must not = 'A3'.	resubmissions permitted 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. For comparison purposes, treat trailing zeroes after leftmost 9 characters as blanks.	The DUNS number you have provided in the SF 424 RR Cover page (item 5), Applicant Information) does not match the number in the eRA Commons profile for your organization. The SO/AOR should make sure the correct DUNS number has been entered in the eRA 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 (based on the Organization DUNS provided on the SF 424 RR Cover page). Revisions should only be submitted for the same organization as the parent grant. This application will be accepted by the agency, 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.		Long-term, change eRA db to 55 chars.
SF424 (R&R)	Applicant Information, City	None		

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Applicant Information, County	None		
SF424 (R&R)	Applicant Information, State	Required if country is US.	The Applicant Information State on the SF 424 RR Cover page must be supplied for US addresses.	
		If country not US must be blank.	The Applicant Information State on the SF 424 RR Cover page should be blank for all countries other than the United States.	
		Transform to 2-char abbreviation before validating and storing. If state name can't be transformed, give error.	The Applicant Information State on the SF 424 RR Cover page is not a valid state name.	
SF424 (R&R)	Applicant Information, Province	Required if country is Canada.	The Applicant Information province on the SF 424 RR Cover page must be supplied for Canadian addresses	Province should be mapped into the same database location as state.
		If country not Canada, must be blank.	The Applicant Information Province on the SF 424 RR Cover page 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 on the SF 424 RR Cover page is not a valid province name.	
SF424 (R&R)	Applicant Information,	Required if country is US.	The Applicant Information Zip Code on the SF 424 RR Cover page was not entered.	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 on the SF 424 RR Cover page must be entered in 5-digit or 9-digit format.	
		If >9 characters, truncate (remove any dashes before truncating).		
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 the agency, 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.	

Component	Field	Validation	Error Message	Notes & Tips
		For an S10, C06, UC6, or G20	The Applicant Organization for this	
		application, return an error if country is not US	application must be located in the US.	
		For an R25 (LV) application,	The Applicant Organization for this	
		return a warning if country is not	application is usually located in the US. This	
		US	application will be accepted by the agency,	
			but may be delayed in the peer review process	
			to determine the eligibility of a foreign	
			Applicant Organization.	
		For an R18 (LV) or U18 (LV)	The Applicant Organization for this application should be located in the US. This	
		application, return a warning if country is not US	application should be located in the US. This application will be accepted by the agency,	
		country is not 0.5	but may be delayed in the peer review	
			process.	
		Must be a valid ISO 3166-1 alpha-	The Applicant Information country code	
		3 country code.	provided (<country>) on the SF 424 RR</country>	
			Cover page is not a valid ISO 3166-1 alpha-3	
			country code.	
SF424 (R&R)	Person to be	If the combination of all items in		Long-term, change in eRA db for Contact
	Contacted	this component is more than 30		Name to accommodate the way it is
		characters, truncate. Display in		submitted through Grants.gov.
$SE424(D, \theta, D)$	Demons to be	grant image as submitted.		
SF424 (R&R)	Person to be Contacted,	None		
	Phone			
	Number			
SF424 (R&R)	Person to be	None		
	Contacted,			
	Fax Number			
SF424 (R&R)	Person to be	e-mail is required	The e-mail address for the Person to Be	
	Contacted, e-		Contacted, listed on the SF 424 RR Cover	
	mail		page, is required.	
		Must contain a '@', with at least 1	The submitted e-mail address for the Person to	
		and at most 64 chars preceding and following the ' $@$ '. Control	Be Contacted, (listed on the SF 424 RR Cover page,) <email>, is invalid. Please enter email</email>	
		characters (ASCII 0 through 31	addresses in the format	
		and 127), spaces and special chars	username@domainname.com	
		$<>()[] \setminus, ;:$ are not valid.	useriume (southummune.com	
SF424 (R&R)	Employer	If >12 characters, truncate (no		
	Identification	warning).		

Component	Field	Validation	Error Message	Notes & Tips
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 (SF 424 RR Cover page, item 7) 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, Revision)	Must be either New, Revision, Resubmission, or Renewal Renewal is not a valid type for a Phase I SBIR/STTR, X01, X02, R03, R21, R34, C06, UC6 or G20 application. Provide warning if renewal is submitted for an R21/R33 combination.	<type application="" of=""> (SF 424 RR Cover page, item 8) is an invalid Type. The Type must be New, Revision (for supplements), Resubmission (for amended applications), or Renewal (for competing continuation). 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.</type>	 You must select one of the following: New, Amended, Resubmission (for revisions/amendments) or Renewal (for competing continuations). Note: <i>Renewal</i> 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.

Component	Field	Validation	Error Message	Notes & Tips
		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 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?			
SF424 (R&R)	Descriptive Title	Truncate if >81 characters 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 (SF 424 RR Cover page, item 11) is not the same as the project title on the parent grant. For a revision, the project title must be the same as the project title on the parent grant.	Long-term, expand eRA db to 200 chars
SF424 (R&R)	Areas Affected by Project			

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Proposed	Must be later than current date	The Proposed Project Start Date (SF 424 RR	
	project start		cover page, item 13) must be later than the	
	date		Proposed Project Start Date.	
SF424 (R&R)	Proposed	Must be later than ProjectStartDate	The Proposed Project Ending Date (SF 424	
	project		RR cover page, item 13) must be later than the	
	ending date		Proposed Project Start Date	
	_	For an R03 (LV), R21 (LV), or R36	The project period for this application is	
		application, return warning if	limited to two years.	
		project period is more than two	Warning message for 'opt out'	
		years long. Define project period	announcements: Be sure that you have	
		by time span between project	complied with the allowable project period	
		period start date and project period	limitations for this FOA. Otherwise, your	
		end date as entered on the SF424	application may be delayed and rejected in the	
		(R&R) Face Page.	review process.	
		For an R15, R33 (LV), or R34 (LV)	The project period for this application is	
		application, return warning if	limited to three years. The application will be	
		project period is more than three	accepted, but may be delayed in the peer	
		years long. Define project period	review process.	
		by time span between project	Warning message for 'opt out'	
		period start date and project period	announcements: Be sure that you have	
		end date as entered on the SF424	complied with the allowable project period	
		(R&R) Face Page.	limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
		For an R01 (LV) or R21/R33 pair	The project period for this application is	
		(LV) application, return warning if	limited to five years. The application will be	
		project period is more than five	accepted, but may be delayed in the peer	
		years long. Define project period	review process.	
		by time span between project	Warning message for 'opt out'	
		period start date and project period	announcements: Be sure that you have	
		end date as entered on the SF424	complied with the allowable project period	
		(R&R) Face Page.	limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	

Component	Field	Validation	Error Message	Notes & Tips
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	Congressional district <congressional District> (SF 424 RR Cover page, item 14) 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.</congressional 	Long-term, expand eRA database to 6 chars.
	Congressional districts of project	truncated.		
SF 424 (R&R)	PD/PI	Required.		
	Contact Information, name (prefix, first name, middle name, last name, suffix)	If only a Commons Account is supplied, display a <i>warning</i> to pay attention to the name that is generated in the grant image, since this will appear exactly as it is represented in the Commons.	On the SF 424 RR Cover, no name was provided for the PD/PI identified on the Senior/Key Person Profile with eRA Commons Username: <credential>. The name listed on this person's eRA Commons account, <commons name<br="" profile="">components>, will be used for this submission.</commons></credential>	
		If this <i>and</i> 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 name, middle initial, last name>, listed on the SF 424 RR Cover, does not match the name listed on the eRA Commons account: <first name, middle initial, last name>. The grant image will display the name as submitted here. If the name listed in the eRA Commons is not current, please update it in the eRA Commons. Instructions on updating profile information are available at https://commons.era.nih.gov/commons- help/216.htm.</first </first 	Post-testing solution: If validation fails, provide warning that the Commons name (or position title) is <i>xxxx</i> and the name submitted through grants.gov is <i>yyyy</i> 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.

Component	Field	Validation	Error Message	Notes & Tips
SF 424 (R&R)	PD/PI Contact 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.	The PD/PI position/title, <position title="">, listed on the SF 424 RR Cover, does not match those listed on the eRA Commons account: <position by<br="" separated="" titles,="">commas>. The grant image will display the position/title as submitted here. If the position/title on the eRA Commons account is not current, please update it in the eRA Commons by editing the appropriate employment record in the PI's Personal Profile.</position></position>	
		Truncate if greater than 40 characters, before comparing to title stored in database. No warning message is needed to the submitter.		
SF 424 (R&R)	PD/PI Contact Information, Organization Name			
SF 424 (R&R)	PD/PI Contact Information, Department	Provide a warning if not entered.	If appropriate for your organization, please supply a department for the PD/PI on the SF 424 RR Cover.	
SF 424 (R&R)	PD/PI Contact Information, Division	Provide a warning if not entered.	If appropriate for your organization, please supply a division for the PD/PI on the SF 424 RR Cover.	
SF 424 (R&R)	PD/PI Contact Information, Street 1 and	Transform province name to 2 char. abbreviation before storing. If province name can't be transformed, give an error.	The PD/PI Profile Province on the SF 424 RR Cover is not a valid province name.	Long-term, change in ERA db for zip code to 13 characters
	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 on the SF 424 RR Cover is not a valid state name.	
SF 424 (R&R)	PD/PI Contact Information, County			

Component	Field	Validation	Error Message	Notes & Tips
SF 424 (R&R)	R) Total estimated project funding	For an S10 application, display a warning if this is greater than 500k.	The direct cost request found on item 16 of the SF 424 RR Cover page 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
		Required for a C06, UC6, or G20 application.	Total Estimated Project Funding (SF 424 RR Cover, item 16a) is required for this application.	appl_periods_t and to the following columns in appls_t: direct_cost_requested_amt,
		Must be non-zero for a C06, UC6, or G20 application. For an X01 or X02 application, provide an error if non-zero values are entered.	Total Estimated Project Funding (SF 424 RR Cover, item 16a) cannot be zero. Total Estimated Project Funding in section 16 on the SF 424 RR Cover page must be zero.	total_cost_requested_year1_amt, total_cost_requested_amt. (indirect_cost_requested_amt should be 0). For X02, all values will be zero.
SF 424 (R&R)	Total federal and non- federal funds	For an X01 or X02 application, provide an error if non-zero values are entered.	Total Federal and non-Federal Funds in section 16 on the SF 424 RR Cover page must be zero.	
		Required for a C06, UC6, or G20 application. Must be non-zero for a C06, UC6,	Total Federal & Non-Federal Funds (SF 424 RR Cover, item 16b) is required for this application. Total Federal & Non-Federal Funds (SF 424	
		or G20 application.	RR Cover, item 16b) cannot be zero.	
SF 424 (R&R)	Estimated program income	For an X01 or X02 application, provide an error if non-zero values are entered.	Total Estimated Program Income in section 16 on the SF 424 RR cover page must be zero.	
		Required for a C06, UC6, or G20 application.	Estimated Program Income (SF 424 RR Cover, item 16c) is required for this application.	
SF 424 (R&R)	Subject to state executive order review?	For C06, UC6, or G20 applications, a response is required in either 17a or b.	A response must be included to the question 'Is application subject to review by state executive order 12372 process' (SF 424 RR Cover page, item 17)	
SF 424 (R&R)	State executive order review date	Required if answer to 'Subject to state executive order review' is 'Yes'	A date must be entered on the SF 424 RR Cover page, item 17, if the answer to the 'Subject to state executive order review' is 'Yes'.	
SF 424 (R&R)	Agreement and certification			

Component	Field	Validation	Error Message	Notes & Tips
SF 424 (R&R)	Authorized representative name	Truncate if first or last name>30 chars, or if suffix>5 chars. Display warning.	The Authorized Representative <element name> (SF 424 RR Cover page, item 19) exceeds the agency character limit. The grant image will display the name as submitted;-the agency will store the first <database length=""> characters in the eRA database.</database></element 	Long-term, change in eRA db to 60 chars for last name, 35 for first name, 10 for suffix (all names in db)
SF 424 (R&R)	Authorized representative position/title	Truncate if >30 chars. Display warning.	The Authorized Representative position/title (SF 424 RR Cover page, item 19) exceeds the agency character limit. The grant image will display the name as submitted; the agency will store the first 30 characters in the eRA database.	Long-term, change in eRA db to 45 chars
SF 424 (R&R)	Authorized representative organization			
SF 424 (R&R)	Authorized representative department			
SF424 (R&R)	Authorized representative division			
SF424 (R&R)	Authorized representative street 1 & 2, city, state, province, zip code, country, phone number, fax, e-mail	If either line 1 or 2 >50 characters, truncate. Transform province to 2 char. abbreviation for province before validating and storing. If province can't be transformed, give error. If zip>9 characters, truncate. Remove dashes before truncating and/or storing Transform state to 2 char abbreviation for state before validating and storing. If state name can't be transformed, give error.	The Authorized Representative Province (SF 424 RR Cover page, item 19) is not a valid province name. The Authorized Representative State (SF 424 RR Cover page, item 19) is not a valid state name.	Long-term, change in eRA db for zip code to 13 characters Province should be mapped into same database location as state.
SF424 (R&R)	Authorized representative county			
SF424 (R&R)	Authorized representative signature and date			

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Pre-application			
	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	Allow applications to come in		
Performance	Location,	without this component.		
Site (R&R)	Organization			
	Name			
Project/	Primary			
Performance	Location,			
Site (R&R)	Street 1 and 2			
Project/	Primary			
Performance	Location, City			
Site (R&R)				
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 Site (R&R)	City			
Project/	Location 1,			
Performance Site (R&R)	County			
Project/Perform ance Site (R&R)	Location 1, State			
Project/Perform ance Site (R&R)	Location 1, Province			Province should be mapped into same database location as state.
Project/Perform ance Site (R&R)	Location 1, Zip code			
Project/Perform ance Site (R&R)	Location 1, Country			
Project/Perform ance Site (R&R)	Additional 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 <i>human subjects</i> 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" (Other Project Information, item 1).	exemption number or assurance number.
		HumanSubjectsUsedQuestion is true.		• If you click Yes that <i>vertebrate animals</i>
		itue.		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 (Other Project	
		be specified	Information, item 1).	
		If HumanSubjectsUsedQuestion is false, provide a warning if	When Human Subjects is "No", Assurance Number does not apply (Other Project	
		AssuranceNumber is specified.	Information, item 1).	
		Must be true if Human Subjects	The 'Human Subjects Involved' question	
		Clinical Trial question is true.	(Other Project Information, item 1) must be	
			"Yes" if the Human Subjects Clinical Trial	
			question on the PHS 398 Cover Page	
			Supplement is "Yes".	
		For S10 application, display a	The answer to the Human Subjects involved	
		warning if this is true.	question (Other Project Information, item 1)	
			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 (Other Project	
Info (R&R)	date	be blank)	Information, item 1a) cannot be in the future.	
Other Project	Exemption	Must be "E1" through "E6"	The Exemption Number (Other Project	
Info (R&R)	number		Information, item 1a) must be within the range $CE1 + EC$	
			of E1 to E6.	

Component	Field	Validation	Error Message	Notes & Tips
Other Project Info (R&R)	Human subject	Provide warning if it doesn't match IPF human subject assurance	The human subject assurance number entered in Other Project Information, item 1a, does	
mjo (Kak)	assurance	number for this organization.	not match what is in the eRA Commons	
	number	Match should be on the last 11	profile for your organization. There are rare	
	number	characters of the IPF assurance	cases where this is permissible. Please make	
		number. If the Assurance Number	sure that the correct number is entered on the	
		that is receive is exactly eight	Other Project Information page. If not, correct	
		characters long and consists of all	and resubmit.	
		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' (Other Project Information, item 2).	
		• 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 in Other Project Information, item 2,	
		warning if uns is true.	should be 'No'. The application will be	
			processed, but a concern may be raised during	
			review.	
Other Project	IACUC	Provide a warning if Vertebrate	When Vertebrate Animals is "No", IACUC	
Info (R&R)	review	Animals Used is 'N'	Approval Pending indicator does not apply	
	pending?		(Other Project Information, item 2).	
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 (Other Project	
		false	Information, item 2).	
		The date can't be in the future	The IACUC Approval Date (Other Project	
<u></u>		D 11 1 10	Information, item 2) 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 (Other Project	
	Assurance #	false	Information, item 2).	

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 entered.	The Animal Welfare Assurance Number entered in Other Project Information, item 2, does not match what is in the eRA 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 Project Info (R&R)	Proprietary or privileged info?	entered.		
Other Project Info (R&R)	Impact on environment?			
Other Project Info (R&R)	Activities outside US?			
Other Project Info (R&R)	Project Summary	For non-C06, UC6, or G20 applications, limited to one page	The Project Summary/Abstract in Other Project Information, item 6 is limited to 30 lines of text.	
Other Project Info (R&R)	Project Narrative	For non-S10 and non-C06, UC6, or G20 applications, limit to 1 page	The Public Health Relevance Statement (labeled 'Project Narrative' in Other Project Information, item 7) 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.
		Required for C06, UC6, or G20 applications.	Please attach the Program Narrative as the Project Narrative attachment on the Other Project Information component.	
		Limited to 40 pages for C06, UC6, or G20 applications.	The Program Narrative (Other Project Information, Project Narrative attachment) is limited to 40 pages.	
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 on the Other Project Information page is required for S10 applications.	

Component	Field	Validation	Error Message	Notes & Tips
Other Project	Other	For S10 applications, provide	At least one attachment should be provided as	Note that multiple attachments may be
Info (R&R)	attachments	warning if at least one attachment	an 'Other Attachment' on the Other Project	received with Other Attachments. They
		has not been included for this.	Information page. Please consult the funding	should all be processed.
			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.	

Research & Related: Senior/Key Person Profile

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key Person (R&R)	PD/PI Profile Information	Pulled from SF 424 RR Cover component		Note: identify this Senior/Key Person as the contact PI if multiple PI roles are defined.
Senior/Key Person (R&R)	PD/PI Profile, credential	Must be specified for the PD/PI	The eRA 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.		
		<i>If specified</i> , must be a valid Commons account.	The eRA Commons Username <credential> in the PD/PI Credential field on the Senior/Key Person page is not a recognized eRA Commons account.</credential>	
		For the PD/PI, this account must be affiliated with the organization submitting the application and have the PI role	The eRA 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 eRA Commons Account Administrator to make sure you have been affiliated with the applicant organization.	

Component	Field	Validation	Error Message	Notes & Tips
Component	Field	ValidationFor a revision, the PI should beassigned to the parent grant. If theperson profile for this Commonsaccount is not the same personprofile assigned as the PI to theparent grant, and the last name ofthe PI assigned to the parent grantmatches the last name that issubmitted for the PI on the currentapplication, provide the indicated	Error Message Warning: The eRA Commons account for the PI in the Credential field on the Senior/Key Person page does not include the parent grant of this submission in its support history. Error: The parent grant that has been entered is not associated with this PI.	Notes & Tips
		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 an SO and a PI role associated with the Commons account.	The eRA Commons account has 'SO' and 'PI' roles. Please create a separate eRA Commons account for the SO/AOR, then delete the 'SO' role from the account included in the submission. You do not need to send a changed/corrected application.	
		Provide a warning if the single role associated with the Commons account is an SO role.	The eRA Commons account is for an SO/AOR. Please add a PI role to this account, create a separate 'SO' eRA Commons account for the SO/AOR, and delete the 'SO' role from the original account. You do not need to send a changed/corrected application.	
Senior/Key Person (R&R)	PD/PI Profile, other project role category			
Senior/Key Person (R&R)	Biosketch	Limited to four pages	The Senior/Key Person Biosketch for the PD/PID, <first last="" name="">, is longer than four pages.</first>	
Senior/Key Person (R&R)	Current and Pending Support			

Component	Field	Validation	Error Message	Notes & Tips
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 x, name	chars, or suffix>5 chars. Display warning.	<pre><first last="" name=""> (Senior/Key Person page) exceeds the agency limit. The grant image will display the name as submitted; the agency will store the first <database length=""> characters only.</database></first></pre>	for last name, 35 for first name, 10 for suffix (all names in db) ("nth" indicates the relative order of this KeyPerson element)
		If this <i>and</i> 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=""> on the Senior/Key Person page does not match the eRA Commons account name (<commons profile name components>). The grant image will display the name as submitted.</commons </submitted>	Post-testing solution: If validation fails, provide warning that Commons name is <i>xxxx</i> and name submitted through grants.gov is <i>yyyy</i> 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)' on the Senior/Key Person page 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 on the Senior/Key Person page.</key 	
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			

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, county			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, state			
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 for a key person with a	The eRA Commons Username <credential>,</credential>	
Person (R&R)	& key person	PD/PI role, must be a valid	specified on the Senior/Key Person page, for	
	x, credential	Commons account.	PD/PI <first last="" name="">, is not a</first>	
			recognized eRA Commons account.	
		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 eRA 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>	

Component	Field	Validation	Error Message	Notes & Tips
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.		
		For a C06, UC6, or G20	A Facilities Person must be identified for this	
		application, there must be at least	application. Please provide the information for	
		one key person identified with a	this person after the PD/PI on the Senior/Key	
		project role of 'Other' or 'Other	Person page. Specify a project role of 'Other'	
		Professional'.	or 'Other Professional', and an Other Project	
		D 11 10 1 1 1	Role Category of 'Facilities Person'.	
		Provide an error if project role is	PD/PI <first last="" name=""> has been</first>	
		'PD/PI' and credential is the same	identified in both the PD/PI portion and in the	
		as the PD/PI credential.	Senior/Key Person Profile portion of the	
		France On the continue	Senior/Key Person page. A role of 'Co-PI' has been indicated for PD/PI	
		For non-Opdiv applications,		
		provide a warning if the 'Co-PI' role has been indicated	<first last="" name=""> on the Senior/Key Person page. NIH does not use this role. The</first>	
		Tote has been indicated	application will be processed, but may be	
			delayed in the peer review process.	
		If project role is 'PD/PI', identify	delayed in the peel leview process.	Need to create role record for multiple PIs.
		in database as Multiple PI.		Also need to set multi pi indicator code in
		in database as Multiple F1.		appls t. Populate affiliation data in
				person_involvements_t.external_org_id
				with the org identified as the default
				account affiliation. Should be indicated in
				mapping document.
Senior/Key	Profile, senior	Accept "Other Project Role	For key person <first last="" name=""> on</first>	
Person (R&R)	& key person	Category" only when "Project	the Senior/Key Person page, an 'Other Project	
	x, other	Role" is "Other" or "Other	Role Category' was submitted for a project	
	project role	Professional"	role of <project role="">. This can be used only</project>	
	category		when Project Role is "Other" or "Other	
			Professional".	
Senior/Key	Senior & key	Limited to four pages	The Biosketch for Senior/Key Person <first< td=""><td></td></first<>	
Person (R&R)	person x,		name last name> on the Senior/Key Person	
	Biosketch		page is longer than four pages.	

Component	Field	Validation	Error Message	Notes & Tips
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 on the Senior/Key Person page. 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 the Research & Related Senior/Key Person Expanded version 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 on the Senior/Key Person page 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 on the Senior/Key Person page 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	Both a modular and a detailed budget have been included with this submission on the 424 RR Budget page. 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
		Allow a submission with neither a modular budget nor a detailed budget component.	R03, R15, R21, and R34 applications must	the appropriate component to be chosen. Choose one or the other, but not both. In mapping, assign a budget period ID
		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. Applications where the applicant organization is foreign also are exempt from this validation.	use the PHS 398 Modular Budget Form and not the SF 424 R&R Budget Form.	If you are submitting an STTR application, you must include a Research Institution Budget page for each year of the project (submitted using the Subaward budget type on the budget page).
		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.	
		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=""> on the 424 RR Budget page.</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 on the 424 RR Budget page.	
		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.	

Component	Field	Validation	Error Message	Notes & Tips
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 on the 424 RR Budget page.	You can submit only one budget with the budget type "Project" for Sections A&B.
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 validation has failed.		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	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-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-must be the same as the proposed project start date listed on the SF424 (R&R) Cover page.
		For budget years after budget year 1, must be greater than or equal to the Proposed Project Start Date listed on the SF 424 RR Face Page.	The start date for budget year budget year> must be equal to or later than the proposed project start date listed on the SF 424 RR 	
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 <budget year=""> on the 424 RR Budget page (section A&B) exceeds the agency character limit. The grant image will display the name as submitted; the agency will store the first <database length=""> characters in the eRA database.</database></budget></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 (for the PI listed on the SF 424 RR Cover only), must match Senior/Key Person form last name and first name.	The < name> given for the PD/PI for budget year budget year> on the 424 RR Budget page (section A&B) does not match the name given for the PD/PI on the SF 424 RR Cover.	
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 424 RR Detailed Budget Page (Section A&B) for budget year budget year>.	For an STTR submission, the PI/PD could be on the Research Institution Budget.

Component	Field	Validation	Error Message	Notes & Tips
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 424 RR Detailed Budget Page for budget year <budget year="">, 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.</budget></first>	
		For an R13 submission, a value for calendar months, academic months, or summer months is required for each senior/key person. The value may be zero.	Senior/Key Person <first last="" name="">, listed on the 424 RR Detailed Budget Page for budget year <budget year="">, must include effort (zero or greater) in calendar months, academic months, or summer months. Note: use either calendar months or a combination of academic and summer months</budget></first>	Need to confirm that a zero is treated differently from a null value, also that a system to system submission with an empty tag will not result in a zero value being inserted in that element
Budget, A&B, Year x (R&R)	Senior/Key Person acad. mos	Provide warning if both academic and calendar months have been provided for a person for a budget year.	Both academic and calendar months have been included for <senior first<br="" key="" person="">Name Last Name>, for budget year <budget year> on the 424 RR Budget page (section A&B). Please use either calendar months or a 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 </senior>	
Budget, A&B, Year x (R&R)	Senior/Key Person summer mos			
Budget, A&B, Year x (R&R)	Senior/Key Person Requested Salary			
Budget, A&B, Year x (R&R)	Senior/Key Person Fringe benefits			

Component	Field	Validation	Error Message	Notes & Tips
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 Salary and Fringe	First Name Last Name> on the 424 RR	
	Requested	Benefits for the Senior/Key Person	Budget page (section A&B) for Budget Year	
		for the budget year.	<budget year=""> does not equal the sum of the</budget>	
			Requested Salary and the Fringe Benefits for	
			the corresponding budget year.	
Budget, A&B,	Total funds	Required if Additional Senior Key	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		on the 424 RR Budget Page.	
	attachment			
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	Requested for the budget year.	<budget year=""> on the 424 RR Budget page</budget>	
	all senior/key		(section A&B) does not equal the sum of	
	persons		Funds Requested for all Senior/Key Persons	
			for the corresponding budget year.	
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 on the 424 RR Budget page	
	Persons	page for this year.	(section A&B) for budget year budget year>	
	attachment		only if eight senior/key persons have been	
D. L. AAD			submitted on the budget page.	
Budget, A&B,	Other			
Year x ($R\&R$)	Personnel,			
	(number of			
Duda et A P D	personnel)			
Budget, A&B, Year x (R&R)	Other Personnel			
Τεαι χ (ΚαΚ)	(Project Role)			
Budget, A&B,	Other			
Year x (R&R)	Personnel			
Tear x (Rak)	(Cal. Mos)			
Budget, A&B,	Other			
Year x (R&R)	Personnel			
1000 a (num)	(acad.mos)			
Budget, A&B,	Other			
Year x (R&R)	Personnel			
	(summer			
	mos)			
Budget, A&B,	Other			
Year x (R&R)	Personnel			
	(Requested			
	salary)			

Component	Field	Validation	Error Message	Notes & Tips
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	<budget year=""> on the 424 RR Budget page</budget>	
	Requested)	budget year.	(section A&B) does not equal the sum of the	
			Requested Salary and the Fringe Benefits for	
			the corresponding budget year.	
Budget, A&B,	Total number	Must equal the sum of number of	The total number of Other Personnel on the	
Year x (R&R)	other	personnel for all project roles	424 RR Budget page (section A&B) does not	
	personnel	under Other Personnel.	equal the sum of the number of other	
			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> on	
	other	the budget year.	the 424 RR Budget page (section A&B) does	
	personnel		not equal the sum of Funds Requested for all	
			Other Personnel for the corresponding budget	
			year.	
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=""> on the 424</budget>	
	fringe	and Total Funds Requested other	RR Budget page (section A&B) does not	
	benefits	personnel	equal the sum of Total Funds requested for all	
			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,	Equipment	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> on the 424 RR	
	total	budget year.	Budget page (section C, D & E) does not	
	equipment		equal the sum of Funds Requested for all	
			Equipment Items for the corresponding budget	
			year.	
Budget, C, D, E,	Additional			
Year x (R&R)	equipment			
	attachment			
Budget, C, D, E,	Travel,			
Year x (R&R)	domestic travel costs			
Budget, C, D, E,	Travel,			
Year x (R&R)	foreign travel			
ΤεάΓ χ (ΚάΚ)	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> on the 424 RR Budget page	
Icul A (Man)	COSt	travel costs for the budget year.	(section C, D & E) does not equal the sum of	
		autor costs for the buuget 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			

Component	Field	Validation	Error Message	Notes & Tips
Budget, C, D, E,	Participant/			
Year $x(R\&R)$	trainee			
	support costs:			
	stipends			
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=""> on the 424</budget>	
	support costs:	the budget year.	RR Budget page (section C, D & E) does not	
	Total Doution out/		equal the sum of Participant/trainee support	
	Participant/ Trainee		costs for the corresponding budget year.	
	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			
Year $x(R\&R)$	Costs			
	(Subawards/			
	Consortium/			
	Contractual			
	Costs)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs			
	(Equipment			
	or Facility			
	Rental/ User			
	Fees)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs			
	(Alterations			
	and			
	Renovations)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs (other			
	description 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=""> on the 424 RR Budget page</budget>	
	Other Direct		(section F-K) does not equal the sum of other	
	Costs		direct costs for all categories for the	
		D 1	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 on the 424 RR Budget page $(x_1, x_2, x_3, x_4, x_5, x_4, x_5, x_5, x_5, x_5, x_5, x_5, x_5, x_5$	
		Must be equal to the sum of total	(section F-K). The Total Direct Costs for A-F for Budget	
		salary, wages and fringe benefits,	Year <budget year=""> on the 424 RR Budget</budget>	
		total funds requested for	page (section F-K) does not equal the sum of	
		equipment, total travel cost, total	direct costs for Sections A-F.	
		participant/trainee support costs,	direct costs for Sections A-r.	
		and total other direct costs		
		For non-Opdiv R01, R03, R15,	R01, R03, R15, R21and R34 direct cost	
		R21, and R34 submissions,	requests of \$250K or less each year on the 424	
		provide warning if subtotal direct	RR Budget page (section F-K) must be in	
		costs for <i>every</i> budget year is <=	modules of \$25K, using the PHS 398 Modular	
		\$250K. Applications where the	Budget Form and not the R&R Budget Form.	
		applicant organization is foreign	Incorrect applications may be delayed in the	
		are exempt from this validation.	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 <i>any</i> budget year is $\geq 500K$ (LV for R01, R18, U18, R25). Calculate subtotal direct costs as follows: Total Direct Costs (A-F) <i>minus</i> the sum of Total Indirect Costs for all budgets for the corresponding year with budget type 'subaward/consortium'.	Direct cost requests (on the 424 RR Budget page section F-K) >=\$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. 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.	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 (on the 424 RR Budget page, section F-K) 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=""> on the 424 RR Budget page (section F-K) 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	The Total Direct and Indirect Costs Funds Requested for Year <i>x</i> is required on the 424 RR Budget page (section F-K).	

Component	Field	Validation	Error Message	Notes & Tips
Budget, F-K, Year x (R&R)	Fee	Must be equal to the sum of Total Direct Costs and Total Indirect Costs A fee cannot be entered for a subaward/consortium budget.	The Total Direct and Indirect Institutional Costs on the 424 RR Budget page (section F- K) is not equal to the sum of Total Other Direct Costs and Total Indirect Costs. A fee has been entered for year $\langle x \rangle$ of the budget for $\langle \text{organization name} \rangle$ on the 424 RR Budget page (section F-K). Fees are not allowed for subaward/consortium budgets.	
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	A fee has been entered for year <x> of the Project budget on the 424 RR Budget page (section F-K). 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 on the 424 RR Budget</x>	
		100k, calculated as total cost (direct cost, indirect cost, and fee). 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). If Fast-Track cost limitation is	page (section F-K). The Phase II cost limitation of 750k has been exceeded. Please explain the deviation in the Budget Justification on the 424 RR Budget page (section F-K). The Fast-Track cost limitation of 850k has	
		exceeded, must not be blank or null. Cost limitation is 850k, calculated as total cost (direct cost, indirect cost, and fee).	been exceeded. Please explain the deviation in the Budget Justification on the 424 RR Budget page (section F-K).	
		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 on the 424 RR Budget page (section F-K).	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 on the 424 RR Budget page (section F-K).	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 on the	Budget Justification for the first budget
		two years, calculated as the time	424 RR Budget page (section F-K).	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 424 RR Cumulative Budget Senior/Key	
Budget (R&R)	Senior/Key	Funds Requested for all senior/key	Person Total does not equal the sum of Total	
	Person Total	persons for every budget year for	Funds Requested for all senior/key persons for	
		this budget.	all budget years.	
Cumulative	Section B,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Other	
Budget (R&R)	Other	Funds Requested for Other	Personnel Total does not equal the sum of	
	Personnel	Personnel for every budget year for	Total Funds Requested for Other Personnel	
	Total	this budget.	for all budget years.	
Cumulative	Total Number	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total	
Budget (R&R)	other	Number Other Personnel for every	Number Other Personnel does not equal the	
	personnel	budget year for this budget.	sum of Total Number Other Personnel for all	
			budget years.	
Cumulative	Total Salary,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Salary,	
Budget (R&R)	Wages, and	Salary, Wages, and Fringe Benefits	Wages, and Fringe Benefits do not equal the	
-	Fringe	for every budget year for this	sum of Total Salary, Wages, and Fringe	
	Benefits	budget.	Benefits for all budget years.	
Cumulative	Section C,	Must be equal to the sum of Total	The 424 RR 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 424 RR Cumulative Budget Total Travel	
Budget (R&R)	Travel, Total	Travel Cost for every budget year	Cost does not equal the sum of Total Travel	
	-	for this budget.	Costs for all budget years.	
Cumulative	Section D,	Must be equal to the sum of	The 424 RR Cumulative Budget Domestic	
Budget (R&R)	Travel,	Domestic Travel Cost for every	Travel Cost does not equal the sum of	
	Domestic	budget year for this budget.	Domestic Travel Costs for all budget years.	
Cumulative	Section D,	Must be equal to the sum of	The 424 RR Cumulative Budget Foreign	
Budget (R&R)	Travel,	Foreign Travel Cost for every	Travel Cost does not equal the sum of Foreign	
	Foreign	budget year for this budget.	Travel Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total	
Budget (R&R)	Participant/	Participant/Trainee Support Costs	Participant/Trainee Support Costs does not	
0 . /	Trainee, Total	for every budget year for this	equal the sum of Total Participant/Trainee	
	, í	budget.	Support Costs for all budget years.	

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Section E,	Must be equal to the sum of	The 424 RR Cumulative Budget	
Budget (R&R)	Participant/	Participant/Trainee, Tuition, Fees,	Participant/Trainee, Tuition, Fees, Health	
0	Trainee,	Health Insurance Costs for every	Insurance Costs does not equal the sum of	
	Tuition, Fees,	budget year for this budget.	Participant/Trainee, Tuition, Fees, Health	
	Health		Insurance Costs for all budget years.	
	Insurance			
Cumulative	Section E,	Must be equal to the sum of	The 424 RR Cumulative Budget	
Budget (R&R)	Participant/	Participant/Trainee, Stipends Costs	Participant/Trainee, Stipends Costs does not	
	Trainee,	for every budget year for this	equal the sum of Participant/Trainee, Stipends	
	Stipends	budget.	Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of	The 424 RR Cumulative Budget	
Budget (R&R)	Participant/	Participant/Trainee, Travel Costs	Participant/Trainee, Travel Costs does not	
	Trainee,	for every budget year for this	equal the sum of Participant/Trainee, Travel	
	Travel	budget.	Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of	The 424 RR Cumulative Budget	
Budget (R&R)	Participant/	Participant/Trainee, Subsistence	Participant/Trainee, Subsistence Costs does	
	Trainee,	Costs for every budget year for this	not equal the sum of Participant/Trainee,	
	Subsistence	budget.	Subsistence Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of	The 424 RR Cumulative Budget	
Budget (R&R)	Participant/	Participant/Trainee, Other Costs	Participant/Trainee, Other Costs does not	
	Trainee,	for every budget year for this	equal the sum of Participant/Trainee, Other	
	Other	budget.	Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of the	The 424 RR 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 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs for every budget year	Costs does not equal the sum of Other Direct	
	Costs, Total	for this budget.	Costs for all budget years.	
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Materials and	Costs, Materials and Supplies, does not equal	
	Costs,	Supplies, for every budget year for	the 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 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Publication Costs, for	Costs, Publication Costs, does not equal the	
	Costs,	every budget year for this budget.	sum of Publication Costs for all budget years.	
	Publication			
	Costs			

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Consultant Services,	Costs, Consultant Services, does not equal the	
-	Costs,	for every budget year for this	sum of Consultant Services for all budget	
	Consultant	budget.	years.	
	Services			
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, ADP/Computer	Costs, ADP/Computer Services, does not	
	Costs, ADP/	Services, for every budget year for	equal the sum of ADP/Computer Services for	
	Computer	this budget.	all budget years.	
	Services			
Cumulative	Section F,	Must equal the sum of Other Direct	The 424 RR Cumulative Budget Section F,	
Budget (R&R)	Other Direct	Costs, Subawards/Consortium/	Other 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 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Equipment or	Costs, Equipment or Facility Rental, does not	
	Costs, Equip	Facility Rental, for every budget	equal the sum of Equipment or Facility Rental	
	or facility	year for this budget.	for all budget years.	
	rental			
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Alterations and	Costs, Alterations and Renovations, does not	
	Costs,	Renovations, for every budget year	equal the sum of Alterations and Renovations	
	Alterations	for this budget.	for all budget years.	
	and			
	Renovations			
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Other, for every	Costs, Other, does not equal the sum of Other	
	Costs, other	budget year for this budget.	Direct Costs, Other for all budget years.	
Cumulative	Section G,	Required.	The 424 RR Cumulative Budget Direct Costs	
Budget (R&R)	Direct Costs		is required.	
	(A-F), total	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Direct	
		Direct Costs for every budget year	Costs does not equal the sum of Total Direct	
		for this budget.	Costs for all budget years.	
Cumulative	Section H,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Indirect	
Budget (R&R)	Indirect Costs	Indirect Costs for every budget	Costs does not equal the sum of Total Indirect	
		year for this budget.	Costs for all budget years.	
Cumulative	Section I,	Required	The 424 RR Cumulative Budget Total Direct	
Budget (R&R)	Total Direct	_	and Indirect Costs are required.	

Component	Field	Validation	Error Message	Notes & Tips
	and Indirect	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Direct	
	Costs	Direct and Indirect Costs for every	and Indirect Costs do not equal the sum of	
		budget year for this budget.	Total Direct and Indirect Costs for all budget	
			years.	
Cumulative	Section J, Fee	Must be equal to the sum of Fee	The 424 RR Cumulative Budget Fee does not	
Budget (R&R)		for every budget year for this	equal the sum of the Fee for all budget years.	
		budget.		
Cumulative	Budget			
Budget (R&R)	Justification			
	(attachment)			

Construction Budget

Component	Field	Validation	Error Message	Notes & Tips
Construction	Administratio		_	May occur up to 11 times
Budget (R&R)	n and Legal			
-	Expenses,			These will have one budget period only. It
	Total Cost			should be mapped with the same start and
				end date as the project period.
Construction	Administratio			May occur up to 11 times
Budget (R&R)	n and Legal			
	Expenses,			
	Costs Not			
	Allowable for			
	Participation			
Construction	Administratio	Provide error if not equal to	The Total Allowable Costs for Administration	May occur up to 11 times
Budget (R&R)	n and Legal	column A (Total Cost) minus	and Legal Expenses (line <line number=""> of</line>	
	Expenses,	column B (Costs Not Allowable	the Construction Budget) must be equal to the	
	Total	for Participation).	difference of columns A (Total Cost) and B	
	Allowable		(Costs Not Allowable for Participation)	
	Costs			
Construction	Subtotal 1,	Provide error if not equal to the	The Total Cost Subtotal on the Construction	
Budget (R&R)	Total Cost	sum of lines 1-11, Total Cost	Budget must be equal to the sum of total costs	
			for all Administration and Legal Expenses	
			entries	
Construction	Subtotal 1,	Provide error if not equal to the	The Costs Not Allowable for Participation	
Budget (R&R)	Costs Not	sum of lines 1-11, Costs Not	Subtotal on the Construction Budget must be	
	Allowable for	Allowable for Participation	equal to the sum of all Administration and	
	Participation		Legal Expenses entries	
Construction	Subtotal 1,	Provide error if not equal to	The Total Allowable Costs Subtotal on the	
Budget (R&R)	Total	column A (Total Cost) minus	Construction Budget must be equal to the	
	Allowable	column B (Costs Not Allowable	difference of columns A (Total Cost) and B	
	Costs	for Participation).	(Costs Not Allowable for Participation)	
		Provide error if not equal to the	The Total Allowable Costs Subtotal on the	
		sum of lines 1-11, Total Allowable	Construction Budget must be equal to the sum	
		costs	of all Administration and Legal Expenses	
<i>a</i>			entries	
Construction	Contingencies			
Budget (R&R)	, Total Cost			

Component	Field	Validation	Error Message	Notes & Tips
Construction	Contingencies		¥	•
Budget (R&R)	, Costs Not			
_	Allowable for			
	Participation			
Construction	Contingencies	Provide error if not equal to	The Total Allowable Costs for Contingencies	
Budget (R&R)	, Total	column A (Total Cost) minus	on the Construction Budget must be equal to	
	Allowable	column B (Costs Not Allowable	the difference of columns A (Total Cost) and	
	Costs	for Participation).	B (Costs Not Allowable for Participation)	
Construction	Subtotal 2,	Provide error if not equal to the	The Total Cost Subtotal on the Construction	
Budget (R&R)	Total Cost	sum of lines 12 and 13, Total Cost	Budget must be equal to the sum of	
			Contingencies and the subtotal of all	
			Administration and Legal Expenses entries	
Construction	Subtotal 2,	Provide error if not equal to the	The Costs Not Allowable for Participation	
Budget (R&R)	Costs Not	sum of lines 12 and 13, Costs Not	Subtotal on the Construction Budget must be	
	Allowable for	Allowable for Participation	equal to the sum of Contingencies and the	
	Participation		subtotal of all Administration and Legal	
			Expenses entries	
Construction	Subtotal 2,	Provide error if not equal to	The Total Allowable Costs Subtotal on the	
Budget (R&R)	Total	column A (Total Cost) minus	Construction Budget must be equal to the	
	Allowable	column B (Costs Not Allowable	difference of columns A (Total Cost) and B	
	Costs	for Participation).	(Costs Not Allowable for Participation)	
		Provide error if not equal to the	The Total Allowable Costs Subtotal on the	
		sum of lines 12 and 13, Total	Construction Budget must be equal to the sum	
		Allowable Costs	of Contingencies and the subtotal of all	
			Administration and Legal Expenses entries	
Construction	Project			
Budget (R&R)	(Program)			
	Income, Total			
	Cost			
Construction	Project			
Budget (R&R)	(Program)			
	Income, Costs			
	Not Allowable			
	for			
	Participation			
Construction	Project	Provide error if not equal to	The Project (Program) Income, Total	
Budget (R&R)	(Program)	column A (Total Cost) minus	Allowable Costs on the Construction Budget	
	Income, Total	column B (Costs Not Allowable	must be equal to the difference of columns A	
	Allowable	for Participation).	(Total Cost) and B (Costs Not Allowable for	
	Costs		Participation)	

Component	Field	Validation	Error Message	Notes & Tips
Construction	Total Project	Provide error if not equal to line 14	The Total Project Costs, Total Cost on the	
Budget (R&R)	Costs, Total	minus line 15, Total Cost	Construction Budget must be equal to the	
	Cost		subtotal minus the Project Income.	
Construction	Total Project	Provide error if not equal to line 14	The Total Project Costs, Costs Not Allowable	
Budget (R&R)	Costs, Costs	minus line 15, Costs Not	for Participation on the Construction Budget	
	Not Allowable	Allowable for Participation	must be equal to the subtotal minus the Project	
	for		Income.	
	Participation			
Construction	Total Project	Provide error if not equal to	The Total Project Costs, Total Allowable	Map to appls_t.total_period_amt and
Budget (R&R)	Costs, Total	column A (Total Cost) minus	Costs on the Construction Budget must be	appl_periods_t.direct_cost_amt
	Allowable	column B (Costs Not Allowable	equal to the difference of columns A (Total	
	Costs	for Participation).	Cost) and B (Costs Not Allowable for	
			Participation)	
		Provide error if not equal to line 14	The Total Project Costs, Total Allowable	
		minus line 15, Total Allowable	Costs on the Construction Budget must be	
		Costs	equal to the subtotal minus the Project	
			Income.	
Construction	Federal			
Budget (R&R)	Funding			
Construction	Federal			
Budget (R&R)	Assistance			
	Requested			

SBIR/STTR Information

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR	Program	One and only one choice may be	Please select one Program Type: SBIR or	
(NIH)	Type (SBIR,	made.	STTR on the SBIR/STTR Information page.	
	STTR, Both)	Choice must be consistent with the	You have selected a Program Type of	
		information stored for the	<program type=""> on the SBIR/STTR</program>	
		announcement: if the	component on the SBIR/STTR Information	
		announcement is indicated as	page. That is not the correct program type for	
		'SBIR', 'SBIR' must be selected;	this announcement. Please refer to the FOA	
		if announcement is indicated as	for the correct program type for this	
		'STTR', 'STTR' must be selected.	application.	
		'Both' is not a valid choice.	For submissions to this agency, "Both" is not	
			an acceptable value for the 'Program Type'	
			field on the 424 RR SBIR/STTR Information	
			Component.	
SBIR/STTR	SBIR/STTR	One and only one choice may be	Please select one SBIR/STTR Type: Phase I,	
(NIH)	Type (Phase	made.	Phase II, or Fast-Track (424 RR SBIR/STTR	
	I, Phase II,		Information Component).	
	Fast-Track)			
SBIR/STTR	Question 1.	Required.		Store response in database.
(NIH)	Small			
	Business			
	Eligibility			
CDID/C/TTD	(Y/N)	D 1		
SBIR/STTR	Question 2.	Required.		Store response in database.
(NIH)	Are			
	Subcontracts			
	Included? (Y/N)			
SBIR/STTR	Name of	Required entry if response to 'Are	If Question 2 on the SBIR/STTR Information	Store response in database.
(NIH)	Labs/	Subcontracts Included?' is 'Yes'.	Component-indicates that subcontracts are	
(1111)	Agencies For	Subcontracts included: 15 1 CS.	included, the name(s) of labs or agencies for	
	Subcontracts		subcontracts must be included.	
	Subcontracts	Cannot be included if response to	If Question 2 on the SBIR/STTR Information	
		'Are Subcontracts Included?' is	Component indicates that subcontracts are not	
		'No'.	included, the name(s) of labs or agencies for	
			subcontracts cannot be included.	

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR (NIH)	Question 3. Located in HUBZone (Y/N)	Required.		Store response in database.
SBIR/STTR (NIH)	Question 4. Research to be Performed in US? (Y/N)	Required.		Store response in database.
SBIR/STTR (NIH)	Explanation of Foreign Performance	Must be included if answer to 'work to be performed in US' question is 'no'.	If Question 4 on the SBIR/STTR Information Component indicates that research is not to be performed in the US, an explanation attachment must be provided.	
		Cannot be included if answer to 'work to be performed in US' question is 'yes'.	If Question 4 on the SBIR/STTR Information Component 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.		Store response in database.
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'.		Store response in database.
SBIR/STTR (NIH)	Question 6. Disclosure Permission Statement (Y/N)	Required		Map response to appls_t, disclosure_permission_code
SBIR/STTR (NIH)	Commercializ ation Plan Attachment	Required for Phase II and Fast Track submissions	The Commercialization Plan is required on the SBIR/STTR Information Component for Phase II and Fast Track submissions	
		Cannot be submitted for anything other than Phase II or Fast Track submissions	A Commercialization Plan can only be submitted for Phase II and Fast Track submissions on the SBIR/STTR Information Component.	
		Limited to 15 pages.	The Commercialization Plan on the SBIR/STTR Information Component is limited to 15 pages	

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR	Question 8.	Required for SBIR		Store response in database.
(NIH)	Receipt of			
	Phase II SBIR			
	Awards (Y/N)			
SBIR/STTR	Company			
(NIH)	Commercializ			
	ation History			
	Attachment			
SBIR/STTR	Question 9.	Required for SBIR		Store response in database.
(NIH)	SBIR PD/PI			
	Primary			
	Employment			
	(Y/N)			
SBIR/STTR	Question 10.	Required for STTR		Store response in database.
(NIH)	STTR PD/PI			
	Commitment			
	(Y/N)			
SBIR/STTR	Question 11.	Required for STTR		Store response in database.
(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 eRA Commons account: <list of<br="">degrees in the profile, separated by commas>. The grant image will display the degrees as submitted. If the degrees listed in the eRA Commons are not current, please update them in the eRA Commons. Instructions on updating profile information is available at https://commons.era.nih.gov/commons- help/216.htm.</list></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 xxx 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".	The Human Subjects Clinical Trial question on the PHS 398 Cover Page Supplement must be answered if the answer to 'Human Subjects Involved' on the Other Project information page is "Yes".	

Component	Field	Validation	Error Message	Notes & Tips
		If Human Subjects NIH-Defined Phase III Clinical Trial is true, must be true.	The Human Subjects Clinical Trial question on the PHS 398 Cover Page Supplement must be "Yes" if the answer to Human Subjects NIH-Defined Phase III Clinical Trial is "Yes".	·
		For S10 application, provide a warning if this is true.	The answer to the Human Subjects Clinical Trial question on the PHS 398 Cover Page Supplement 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 Clinical Trial	An answer is required if the answer to 'Human Subjects Clinical Trial' is "Yes".	The Human Subjects NIH-Defined Phase III Clinical Trial question on the PHS 398 Cover Page Supplement must be answered if the answer to the Human Subjects Clinical Trial question is "Yes".	
	(Y/N)	If Human Subjects Clinical Trial is false, must be false	The Human Subjects NIH-Defined Phase III Clinical Trial on the PHS 398 Cover Page Supplement 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		
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	The Applicant Organization State on the PHS 398 Cover Page Supplement must be supplied for US addresses.	

Component	Field	Validation	Error Message	Notes & Tips
		If country is not US must be blank.	The Applicant Organization State on the PHS 398 Cover Page Supplement should be blank for all countries other than the United States	
		Transform state name to 2-char abbreviation before validating and storing. If state name can't be transformed, give error.	The Applicant Organization State on the PHS 398 Cover Page Supplement is not a valid state name.	
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 province name.	
Cover Page (NIH)	Applicant Organization Contact Zip Code	Required if country is US.	The Applicant Organization Zip Code on the PHS 398 Cover Page Supplement must be entered for US addresses.	Long-term, change in eRA db to 13 characters.
		Must be 5 or 9 numeric digits if country is US.	The Applicant Organization Zip Code on the PHS 398 Cover Page Supplement must be entered in 5-digit or 9-digit format.	
		If >9 characters, truncate (remove any dashes before truncating).		
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>) on the PHS 398 Cover Page Supplement 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 on the PHS 398 Cover Page Supplement 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.

Component	Field	Validation	Error Message	Notes & Tips
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" on the PHS 398 Cover Page Supplement, 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" on the PHS 398 Cover Page Supplement, HESC Cell Lines may not be included and the 'Can't be Referenced' checkbox must not be checked.	
		If specific stem cell line is included, must be a valid stem cell line in eRA database. Comparison should not be case-sensitive.	Stem cell line <cell line="" number=""> on the PHS 398 Cover Page Supplement is not a valid stem cell line number.</cell>	
		If 'Can't Be Referenced' is checked, no other cell lines may be entered.	If the 'Can't be Referenced' checkbox is checked on the PHS 398 Cover Page Supplement, no other stem cell lines may be entered.	
Cover Page (NIH)	HESC 'can't be referenced' checkbox	If HESC involved='Y', must include this or 'HESC Cell Lines'	If the answer to 'HESC involved' is "Yes" on the PHS 398 Cover Page Supplement, HESC Cell Lines must be included or the 'Can't be Referenced' checkbox must be checked.	
		If HESC involved='N', can't include this or 'HESC Cell Lines'	If the answer to 'HESC involved' is "No" on the PHS 398 Cover Page Supplement, 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		Accept submission of modular	Both a modular and a detailed budget have	
Budget, Years		budget or detailed budget, but not	been included with this submission. One or	
1-5 (NIH)		both	the other may be submitted.	
		Do not accept a modular budget for	Modular budgets may not be submitted for	
		R13 applications (activity code on funding opportunity = 'R13' or 'U13')	Conference Grant applications.	
		Do not accept a modular budget for	Applications with modular budgets may not	
		an application where the applicant	be submitted by a foreign applicant	
		organization is foreign.	organization. Please submit using the 424 RR Budget component.	
		For a revision, if the parent grant	The parent grant for this revision uses the non-	
		budget is non-modular, only a	modular format; therefore, this application	
		detailed budget component may be	may include a detailed R&R budget	
		submitted.	component only.	
		For an R15 application (activity code on funding opportunity =	An AREA grant should be submitted for one	
		'R15'), return warning if more than	budget period only (see the PHS 398 Modular Budget).	
		one budget period has been included.	Budget).	
		Do not accept a modular budget for SBIR/STTR applications	Modular budgets may not be submitted for SBIR/STTR submissions.	
Modular	Start Date	For budget period 1, for new	For new applications and resubmissions, the	
Budget, Years		applications and resubmissions to	modular budget year 1 start date must be the	
1-5 (NIH)		new applications, must be the same as the Project Start Date listed on the SF 424 RR Face Page	same as the proposed project start date listed on the SF 424 RR Cover Page.	
		For budget years after budget year	The start date for budget year < budget year>	
		1, if entered, must be greater than	must be equal to or later than the proposed	
		or equal to the Proposed Project	project start date listed on the SF 424 RR	
		Start Date listed on the SF 424 RR Face Page.	Cover page.	
Modular	End Date	Budget period end date must be	The modular budget year < budget year > end	
Budget, Years		greater than budget period start	date must be later than the modular budget	
1-5 (NIH)		date.	year <budget year=""> start date.</budget>	

Component	Field	Validation	Error Message	Notes & Tips
Modular	Direct Costs,	Must be <= 250K, must be a	The total direct costs for modular budget year	•
Budget, Years	Direct Cost	multiple of 25K for each budget	 sudget year> are greater than \$250K, or are	
1-5 (NIH)	Less	year	not in increments of \$25K.	
	Consortium,	For R15 submissions, provide	Direct cost requests are limited to \$150k a	
	F&A	warning if this value for any	year for AREA grants (PHS 398 Modular	
		budget year is ≥ 150 K.	Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A). Applications that exceed	
			this limit may be delayed in the peer review	
			process or rejected.	
		For R03 submissions, provide	Direct cost requests are limited to \$50k a year	
		warning if this value for any	for this application (PHS 398 Modular	
		budget year is >50K (LV).	Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A9). 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 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 (PHS 398 Modular	
		budget year is >200K (LV).	Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A). 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 direct cost limitations for this FOA (PHS 398 Modular	
			Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A). 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 (PHS 398 Modular	
		budget year is $>225K$ (LV).	Budget, Direct Costs, Direct Cost Less	
		buuget year 15 - 223K (LV).	Consortium, F&A). Applications that exceed	
			this limit may be delayed in the peer review	
			process or rejected.	
		1	process of rejected.	

Component	Field	Validation	Error Message	Notes & Tips
Modular	Direct Costs,	Must be less than 10,000,000,000	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 NIH processing, the Consortium F&A	Grants.gov accepts up to 14 bytes
Budget, Years 1-5 (NIH)	Consortium, F&A		amount on the PHS 398 Modular Budget must be less than 10,000,000,000.	(including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Direct Costs, Total Direct Costs	Must equal sum of Direct Cost Less Consortium, F&A and Consortium, F&A for the corresponding budget year (if both are submitted). If only Direct Cost Less Consortium, F&A is submitted for that budget year, must equal that.	The total direct costs for modular budget year <budget year=""> in the PHS 398 Modular Budget do not equal the sum of Direct Cost Less Consortium, F&A and Consortium, F&A</budget>	
		Must be less than 10,000,000,000	The Total Direct Costs amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	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=""> (PHS 398 Modular Budget). 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	The Indirect Cost Base amount in the PHS 398 Modular Budget 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	The Funds Requested amount on the PH 398 Modular Budget 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			

NIH Electronic Submission

Component	Field	Validation	Error Message	Notes & Tips
Modular	Indirect			
Budget, Years	Costs,			
1-5 (NIH)	Indirect Cost			
	Rate			
	Agreement Date			
Modular	Indirect	Must equal sum of Indirect Costs,	The Total Indirect Costs do not equal the sum	
Budget, Years	Costs,	Funds Requested 1-4 for the	of Funds Requested for budget year < budget	
1-5 (NIH)	Total Indirect	corresponding budget year, if any	year> (PHS 398 Modular Budget).	
	Costs	Indirect Costs were entered.		
		Must be less than 10,000,000,000	The Total Indirect Costs amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular	Total Direct	Must be greater than 0 for first	For Modular Budget Year 1, Total Direct and	
Budget, Years	and Indirect	budget period.	Indirect Costs must be greater than zero (PHS	
1-5 (NIH)	Costs, Funds		398 Modular Budget)	
	Requested	Must be equal to the sum of Total	For Modular Budget Year <budget year=""></budget>	
		Direct Costs and Total Indirect	(PHS 398 Modular Budget), the Total Direct	
		Costs for the corresponding budget	and Indirect Costs must be equal to Total	
		period.	Direct Costs plus Total Indirect Costs	
		Must he less than 10,000,000,000	requested for that budget year.	Cronto con coorto un to 15 hutor
		Must be less than 10,000,000,000	The Total Direct and Indirect Costs on the	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts
			PHS 398 Modular Budget amount must be less than 10,000,000,000.	no more than 10. Long-term db change is
			1055 than 10,000,000,000.	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 in the PHS 398	
Cumulative	Consortium	F&A values for all budget years	Modular Budget must be equal to the sum of	
(NIH)	F&A for		Total Direct Cost Less Consortium F&A	
	Entire Project		values for all budget years.	
	Period	For R03 submissions, provide	Cumulative direct cost requests on the PHS	
		warning if this value is >100K	398 Modular Budget are limited to a total of	
		(<mark>LV</mark>).	\$100k for this application. 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 on the PHS	
		warning if this value is >275K	398 Modular Budget are limited to a total of	
		(<mark>LV</mark>).	\$275k for this application. 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 on the PHS	
		warning if this value is >450K	398 Modular Budget are limited to a total of	
		(LV).	\$450k for this application. 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.	

Component	Field	Validation	Error Message	Notes & Tips
Modular Budget, Cumulative (NIH)	Total Consortium F&A for Entire Project	Must be equal to the sum of all Consortium F&A values for all budget years	The Total Consortium F&A for Entire Project Period must be equal to the sum of Consortium F&A values for all budget years (PHS 398 Modular Budget).	
	Period	Must be less than 10,000,000,000	The Total Consortium F&A for Entire Project Period amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	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 Costs for Entire Project	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 (PHS 398 Modular Budget).	
	Period	Must be less than 10,000,000,000	The Total Direct Costs for Entire Project Period amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	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 Indirect Costs for Entire Project	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 (PHS 398 Modular Budget).	
	Period	Must be less than 10,000,000,000	The Total Indirect Costs for Entire Project Period amount (PHS 398 Modular Budget) 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 (PHS 398 Modular Budget).	
	Entire Project Period	Must be less than 10,000,000,000	The Total Direct and Indirect Costs for Entire Project Period amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	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	Provide a warning if this attachment hasn't been included with a modular budget.	In most cases, a Personnel Justification attachment should be included if a Modular Budget is being submitted. If this is not included, the application will be processed, but may be delayed in the Peer Review process.	
Modular Budget, Cumulative (NIH)	Budget Justifications, Consortium Justification			

Component	Field	Validation	Error Message	Notes & Tips
Modular	Budget			
Budget,	Justifications,			
Cumulative	Additional			
(NIH)	Narrative			
	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 if a Change	
	Investigator/		of PI has been indicated on the PHS 398	
	Change of		Checklist. Revisions must have the same PI as	
	Inst.; Change of PI		the parent grant.	
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
	Investigator/	for change of PI	there has been a Change of PI indicated on the	Investigator, you must include the name of
	Change of	C	PHS 398 Checklist.	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			
	Investigator/ Change of			
	Inst.: change			
	of grantee			
	inst.			
Checklist (NIH)	Change of	If >40 characters, truncate.		Grants.gov length is 120, our db length is
	Investigator/			40. Consider long-term db change.
	Change of			
	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 on the PHS 398 Checklist 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 on the PHS 398 Checklist 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	If answer to Program Income Anticipated on the PHS 398 Checklist question is 'N', no program income detail may be entered. No program income may be included on the PHS 398 Checklist for S10 applications. Anticipated amount for program income has been provided for <x> budget years on the PHS 398 Checklist. Only <y> years of</y></x>	
Checklist (NIH)	Program Income, Anticipated Amount 1-5	provided in the budget component. Must be less than 10,000,000,000	budgets were provided with this application. The Program Income Anticipated Amount (PHS 398 Checklist) for budget period <budget period=""> must be less than 10,000,000,000.</budget>	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 on the PHS 398 Research Plan.	
	Attachments:	Required for revisions.	An Introduction must be included for	
	Introduction		revisions on the PHS 398 Research Plan	
		Limited to 1 page for revisions.	The Introduction for a revision is limited to	
			one page on the PHS 398 Research Plan	
		Limited to 3 pages for non-	The Introduction is limited to three pages on	
		SBIR/STTR and non-R36	the PHS 398 Research Plan.	
		resubmissions (except as explicitly		
		listed below).		
		Introduction limited to 1 page for	The Introduction is limited to one page for this	
		Phase I SBIR/STTR, R03 (LV),	submission on the PHS 398 Research Plan.	
		R13, U13, R21 (LV), and R36	Warning message for 'opt out'	
		resubmissions.	announcements: Be sure that you have	
			complied with the allowable page limitations	
			for the Introduction for this FOA (see PHS	
			398 Research Plan). Otherwise, your	
			application may be delayed and rejected in the review process.	
		Introduction limited to 3 pages for	The Introduction (see PHS 398 Research Plan)	
		Phase II and Fast Track	is limited to three pages for this submission.	
		SBIR/STTR, R01, R18, U18, R25,	is mined to three pages for this submission.	
		R33, R21/R33, and R34		
		resubmissions, as well as for R03		
		and R21 resubmissions that have		
		opted out.		
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. If the	
(/	Attachments:	greater than 25 pages and less than	total space occupied by text does not exceed	
	Specific Aims	or equal to 28 pages (applies to all	25 pages then no action is needed.	

Component	Field	Validation	Error Message	Notes & Tips
		applications not specifically listed	Warning message for 'opt out'	
		below, including Fast Track) (LV)	announcements: Be sure that you have	
		for R01, R18, U18, R25, R33,	complied with the allowable page limitations	
		R21/R33, and R34).	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. If the	
		to 28 pages (applies to all	total space occupied by text does not exceed	
		applications not specifically listed	25 pages then no action is needed.	
		below, including Fast Track) ((LV)	Warning message for 'opt out'	
		for R01, R18, U18, R25, R33,	announcements: Be sure that you have	
		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.	
		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. If the	
		Plan Attachments 2-5 together are	total space occupied by text does not exceed	
		greater than 15 pages and less than	15 pages then no action is needed.	
		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	
			and rejected in the review process.	
		For SBIR/STTR Phase I and R21	The Research Plan f is limited to 15 pages.	
		(LV), Attachments 2-5 together	This may span 18 pages due to page breaks. If	
		must be less than or equal to 18	the total space occupied by text does not	
		pages	exceed 15 pages then no action is needed.	
			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	The Conference Plan for a Conference Grant	Applicants will be instructed to submit one
		(activity code on funding	application is limited to 10 pages (PHS 398	attachment only, in the Research Design
		opportunity = 'R13' or 'U13'),	Research Plan).	and Methods attachment.
		Research Plan Attachments 2-5		
		together must be less than or equal		
		to 10 pages.		

Component	Field	Validation	Error Message	Notes & Tips
		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 (PHS 398 Research Plan).	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 13 pages due to page breaks. If the total space occupied by text does not exceed 10 pages then no action is needed.	
			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. If the total space occupied by text does not exceed 10 pages then no action is needed.	
			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 (NIH)	Research Plan Attachments: Background and Significance			
Research Plan (NIH)	Research Plan Attachments: Preliminary Studies/ Progress Report	Must be included for renewals, revisions, and Phase II SBIR. Exceptions to this validation are S10 and R13.	A Progress Report attachment must be included for renewals (competing continuations), revisions (supplements), and Phase II SBIR/STTR applications (see the PHS 398 Research Plan).	For grant image, bookmark should be set based on whether this is a new (should show Preliminary Studies) or a resubmission, revision, or renewal (should show Progress Report)

Component	Field	Validation	Error Message	Notes & Tips
Research Plan	Research	Required for all submissions	The Research Design and Methods section of	
(NIH)	Plan	except S10.	the PHS 398 Research Plan must be attached	
	Attachments:		to the application.	
	Research			
	Design and			
	Methods			
Research Plan	Research			Will only be included in Research Plan for
(NIH)	Plan			versions 1.1 and forward
	Attachments:			
	Inclusion			
	Enrollment			
	Report			
Research Plan	Research			Will only be included in Research Plan for
(NIH)	Plan			versions 1.1 and forward
	Attachments:			
	Progress			
	Report			
	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 on the PHS 398 Research	
(1111)	Attachments:	in multian Subjects is yes.	Plan page if the response to the Human	
	Protection of		Subjects question on the Other Project	
	Human		Information page is 'Yes'.	
	Subjects			
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 PHS 398	
	Attachments:	Exemption is not E4	Research Plan page if the response to the	
	Inclusion of		Human 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 PHS 398	
	Attachments:	Exemption is not E4	Research Plan page if the response to the	
	Targeted/		Human Subjects question on the Other Project	
	Planned		Information Page is 'Yes' and if the	
	Enrollment		Exemption Number is not 4.	
	Table			

Component	Field	Validation	Error Message	Notes & Tips
Research Plan (NIH)	Research Plan Attachments: Inclusion of Children	Required for non-S10 applications if Human Subjects is true and Exemption is not E4	The Inclusion of Children Attachment must be included on the PHS 398 Research Plan page if the response to the Human Subjects question on the Other Project Information Page is 'Yes' and if the Exemption Number is not 4.	
Research Plan (NIH)	Research Plan Attachments: Data and Safety Monitoring Plan	For schema version 1.0, required for non-S10 applications if Human Subjects is true and Clinical Trial question is true.	The Data and Safety Monitoring Plan Attachment must be included on the PHS 398 Research Plan if the response to the Human Subjects question is 'Yes' and the response to the Clinical Trial question is 'Yes'	Will not be included in Research Plan component for versions later than 1.0
Research Plan (NIH)	Research Plan Attachments: Vertebrate Animals	Required for non-S10 applications if VertebrateAnimalsUsedQuestion is Y	A Vertebrate Animals attachment must be included on the PHS 398 Research Plan page if the response to the Vertebrate/Animals Subject Used Question on the Other Project Information page is 'Yes'	
Research Plan (NIH)	Research Plan Attachments: Select Agent Research			Will only be included in Research Plan for versions 1.1 and forward
Research Plan (NIH)	Research Plan Attachments: Multiple PI Leadership Plan	Required if multiple PIs are included with the submission	The Multiple PI Leadership Plan attachment on the PHS 398 Research Plan must be included if multiple PIs have been included on the Senior/Key Person page.	Will only be included in Research Plan for versions 1.1 and forward
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 on the PHS 398 Research Plan. Certification Letters should be included in this attachment.	

Component	Field	Validation	Error Message	Notes & Tips
Research Plan	Research			
(NIH)	Plan			
	Attachments:			
	Resource			
	Sharing Plan			
Research Plan	Research	Limited to 10 appendixes	You have submitted more than 10 appendices	
(NIH)	Plan		on the PHS 398 Research Plan. There is a	
	Attachments:		limit of 10 appendix attachments allowed.	
	Appendix	At least one appendix is required	An R36 application must include at least one	
		for an R36 application (activity	Appendix attachment in the PHS 398	
		code on funding opportunity =	Research Plan. Transcripts should be included	
		'R36').	in this attachment.	
		Appendixes are not allowed for	Appendices may not be submitted for a Phase	
		SBIR or STTR Phase I	I SBIR or STTR application on the PHS 398	
		applications, unless the application	Research Plan.	
		is in response to an RFA.		
		Provide a warning if an appendix is	For most RFAs, the submission of appendices	
		submitted for an SBIR or STTR	with a Phase I SBIR or Phase I STTR is not	
		Phase I application that is in	permitted. Be sure that you have complied	
		response to an RFA.	with the guidance provided for appendices in	
			this FOA. Otherwise, your application may be	
			delayed or rejected in the review process.	

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 in the PHS 398 Cover	
		'R13' or 'U13'), provide warning	Letter section indicating NIH institute	
		if the cover letter is not attached.	approval for a Conference Grant application.	