





Exchange Services Notes, Tips and Validations (with changes) 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 PureEdge™ 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	Summary of Changes
3.5	Requirements for 200810
	Warning if indirect cost rate is not equal to 8 for a K application
	• Change of PI not allowed for K application (Traing K exempt form validation)
	Error if cover letter not attached for mentored K
	 Added New Career Development Supplemental Form Fields elements, rules, and validations
	Updated numbering of Career Development Supplemental Form Fields elements
	Updated error/warning messages for the following:
	Cover letter required (for K application with reference letter)
	Error message if mentoring plan provided for mentored K
	Citizenship message for K applications
	Added missing validation and error for The Statements by Mentor, Co-Mentors, Consultants, Contributors
	attachment Career Development Supplemental Form
	Revision to Citizenship validation and message for K application
	Revision to page limits warning messages for candidate information and research plan attachment on Career
	Development Supplemental Form

Key

NEW!	To comply with Section 508, all changes will be indicated with a NEW! Icon in the Notes & Tips column
(Minimum	Other Agency mechanisms that have not transitioned for NIH will be subject to a set of minimum validations and are
Validations)	identified as Minimum Validations in this document.

Truncated Items—Note: where items are truncated, grant image should display value as submitted through grants.gov, unless otherwise indicated. (Minimum Validations)

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. (Minimum Validations)

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." (Minimum Validations)

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." (Minimum Validations)

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." (Minimum Validations)

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. (Minimum Validations)

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." (Minimum Validations)

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 inches. (Minimum Validations)

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. (Minimum Validations)

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.

Minimum Validations for Specific-Mechanisms—Other Agency mechanisms that have not transitioned for NIH will be subject to a set of minimum validations, identified as Minimum Validations in the validations listed below and in the processing sections above. This set of minimum validations may also apply to NIH mechanisms for which applications are being submitted through Grants. Gov but that have not gone through a full transition. The affected mechanisms are to be found in a property file.

Identifying Types of Career Awards

Career Awards (Ks) fall into three main groups: mentored, independent, and training. An indicator needs to be added to the information stored for each activity code to identify which type of Career Award is represented by the activity.

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

SF424 (R&R)

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF424 (R&R)	Type of	1.1.1	For non-X02 submissions, do not accept 'Pre-	'Pre-application' (SF 424 RR	
	Submission		application' as submission type (Minimum	cover page, Type of Submission) is	
	(Pre-App, App,		Validations)	not a recognized submission type	
	Changed App)		,	for these applications.	
		1.1.2	For X02 submissions, do not accept 'Application'	'Application' is not a recognized	
			as submission type	submission type for X02	
				applications. Please select 'pre-	
				Application' as the type of	
				submission on the SF 424 RR	
				Cover page.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		1.1.3	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. (Minimum Validations)	This application is a duplicate of a previous submission for the same council round. Please submit again using the 'Changed/Corrected Application' Type of Submission on the SF 424 RR cover page.	
		1.1.4	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.	
		1.1.5	Do not accept changed/corrected application if the original application has been verified. (Minimum Validations)	Your application has already been submitted for processing by NIH staff. Please contact the Scientific Review Administrator (SRA) for permission to submit corrections.	
		1.1.6	Do not accept changed/corrected application if the PI, DUNS, Project Title, and council round are a duplicate of another application and the opportunity ID is not the same as that of the other application. (Minimum Validations)	This application is a duplicate of a previous submission for the same council round, but in response to a different announcement.	
SF424 (R&R)	Date Submitted	1.2.1	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)	Date Received		date	the I hase I buuget.	
SF424 (R&R)	by State State Application Identifier				
SF424 (R&R)	Date Received by Grants.gov				

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF424 (R&R)	Federal Identifier	1.7.1a	If a resubmission or renewal, this component is mandatory (Minimum Validations)	For resubmissions (amended applications) and renewals (competing continuations), the Federal Identifier must be included. Please include the only IC and serial number of the prior grant number in the Federal Identifier field on the SF 424 RR	Notes & Tips
		1.7.1b	If a revision, this component is mandatory (Minimum Validations)	For revisions, the Federal Identifier must be included. Please include the IC and serial number of the parent grant number in the Federal Identifier field on the SF242 (R&R) Cover page (e.g., CA123456).	
		1.7.2	If a new Phase II SBIR/STTR, this component is mandatory	For Phase II SBIR/STTR submissions, the 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).	
		1.7.3	If a renewal Phase II SBIR/STTR, this component is mandatory	For Phase II SBIR/STTR submissions, the 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).	
		1.7.4	If Phase II SBIR/STTR, and Phase I grant number is found in NIH database, provide warning if Phase I grant has not been awarded.	Phase II SBIR/STTR applications may be submitted only if the Phase I grant has been awarded.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Component	TICIO	1.7.5	If a resubmission, revision, or renewal, or a new Phase II SBIR/STTR, components of grant number must be 'parsable'. Components are <application_type> <mechanism> <institute> <serial number="">-<support year=""><suffix 'a'="" 's'.<="" (example:="" (ic)="" (must="" -application="" 1="" 1r01gm072828-01a1)="" 99suffix="" a="" an="" anywhere="" assigned="" be="" been="" by="" charactersserial="" code="" code)="" consists="" dash)support="" followed="" from="" has="" ic="" is="" letter="" number="" numberinstitute="" numbermechanism="" of="" one-digit="" or="" sequentially="" start="" td="" that="" to="" two="" two-digit="" type="" will="" with="" within="" year=""><td>Federal Identifier format (SF 424 RR Cover page) is not valid. Please include only the IC and serial number of the prior grant (e.g., CA123456).</td><td>Notes & Tips</td></suffix></support></serial></institute></mechanism></application_type>	Federal Identifier format (SF 424 RR Cover page) is not valid. Please include only the IC and serial number of the prior grant (e.g., CA123456).	Notes & Tips
		1.7.6	-At least the IC and serial number must be included. (Minimum Validations) If a resubmission, revision, or renewal, or a new Phase II SBIR/STTR, the prior grant number must exist in the NIH system. Matching is performed against Major Activity Code, Institute/ Center and Serial Number. In cases where the major activity code of the prior is 'U', matching is performed only on IC and serial number. (Minimum Validations)	The Federal Identifier that you have entered (SF 424 RR Cover page) is not a grant number that has been previously assigned.	
		1.7.7	If a resubmission, revision, or renewal, or a new Phase II SBIR/STTR, mandatory components are IC and serial number. (Minimum Validations)	You must include the <missing component=""> of the prior grant in the Federal Identifier field on the SF 424 RR Cover Page.</missing>	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		1.7.8	If PIChangeIndicator not set, check if PI on this	The prior grant entered as the	-
			submission has same Commons Account as PI	Federal Identifier (SF 424 RR	
			assigned to the prior grant. If not, provide warning	Cover page) is not associated with	
			if last name of PI on prior grant matches last name	the eRA Commons account for this	
			for PI on current application.	PI. If this application involves a	
				change of PI, please indicate	
				'Change of PI' on the PHS 398	
			Provide error if Commons Account doesn't match	Checklist page. If this is not a	
			and last name of PI on prior grant doesn't match	change of PI, this application will	
			last name for PI on current application.	be received by the agency, but may	
				be returned after internal	
			Ignore case, spaces, and punctuation on match.	processing.	
			Tenero ouco, spuros, una punoruarien en muten.	processing.	
				The prior grant that has been	
				entered as the Federal Identifier	
				(SF 424 RR Cover page) is not	
				associated with this PI. If this	
				application involves a change of	
				PI, please indicate 'Change of PI'	
				on the PHS 398 Checklist page.	
		1.7.9	For a resubmission, a summary statement must	A resubmission (an amended	
		1.7.9		`	
			have been mailed for the prior grant, unless the	application) cannot be submitted	
			prior grant has been withdrawn without a summary	until the Summary Statement for	
			statement. (Minimum Validations)	the previous application has been	
		1710		released by the agency.	
		1.7.10	For a resubmission, the prior grant must not have	A resubmission (an amended	
			been awarded, unless it has been identified as	application) cannot be submitted if	
			interim funding. (Minimum Validations)	a prior version in the same support	
		2 = 1 :		year has been awarded.	
		1.7.11	For a resubmission, if the prior grant suffix code =	The number of resubmissions for	
			'A2', display a warning (default for mechanisms	an application is normally limited	
			not otherwise defined).	to two. This application will be	
				received by the agency, but may be	
				returned after internal processing.	
		1.7.12	For a resubmission, of an R36 application (activity	This application has exceeded the	
			code on funding opportunity = 'R36'), prior grant	number of resubmissions permitted	
			suffix code must not = 'A2'.	and cannot be accepted.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		1.7.13	For a resubmission, prior grant suffix code must not = 'A3'.	This application has exceeded the number of resubmissions permitted and cannot be accepted.	
		1.7.14	For a revision, the parent grant must be awarded. (Minimum Validations)	The parent grant for a revision must be awarded. The parent grant for this submission is not a funded grant.	
		1.7.15	Ignore entries in this field for a DP1 or DP2 application.		
		1.7.16	For resubmissions, renewals, and revisions, provide a warning if the activity code of the prior grant doesn't match the activity code of the announcement. SBIR/STTR, R21/R33, and R33 are exempted from this validation.	The mechanism (activity code) of the prior submission (referenced by the Federal Identifier on the SF 424 RR Cover page) does not match the mechanism of the Funding Opportunity Announcement (FOA), <activity code="">. Please check the Federal Identifier provided for your application to ensure you are including the correct prior information and the FOA to ensure you are submitting to the correct opportunity. This application will be processed but there may be a delay in referral.</activity>	
		1.7.17	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).

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF424 (R&R)	Applicant Information, Organizational DUNS	1.8.1	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. (Minimum Validations)	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.
		1.8.2	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.	
		1.8.3	Organization must not be 'closed' in IMPAC II database.	The DUNS number you have provided in the SF 424 RR Cover page (item 5, Applicant Information) matches an organization in the eRA Commons that has been marked as 'closed'—i.e., it is no longer recognized as an active organization. Please resubmit using a DUNS number for an active organization.	Find closed records in external_orgs_t with a record_status_code of 'C'.
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.

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF424 (R&R)	Applicant Information, Department		None		
SF424 (R&R)	Applicant Information, Division		None		
SF424 (R&R)	Applicant Information, Street 1 and 2	1.12.1	If either line>50 characters, truncate (Minimum Validations)		Long-term, change eRA db to 55 chars.
SF424 (R&R)	Applicant Information, City		None		
SF424 (R&R)	Applicant Information, County		None		
SF424 (R&R)	Applicant Information, State	1.15.1	Required if country is US. (Minimum Validations)	The Applicant Information State on the SF 424 RR Cover page must be supplied for US addresses.	
		1.15.2	If country not US must be blank. (Minimum Validations)	The Applicant Information State on the SF 424 RR Cover page should be blank for all countries other than the United States.	
		1.15.3	Transform to 2-char abbreviation before validating and storing. If state name can't be transformed, give error. (Minimum Validations)	The Applicant Information State on the SF 424 RR Cover page is not a valid state name.	
SF424 (R&R)	Applicant Information, Province	1.16.1	Required if country is Canada. (Minimum Validations)	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.
		1.16.2	If country not Canada, must be blank. (Minimum Validations)	The Applicant Information Province on the SF 424 RR Cover page should be blank for all countries other than Canada	
		1.16.3	Transform to 2-char abbreviation before validating and storing. If province name can't be transformed, give error. (Minimum Validations)	The Applicant Information Province on the SF 424 RR Cover page is not a valid province name.	
SF424 (R&R)	Applicant Information, Zip Code	1.17.1	Required if country is US. (Minimum Validations)	The Applicant Information Zip Code on the SF 424 RR Cover page was not entered.	Long-term, change in eRA db to 13 characters.

Component	Field	Rule	Validation	Error Message	Notes & Tips
		1.17.2	Must be 5 or 9 numeric digits if country is US. (Minimum Validations)	The Applicant Information Zip Code on the SF 424 RR Cover page must be entered in 5-digit or 9-digit format.	
		1.17.3	For country other than US, if >9 characters, truncate (remove any dashes before truncating). (Minimum Validations)		
	Applicant Information, Country	1.18.1	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.	
		1.18.2	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.	
		1.18.3	For an SC1, SC2, SC3, S10, S11, S21, S22, DP2, C06, G08, UC6, G20, or K application, or for an application in response to a VA announcement, return an error if country is not US	The Applicant Organization for this application must be located in the US.	
		1.18.3	For an application in response to a VA announcement, return an error if country is not US	The Applicant Organization for this application must be located in the US.	
		1.18.4	For an R25 (LV) application, return a warning if country is not US	The Applicant Organization for this application is usually located in the US. This 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.	
		1.18.5	For an R18 (LV) or U18 (LV) application, return a warning if country is not US	The Applicant Organization for this application should be located in the US. This application will be accepted by the agency, but may be delayed in the peer review process.	
		1.18.6	Must be a valid ISO 3166-1 alpha-3 country code.	The Applicant Information country code provided (<country>) on the SF 424 RR Cover page is not a valid ISO 3166-1 alpha-3 country code.</country>	

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF424 (R&R)	Person to be Contacted	1.19.1	If the combination of all items in this component is more than 30 characters, truncate. Display in grant image as submitted. (Minimum Validations)		Long-term, change in eRA db for Contact Name to accommodate the way it is submitted through Grants.gov.
SF424 (R&R)	Person to be Contacted, Phone Number		None		
SF424 (R&R)	Person to be Contacted, Fax Number		None		
SF424 (R&R)	Person to be Contacted, e- mail	1.22.1	e-mail is required	The e-mail address for the Person to Be Contacted, listed on the SF 424 RR Cover page, is required.	
		1.22.2	Must contain a '@', with at least 1 and at most 64 chars preceding and following the '@'. Control characters (ASCII 0 through 31 and 127), spaces and special chars <> ()[];: are not valid.	The submitted e-mail address for the Person to Be Contacted, (listed on the SF 424 RR Cover page,) <email>, is invalid. Please enter email addresses in the format username@domainname.com</email>	
SF424 (R&R)	Employer Identification	1.23.1	If >12 characters, truncate (no warning). (Minimum Validations)		
		1.23.2	If <13 characters, provide a warning if it is not either 9 characters or 12 characters (after dashes are removed).	The Employer Identification Number on the SF 424 RR Cover page should be a length of 9 characters or 12 characters. The application will be accepted by the agency.	
		1.23.3	If 12 characters, don't map to database if EIN number doesn't exist in eRA database. Strip off dashes before doing comparison.		
		1.23.4	If 9 characters, add a '1' to the beginning of the number and 'A1' to the end (for a total of 12 characters), don't map to database if resulting EIN number doesn't exist in eRA database. Strip off dashes before doing comparison.		

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF424 (R&R)	Type of Applicant (other, woman owned, disadvantaged)	1.24.1	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)	1.25.1	Must be either New, Revision, Resubmission, or Renewal (Minimum Validations) Renewal is not a valid type for a Phase I	<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 continuations). A renewal (competing</type>	For a revision, define parent grant by finding the most recent type 1, type 2, or type 9 that matches on the major activity code, IC and serial number provided in the Federal Identifier, where the Project
			SBIR/STTR, SC2, S11 X01, X02, R03, R21, R34, U34, C06, UC6, G08, G13, G20, or mentored K application.	continuation) cannot be submitted for this application.	Start Date on the parent is earlier than or equal to the revision's Project Start Date, and the
		1.25.3	Provide warning if renewal is submitted for an R21/R33 combination or for a UH2/UH3 combination.	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.	Project End Date on the parent is later than or equal to the revision's Project End Date. Subprojects and other revisions should be excluded from consideration as parent grants. In cases where the major activity
		1.25.4	Revision is not a valid type for an S10, X01, or an X02 application. For a DP1 or DP2 application, must be New.	A revision (supplement) cannot be submitted for this application. Resubmissions, renewals, and revisions cannot be submitted for this application. This is indicated in the Type of Application on the	code of the prior is 'U', matching is performed only on IC and serial number. Map type of application to database.
				in the Type of Application on the SF 424 RR Cover page.	uatabase.

Component	Field	Rule	Validation	Error Message	Notes & Tips
•		1.25.6	For an SC1 application, provide error for a renewal if there has already been an awarded renewal for this grant.	SC1 applications may not be submitted if a renewal (a competing continuation) has been awarded in the past.	
		1.25.7	For an SC1 application, provide error for a renewal if the PI has been awarded any R01 grants, whether as a single PI or as a multiple PI.	The PI, <first any="" applications="" awarded="" be="" been="" grants="" grants.<="" has="" if="" in="" last="" may="" name="" name)="" not="" past.="" pi="" r01="" sc1="" submitted="" td="" the=""><td></td></first>	
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				
SF424 (R&R)	Submitted to other agencies?				
SF424 (R&R)	Descriptive Title	1.30.1	Truncate if >81 characters (Minimum Validations)		Long-term, expand eRA db to 200 chars
		1.30.2	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.	
SF424 (R&R)	Areas Affected by Project				
SF424 (R&R)	Proposed project start date	1.32.1	Must be later than current date (Minimum Validations)	The Proposed Project Start Date (SF 424 RR cover page, item 13) must be later than the Proposed Project Start Date.	
SF424 (R&R)	Proposed project ending date	1.33.1	Must be later than ProjectStartDate	The Proposed Project Ending Date (SF 424 RR cover page, item 13) must be later than the Proposed Project Start Date	
		1.33.2	For an R03 (LV), R21 (LV), or R36 application, return warning if project period is more than two	The project period for this type of application is limited to two years.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
				Warning message for 'opt out'	
				announcements: Be sure that you	
				have complied with the allowable	
				project period limitations for this	
				FOA. Otherwise, your application	
				may be delayed and rejected in the	
				review process.	
		1.33.3	For an R15, R33 (LV), R34 (LV), U34, G08, or G13	The project period for this type of	
			application, return warning if project period is	application is limited to three	
			more than three years long. Define project period	years. The application will be	
			by time span between project period start date and	accepted, but may be delayed in	
			project period end date as entered on the SF424	the peer review process.	
			(R&R) Face Page.	Warning message for 'opt out'	
				announcements: Be sure that you	
				have complied with the allowable	
				project period limitations for this	
				FOA. Otherwise, your application	
				may be delayed and rejected in the	
				review process.	
		1.33.4	For an R01 (LV) or R21/R33 pair (LV) application,	The project period for this type of	
			return warning if project period is more than five	application is limited to five years.	
			years long. Define project period by time span	The application will be accepted,	
			between project period start date and project	but may be delayed in the peer	
			period end date as entered on the SF424 (R&R)	review process.	
			Face Page.	Warning message for 'opt out'	
				announcements: Be sure that you	
				have complied with the allowable	
				project period limitations for this	
				FOA. Otherwise, your application	
				may be delayed and rejected in the	
				review process.	
		1.33.5	For a DPI or DP2 application, the project period	The project period for this	
			must be exactly five years long. Define project	application must be five years.	
			period by the number of <i>years</i> only between the	This is determined by the proposed	
			project start date and the project end date.	Project Start Date and the	
				Proposed Project Ending Date on	
				the SF 424 RR Cover page.	
		1.33.6	Must be no more than 20 years greater than	The Proposed Project Ending Date	
			today's date.	(SF 424 RR Cover page, item 13)	
				cannot be more than 20 years in	
				the future.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF424 (R&R)	Congressional districts of applicant	1.34.1	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 submitted. (Minimum Validations)	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/db q/officials/?lvl=L.</congressional>	Long-term, expand eRA database to 6 chars.
	Congressional districts of project				
SF 424 (R&R)	PD/PI Contact	1.36.1	Required. (Minimum Validations)		
	Information, name (prefix, first name, middle name, last name, suffix)	1.36.2	If only a Commons Account is supplied, display a warning 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 components="" name="" profile="">, will be used for this submission.</commons></credential>	
		1.36.3	If this and Commons account provided (and Commons account is recognized), provide warning if last name and first name on account doesn't match provided last name and first name. Comparison to ignore case and embedded spaces, but not embedded punctuation.	The name provided for the PD/PI on the SF 424 RR Cover, <first last="" name="" name,=""> does not match the name listed on the eRA Commons account: <first last="" name="" name,="">. The application 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 xxxx and the name submitted through grants.gov is yyyy and we will be displaying the Commons data. Provide ability for the submitter to update their Commons account and to regenerate the image to display the updated information from the Commons account.

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF 424 (R&R)	PD/PI Contact Information, Position/Title	1.37.1	If there is no position/title entered on any employment record for this person and organization in Commons, store the submitted position/title in all employment records for that person and organization in the Commons. Truncate if greater than 40 characters, before comparing to title stored in database. No warning message is needed to the submitter. (Minimum Validations)		
SF 424 (R&R)	PD/PI Contact Information, Organization Name				
SF 424 (R&R)	PD/PI Contact Information, Department	1.39.1			
SF 424 (R&R)	PD/PI Contact Information, Division	1.40.1			
SF 424 (R&R)	PD/PI Contact Information, Street 1 and 2, city, state, province, zip, country, phone	1.41.1	Transform province name to 2 char. abbreviation before storing. If province name can't be transformed, give an error. (Minimum Validations) Transform state name to 2 char. abbreviation before storing. If state name can't be transformed,	The PD/PI Profile Province on the SF 424 RR Cover is not a valid province name. The PD/PI Profile State on the SF 424 RR Cover is not a valid state	Long-term, change in ERA db for zip code to 13 characters Map the role-level HOM address for the PD/PI based on the address submitted for the PD/PI
	number, fax number, e-mail		give an error. (Minimum Validations)	name.	on the 424 RR Cover, instead of creating it based on the profile.
SF 424 (R&R)	PD/PI Contact Information, County				
SF 424 (R&R)	Total estimated project funding	1.43.1	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 and DP1 for budget figures should come from this element instead of from budget components. It should be mapped to appl_periods_t and to
		1.43.2	Required for a C06, UC6, or G20 application.	Total Estimated Project Funding (SF 424 RR Cover, item 16a) is required for this application.	the following columns in appls_t: direct cost requested amt,
		1.43.3	Must be non-zero for a C06, UC6, or G20 application.	Total Estimated Project Funding (SF 424 RR Cover, item 16a) cannot be zero.	total_cost_requested_year1_amt, total_cost_requested_amt. (indirect_cost_requested_amt

Component	Field	Rule	Validation	Error Message	Notes & Tips
-		1.43.4	For an X01 or X02 application, provide an error if	Total Estimated Project Funding in	-
			non-zero values are entered.	section 16 on the SF 424 RR Cover	
				page must be zero.	
		1.43.5	For an S21 or S22 application, provide a warning	Total Estimated Project Funding	
			if zero or null.	(SF 424 RR Cover, item 16a)	
				should not be zero. The	
				application will be processed, but a	
				concern may be raised during	
				review.	
		1.43.6	For a DP1 application, provide an error if not	For a DP1 application, Total	
			2,500,000.	Estimated Project Funding (SF 424	
				RR Cover, item 16a) must be 2.5	
				million.	
		1.43.7	For a DP2 application, provide an error if greater	For a DP2 application, Total	
			than 1.5 million	Estimated Project Funding (SF 424	
				RR Cover, item 16a) cannot be	
				greater than 1.5 million.	
SF 424 (R&R)	Total federal	1.44.1	For an X01 or X02 application, provide an error if	Total Federal and non-Federal	
	and non-federal funds		non-zero values are entered.	Funds in section 16 on the SF 424	
				RR Cover page must be zero.	
		1.44.2	Required for a C06, UC6, or G20 application.	Total Federal & Non-Federal	
				Funds (SF 424 RR Cover, item	
				16b) is required for this	
				application.	
		1.43.3	Must be non-zero for a C06, UC6, or G20	Total Federal & Non-Federal	
			application.	Funds (SF 424 RR Cover, item	
				16b) cannot be zero.	
		1.44.4	For an S21 or S22 application, provide a warning	Total Federal and non-Federal	
			if zero or null.	Funds (SF 424 RR Cover, item	
				16b) should not be zero. The	
				application will be processed, but a	
				concern may be raised during	
				review.	
		1.44.5	For a DP1 application, provide an error if not	For a DP1 application, Total	
			2,500,000.	Federal & Non-Federal Funds (SF	
				424 RR Cover, item 16b) must be	
				2.5 million.	
		1.44.6	For a DP2 application, provide an error if greater	For a DP2 application, Total	
			than 1.5 million.	Federal & Non-Federal Funds (SF	
				424 RR Cover, item 16b) cannot	
				be greater than 1.5 million.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
SF 424 (R&R)	Estimated	1.45.1	For an X01, X02, DP1 or DP2 application, provide	Total Estimated Program Income	
	program		an error if non-zero values are entered.	in section 16 on the SF 424 RR	
	income	1.45.0	B : 10 COC HCC COO 1: 1:	cover page must be zero.	_
		1.45.2	Required for a C06, UC6, or G20 application.	Estimated Program Income (SF	
				424 RR Cover, item 16c) is	
CE 424 (D 0 D)	Cubicat to atota	1.46.1	For C06, UC6, or G20 applications, a response is	required for this application. A response must be included to the	
SF 424 (R&R)	Subject to state executive order	1.40.1	required in either 17a or b.	question 'Is application subject to	
	review?		required in cities 17a of 6.	review by state executive order	
	Teview.			12372 process' (SF 424 RR Cover	
				page, item 17)	
SF 424 (R&R)	State executive	1.47.1	Required if answer to 'Subject to state executive	A date must be entered on the SF	
51 121 (18611)	order review	1.17.1	order review' is 'Yes'	424 RR Cover page, item 17, if the	
	date			answer to the 'Subject to state	
				executive order review' is 'Yes'.	
SF 424 (R&R)	Agreement and				
	certification				
SF 424 (R&R)	Authorized	1.49.1	Truncate if first or last name>30 chars, or if	The Authorized Representative	Long-term, change in eRA db to
	representative		suffix>5 chars. Display warning. (Minimum	<pre><element name=""> (SF 424 RR</element></pre>	60 chars for last name, 35 for
	name		Validations)	Cover page, item 19) exceeds the	first name, 10 for suffix (all
				agency character limit. The	names in db)
				application image will display the	
				name as submitted; the agency will	
				store the first <database length=""> characters in the eRA database.</database>	
SF 424 (R&R)	Authorized	1.50.1	Truncate if >30 chars. (Minimum Validations)	characters in the CKA database.	Long-term, change in eRA db to
21 /2 / (Iteal)	representative	1.00.1	Truncate 11 - 30 chars. (William Vandations)		45 chars
	position/title				
SF 424 (R&R)	Authorized				
	representative				
	organization				
SF 424 (R&R)	Authorized				
	representative				
	department				
SF424 (R&R)	Authorized				
	representative				
CE 42 4 (D 0 D)	division				I and taken a language DA 11
SF424 (R&R)	Authorized	1.54.2	Transferms massings to 2 stars attached to 2	The Authorized Decree	Long-term, change in eRA db
	representative	1.54.2	Transform province to 2-char abbreviation for	The Authorized Representative	for zip code to 13 characters
	street 1 & 2,		province before validating and storing. If province	Province (SF 424 RR Cover page,	Drayings should be manned into
	city, state,		can't be transformed, give error. (Minimum	item 19) is not a valid province	Province should be mapped into same database location as state.
	province, zip		Validations)	name.	same database location as state.

Component	Field	Rule	Validation	Error Message	Notes & Tips
		1.54.3	Transform state to 2 char abbreviation for state	The Authorized Representative	
			before validating and storing. If state name can't	State (SF 424 RR Cover page, item	
			be transformed, give error. (Minimum	19) is not a valid state name.	
			Validations)		
		1.54.4	If zip>9 characters, truncate. Remove dashes		
			before truncating and/or storing (Minimum		
			Validations)		
SF424 (R&R)	Authorized				
	representative				
	county				
SF424 $(R&R)$	Authorized				
	representative				
	signature and				
	date				
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	Rule	Validation	Error Message	Notes & Tips
Project/	Primary	2.1.1	Allow applications to come in without this		
Performance	Location,		component.		
<i>Site</i> (<i>R&R</i>)	Organization				
	Name				
Project/	Primary				
Performance	Location,				
<i>Site</i> (<i>R&R</i>)	Street 1 and 2				
Project/	Primary				
Performance	Location, City				
<i>Site</i> (<i>R&R</i>)					
Project/	Primary				
Performance	Location,				
<i>Site</i> (<i>R&R</i>)	County				
Project/	Primary				
Performance	Location,				
Site $(R\&R)$	State				
Project/	Primary				Province should be mapped into
Performance	Location,				same database location as state.
Site (R&R)	Province				
Project/Perform	Primary				
ance Site (R&R)	Location, Zip				
ance site (R&R)	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				
<i>Site</i> (<i>R&R</i>)					

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

Research & Related: Other Project Information

Component	Field	Rule	Validation	Error Message	Notes & Tips
Other Project Info (R&R)	Human Subjects Involved?	3.1.1	Either ExemptionNumber or AssuranceNumber must be specified if HumanSubjectsUsedQuestion is true. DP1 applications are exempt from this validation. If HumanSubjectsUsedQuestion is false, ExemptionNumber must not be specified. DP1 applications are exempt from this validation.	Either Exemption Number or Assurance Number must be provided if Human Subjects is "Yes" (Other Project Information, item 1). When Human Subjects is "No", Exemption Number must not be specified (Other Project	
		3.1.3	If HumanSubjectsUsedQuestion is false, provide a warning if AssuranceNumber is specified. DP1 applications are exempt from this validation.	Information, item 1). When Human Subjects is "No", Assurance Number does not apply (Other Project Information, item 1).	
		3.1.4	Must be true if Human Subjects Clinical Trial question is true.	The 'Human Subjects Involved' question (Other Project Information, item 1) must be "Yes" if the Human Subjects Clinical Trial question on the PHS 398 Cover Page Supplement is "Yes".	
		3.1.5	For S10, S21, S22 applications, display a warning if this is true.	The answer to the Human Subjects involved question (Other Project Information, item 1) should be 'No'. The application will be processed, but a concern may be raised during review.	
Other Project Info (R&R)	IRB review pending?				
Other Project Info (R&R)	IRB approval date	3.3.1	Date can't be in the future (but can be blank)	The IRB approval date (Other Project Information, item 1a) cannot be in the future.	
		3.3.2	Year of date must be greater than 1990	The year of the IRB approval date must be greater than 1990.	
Other Project Info (R&R)	Exemption number				Never implemented

Component	Field	Rule	Validation	Error Message	Notes & Tips
Component Other Project Info (R&R)	Field Human subject assurance number	3.5.1	Validation Provide warning if it doesn't match IPF human subject assurance number for this organization. Match should be on the last 11 characters of the IPF assurance number. If the Assurance Number that is receive is exactly eight characters long and consists of all numeric digits, provide warning if after stripping off a leading 'FWA' from the number stored in the IPF (if it exists), the numbers don't match. After the comparison is made in this latter case, prefix the submitted number with 'FWA' before storing in the database.	Error Message The human subject assurance number entered in Other Project Information, item 1a, 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. Note, if you do not have an approved assurance on file with OHRP and have inserted "None" in item 1a, no correction is	Notes & Tips
Info (R&R)	Vertebrate animals used?	3.6.1	If this is 'Y', then ONE of the following must be provided: • Assurance Number + IACUC Approval Date • Assurance Number + IACUC Approval Pending • The word 'None' (case insensitive, don't validate on punctuation) DP1 applications are exempt from this validation.	necessary. When Vertebrate Animals is "Yes", you must provide one of the following (1) animal welfare assurance number + IACUC approval date, (2) animal welfare assurance number + an indication that IACUC approval is pending OR (3) the word 'None' (Other Project Information, item 2).	
	IACUC	3.6.2	For S10 applications, display a warning if this is true. Provide a warning if Vertebrate Animals Used is	The answer to the Vertebrate Animals Used question in Other Project Information, item 2, should be 'No'. The application will be processed, but a concern may be raised during review.	
Other Project Info (R&R)	review pending?	3./.1	Provide a warning if Vertebrate Animals Used is 'N'	When Vertebrate Animals is "No", IACUC Approval Pending indicator does not apply (Other Project Information, item 2).	
Other Project Info (R&R)	IACUC approval date	3.8.1	Provide a warning if VertebrateAnimalsUsedQuestion is false	When Vertebrate Animals is "No", IACUC Approval Date does not apply (Other Project Information, item 2).	
		3.8.2	Year of date must be greater than 1990 The date can't be in the future	The year of the IACUC approval date must be greater than 1990. The IACUC Approval Date (Other Project Information, item 2) cannot	
				be in the future.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Other Project Info (R&R)	Animal Welfare	3.9.1	Provide a warning if VertebrateAnimalsUsedQuestion is false	When Vertebrate Animals is "No", Assurance Number does not apply	
Injo (K&K)	Assurance #		vertebrate/Allilliais/OscuQuestion is faise	(Other Project Information, item 2).	
		3.9.3	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?				
Other Project	Impact on				
Info (R&R)	environment?				
Other Project Info (R&R)	Activities outside US?				
Other Project Info (R&R)	Project Summary	3.13.1	Limited to one page	The Project Summary/Abstract in Other Project Information, item 6 is limited to 30 lines of text.	
		3.13.2	Required	The Abstract (labeled 'Project Summary/Abstract' on the Other Project Information component) must be included.	
Other Project Info (R&R)	Project Narrative	3.14.1	For all applications except those in response to C06, UC6 or G20, 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.	This will be used for the Public Health Relevance Statement.
		3.14.2	Required for C06, UC6, or G20 applications.	Please attach the Program Narrative as the Project Narrative attachment on the Other Project Information component.	
		3.14.3	Provide a warning if greater than 40 pages for C06, UC6, or G20 applications.	The Program Narrative (Other Project Information, Project Narrative attachment) is limited to 40 pages.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		3.14.6	Required for all applications (validation does not apply to C06, UC6 or G20).	The Public Health Relevance Statement (labeled 'Project Narrative' in Other Project Information, item 7) must be included.	
Other Project Info (R&R)	Bibliography and References	3.15.1	Provide a warning if this attachment hasn't been included. This validation only applies to NIH applications. Provide error if attached for a DP1 or DP2	In most cases, a Bibliography and References Cited attachment should be included. The Bibliography and References	
			application	attachment on the Other Project Information page may not be included for this application.	
Other Project Info (R&R)	Facilities and other resources	3.16.1	Provide error if attached for a DP1 or DP2 application	The Facilities and Other Resources attachment on the Other Project Information page may not be included for this application.	
Other Project Info (R&R)	Equipment	3.17.1	Required for S10 applications.	The Equipment Attachment on the Other Project Information page is required for S10 applications.	
		3.17.2	Provide error if attached for a DP1 or DP2 application	The Equipment attachment on the Other Project Information page may not be included for this application.	
Other Project Info (R&R)	Other attachments	3.18.1	For S10 applications, provide error if at least one attachment has not been included for this.	No attachment was provided as an 'Other Attachment' on the Other Project Information page. Please attach the Instrumentation Plan in this location. Please also consult the funding opportunity announcement to which you are responding for any additional information to be attached as an 'Other Attachment.'	Note that multiple attachments may be received with Other Attachments. They should all be processed.

Component	Field	Rule	Validation	Error Message	Notes & Tips
		3.18.2	For DP1 applications, provide error if there are	For a DP1 application, two	
			not exactly two attachments for this.	attachments should be provided as	
				'Other Attachments' on the Other	
				Project Information page. One	
				Attachment should be used for the	
				description of the applicant's most	
				significant research	
				accomplishment; the other	
				attachment should be used for the	
				essay	
		3.18.3	For S21 and S22 applications, provide error if at	At least three attachments must be	
			least three attachments haven't been included for	provided as an 'Other Attachment'	
			this.	on the Other Project Information	
				page. Please consult the funding	
				opportunity announcement for the	
				type(s) of information to be	
		2.10.5	D 7/4 1' (' 1 T) (A 1' (' '	attached.	
		3.18.5	For VA applications where Type of Application is	An Introduction cannot be	
			'New', do not accept file named	submitted (as an Other Attachment	
			'01_VA_Intro.pdf'	on the Other Project Information	
		3.18.6	For VA applications where Type of Application is	page) for new applications. An Introduction must be included	
		3.18.0	'Resubmission' or 'Revision', a file named	as an 'Other Attachment' for	
			'01_VA_Intro.pdf' is required.	resubmissions and revisions on the	
			or_vA_muo.pur is required.	Other Project Information page.	
				The attachment should be named	
				'01 VA Intro.pdf'.	
		3.18.7	For VA applications where a file named	The Introduction for a revision,	
			'01_VA_Intro.pdf' has been submitted for a	submitted as an Other Attachment	
			revision, it cannot be greater than 1 page.	on the Other Project Information	
				page, is limited to one page	
		3.18.8	For VA applications where a file named	The Introduction for a	
			'01_VA_Intro.pdf' has been submitted for a	resubmission, submitted as an	
			resubmission, it cannot be greater than 3 pages.	Other Attachment on the Other	
				Project Information page, is	
				limited to three pages.	
		3.18.9	For VA applications where a file named	The Research Plan, submitted as an	
			'02_VA_Research_Plan.pdf' has been submitted,	Other Attachment on the Other	
			it cannot be greater than 25 pages.	Project Information page, is	
				limited to 25 pages.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		3.18.10	For VA applications, require the submission of a	A Research Plan is required for	
			file named '02_VA_Research_Plan.pdf'.	this application. Please submit it	
				as an 'Other Attachment' on the	
				Project Information page, titled	
				'02_VA_Research_Plan.pdf'.	
		3.18.11	For VA applications where Type of Application is	A bibliography of publications	
			'Renewal', a file named	resulting from the last period of	
			'03_VA_Prog_Report_Pubs.pdf' is required.	VA funding must be included for	
				all renewals. Please submit it as an	
				'Other Attachment' on the Project	
				Information page, titled	
				'03_VA_Prog_Report_Pubs.pdf'.	
		3.18.12	For VA applications where Human Subjects is 'Y',	A Human Subjects attachment	
			a file named '04_VA_Human_Subjects.pdf' is	must be included if the response to	
			required.	the Human Subjects question on	
				the Other Project Information page	
				is 'Yes'. Please submit it as an	
				'Other Attachment' on the Project	
				Information page, titled	
		2.10.12		'04_VA_Human_Subjects.pdf'.	
		3.18.13	For VA applications where Vertebrate Animals is	A Vertebrate Animals attachment	
			'Y', a file named '05_VA_Animals.pdf' is	must be included if the response to	
			required.	the Vertebrate/Animals Subject	
				Used Question on the Other	
				Project Information page is 'Yes'.	
				Please submit it as an 'Other	
				Attachment' on the Project	
				Information page, titled	
		3.18.14	For VA analizations where multiple DIs and	'05_VA_Animals.pdf'.	
		3.18.14	For VA applications where multiple PIs are included, a file named '06_VA_Multiple_PI.pdf'	The Multiple PI Leadership Plan attachment must be included if	
			is required.	multiple PIs have been included on	
			is required.	the Senior/Key Person page.	
				Please submit it as an 'Other	
				Attachment' on the Project	
				Information page, titled	
				'06_VA_Multiple_PI.pdf'.	
		3.18.14.	For VA applications where multiple PIs are not	The Multiple PI Leadership Plan	
		1	included, do not accept a file named	attachment should not be included	
			'06_VA_Multiple_PI.pdf'.	as an 'Other Attachment' on the	
				Project Information page if a single	
				PI has been included on the	
				Senior/Key Person page.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
-		3.18.15	For applications in response to VA	An attachment submitted as an	-
			announcements, provide warning if any attachment	'Other Attachment' on the Other	
			file names are not provided in one of the following	Project Information page has the	
			formats:	name ' <file name="">'. This is not a</file>	
			01_VA_Intro.pdf	valid name for this attachment.	
			02_VA_Research_Plan.pdf	Please refer to the FOA for the list	
			03_VA_Prog_Report_Pubs.pdf	of valid file names to be submitted	
			04_VA_Human_Subjects.pdf	as an 'Other Attachment'. The	
			05_VA_Animals.pdf	application will be processed, but	
			06_VA_Multiple_PI.pdf	concerns may be raised during	
			07_VA_Agreements.pdf	review of the application.	
			08_VA_Letters.pdf		
			09_VA_Appendix_1.pdf		
			10_VA_Appendix_2.pdf		
		3.18.16	For DP2 applications, provide error if there is not	For a DP2 application, one	
			exactly one attachment for this.	attachment should be provided as	
				an 'Other Attachment' on the	
				Other Project Information page.	
				This attachment should be used for	
				the essay.	

Research & Related: Senior/Key Person Profile

Component	Field	Rule	Validation	Error Message	Notes & Tips
Senior/Key Person (R&R)	PD/PI Profile Information	4.1.1	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	4.2.1	Must be specified for the PD/PI ((Minimum Validations)	The eRA Commons Username must be submitted for the PD/PI in the PD/PI Credential field on the Senior/Key Person page.	
		4.2.2	Truncate if greater than 30 characters, before comparing to account stored in database. No warning message is needed to the submitter. (Minimum Validations)		
		4.2.3	If specified, must be a valid Commons account. (Minimum Validations)	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>	
		4.2.4	For the PD/PI, this account must be affiliated with the organization submitting the application and have the PI role (Minimum Validations)	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.	
		4.2.5	For a revision, the PI should be assigned to the parent grant. If the person profile for this Commons account is not the same person profile assigned as the PI to the parent grant, and the last name of the PI assigned to the parent grant matches the last name that is submitted for the PI on the current application, provide the indicated warning. This match must not be case-sensitive, and should compare only the non-blank, non-punctuation characters that appear in the last name. If neither the profile nor the last name match, provide the indicated error.	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.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		4.2.6	Provide a warning if there is both an SO and a PI	The eRA Commons account has	
			role associated with the Commons account.	'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.	
		4.2.7	Provide a warning if the single role associated with	The eRA Commons account	
			the Commons account is an SO role.	included for the PD/PI 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:	
				however, you will need to change	
				the roles on the Commons account	
				as instructed, or the PD/PI will not	
				be able to view the review outcome	
				or the Summary Statement.	
		4.2.8	For a DP2, provide a warning if the PD/PI has	A DP2 application should not be	
			been a PD/PI on a previous awarded DP1, DP2,	submitted for a PD/PI who has	
			R01, U01, P (any P), R23, R29, R33, R37,	ever been a PI or a multiple PI on	
			K99/R00, K02, K04, K05, K24, or K26.	an R01 or equivalent NIH grant	
				(e.g., R23, R29, R33, R37, DP1,	
				DP2, U01, P01 or center grant);	
				who has been a leader of a P01 or	
				center grant peer-reviewed project;	
				or who has been the recipient of a	
				K99/R00, K02, K04, K05, K24, or	
				K26 award. A PI who replaced	
				another PI on an awarded grant is	
				allowed to submit a DP2	
				application. This application will	
				continue processing, but may be	
				returned if it is determined that	
				eligibility criteria are not met.	
		4.2.10	For a DP1 application, the PD/PI must not have	A DP1application cannot be	
			been a PD/PI on a previously awarded DP1.	submitted for a PD/PI who has	
				previously received a DP1 award.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Senior/Key Person (R&R)	PD/PI Profile, other project role category				
Senior/Key Person (R&R)	Biosketch	4.4.1	Limited to four pages	The Senior/Key Person Biosketch for the PD/PID, <first last="" name="">, is longer than four pages.</first>	
		4.4.2	Limited to two pages for a DP1 or DP2 application.	The Senior/Key Person Biosketch for the PD/PI is limited to two pages for this application.	
Senior/Key Person (R&R)	Current and Pending Support	4.5.1	Attachment is required for a DP1 or DP2 application.	For this application, a Current and Pending Support attachment must be included for the PD/PI on the Senior/Key Person page	
Senior/Key Person (R&R)	Profile, senior & key person x, name	4.6.1	Truncate if first or last name>30 chars, or suffix>5 chars. (Minimum Validations)		Long-term, change in eRA db to 60 chars for last name, 35 for first name, 10 for suffix (all names in db) ("nth" indicates the relative order of this KeyPerson element)
		4.6.2	If this <i>and</i> Commons Account provided (and Commons account is recognized), provide warning if last name <i>and</i> first name on account don't match provided name. Comparison to ignore case and embedded spaces, but not embedded punctuation.	The name provided for Key Person <submitted first="" last="" name=""> on the Senior/Key Person page does not match the eRA Commons account name (<commons first="" last="" name="" profile="">). The application- image will display the name as submitted.</commons></submitted>	If the Commons account was not recognized, store data in eappl_personnel record without the person ID.
		4.6.3	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.	
		4.6.4	For DP1 and DP2 applications, provide error if any senior/key persons included (other than the PD/PI on the SF 424 RR Cover)	For this application, the only Senior/Key Person who should be included is the PD/PI who is listed on the SF 424 RR Cover page.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Senior/Key	Profile, senior	4.7.1	Truncate if greater than 40 characters. No warning		
Person (R&R)	& key person		message is needed to the submitter. (Minimum		
	x, position		Validations)		
	title		,		
Senior/Key	Profile, senior	4.8.1	Needs to be enforced as mandatory.	The organization name for Key	
Person (R&R)	& key person			Person < Key Person First Name	
	<i>x</i> ,			Last Name> must be provided on	
	organization			the Senior/Key Person page.	
	name				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
	x, department				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
	x, division				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
	x, street 1 and				
~ . ~~	2				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
~ . ~~	x, city				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
g : ///	x, county				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
C : /IV	x, state				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
C · /IV	x, province				I are town alone in aDA distant
Senior/Key	Profile, senior				Long-term, change in eRA db to 13 characters.
Person (R&R)	& key person				15 characters.
Conion/V	x, zip code				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
Canian/Van	x, country				
Senior/Key	Profile, senior				
Person (R&R)	& key person				
	x, phone				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Senior/Key Person (R&R)	Profile, senior & key person x, fax				
Senior/Key Person (R&R)	Profile, senior & key person x, e-mail				
Senior/Key Person (R&R)	Profile, senior & key person x, credential	4.21.1	If specified for a key person with a PD/PI role, must be a valid Commons account. (Minimum Validations)	The eRA Commons Username <credential>, specified on the Senior/Key Person page, for PD/PI <first last="" name="">, is not a recognized eRA Commons account.</first></credential>	
		4.21.2	Truncate if greater than 30 characters, before comparing to account stored in database. No warning message is needed to the submitter. (Minimum Validations)		
		4.21.3	If specified for a key person with a PD/PI role, the Commons account must have a PI role associated with it (may have other roles as well).	The Commons account associated with <credential> does not have a PI role. Please add a PI role to this account before submitting a changed/corrected application.</credential>	
		4.21.4	Must be specified if project role is 'PD/PI'. (Minimum Validations)	The eRA Commons Username has not been specified in the 'Credential' field on the Senior/Key Person page for PD/PI <first last="" name=""></first>	
Senior/Key Person (R&R)	Profile, senior & key person x, project role	4.22.1	For an R36 application (activity code on funding opportunity = 'R36'), there must be at least one key person included in addition to the PD/PI identified in the PD/PI component.	A mentor must be identified for an R36 application. List the mentor as a key person on the Senior Key Person page.	
		4.22.2	For a C06, UC6, or G20 application, there must be at least one key person identified with a project role of 'Other' or 'Other Professional'.	A Facilities Person must be identified for this application. Please provide the information for this person after the PD/PI on the Senior/Key Person page. Specify a project role of 'Other' or 'Other Professional', and an Other Project Role Category of 'Facilities Person'.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		4.22.3	For an S11 application, there must be at least one key person identified with a project role of 'Other' or 'Other Professional'.	A Collaborator must be identified for this application. Please provide the information for this person after the PD/PI on the Senior/Key Person page. Specify a project role of 'Other' or 'Other Professional', and an Other Project Role Category of 'Collaborator'.	
		4.22.41	For an SC2 application, there must be at least one key person identified with a project role of 'Other' or 'Other Professional' and a project role category of 'Mentor'.	A Mentor must be identified for this application. Please provide the information for this person after the PD/PI on the Senior/Key Person page. Specify a project role of 'Other' or 'Other Professional', and an Other Project Role Category of 'Mentor'.	
		4.22.5	Provide an error if project role is 'PD/PI' and credential is the same as the PD/PI credential.	PD/PI <first last="" name=""> has been identified in both the PD/PI portion and in the Senior/Key Person Profile portion of the Senior/Key Person page.</first>	
		4.22.6	For NIH applications only, provide a warning if the 'Co-PI' role has been indicated	The role of 'Co-PI' has been indicated for Senior/Key Person <first last="" name=""> on the Senior/Key Person page is not used by NIH. For multiple Principal Investigators, use the PD/PI role. Otherwise, select another role.</first>	
		4.22.61	For SC1, SC2, or SC3 applications, provide an error if the 'Co-PI' role has been indicated	The role of 'Co-PD/PI', indicated for Senior/Key Person <first last="" name=""> on the Senior/Key Person page, is not applicable to this mechanism.</first>	
		4.22.7	If project role is 'PD/PI', identify in database as Multiple PI.		Need to create role record for multiple PIs. Also need to set multi_pi_indicator_code in appls_t. 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.

Component	Field	Rule	Validation	Error Message	Notes & Tips
		4.22.8	For an SC1, SC2, or SC3 application, or for a K application, provide an error if the project role is 'PD/PI.' K12 applications are exempt from this validation.	For this mechanism, applications that include multiple PIs cannot be submitted.	
Senior/Key Person (R&R)	Profile, senior & key person x, other project role category	4.23.1	Accept "Other Project Role Category" only when "Project Role" is "Other" or "Other Professional"	For key person <first last="" name=""> on the Senior/Key Person page, an 'Other Project Role Category' was submitted for a project role of <project role="">. This can be used only when Project Role is "Other" or "Other Professional".</project></first>	
Senior/Key Person (R&R)	Senior & key person x, Biosketch	4.24.1	Limited to four pages	The Biosketch for Senior/Key Person <first last="" name=""> on the Senior/Key Person page is longer than four pages.</first>	
Senior/Key Person (R&R)	Senior & key person x, Current and Pending Support	4.25.1	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	4.26.1	For version 1.0 of Key Person component, accept only if eight 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.	
		4.26.2	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 40 senior/key person profiles have been submitted on the Senior/Key Person page.	
		4.26.3	Provide error if included for a DP1 or DP2 application.	The Additional Senior/Key Person Profiles attachment cannot be submitted for this application.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Senior/Key	Additional	4.27.1	Accept only if an Additional Senior/Key Person	An Additional Senior/Key Person	
Person (R&R)	Senior/Key		Profiles attachment has been submitted and	Biosketch attachment may be	
	Person		accepted.	submitted on the Senior/Key	
	Biosketch			Person page only if an Additional	
				Senior/Key Person Profiles	
				attachment has been submitted and	
				accepted.	
		4.27.2	Provide error if included for a DP1 or DP2	The Additional Senior/Key Person	
			application.	Biosketch attachment cannot be	
				submitted for this application.	
Senior/Key	Additional	4.28.1	Accept only if an Additional Senior/Key Person	An Additional Senior/Key Person	
Person (R&R)	Senior/Key		Profiles attachment has been submitted and	Current and Pending Support	
	Person		accepted.	attachment may be submitted on	
	Current and			the Senior/Key Person page only if	
	Pending			an Additional Senior/Key Person	
	Support			Profiles attachment has been	
				submitted and accepted.	
		4.28.2	Provide error if included for a DP1 or DP2	The Additional Senior/Key Person	
			application.	Current and Pending Support	
				attachment cannot be submitted for	
				this application.	

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

Component	Field	Rule	Validation	Error Message	Notes & Tips	
Budget, A&B, Year x (R&R)			Unless specifically stated, all project budget validations also apply to the subaward budget.		In mapping, assign a budget period ID based on the year of	
		5.0.1	Accept submission of modular budget or detailed budget, but not both (Minimum Validations)	Both a modular and a detailed budget have been included with this submission. One or the other may be submitted.	the budget.	
		5.0.2	Require a submission of either a modular budget or a detailed budget component. The following mechanisms are exempt from this validation: S10, X01, X02, C06, UC6, G20, DP1, DP2-(Minimum Validations)	You must include a budget component with this application.		
		5.0.3	A subaward budget should not be accepted if a modular budget has been included	A subaward budget may not be included if a modular budget has been submitted.		
	5.0.4 5.0.41 5.0.5 5.0.6	5.0.4	An application in response to an R03, R15, R21, R34 or U34 opportunity (but not R21/R33) must be submitted with a modular budget. Non-NIH applications and 'opt out' announcements are exempt from this validation. Applications where the applicant organization is foreign also are exempt from this validation.	R03, R15, R21, R34 and U34 applications submitted by domestic institutions (U.S.) must use the PHS 398 Modular Budget Form and not the SF 424 R&R Budget Form.		
		5.0.41	An application in response to an SC1, SC2, or SC3 opportunity must be submitted with a modular budget.	SC1, SC2, and SC3 applications must use the PHS 398 Modular Budget Form and not the SF 424 R&R Budget Form.		
		5.0.5		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		
		5.0.7	For an S11 application, there must be at least one budget included with budget type of subaward/consortium for each year of the project budget.	A subaward budget must be included with this submission for the Collaborator, for each year included on the project budget.		

Component	Field	Rule	Validation	Error Message	Notes & Tips
		5.0.8	For an S21/S22 application, provide a warning if a fourth budget period is included.	No more than three budget years should be included on the 424 RR Budget. The application will be processed, but a concern may be	
				raised during review.	
Budget, A&B, Year x (R&R)	Organization al DUNS	5.1.1	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>	
		5.1.2	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 number should not appear on a Subaward budget; i.e., a Subaward budget must have a different DUNS number entered.	
		5.1.3	This must be a budget that has been identified as 'Project'	A Subaward budget has been identified for the applicant organization. All budget requirements for the applicant organization must be included in the project budget.	
Budget, A&B, Year x (R&R)	Budget type (project, subaward/ consortium)	5.2.1	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.	
Budget, A&B, Year x (R&R)	Name of organization (for subaward/ consortium)	5.3.1	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	5.4.1	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 pages must be the same as the proposed project start date listed on the SF424 RR Cover page.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		5.4.2	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 dudget year> must be equal to or later than the proposed project start date listed on the SF 424 RR Cover page.	
Budget, A&B, Year x (R&R)	End Date	5.5.1	Must be greater than the budget start date and less than or equal to the Project Period End Date, both listed on the SF 424 RR Face Page.	The end date for budget year budget year> must be later than the budget start date and less than or equal to the proposed project end date listed on the SF 424 RR Cover page.	
Budget, A&B, Year x (R&R)	Senior/Key Person Name (prefix, first name, middle	5.6.1	Truncate if first or last name>30 chars, or if suffix>5 chars ((Minimum Validations)		Long-term, change in eRA db to 60 chars for last name, 35 for first name, 10 for suffix (all names in db)
	name, last name, suffix)	5.6.2	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>	
Budget, A&B, Year x (R&R)	Senior/Key Person Project Role	5.7.1	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 (with a role of PD/PI) 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.
Budget, A&B, Year x (R&R)	Senior/Key Person Base Salary	5.8.1	Cannot be greater than 99,999,999.99.	The Base Salary for <senior first="" key="" last="" name="" person=""> on the 424 RR Budget page (section A&B) for Budget Year < Budget Year> exceeds the allowable amount for the agency (\$99,999,999).</senior>	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Budget, A&B, Year x (R&R)	Senior/Key Person Cal. Mos 5.9.1		For non-R13 submissions (except for PD/PIs on STTR 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 <budy>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. For information about calculating person months, see http://grants1.nih.gov/grants/policy/person months fags.htm.</budy></first>	
		5.9.2	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 name 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. For information about calculating person months, see http://grants1.nih.gov/grants/policy/person_months_fags.htm	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
		5.9.3	For PD/PIs on STTR submissions, a non-zero value for calendar months, academic months, or summer months is required on either the project budget or the subaward budget. It is not required on both.	PD/PI <first last="" name="">, listed on the 424 RR Detailed Budget Page for budget year <bud> 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. For information about calculating person months, see http://grants1.nih.gov/grants/policy/person months fags.htm.</budget></bud></first>	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Budget, A&B,	Senior/Key	5.10.1	Provide warning if both academic and calendar	Both academic and calendar	_
Year x (R&R)	Person acad.		months have been provided for a person for a	months have been included for	
	mos		budget year.	<senior first="" key="" name<="" p="" person=""></senior>	
				Last Name>, for budget year	
				<budy> </budy>	
				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, A&B,	Senior/Key				
Year x (R&R)	Person				
	summer mos				
Budget, A&B,	Senior/Key				
$Year \ x \ (R\&R)$	Person				
	Requested				
D 1 . 40D	Salary	5 12 1	G 11 1 1 00 000 000 00	TIL D. C C	
Budget, A&B,	Senior/Key	5.13.1	Cannot be greater than 99,999,999.99.	The Fringe Benefit amount for	
$Year \ x \ (R\&R)$	Person Fringe			<pre><senior first="" key="" name<="" person="" pre=""></senior></pre>	
	benefits			Last Name> on the 424 RR Budget	
				page (section A&B) for Budget Year < Budget Year> exceeds the	
				allowable amount for the agency (\$99,999,999).	
Budget, A&B,	Senior/Key	5.14.1	Must be equal to the sum of Requested Salary and	The Funds Requested for	
Year x ($R&R$)	Person Funds	3.14.1	Fringe Benefits for the Senior/Key Person for the	Senior/Key Person First Name	
Tear x (Rack)	Requested		budget year.	Last Name on the 424 RR Budget	
	Requested		budget year.	page (section A&B) for Budget	
				Year <budget year=""> does not</budget>	
				equal the sum of the Requested	
				Salary and the Fringe Benefits for	
				the corresponding budget year.	
Budget, A&B,	Total funds	5.15.1	Required if Additional Senior Key Persons	If the Additional Senior Key	
Year x (R&R)	requested for	0.10.1	Attachment is included.	Persons Attachment is included,	
	Senior Key			the total funds that are requested in	
	Persons in			the attachment must be provided	
	attachment			on the 424 RR Budget Page.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Budget, A&B,	Total Funds				Never implemented
$Year \ x \ (R\&R)$	requested for				
	all senior/key				
	persons				
Budget, A&B,	Additional	5.17.1	Accept only if eight key personnel have been	An Additional Senior/Key Person	
$Year \ x \ (R\&R)$	Senior Key		submitted on the budget page for this year.	attachment may be submitted on	
	Persons			the 424 RR Budget page (section	
	attachment			A&B) for budget year <budget< td=""><td></td></budget<>	
				year> only if eight senior/key	
				persons have been submitted on	
				the budget page.	
Budget, A&B,	Other]			
$Year \ x \ (R\&R)$	Personnel,				
	(number of				
	personnel)				
Budget, A&B,	Other				
$Year \ x \ (R\&R)$	Personnel				
	(Project Role)				
Budget, A&B,	Other				
$Year \ x \ (R\&R)$	Personnel				
	(Cal. Mos)				
Budget, A&B,	Other				
$Year \ x \ (R\&R)$	Personnel				
	(acad.mos)				
Budget, A&B,	Other				
$Year \ x \ (R\&R)$	Personnel				
	(summer				
	mos)				
Budget, A&B,	Other				
$Year \ x \ (R\&R)$	Personnel				
	(Requested				
	salary)				
Budget, A&B,	Other				
$Year \ x \ (R\&R)$	Personnel				
	(Fringe				
	benefits)				
Budget, A&B,	Other				Never implemented
$Year \ x \ (R\&R)$	Personnel				
	(Funds				
	Requested)				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Budget, A&B,	Total number				Never implemented
Year x (R&R)	other				
	personnel				
Budget, A&B,	Total Funds				Never implemented
Year x (R&R)	Requested				
	other				
	personnel				
Budget, A&B,	Total salary,	5.28.1	Must equal the sum of Total Funds requested for	The Total Salary, Wages and	
Year x (R&R)	wages and		all senior/key persons and Total Funds Requested	Fringe Benefits for Budget Year	
	fringe		other personnel	<budget year=""> on the 424 RR</budget>	
	benefits			Budget page (section A&B) does	
				not 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	Rule	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				Never implemented
$Year \ x \ (R\&R)$	description,				
	total				
	equipment				
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				
	costs				
Budget, C, D, E,	Total travel				Never implemented
Year x (R&R)	cost				
Budget, C, D, E,	Participant/				
$Year \ x \ (R\&R)$	trainee				
	support costs:				
	tuition				
Budget, C, D, E,	Participant/				
$Year \ x \ (R\&R)$	trainee				
	support costs:				
	stipends				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Budget, C, D, E,	Participant/				
Year $x(R&R)$	trainee				
	support costs:				
	travel				
Budget, C, D, E,	Participant/				
Year x (R&R)	trainee				
	support costs:				
	subsistence				
Budget, C, D, E,	Participant/				
$Year \ x \ (R\&R)$	trainee				
	support costs:				
	other				
Budget, C, D, E,	Participant/				
$Year \ x \ (R\&R)$	trainee				
	support costs:				
	description of				
	other				
Budget, C, D, E,	Participant/				
$Year \ x \ (R\&R)$	trainee				
	support costs:				
	number of				
	Participants/				
	Trainees				
Budget, C, D, E,	Participant/				Never implemented
$Year \ x \ (R\&R)$	trainee				
	support costs:				
	Total				
	Participant/				
	Trainee				
	Support Costs				

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

Component	Field	Rule	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				
D 1 - EW	Renovations)				
Budget, F-K,	Other Direct				
$Year \ x \ (R\&R)$	Costs (other				
	description 1)				

Component	Field	Rule	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	7.14.1	Must be equal to the sum of other direct costs for	The Total Other Direct Costs for	
Year x (R&R)	Costs, Total		the budget year.	Budget Year <budget year=""> on</budget>	
,	Other Direct			the 424 RR Budget page (section	
	Costs			F-K) does not equal the sum of	
				other direct costs for all categories	
				for the corresponding budget year.	
Budget, F-K,	Total Direct	7.15.1	Required.	The Total Direct Costs Funds	
Year $x(R&R)$	Costs (A-F)			Requested for Year x is required on	
,				the 424 RR Budget page (section	
				F-K).	
		7.15.2	Must be equal to the sum of total salary, wages	The Total Direct Costs for A-F for	
			and fringe benefits, total funds requested for	Budget Year <budget year=""> on</budget>	
			equipment, total travel cost, total	the 424 RR Budget page (section	
			participant/trainee support costs, and total other	F-K) does not equal the sum of	
			direct costs	direct costs for Sections A-F.	
		7.15.3	For R01, R03, R15, R21, R34 and U34	R01, R03, R15, R21,R34 and U34	
			submissions that are for NIH, provide warning if	direct cost requests of \$250K or	
			subtotal direct costs for <i>every</i> budget year is <=	less each year on the 424 RR	
			\$250K. Applications where the applicant	Budget page (section F-K) must be	
			organization is foreign are exempt from this	in modules of \$25K, using the PHS	
			validation. Calculate subtotal direct costs as	398 Modular Budget Form and not	
			follows: Total Direct Costs (A-F) minus the sum of	the R&R Budget Form. Incorrect	
			Total Indirect Costs for all budgets for the	applications may be delayed in the	
			corresponding year with budget type	peer review process or rejected.	
			'subaward/consortium'.	1 3	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		7.15.4	For an S11 submission, provide a warning on a subaward budget if this is greater than \$75K.	The total cost per year for a subaward budget should not be greater than \$75K. The application will be processed, but a concern may be raised during review.	
		7.15.5	For a G11 submission, provide a warning if subtotal direct costs for budget year 1 is greater than \$60K. 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) for the first budget year should not be greater than \$60K. The application will be processed, but concerns may be raised during review.	
		7.15.6	For a G13 submission, subtotal direct costs on the project budget cannot be greater than 50k. 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) can not be greater than \$50K.	
		7.15.7	For non-SBIR/STTR submissions, non-S21 or S22 submissions, and for submissions that are not in response to an RFA, provide warning if subtotal direct costs for any budget year is >= 500K (LV for R01, R18, U18, R25). 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	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.	Design note: RFA announcements have rfa_pa_notices_t.notice_type_co de='R'
			'subaward/consortium'.	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.	
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Type	7.16.1	Allow submissions to come in with no indirect costs. (Minimum Validations)		

Component	Field	Rule	Validation	Error Message	Notes & Tips
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Rate	7.17.1	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>	
		7.17.2	If provided for a K application (including K12), provide a warning if not equal to 8.	Warning message: The Indirect Cost Rate (on the 424 RR Budget page section F-K) is not equal to 8 for budget Year < Budget Year>.	NEW!
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Base	7.18.1	Provide an error if included on a G08, S21, or S22 application.	No indirect cost base may be included for this application on the 424 RR Budget page section F-K, budget year budget year budget year>.	
Budget, F-K, Year x (R&R)	Indirect Costs, Funds Requested	7.19.1	Provide an error if included on a G08, S21, or S22 application.	No indirect cost funds may be requested for this application on the 424 RR Budget page section F-K, budget year < budget year>.	
Budget, F-K, Year x (R&R)	Indirect Costs, Cognizant Federal Agency				
Budget, F-K, Year x (R&R)	Total Indirect Costs	7.21.1	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	7.22.1	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).	
		7.22.2	Must be equal to the sum of Total Direct Costs and Total Indirect Costs	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.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Budget, F-K,	Fee	7.231	A fee cannot be entered for a subaward/consortium	A fee has been entered for year	
Year x (R&R)			budget.	$\langle x \rangle$ of the budget for	
				<pre><organization name=""> on the 424</organization></pre>	
				RR Budget page (section F-K).	
				Fees are not allowed for	
				subaward/consortium budgets.	
Budget, F-K,	Budget	7.24.1	If fee is requested for SBIR/STTR, must not be	A fee has been entered for year	
Year x (R&R)	Justification		blank or null	$\langle x \rangle$ 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.	
		7.24.2	If SBIR/STTR Phase I cost limitation is exceeded,	The Phase I cost limitation of 100k	
			must not be blank or null. Cost limitation is 100k,	has been exceeded. Please explain	
			calculated as total cost (direct cost, indirect cost,	the deviation in the Budget	
			and fee).	Justification on the 424 RR Budget	
				page (section F-K).	
		7.24.3	If SBIR/STTR Phase II cost limitation is exceeded,	The Phase II cost limitation of	
			must not be blank or null. Cost limitation is 750k,	750k has been exceeded. Please	
			calculated as total cost (direct cost, indirect cost,	explain the deviation in the Budget	
			and fee).	Justification on the 424 RR Budget	
				page (section F-K).	
		7.24.4	If Fast-Track cost limitation is exceeded, must not	The Fast-Track cost limitation of	
			be blank or null. Cost limitation is 850k, calculated	850k has been exceeded. Please	
			as total cost (direct cost, indirect cost, and fee).	explain the deviation in the Budget	
				Justification on the 424 RR Budget	
				page (section F-K).	
		7.24.5	If Phase I SBIR time limitation is exceeded, must	The Phase I SBIR time limitation	Since there is no cumulative
			not be blank or null. Time limitation is six months,	of six months has been exceeded.	budget justification, this
			calculated as the time between the start date of the	Please explain the deviation in the	validation will look at the
			first budget period and the end date of the last	Budget Justification on the 424 RR	Budget Justification for the first
			budget period.	Budget page (section F-K).	budget period. Instructions
					should include this.
		7.24.6	If Phase I STTR time limitation is exceeded, must	The Phase I STTR time limitation	Since there is no cumulative
			not be blank or null. Time limitation is one year,	of one year has been exceeded.	budget justification, this
			calculated as the time between the start date of the	Please explain the deviation in the	validation will look at the
			first budget period and the end date of the last	Budget Justification on the 424 RR	Budget Justification for the first
			budget period.	Budget page (section F-K).	budget period. Instructions
					should include this.

Component	Field	Rule	Validation	Error Message	Notes & Tips
		7.24.7	If Phase II SBIR/STTR time limitation is	The Phase II SBIR/STTR time	Since there is no cumulative
			exceeded, must not be blank or null. Time	limitation of two years has been	budget justification, this
			limitation is two years, calculated as the time	exceeded. Please explain the	validation will look at the
			between the start date of the first budget period	deviation in the Budget	Budget Justification for the first
			and the end date of the last budget period.	Justification on the 424 RR Budget	budget period. Instructions
				page (section F-K).	should include this.

Research & Related Budget: Cumulative Budget

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cumulative	Section A,				Never implemented
Budget (R&R)	Senior/Key				
	Person Total				
Cumulative	Section B,				Never implemented
Budget (R&R)	Other				
	Personnel				
	Total				
Cumulative	Total Number				Never implemented
Budget (R&R)	other				
	personnel				
Cumulative	Total Salary,				Never implemented
Budget (R&R)	Wages, and				
	Fringe				
	Benefits				
Cumulative	Section C,				Never implemented
Budget (R&R)	Equipment				
	Totals				
Cumulative	Section D,				Never implemented
Budget (R&R)	Travel, Total				
Cumulative	Section D,				Never implemented
Budget (R&R)	Travel,				
	Domestic				
Cumulative	Section D,				Never implemented
Budget (R&R)	Travel,				
	Foreign				
Cumulative	Section E,				Never implemented
Budget (R&R)	Participant/				
	Trainee, Total				
Cumulative	Section E,				Never implemented
Budget (R&R)	Participant/				
	Trainee,				
	Tuition, Fees,				
	Health				
	Insurance				
Cumulative	Section E,				Never implemented
Budget (R&R)	Participant/				
	Trainee,				
	Stipends				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cumulative	Section E,				Never implemented
Budget (R&R)	Participant/				
	Trainee,				
	Travel				
Cumulative	Section E,				Never implemented
Budget (R&R)	Participant/				
	Trainee,				
	Subsistence				
Cumulative	Section E,				Never implemented
Budget (R&R)	Participant/				
	Trainee,				
	Other				
Cumulative	Section E,				Never implemented
Budget (R&R)	Participant/				
	Trainee,				
	Number				
Cumulative	Section F,				Never implemented
Budget (R&R)	Other Direct				
	Costs, Total				
Cumulative	Section F,				Never implemented
Budget (R&R)	Other Direct				
	Costs,				
	Materials and				
	Supplies				
Cumulative	Section F,				Never implemented
Budget (R&R)	Other Direct				
	Costs,				
	Publication				
	Costs				
Cumulative	Section F,				Never implemented
Budget (R&R)	Other Direct				
	Costs,				
	Consultant				
	Services				
Cumulative	Section F,				Never implemented
Budget (R&R)	Other Direct				
	Costs, ADP/				
	Computer				
	Services				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cumulative	Section F,				Never implemented
Budget (R&R)	Other Direct				
	Costs, sub,				
	consortium,				
	contractual				
Cumulative	Section F,				Never implemented
Budget (R&R)	Other Direct				
	Costs, Equip				
	or facility				
	rental				
Cumulative	Section F,				Never implemented
Budget(R&R)	Other Direct				
	Costs,				
	Alterations				
	and				
Cli	Renovations				NIin-ul
Cumulative	Section F, Other Direct				Never implemented
Budget (R&R)	Costs, other				
Cumulative	Section G,	8.25.1	Required.	The 424 RR Cumulative Budget	
Budget (R&R)	Direct Costs	0.23.1	Required.	Direct Costs is required.	
Buaget (K&K)	(A-F), total	8.25.2	Must be equal to the sum of Total Direct Costs for	The 424 RR Cumulative Budget	
	(A-1'), total	6.23.2	every budget year for this budget.	Total Direct Costs does not equal	
			every budget year for this budget.	the sum of Total Direct Costs for	
				all budget years.	
		8.25.3	For a G08 submission with one budget period,	The 424 RR Cumulative Budget	
		0.23.3	must be less than or equal to \$150k.	Total Direct Costs cannot exceed	
			must be less than of equal to \$130k.	\$150k if one budget period has	
				been included.	
		8.25.4	For a G08 submission with two budget periods,	The 424 RR Cumulative Budget	
		0.20	must be less than or equal to \$300k.	Total Direct Costs cannot exceed	
				\$300k if two budget periods have	
				been included.	
		8.25.5	For a G08 submission with three budget periods,	The 424 RR Cumulative Budget	
			must be less than or equal to \$450k.	Total Direct Costs cannot exceed	
			*	\$450k if three budget periods have	
				been included.	
		8.25.6	Cannot be greater than 99,999,999.99.	The Direct Costs (A-F) on the	
				Cumulative 424 RR Budget page	
				(section G) exceeds the allowable	
				amount for the agency	
				(\$99,999,999).	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cumulative Budget (R&R)	Section H, Indirect Costs	8.26.1	Must be equal to the sum of Total Indirect Costs for every budget year for this budget.	The 424 RR Cumulative Budget Total Indirect Costs does not equal the sum of Total Indirect Costs for all budget years.	
		8.26.2	Cannot be greater than 99,999,999.99.	The Indirect Costs on the Cumulative 424 RR Budget page (section H) exceeds the allowable amount for the agency (\$99,999,999).	
Cumulative Budget (R&R)	Section I, Total Direct and Indirect	8.27.1	Required	The 424 RR Cumulative Budget Total Direct and Indirect Costs are required.	
	Costs	8.27.2	Must be equal to the sum of Total Direct and Indirect Costs for every budget year for this budget.	The 424 RR Cumulative Budget Total Direct and Indirect Costs do not equal the sum of Total Direct and Indirect Costs for all budget years.	
Cumulative Budget (R&R)	Section J, Fee				Never implemented
Cumulative Budget (R&R)	Budget Justification (attachment)				

Construction Budget

Component	Field	Rule	Validation	Error Message	Notes & Tips
Construction Budget (R&R)	Administratio n and Legal Expenses, Total Cost				These will have one budget period only. It should be mapped with the same start and end date as the project period.
Construction Budget (R&R)	Administratio n and Legal Expenses, Costs Not Allowable for Participation				
Construction Budget (R&R)	Administratio n and Legal Expenses, Total Allowable Costs	9.3.1	Provide error if not equal to column A (Total Cost) minus column B (Costs Not Allowable for Participation).	The Total Allowable Costs for Administration and Legal Expenses (the Construction Budget) must be equal to the difference of columns A (Total Cost) and B (Costs Not Allowable for Participation)	
Construction Budget (R&R)	Land, Structures, Rights-of-way, etc., Total Cost				
Construction Budget (R&R)	Land, Structures, Rights-of-way, etc., Costs Not Allowable for Participation				
Construction Budget (R&R)	Land, Structures, Rights-of-way, etc., Total Allowable Costs	9.6.1	Provide error if not equal to column A (Total Cost) minus column B (Costs Not Allowable for Participation).	The Total Allowable Costs for Land, Structures, Rights-of-way, Appraisals, etc., (Construction Budget) must be equal to the difference of columns A (Total Cost) and B (Costs Not Allowable for Participation)	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Construction	Relocation				
Budget (R&R)	Expenses and				
	Payments,				
	Total Cost				
Construction	Relocation				
Budget (R&R)	Expenses and				
	Payments,				
	Costs Not				
	Allowable for				
	Participation				
Construction	Relocation	9.9.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	Expenses and		minus column B (Costs Not Allowable for	Relocation Expenses and Payments	
	Payments,		Participation).	(Construction Budget) must be	
	Total		- /	equal to the difference of columns	
	Allowable			A (Total Cost) and B (Costs Not	
	Costs			Allowable for Participation)	
Construction	Architectural			•	
Budget (R&R)	and				
	Engineering				
	Fees, Total				
	Cost				
Construction	Architectural				
Budget (R&R)	and				
	Engineering				
	Fees, Costs				
	Not Allowable				
	for				
	Participation				
Construction	Architectural	9.12.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	and		minus column B (Costs Not Allowable for	Architectural and Engineering Fees	
	Engineering		Participation).	(Construction Budget) must be	
	Fees, Total			equal to the difference of columns	
	Allowable			A (Total Cost) and B (Costs Not	
	Costs	<u> </u>		Allowable for Participation)	
Construction	Other				
Budget (R&R)	Architectural				
	and				
	Engineering				
	Fees, Total				
1	Cost				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Construction	Other				-
Budget (R&R)	Architectural				
	and				
	Engineering				
	Fees, Costs				
	Not Allowable				
	for				
	Participation				
Construction	Other	9.15.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	Architectural	7.13.1	minus column B (Costs Not Allowable for	Other Architectural and	
Buagei (Ran)	and		Participation).	Engineering Fees (Construction	
	Engineering		i articipation).	Budget) must be equal to the	
	Fees, Total			difference of columns A (Total	
	Allowable			Cost) and B (Costs Not Allowable	
<u> </u>	Costs			for Participation)	
Construction	Project				
Budget (R&R)	Inspection				
	Fees, Total				
	Cost				
Construction	Project				
Budget (R&R)	Inspection				
	Fees, Costs				
	Not Allowable				
	for				
	Participation				
Construction	Project	9.18.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	Inspection		minus column B (Costs Not Allowable for	Project Inspection Fees	
	Fees, Total		Participation).	(Construction Budget) must be	
	Allowable		1 /	equal to the difference of columns	
	Costs			A (Total Cost) and B (Costs Not	
				Allowable for Participation)	
Construction	Site Work,			- · · · · · · · · · · · · · · · · · · ·	
Budget (R&R)	Total Cost				
Construction	Site Work,				
Budget (R&R)	Costs Not				
244501 (116611)	Allowable for				
	Participation				
Construction	Site Work,	9.21.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for Site	
Budget (R&R)	Total	7.21.1	minus column B (Costs Not Allowable for	Work (Construction Budget) must	
Buuger (Rock)	Allowable		Participation).	be equal to the difference of	
	Costs		i articipation).	columns A (Total Cost) and B	
	Cusis			(Costs Not Allowable for	
	1			Participation)	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Construction	Demolition				
Budget (R&R)	and Removal,				
	Total Cost				
Construction	Demolition				
Budget (R&R)	and Removal,				
	Costs Not				
	Allowable for				
	Participation				
Construction	Demolition	9.24.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	and Removal,		minus column B (Costs Not Allowable for	Demolition and Removal	
	Total		Participation).	(Construction Budget) must be	
	Allowable			equal to the difference of columns	
	Costs			A (Total Cost) and B (Costs Not	
				Allowable for Participation)	
Construction	Construction,				
Budget (R&R)	Total Cost				
Construction	Construction,				
Budget (R&R)	Costs Not				
	Allowable for				
	Participation				
Construction	Construction,	9.27.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	Total		minus column B (Costs Not Allowable for	Construction (Construction	
	Allowable		Participation).	Budget) must be equal to the	
	Costs			difference of columns A (Total	
				Cost) and B (Costs Not Allowable	
				for Participation)	
Construction	Equipment,				
Budget (R&R)	Total Cost				
Construction	Equipment,				
Budget (R&R)	Costs Not				
	Allowable for				
<u> </u>	Participation	0.20.1	D 11 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TI TI I I I I I I I I I I I I I I I I I	
Construction	Equipment,	9.30.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	Total		minus column B (Costs Not Allowable for	Equipment (Construction Budget)	
	Allowable		Participation).	must be equal to the difference of	
	Costs			columns A (Total Cost) and B	
				(Costs Not Allowable for	
Canatanatian	Missellanes			Participation)	
Construction	Miscellaneous,				
Budget (R&R)	Total Cost				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Construction Budget (R&R)	Miscellaneous, Costs Not Allowable for Participation				
Construction Budget (R&R)	Miscellaneous, Total Allowable Costs	9.33.1	Provide error if not equal to column A (Total Cost) minus column B (Costs Not Allowable for Participation).	The Total Allowable Costs for Miscellaneous (Construction Budget) must be equal to the difference of columns A (Total Cost) and B (Costs Not Allowable for Participation)	
Construction Budget (R&R)	Subtotal 1, Total Cost	9.34.1	Provide error if not equal to the sum of lines 1-11, Total Cost	The Total Cost Subtotal on the Construction Budget must be equal to the sum of total costs for all Administration and Legal Expenses entries	
Construction Budget (R&R)	Subtotal 1, Costs Not Allowable for Participation	9.35.1	Provide error if not equal to the sum of lines 1-11, Costs Not Allowable for Participation	The Costs Not Allowable for Participation Subtotal on the Construction Budget must be equal to the sum of all Administration and Legal Expenses entries	
Construction Budget (R&R)	Subtotal 1, Total Allowable Costs	9.36.1	Provide error if not equal to column A (Total Cost) minus column B (Costs Not Allowable for Participation).	The Total Allowable Costs Subtotal on the Construction Budget must be equal to the difference of columns A (Total Cost) and B (Costs Not Allowable for Participation)	
		9.36.2	Provide error if not equal to the sum of lines 1-11, Total Allowable costs	The Total Allowable Costs Subtotal on the Construction Budget must be equal to the sum of all Administration and Legal Expenses entries	
Construction Budget (R&R)	Contingencies , Total Cost				
Construction Budget (R&R)	Contingencies , Costs Not Allowable for Participation				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Construction	Contingencies	9.39.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs for	
Budget (R&R)	, Total		minus column B (Costs Not Allowable for	Contingencies on the Construction	
	Allowable		Participation).	Budget must be equal to the	
	Costs			difference of columns A (Total	
				Cost) and B (Costs Not Allowable	
				for Participation)	
Construction	Subtotal 2,	9.40.1	Provide error if not equal to the sum of lines 12	The Total Cost Subtotal on the	
Budget (R&R)	Total Cost		and 13, Total Cost	Construction Budget must be equal	
				to the sum of Contingencies and	
				the subtotal of all Administration	
				and Legal Expenses entries	
Construction	Subtotal 2,	9.41.1	Provide error if not equal to the sum of lines 12	The Costs Not Allowable for	
Budget (R&R)	Costs Not		and 13, Costs Not Allowable for Participation	Participation Subtotal on the	
	Allowable for			Construction Budget must be equal	
	Participation			to the sum of Contingencies and	
				the subtotal of all Administration	
				and Legal Expenses entries	
Construction	Subtotal 2,	9.42.1	Provide error if not equal to column A (Total Cost)	The Total Allowable Costs	
Budget (R&R)	Total Allowable		minus column B (Costs Not Allowable for	Subtotal on the Construction	
			Participation).	Budget must be equal to the	
	Costs			difference of columns A (Total	
				Cost) and B (Costs Not Allowable	
				for Participation)	
		9.42.1	Provide error if not equal to the sum of lines 12	The Total Allowable Costs	
			and 13, Total Allowable Costs	Subtotal on the Construction	
				Budget must be equal to the sum 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				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Construction Budget (R&R)	Project (Program) Income, Total Allowable Costs	9.45.1	Provide error if not equal to column A (Total Cost) minus column B (Costs Not Allowable for Participation).	The Project (Program) Income, Total Allowable Costs on the Construction Budget must be equal to the difference of columns A (Total Cost) and B (Costs Not	·
Construction Budget (R&R)	Total Project Costs, Total Cost	9.46.1	Provide error if not equal to line 14 minus line 15, Total Cost	Allowable for Participation) The Total Project Costs, Total Cost on the Construction Budget must be equal to the subtotal minus the Project Income.	
Construction Budget (R&R)	Total Project Costs, Costs Not Allowable for Participation	9.47.1	Provide error if not equal to line 14 minus line 15, Costs Not Allowable for Participation	The Total Project Costs, Costs Not Allowable for Participation on the Construction Budget must be equal to the subtotal minus the Project Income.	
Construction Budget (R&R)	Total Project Costs, Total Allowable Costs	9.48.1	Provide error if not equal to column A (Total Cost) minus column B (Costs Not Allowable for Participation).	The Total Project Costs, Total Allowable Costs on the Construction Budget must be equal to the difference of columns A (Total Cost) and B (Costs Not Allowable for Participation)	Map to appls_t.total_period_amt and appl_periods_t.direct_cost_amt
		9.48.2	Provide error if not equal to line 14 minus line 15, Total Allowable Costs	The Total Project Costs, Total Allowable Costs on the Construction Budget must be equal to the subtotal minus the Project Income.	
Construction Budget (R&R)	Federal Funding				
Construction Budget (R&R)	Federal Assistance Requested				

SBIR/STTR Information

Component	Field	Rule	Validation	Error Message	Notes & Tips
SBIR/STTR (NIH)	Program Type (SBIR, STTR, Both)	10.1.1	One and only one choice may be made.	Please select one Program Type: SBIR or STTR on the SBIR/STTR Information page.	
		10.1.2	Choice must be consistent with the information stored for the announcement: if the announcement is indicated as 'SBIR', 'SBIR' must be selected; if announcement is indicated as 'STTR', 'STTR' must be selected.	You have selected a Program Type of <program type=""> on the SBIR/STTR component on the SBIR/STTR Information page. That is not the correct program type for this announcement. Please refer to the FOA for the correct program type for this application.</program>	
		10.1.3	'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 (NIH)	SBIR/STTR Type (Phase I, Phase II, Fast-Track)	10.2.1	One and only one choice may be made.	Please select one SBIR/STTR Type: Phase I, Phase II, or Fast- Track (424 RR SBIR/STTR Information Component).	
SBIR/STTR (NIH)	Question 1. Small Business Eligibility (Y/N)	10.3.1	Required.		Store response in database.
SBIR/STTR (NIH)	Question 2. Are Subcontracts Included? (Y/N)	10.4.1	Required.		Store response in database.
SBIR/STTR (NIH)	Name of Labs/ Agencies For Subcontracts	10.5.1	Required entry if response to 'Are Subcontracts Included?' is 'Yes'.	If Question 2 on the SBIR/STTR Information Component indicates that subcontracts are included, the name(s) of labs or agencies for subcontracts must be included.	Store response in database.

Component	Field	Rule	Validation	Error Message	Notes & Tips
		10.5.2	Cannot be included if response to 'Are Subcontracts Included?' is 'No'.	If Question 2 on the SBIR/STTR Information Component indicates that subcontracts are not included, the name(s) of labs or agencies for subcontracts cannot be included.	
SBIR/STTR (NIH)	Question 3. Located in HUBZone (Y/N)	10.6.1	Required.		Store response in database.
SBIR/STTR (NIH)	Question 4. Research to be Performed in US? (Y/N)	10.7.1	Required.		Store response in database.
SBIR/STTR (NIH)	Explanation of Foreign Performance	10.8.1	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.	
		10.8.2	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)	10.9.1	Required.		Store response in database.
SBIR/STTR (NIH)	Names of other Federal agencies for	10.10.1	Required entry if answer to 'submittal of equivalent work to other agencies' question is 'yes'.		Store response in database.
	equivalent work	10.10.2	Cannot be included if answer to 'submittal of equivalent work to other agencies' question is 'no'.		
SBIR/STTR (NIH)	Question 6. Disclosure Permission Statement (Y/N)	10.11.1	Required		Map response to appls_t, disclosure_permission_code
SBIR/STTR (NIH)	Commercializ ation Plan Attachment	10.12.1	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	

Component	Field	Rule	Validation	Error Message	Notes & Tips
-		10.12.2	Cannot be submitted for anything other than Phase	A Commercialization Plan can	
			II or Fast Track submissions	only be submitted for Phase II and	
				Fast Track submissions on the	
				SBIR/STTR Information	
				Component.	
		10.12.3	Limited to 15 pages.	The Commercialization Plan on the	
				SBIR/STTR Information	
				Component is limited to 15 pages.	
				Warning message for 'opt out'	
				announcements: Be sure that you	
				have complied with the allowable	
				page limitations for the	
				Commercialization Plan for this	
				FOA. Otherwise, your application	
				may be delayed and rejected in the	
SBIR/STTR	Question 8.	10.13.1	Required for SBIR	review process.	Store response in database.
(NIH)	Receipt of	10.13.1	Required for SBIK		Store response in database.
11111)	Phase II SBIR				
	Awards (Y/N)				
SBIR/STTR	Company				
(NIH)	Commercializ				
,	ation History				
	Attachment				
SBIR/STTR	Question 9.	10.15.1	Required for SBIR		Store response in database.
(NIH)	SBIR PD/PI				
	Primary				
	Employment				
	(Y/N)				
SBIR/STTR	Question 10.	10.16.1	Required for STTR		Store response in database.
(NIH)	STTR PD/PI				
	Commitment				
	(Y/N)	40.45 :	D : 10 grapp		
SBIR/STTR	Question 11.	10.17.1	Required for STTR		Store response in database.
(NIH)	STTR work				
	percentages				
	(Y/N)				

PHS 398 Cover Page Supplement

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cover Page	PD/PI	11.1.1	Read only, pulled from		
(NIH)	Information		R&R		
	(prefix, first,				
	middle, last,				
	suffix)				
Cover Page	PD/PI New	11.2.1	On an R01 submission, if	For an R01 submission to be considered a New	
(NIH)	Investigator		'Yes', PD/PI (and multiple	Investigator application, the PD/PI must not have	
	Question		PIs) should not have a PI or	received agency R01 funding in the past. All PIs	
			multiple PI role on any	(including multiple PIs) must meet the definition of New	
			awarded R01.	Investigator for this box to be checked.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Component Cover Page (NIH)	Field PD/PI Degrees	Rule 11.3.1	Validation Match against 4 character degree codes in PI's Commons account (ignore case, spaces, or punctuation). If the Commons account has degrees, but the submitted degree does not appear on the list of Commons degrees, 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 PD/PI degree: <degree>, listed on the PHS 398 Cover Page, is not one of the degrees listed for the eRA Commons account: <list by="" commas="" degrees="" in="" of="" profile,="" separated="" the="">. The application 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 are available at https://commons.era.nih.gov/commons-help/216.htm.</list></degree>	Notes & Tips
		11.3.2	the role. (Minimum Validations) If there are no degrees listed in the Commons account, give a warning and copy the degrees from the application to the profile.	The eRA Commons profile did not have any degrees associated with the PD/PI. The system has automatically updated the profile to include the degrees included on the grant application. We advise reviewing the profile data to ensure accuracy of the information.	
		11.3.3	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 application image, you should include them on the PHS 398 Cover Page Supplement.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cover Page (NIH)	Human Subjects Clinical Trial (Y/N)	11.4.1	If the application includes the 398 Cover Page Supplement component, an answer is required if the answer to 'Human Subjects Involved' is "Yes". If Human Subjects NIH-Defined Phase III Clinical Trial is true, must be true.	The Human Subjects Clinical Trial question 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". 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	
		11.4.3	For S10 application, provide a warning if this is true.	is "Yes". 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	11.5.1	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".	
	Clinical Trial (Y/N)	11.5.2	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)	11.8.1	If either line>50 characters, truncate (Minimum Validations)		
Cover Page (NIH)	Applicant Organization Contact City				
Cover Page (NIH)	Applicant Organization Contact County				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cover Page	Applicant	11.11.1	Required if country is US	The Applicant Organization State on the PHS 398 Cover	
(NIH)	Organization		(Minimum Validations)	Page Supplement must be supplied for US addresses.	
Contac	Contact State	11.11.2	If country is not US must be	The Applicant Organization State on the PHS 398 Cover	
			blank. (Minimum	Page Supplement should be blank for all countries other	
			Validations)	than the United States	
		11.11.3	Transform state name to 2-	The Applicant Organization State on the PHS 398 Cover	
			char abbreviation before	Page Supplement is not a valid state name.	
			validating and storing. If state name can't be		
			transformed, give error.		
			(Minimum Validations)		
Cover Page	Applicant	11.12.1	Required if country is	The Applicant Organization Province must be supplied	Province should be mapped into
(NIH)	Organization		Canada. (Minimum	on the PHS 398 Cover Page Supplement for Canadian	same database location as state.
	Contact		Validations)	addresses.	
	Province	11.12.2	If country is not Canada	The Applicant Organization Province on the PHS 398	
			must be blank. (Minimum	Cover Page Supplement should be blank for all countries	
			Validations)	other than Canada.	
		11.12.3	Transform province name to	The Applicant Organization Province on the PHS 398	
			2-char abbreviation before validating and storing. If	Cover Page Supplement is not a valid province name.	
			province name can't be		
			transformed, give error.		
			(Minimum Validations)		
Cover Page	Applicant	11.13.1	Required if country is US.	The Applicant Organization Zip Code on the PHS 398	Long-term, change in eRA db to
(NIH)	Organization		(Minimum Validations)	Cover Page Supplement must be entered for US	13 characters.
	Contact Zip		(William Variations)	addresses.	
	Code				
		11.13.2	Must be 5 or 9 numeric	The Applicant Organization Zip Code on the PHS 398	
			digits if country is US.	Cover Page Supplement must be entered in 5-digit or 9-	
		11.12.2	(Minimum Validations)	digit format.	
		11.13.3	For country other than US,		
			if >9 characters, truncate (remove any dashes before		
			truncating). (Minimum		
			Validations)		
Cover Page	Applicant	11.14.1	Must be a valid ISO 3166-1	The Applicant Organization country code provided	
(NIH)	Organization		alpha-3 country code.	(<country>) on the PHS 398 Cover Page Supplement is</country>	
	Contact			not a valid ISO 3166-1 alpha-3 country code.	
	Country				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Cover Page (NIH)	HESC Involved (Y/N)	11.15.1	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.
		11.15.2	A response is required for this element.	A response of 'Yes' or 'No' is required for the HESC Involved (Y/N) element on the PHS 398 Cover Page.	Although the element is required by the PureEdge form, the schema does not currently require it for system to system submissions.
Cover Page (NIH)	HESC Cell Lines	11.16.1	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.	
		11.16.2	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.	
		11.16.3	If specific stem cell line is included, must be a valid stem cell line in eRA database. Comparison should not be case-sensitive. (Minimum Validations)	Stem cell line <cell line="" number=""> on the PHS 398 Cover Page Supplement is not a valid stem cell line number.</cell>	
		11.16.4	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	11.17.1	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.	
		11.17.2	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.	
Modular Budget, Years 1-5 (NIH)		12.0.1	Accept submission of modular budget or detailed budget, but not both	Both a modular and a detailed budget have been included with this submission. One or the other may be submitted.	
		12.0.2	Do not accept a modular budget for R13 applications (activity code on funding opportunity = 'R13' or 'U13')	Modular budgets may not be submitted for Conference Grant applications.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		12.0.3	Do not accept a modular budget for an application where the applicant organization is foreign.	Applications with modular budgets may not be submitted by a foreign applicant organization. Please submit using the 424 RR Budget component.	
		12.0.4	For a revision, if the parent grant budget is non-modular, only a detailed budget component may be submitted.	The parent grant for this revision uses the non-modular format; therefore, this application may include a detailed R&R budget component only.	
		12.0.5	For an R15 application (activity code on funding opportunity = 'R15'), return warning if more than one budget period has been included.	An AREA grant should be submitted for one budget period only (see the PHS 398 Modular Budget).	
		12.0.6	Do not accept a modular budget for SBIR/STTR applications	Modular budgets may not be submitted for SBIR/STTR submissions.	
		12.0.7	For an SC2 application, provide an error if more than three budget periods have been included	An SC2 application may be submitted for a maximum of three budget periods.	
		12.0.8	For an SC3 application, provide an error if more than four budget periods have been included	An SC3 application may be submitted for a maximum of four budget periods.	
Modular Budget, Years 1-5 (NIH)	Start Date	12.1.1	For budget period 1, if entered, for new applications and resubmissions to new applications, must be the same as the Project Start Date listed on the SF 424 RR Face Page (Minimum	For new applications and resubmissions, the modular budget year 1 start date must be the same as the proposed project start date listed on the SF 424 RR Cover Page.	
		12.1.2	Validations) For budget years after budget year 1, if entered, 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 Cover page.</budget>	

Component	Field	Rule	Validation	Error Message	Notes & Tips
Modular	End Date	12.2.1	Budget period end date must	The modular budget year <budget year=""> end date must be</budget>	-
Budget, Years			be greater than budget	later than the modular budget year <budget year=""> start</budget>	
1-5 (NIH)			period start date and less	date and less than or equal to the proposed project end	
			than or equal to project	date listed on the SF 424 RR Cover page.	
			period end date.		
Modular	Direct Costs,	12.3.1	Must be <= 250K, must be a	The total direct costs for modular budget year <budget< td=""><td></td></budget<>	
Budget, Years	Direct Cost		multiple of 25K for each	year> are greater than \$250K, or are not in increments of	
1-5 (NIH)	Less		budget year	\$25K.	
	Consortium,	12.3.2	For R15 submissions,	Direct cost requests are limited to \$150k a year for	
	F&A		provide warning if this	AREA grants (PHS 398 Modular Budget, Direct Costs,	
			value for any budget year is	Direct Cost Less Consortium, F&A). Applications that	
			>= 150K.	exceed this limit may be delayed in the peer review	
				process or rejected.	
		12.3.3	For R03 submissions,	Direct cost requests are limited to \$50k a year for this	
			provide warning if this	application (PHS 398 Modular Budget, Direct Costs,	
			value for any budget year is	Direct Cost Less Consortium, F&A9). Applications that	
			>50K (<mark>LV</mark>).	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.	
		12.3.4	For R21 submissions,	Direct cost requests are limited to \$200k a year for this	
			provide warning if this	application (PHS 398 Modular Budget, Direct Costs,	
			value for any budget year is	Direct Cost Less Consortium, F&A). Applications that	
			>200K (<mark>LV</mark>).	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	
		10.0.5	D D24 1 : :	in the review process.	
		12.3.5	For R34 submissions,	Direct cost requests are limited to \$225k a year for this	
			provide warning if this	application (PHS 398 Modular Budget, Direct Costs,	
			value for any budget year is	Direct Cost Less Consortium, F&A). Applications that	
			>225K (LV).	exceed this limit may be delayed in the peer review	
			-	process or rejected.	
				Warning message for 'opt out' announcements: Be sure	
				that you have complied with the allowable direct cost	
				limitations for this FOA. Otherwise, your application	
				may be delayed and rejected in the review process.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		12.3.6	For SC2 or SC3 submissions, provide error if this value for <i>any</i> budget year is >100k	Direct cost requests are limited to \$100k a year for this application (PHS 398 Modular Budget, Direct Costs, Direct Cost Less Consortium, F&A).	
Modular Budget, Years 1-5 (NIH)	Direct Costs, Consortium, F&A	12.4.1	Must be less than 10,000,000,000	For NIH processing, the Consortium F&A amount on the PHS 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)	Direct Costs, Total Direct Costs	12.5.1	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	
		12.5.2	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	12.7.1	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	12.8.1	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	12.9.1	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.

Component	Field	Rule	Validation	Error Message	Notes & Tips
Modular	Indirect				
Budget, Years	Costs,				
1-5 (NIH)	Cognizant				
	Agency				
Modular	Indirect				
Budget, Years	Costs,				
1-5 (NIH)	Indirect Cost				
	Rate				
	Agreement				
	Date				
Modular	Indirect	12.12.1	Must equal sum of Indirect	The Total Indirect Costs do not equal the sum of Funds	
Budget, Years	Costs,		Costs, Funds Requested 1-4	Requested for budget year <budget year=""> (PHS 398</budget>	
1-5 (NIH)	Total Indirect		for the corresponding	Modular Budget).	
	Costs		budget year, if any Indirect		
			Costs were entered.		
		12.12.2	Must be less than	The Total Indirect Costs amount must be less than	Grants.gov accepts up to 15
			10,000,000,000	10,000,000,000 (PHS 398 Modular Budget).	bytes (including 2 decimal
					places); NIH accepts no more
					than 10. Long-term db change is
					recommended.
Modular	Total Direct	12.13.1	Must be greater than 0 for	For Modular Budget Year 1, Total Direct and Indirect	
Budget, Years	and Indirect		first budget period.	Costs must be greater than zero (PHS 398 Modular	
1-5 (NIH)	Costs, Funds			Budget)	
	Requested	12.13.2	Must be equal to the sum of	For Modular Budget Year < budget year > (PHS 398	
			Total Direct Costs and Total	Modular Budget), the Total Direct and Indirect Costs	
			Indirect Costs for the	must be equal to Total Direct Costs plus Total Indirect	
			corresponding budget	Costs requested for that budget year.	
			period.		
		12.13.3	Must be less than	The Total Direct and Indirect Costs on the PHS 398	Grants.gov accepts up to 15
			10,000,000,000	Modular Budget amount must be less than	bytes (including 2 decimal
				10,000,000,000.	places); NIH accepts no more
					than 10. Long-term db change is
					recommended.

PHS 398 Modular Budget: Period 5 and Cumulative

Component	Field	Rule	Validation	Error Message	Notes & Tips
Modular	Total Direct	13.1.1	Must be equal to the sum of	The Total Direct Cost less Consortium F&A for Entire	
Budget,	Cost less		all Total Direct Cost less	Project Period in the PHS 398 Modular Budget must be	
Cumulative	Consortium		Consortium F&A values for	equal to the sum of Total Direct Cost Less Consortium	
(NIH)	F&A for		all budget years	F&A values for all budget years.	
	Entire Project	13.1.2	For R03 submissions,	Cumulative direct cost requests on the PHS 398 Modular	
	Period		provide warning if this	Budget are limited to a total of \$100k for this application.	
			value is $>100 \text{K} (\text{LV})$.	Applications that exceed this limit may be delayed in the	
				peer review process or rejected.	
				Warning message for 'opt out' announcements: Be sure	
				that you have complied with the allowable cumulative	
				direct cost limitations for this FOA. Otherwise, your	
				application may be delayed and rejected in the review	
				process.	
		13.1.3	For R21 submissions,	Cumulative direct cost requests on the PHS 398 Modular	
			provide warning if this	Budget are limited to a total of \$275k for this application.	
			value is >275K (LV).	Applications that exceed this limit may be delayed in the	
				peer review process or rejected.	
				Warning message for 'opt out' announcements: Be sure	
				that you have complied with the allowable cumulative	
				direct cost limitations for this FOA. Otherwise, your	
				application may be delayed and rejected in the review	
		12.1.4	E D24 11124	process.	
		13.1.4	For R34 and U34	Cumulative direct cost requests on the PHS 398 Modular	
			submissions, provide	Budget are limited to a total of \$450k for this application.	
			warning if this value is	Applications that exceed this limit may be delayed in the	
			>450K (<mark>LV</mark>).	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.	
		13.1.5	Cannot be greater than	The Total Direct Cost less Consortium F&A for Entire	
		13.1.3	99,999,999.99.	Project Period in the PHS 398 Modular Budget exceeds	
			77,773,777.77.	the allowable amount for the agency (\$99,999,999).	
Modular	Total	13.2.1	Must be equal to the sum of	The Total Consortium F&A for Entire Project Period	
Budget,	Consortium	13.2.1	all Consortium F&A values	must be equal to the sum of Consortium F&A values for	
Cumulative	F&A for		for all budget years	all budget years (PHS 398 Modular Budget).	
Cummunve	I WA IUI	l	101 all budget years	an oudget years (1115 576 Modular Dudget).	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		13.2.2	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	Total Costs, Total Direct Costs for	13.3.1	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).	
(NIH)	Entire Project Period	13.3.2	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	Total Costs, Total Indirect Costs for	13.4.1	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).	
(NIH)	Entire Project Period	13.4.2	Cannot be greater than 99,999,999.99.	The Total Indirect Costs Requested for Entire Project Period in the PHS 398 Modular Budget exceeds the allowable amount for the agency (\$99,999,999).	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	13.5.1	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	13.5.2	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	13.6.1	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.	
Modular Budget, Cumulative (NIH)	Budget Justifications, Consortium Justification				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Modular	Budget				
Budget,	Justifications,				
Cumulative	Additional				
(NIH)	Narrative				
	Justification				

Checklist

Component	Field	Rule	Validation	Error Message	Notes & Tips
Checklist (NIH)	Type of Application	14.1.1	Read only, pulled from R&R		
		14.1.2	Allow a submission with no Checklist component.		
Checklist (NIH)	Federal Identifier		Read only, pulled from R&R		
Checklist (NIH)	Change of Investigator/ Change of	14.3.1	Not accepted for revisions.	A revision may not be submitted if a Change of PI has been indicated on the PHS 398 Checklist. Revisions must have the same PI as the parent grant.	
	Inst.; Change of PI	14.3.2	Not accepted for K applications (except K12)	Error: A Change of PI cannot be indicated on the PHS 398 Checklist for a Career Development Award application.	NEW!
Checklist (NIH)	Change of Investigator/ Change of Inst.: Name of former PI (Prefix, First Name, Middle Name, Last Name, Suffix)	14.4.1	Must be included if application is for change of PI	The name of the former PI must be included if there has been a Change of PI indicated on the PHS 398 Checklist.	
Checklist (NIH)	Change of Investigator/ Change of Inst.: change of grantee inst.				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Checklist (NIH)	Change of Investigator/ Change of Inst.: name of former inst.	14.6.1	If >40 characters, truncate. (Minimum Validations)		Grants.gov length is 120, our db length is 40. Consider long-term db change.
Checklist (NIH)	Inventions and Patents, Yes				
Checklist (NIH)	Inventions and Patents,				
Checklist (NIH)	Inventions and Patents, Previously Reported (Yes or No)	14.9.1	Must be answered if response to Inventions and Patents is 'Yes' Should not be answered if response to Inventions and Patents is 'No'	Inventions and Patents, Previously Reported on the PHS 398 Checklist must be answered if the answer to Inventions and Patents is 'Yes.' 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)		7440333 35 730		
Checklist (NIH)	Program Income, Budget Period 1-5	14.11.1	Should only be completed if answer to Program Income Anticipated question was 'Y'.	If answer to Program Income Anticipated on the PHS 398 Checklist question is 'N', no program income detail may be entered.	
		14.11.2	Provide error if provided for S10 application.	No program income may be included on the PHS 398 Checklist for S10 applications.	
		14.11.3	The number of program income budget periods must be less than or equal to the number of budgets provided in the budget component.	Anticipated amount for program income has been provided for <x> budget years on the PHS 398 Checklist. Only <y> years of budgets were provided with this application.</y></x>	
Checklist (NIH)	Program Income, Anticipated Amount 1-5	14.12.1	Must be less than 10,000,000,000	The Program Income Anticipated Amount (PHS 398 Checklist) for budget period budget period> must be less than 10,000,000,000.	Grants.gov accepts up to 14 bytes (including 2 decimal places); NIH accepts no more than 10, with 2 decimal places. Long-term db change is recommended.
Checklist (NIH)	Program Income, Sources 1-5				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Checklist (NIH)	Assurances/				
	Certification:				
	Explanation				

PHS 398 Research Plan

Component	Field	Rule	Validation	Error Message	Notes & Tips
Research Plan	Type of	15.1.1	Read only, pulled from		
(NIH)	Application		R&R		
		15.1.2	Allow applications to come		
			in without this component.		
Research Plan	Research	15.2.1	Required for resubmission	An Introduction must be included for resubmissions on	
(NIH)	Plan		for non-S10 applications.	the PHS 398 Research Plan.	
	Attachments:	15.2.2	Required for revisions.	An Introduction must be included for revisions on the	
	Introduction			PHS 398 Research Plan	
		15.2.3	Limited to 1 page for	The Introduction for a revision is limited to one page on	
			revisions.	the PHS 398 Research Plan	
		15.2.4	Limited to 3 pages for non-	The Introduction is limited to three pages on the PHS 398	
			SBIR/STTR and non-R36	Research Plan.	
			resubmissions (except as		
			explicitly listed below).		
		15.2.5	Introduction limited to 1	The Introduction is limited to one page for this	
			page for Phase I	submission on the PHS 398 Research Plan.	
			SBIR/STTR, R03 (LV), R13,	Warning message for 'opt out' announcements: Be sure	
			U13, R21 (LV), R36, G08,	that you have complied with the allowable page	
			G13, SC2 and SC3	limitations for the Introduction for this FOA (see PHS	
			resubmissions.	398 Research Plan). Otherwise, your application may be	
				delayed and rejected in the review process.	
		15.2.6	Introduction limited to 3	The Introduction (see PHS 398 Research Plan) is limited	
		13.2.0	pages for Phase II and Fast	to three pages for this submission.	
			Track SBIR/STTR, R01,	to three pages for this submission.	
			R18, U18, R25, R33,		
			R21/R33, R34, U34 and		
			G11 resubmissions, as well		
			as for R03 and R21		
			resubmissions that have		
			opted out.		
	1	l	opica out.		

Component	Field	Rule	Validation	Error Message	Notes & Tips
		15.2.7	Provide a warning if the introduction is more than one page on a G11 resubmission.	The Introduction (see PHS 398 Research Plan) should be no more than one page for this submission. The application will be processed by the agency, but concerns may be raised during review.	
		15.2.8	Must not be included for a new or renewal application.	The Introduction (see PHS 398 Research Plan) should not be attached for a new or renewal application.	
(NIH) Pla	Research Plan Attachments: Specific Aims	15.3.1	Provide warning if Research Plan Attachments 2-5 together are greater than 25 pages and less than or equal to 28 pages (applies to all applications not specifically listed below, including Fast Track) (LV) for R01, R18, U18, R25, R33, R21/R33, R34 and U34). Does not apply to UH2/UH3	The Research Plan is limited to 25 pages. This may span 28 pages due to page breaks. If the total space occupied by text does not exceed 25 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.	
		15.3.2	apply to UH2/UH3 applications. Research Plan Attachments 2-5 together must be less than or equal to 28 pages (applies to all applications not specifically listed below, including Fast Track) ((LV) for R01, R18, U18, R25, R33, R21/R33, R34 and U34). Does not apply to UH2/UH3 applications.	The Research Plan is limited to 25 pages. This may span 28 pages due to page breaks. 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.	
		15.3.3	For SBIR/STTR Phase I, R21(LV), G08, G11, G13, SC2 and SC3, provide warning if Research Plan Attachments 2-5 together are greater than 15 pages and less than or equal to 18 pages	The Research Plan is limited to 15 pages. This may span 18 pages due to page breaks. If the total space occupied by text does not 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.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		15.3.4	For SBIR/STTR Phase I R21 (LV), G08, G11, G13, SC2 and SC3, Attachments 2-5 together must be less than or equal to 18 pages	The Research Plan f is limited to 15 pages. This may span 18 pages due to page breaks.	
				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.	
		15.3.5	For conference grant applications (activity code on funding opportunity = 'R13' or 'U13'), Research Plan Attachments 2-5 together must be less than or equal to 10 pages.	The Conference Plan for a Conference Grant application is limited to 10 pages (PHS 398 Research Plan).	Applicants will be instructed to submit one attachment only, in the Research Design and Methods attachment.
		15.3.6	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.
	15.3.	15.3.7	For R36 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	The Research Plan is limited to 10 pages. This may span 13 pages due to page breaks.	
			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.	
		15.3.8	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. Warning message for 'opt out' announcements: Be sure that you have complied with the allowable page limitations for the Research Plan for this FOA. Otherwise, your application may be delayed and rejected in the review process.	

Component	Field	Rule	Validation	Error Message	Notes & Tips
		15.3.9	For X01 applications, provide a warning if Research Plan Attachments 2-5 together are greater than 10 pages and less than or equal to 26 pages.	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.	
		15.3.10	For X01 applications, provide a warning if Research Plan Attachments 2-5 together are greater than 25 pages and less than or equal to 28 pages.	If the Research Plan for your FOA is limited to 25 pages, then the actual span may be 28 pages due to page breaks. If the total space occupied by text does not exceed 25 pages then no action is needed.	
		15.3.11	For X01 applications, provide an error if Research Plan Attachments 2-5 together are greater than 28 pages.	If the Research Plan for your FOA is limited to 25 pages, then the actual span may be 28 pages due to page breaks. You have exceeded 28 pages.	
Research Plan (NIH)	Research Plan Attachments: Background and Significance				
Research Plan (NIH)	Research Plan Attachments: Preliminary Studies/ Progress Report	15.5.1	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)
Research Plan (NIH)	Research Plan Attachments: Research Design and Methods	15.6.1	Required for all submissions except S10.	The Research Design and Methods section of the PHS 398 Research Plan must be attached to the application.	
Research Plan (NIH)	Research Plan Attachments: Inclusion Enrollment Report				

Component	Field	Rule	Validation	Error Message	Notes & Tips
Research Plan (NIH)	Research Plan Attachments: Progress Report Publication List				
Research Plan (NIH)	Research Plan Attachments: Protection of Human Subjects	15.9.1	Required for all applications except S10, DP1 and DP2, if Human Subjects is 'yes'.	A Protection of Human Subjects 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'.	
Research Plan (NIH)	Research Plan Attachments: Inclusion of Women and Minorities	15.10.1	Required for non-S10 applications if Human Subjects is true and Exemption is not E4	The Inclusion of Women and Minorities 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: Targeted/ Planned Enrollment Table	15.11.1	Required for non-S10 applications if Human Subjects is true and Exemption is not E4	The Targeted/Planned Enrollment Table 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: Inclusion of Children	15.12.1	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: Vertebrate Animals	15.13.1	Required for all applications except S10, DP1 and DP2 if VertebrateAnimalsUsedQue stion 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				_

Component	Field	Rule	Validation	Error Message	Notes & Tips
Research Plan (NIH)	Research Plan Attachments: Multiple PI Leadership Plan	15.15.1	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.	
Research Plan (NIH)	Research Plan Attachments: Consortium/ Contractual Arrangement	15.16.1	Required for an S11 application.	An S11 application must include a Consortium/Contractual Arrangement attachment on the PHS 398 Research Plan.	
Research Plan (NIH)	Research Plan Attachments: Letters of	15.17.1	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.	
	Support	15.17.2	Required for an S11 application.	An S11 application must include a Letters of Support attachment on the PHS 398 Research Plan.	
Research Plan (NIH)	Research Plan Attachments: Resource Sharing Plan				
Research Plan (NIH)	Research Plan Attachments:	15.19.1	Limited to 10 appendixes	You have submitted more than 10 appendices on the PHS 398 Research Plan. There is a limit of 10 appendix attachments allowed.	
	Appendix	15.19.2	At least one appendix is required for an R36 application (activity code on funding opportunity = 'R36').	An R36 application must include at least one Appendix attachment in the PHS 398 Research Plan. Transcripts should be included in this attachment.	
		15.19.3	Appendixes are not allowed for SBIR or STTR Phase I applications, unless the application is in response to an RFA.	Appendices may not be submitted for a Phase I SBIR or STTR application on the PHS 398 Research Plan.	
		15.19.4	Provide a warning if an appendix is submitted for an SBIR or STTR Phase I application that is in response to an RFA.	For most RFAs, the submission of appendices with a Phase I SBIR or Phase I STTR is not permitted. Be sure that you have complied 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	Rule	Validation	Error Message	Notes & Tips
Cover Letter (NIH)	Cover Letter attachment	16.1.1	For an R13 application (activity code on funding opportunity = 'R13' or 'U13'), provide warning if the cover letter is not attached.	For NIH applications only, a cover letter should be attached in the PHS 398 Cover Letter section indicating NIH institute approval for a Conference Grant application.	
		16.1.2	For an application responding to a collaborative announcement, provide a warning if this attachment is not included.	This funding opportunity allows submission of a collaborative group of applications. A Cover Letter attachment must be included (using the PHS 398 Cover Letter component) for all applications that are being submitted as part of a collaborative group. If this application is part of a collaborative group, please make sure you have included a cover letter; otherwise this application will be accepted by the agency, but may be delayed in future processing. If this application is not part of a collaborative group, no further action is required.	Will need to add indicator to database to identify collaborative announcement, defaulted to 'no'
		16.1.3	Required for K applications where reference letter is required (mentored Ks).	A cover letter must be attached for this application. Please include the names of the referees for this application in the cover letter	NEW!
Career Dev. Award (NIH)	Type of Application	17.1.1	Read only, pulled from R&R		NEW!
Career Dev. Award (NIH)	Career Dev. Award Attachments: Introduction	17.2.1	Required for resubmission	An Introduction must be included for resubmissions on the PHS 398 Career Development Award Supplemental Form.	NEW!
		17.2.2	Required for revisions.	An Introduction must be included for revisions on the PHS 398 Career Development Award Supplemental Form.	NEW!
					ON HOLD: Rule not implemented as part of the October 2008 release due to the form not accepting the attachment for Revisions. Will implement at a later date

Component	Field	Rule	Validation	Error Message	Notes & Tips
		17.2.3	Limited to 1 page for revisions	The Introduction for a revision is limited to one page on the PHS 398 Career Development Award Supplemental Form.	NEW!
		17.2.4	Limited to 3 pages for resubmissions.	The Introduction is limited to three pages on the PHS 398 Career Development Award Supplemental Form.	NEW!
Career Dev. Award (NIH)	Career Dev.Award Attachments:				NEW!
	Candidate's Background	17.3.1	Provide warning if Candidate Information section attachments 2-5 and Research Plan attachments 10-13 together are greater than 25 pages and less than or equal to 32 pages (LV)	The Candidate Information and Research Plan sections together are limited to 25 pages. This may span 32 pages due to page breaks	NEW!
		17.3.2		Warning message for 'opt out' announcements: Be sure that you have complied with the allowable page limitations for the Candidate Information section for this FOA. Otherwise, your application may be delayed and rejected in the review process.	NEW!
		17.3.3	Candidate Information section attachments 2-5 and Research Plan attachments 10-13 together must be less than or equal to 32 pages (LV)	The Candidate Information and Research Plan sections together are limited to 25 pages. This may span 32 pages due to page breaks	NEW!
		17.3.4		Warning message for 'opt out' announcements: Be sure that you have complied with the allowable page limitations for the Candidate Information sections for this FOA. Otherwise, your application may be delayed and rejected in the review process.	NEW!
Career Dev. Award (NIH)	Career Dev.Award Attachments: Career Goals and Objectives	17.4.			NEW!

Component	Field	Rule	Validation	Error Message	Notes & Tips
Career Dev. Award (NIH)	Career Dev.Award Attachments: Career Development/ Training Activities During Award Period	17.5.			NEW!
Career Dev. Award (NIH)	Career Dev.Award Attachments: Training in the Responsible Conduct of Research	17.6.			NEW!
Career Dev. Award (NIH)	Career Dev.Award Attachments:	17.7.1	Provide error if provided for a mentored K application	A Mentoring Plan should not be submitted for this application	NEW!
	Mentoring Plan	17.7.2	Required for K05 and K24 applications	For K05 and K24 applications the Mentoring Plan attachment is required on the PHS 398 Career Development Award Supplemental Form.	NEW!
Career Dev. Award (NIH)	Career Dev.Award Attachments: Statements by Mentor, Co- Mentors, Consultants, Contributors	17.8.1	Required for all mentored K applications	The Statements by Mentor, Co-Mentors, Consultants, Contributors attachment is required for this application.	NEW!
Career Dev. Award (NIH)	Career Dev.Award Attachments: Description of Institutional Environment	17.9.			NEW!

Component	Field	Rule	Validation	Error Message	Notes & Tips
Career Dev.	Career	17.10.			NEW!
Award (NIH)	Dev.Award				
	Attachments:				
	Institutional				
	Commitment				
	to Candidate's				
	Research				
	Career				
	Development				
Career Dev.	Career	17.11			AIT\A/I
Award (NIH)	Dev.Award	1/.11			NEW!
nwara (min)	Attachments:				
	Specific Aims				
Career Dev.	Career	17.12			NEW!
Award (NIH)	Development	17.12			INEAN:
11,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Award				
	Attachments:				
	Background				
	and				
	Significance				
Career Dev.	Career	17.13.1	Must be included for	A Progress Report attachment must be included for	NEW!
Award (NIH)	Development		renewals and revisions.	renewals (competing continuations) and revisions	14244.
	Award			(supplements) (see the PHS 398 Career Development	
	Attachments:			Award Supplemental Form).	
	Preliminary				
	Studies/Progr				
	ess Report				
Career Dev.	Career	17.14.			NEW!
Award (NIH)	Development				
	Award				
	Attachments:				
	Research				
	Design and				
C D	Methods	17.15			ALESSA (1
Career Dev.	Career	17.15			NEW!
Award (NIH)	Development Award				
	Award Attachments:				
	Inclusion				
	Enrollment				
	Report]		

Component	Field	Rule	Validation	Error Message	Notes & Tips
Career Dev. Award (NIH)	Career Development Award Attachments: Progress Report Publication List	17.16			NEW!
Career Dev. Award (NIH)	Career Development Award Attachments: Protection of Human Subjects	17.17.1	Required if Human Subjects is 'yes'.	A Protection of Human Subjects attachment must be included on the PHS 398 Career Development Award Supplemental Form if the response to the Human Subjects question on the Other Project Information page is 'Yes'.	NEW!
Career Dev. Award (NIH)	Career Development Award Attachments: Inclusion of Women and Minorities	17.18.1	Required if Human Subjects is true and Exemption is not E4	The Inclusion of Women and Minorities Attachment must be included on the PHS 398 Career Development Award Supplemental Form if the response to the Human Subjects question on the Other Project Information Page is 'Yes' and if the Exemption Number is not 4.	NEW!
Career Dev. Award (NIH)	Career Development Award Attachments: Targeted/Plan ned Enrollment Table	17.19.1	Required if Human Subjects is true and Exemption is not E4	The Targeted/Planned Enrollment Table Attachment must be included on the PHS 398 Career Development Award Supplemental Form if the response to the Human Subjects question on the Other Project Information Page is 'Yes' and if the Exemption Number is not 4.	NEW!
Career Dev. Award (NIH)	Career Development Award Attachments: Inclusion of Children	17.20.1	Required if Human Subjects is true and Exemption is not E4	The Inclusion of Children Attachment must be included on the PHS 398 Career Development Award Supplemental Form if the response to the Human Subjects question on the Other Project Information Page is 'Yes' and if the Exemption Number is not 4.	NEW!
Career Dev. Award (NIH)	Career Development Award Attachments: Vertebrate Animals	17.21.1	Required if Vertebrate Animals is true	A Vertebrate Animals attachment must be included on the PHS 398 Career Development Award Supplemental Form if the response to the Vertebrate/Animals Subject Used Question on the Other Project Information page is 'Yes'	NEW!

Component	Field	Rule	Validation	Error Message	Notes & Tips
Career Dev. Award (NIH)	Career Dev. Award Attachments: Select Agent Research	17.22			NEW!
Career Dev. Award (NIH)	Career Dev. Award Attachments: Consortium/C ontractual Arrangement s	17.23			NEW!
Career Dev. Award (NIH)	Career Dev. Award Attachments: Resource Sharing Plan(s)	17.24			NEW!
Career Dev. Award (NIH)	Career Dev. Award Attachments: Appendix	17.25			NEW!
Career Dev. Award (NIH)	Citizenship	17.26.1	Provide warning on any K application other than K99 where 'Non-U.S. Citizen with temporary U.S. visa' is checked	You have selected a citizenship choice 'Non-U.S. Citizen with temporary U.S. visa' on the PHS 398 Career Development Award Supplemental Form. This is not a valid citizenship option for this application.	NEW!