





Exchange Services Notes, Tips and Validations for Grants.gov Components

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Filling Out an Application for NIH Grants

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

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

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

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

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

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

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

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

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

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

SF424 (R&R)

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Type of Submission (Pre-App, App,	For non-X02 submissions, do not accept 'Pre-application' as submission type (Other Agency)	'Pre-application' (SF 424 RR cover page, Type of Submission) is not a recognized submission type for these applications.	NIH is not accepting "pre-applications" unless specifically noted in the Funding Opportunity Announcement.
	Changed App)	For X02 submissions, do not accept 'Application' as submission type	'Application' is not a recognized submission type for X02 applications. Please select 'pre- Application' as the type of submission on the SF 424 RR Cover page.	
		Do not accept 'Application' submission type if there is an associated prior submission. Find associated prior submission by matching on PI Commons account, institution, and project title for the same council round. (Other Agency)	This application is a duplicate of a previous submission for the same council round. Please submit again using the 'Changed/Corrected Application' Type of sSubmission on the SF 424 RR cover page.	Don't submit duplicate applications for the same council round. If you are submitting corrections to a previously-submitted application, submit it as a "Changed/ Corrected Application."
		Do not accept X02 pre-application submission type if there is an associated prior submission. Find associated prior submission by matching on PI Commons account, institution, and project title for the same council round.	This application is a duplicate of a previous submission for the same council round. Please resubmit using the 'Changed/Corrected Application' Type of Submission on the SF 424 RR cover page.	
SF424 (R&R)	Date Submitted	If Phase II SBIR/STTR, and Phase I identified as NIH grant, provide warning if date submitted is more than 2 years after Phase I project period end date	Phase II SBIR/STTR applications should be submitted within 6 receipt dates after the expiration of the Phase I budget.	
SF424 (R&R)	Applicant Indentifier	Provide a warning if this has not been entered for a DP1 application.	For Pioneer Award applications, the Area of Science must be entered in the Applicant Identifier field on the SF 424 RR Cover Page.	For DP1 applications, map the value in this field to a column in check_list_details_t.
		For DP1 application, provide a warning if the entry is not digits, or is more than two digits.	For Pioneer Award applications, the Area of Science (entered in the Applicant Identifier field on the SF 424 RR Cover Page) is limited to two digits.	For DP1 applications that do not have 1 or 2 digits entered in this field, do not map the value in the field to the database.
SF424 (R&R)	Date Received by State			

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	State			
	Application			
CE424 (D @ D)	Identifier			
SF424 (R&R)	Date Received by Grants.gov			
SF424 (R&R)	Federal Identifier	If a resubmission, revision, or renewal, this component is	For resubmissions (amended applications) and renewals (competing continuations), the	You must include the prior grant number here if you are submitting a revised
	Identifier	mandatory (Other Agency)	Federal Identifier must be included. Please include only the IC and serial number of the prior grant number in the Federal Identifier field on the SF 424 RR Cover page (e.g., CA123456).	application (resubmission), a competing continuation (renewal), or a new Phase II SBIR/STTR. The IC and serial number of the prior grant number will be checked for accuracy.
			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).	Schema must parse out the components of the grant number.
		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).	
		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).	
		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	Validation	Error Message	Notes & Tips
-		If a resubmission, revision, or	Federal Identifier format (SF 424 RR Cover	•
		renewal, or a new Phase II	page) is not valid. Please include only the IC	
		SBIR/STTR, components of grant	and serial number of the prior grant (e.g.,	
		number must be 'parsable'.	CA123456).	
		Components are		
		<application_type> <mechanism></mechanism></application_type>		
		<institute> <serial number="">-</serial></institute>		
		<support year=""><suffix code)<="" td=""><td></td><td></td></suffix></support>		
		(example: 1R01GM072828-01A1)		
		 Application Type is a one-digit 		
		number.		
		-Mechanism is a letter followed		
		by a two-digit number.		
		-Institute (IC) consists of two		
		characters.		
		-Serial number is a number that		
		has been assigned sequentially		
		within an IC (must be followed by		
		a dash).		
		-Support year is anywhere from 1		
		to 99.		
		-Suffix code will start with an 'A'		
		or an 'S'.		
		-At least the IC and serial number		
		must be included. (Other Agency)		
		If a resubmission, revision, or	The Federal Identifier that you have entered	
		renewal, or a new Phase II	(SF 424 RR Cover page) is not a grant number	
		SBIR/STTR, the prior grant	that has been previously assigned.	
		number must exist in the NIH		
		system. Matching is performed		
		against NIH Institute/ Center and		
		Serial Number. (Other Agency)		
		If a resubmission, revision, or	You must include the <missing component=""></missing>	
		renewal, or a new Phase II	of the prior grant in the Federal Identifier field	
		SBIR/STTR, mandatory	on the SF 424 RR Cover Page.	
		components are IC and serial		
		number. (Other Agency)		

Component	Field	Validation	Error Message	Notes & Tips
		If PIChangeIndicator not set, check if PI on this submission has same Commons Account as PI assigned to the prior grant. If not, provide warning if last name of PI on prior grant matches last name for PI on current application. Provide error if Commons Account	The prior grant entered as the Federal Identifier (SF 424 RR Cover page) is not associated with the eRA Commons account for this PI. If this application involves a change of PI, please indicate 'Change of PI' on the PHS 398 Checklist page. If this is not a change of PI, this application will be received by the agency, but may be returned after internal processing.	
		doesn't match and last name of PI on prior grant doesn't match last name for PI on current application.		
		Ignore case, spaces, and punctuation on match.	The prior grant that has been entered as the Federal Identifier (SF 424 RR Cover page) is not associated with this PI. If this application involves a change of PI, please indicate 'Change of PI' on the PHS 398 Checklist page.	
		For a resubmission, a summary statement must have been mailed for the prior grant, unless the prior grant has been withdrawn. (Other Agency)	A resubmission (an amended application) cannot be submitted until the Summary Statement for the previous application has been released by the agency.	
		For a resubmission, the prior grant must not have been awarded, unless it has been identified as interim funding. (Other Agency)	A resubmission (an amended application) cannot be submitted if a prior version in the same support year has been awarded.	
		For a resubmission, if the prior grant suffix code = 'A2', display a warning (default for mechanisms not otherwise defined).	The number of resubmissions for an application is normally limited to two. This application will be received by the agency, but may be returned after internal processing.	
		For a resubmission, of an R36 application (activity code on funding opportunity = 'R36'), prior grant suffix code must not = 'A2'.	This application has exceeded the number of resubmissions permitted and cannot be accepted.	
		For a resubmission, prior grant suffix code must not = 'A3'.	This application has exceeded the number of resubmissions permitted and cannot be accepted.	
		For a revision, the parent grant must be awarded. (Other Agency)	The parent grant for a revision must be awarded. The parent grant for this submission is not a funded grant.	

Component	Field	Validation	Error Message	Notes & Tips
		Ignore entries in this field for a DP1 application.		
		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. Error message text is the same as the items</activity>	These need to be warnings, since it is
		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.	above.	possible to submit a phase II application where the phase I was funded externally (or funded as an NIH contract, not a grant).
SF424 (R&R)	Applicant Information, Organization al DUNS	Must match DUNS recorded for IPF in Commons. Validate the leftmost 9 characters only, discarding any characters submitted in places 10-13. For comparison purposes, treat trailing zeroes after leftmost 9 characters as blanks. (Other Agency)	The DUNS number you have provided in the SF 424 RR Cover page (item 5), Applicant Information) does not match the number in the eRA Commons profile for your organization. The SO/AOR should make sure the correct DUNS number has been entered in the eRA Commons. Instructions on editing institutional profiles are available at https://commons.era.nih.gov/commons-help/189.htm.	If application is from domestic institution of higher education, set appls_t.external_org_WIP_flag='Y'; if not, set appls_t.external_org_WIP_flag='N'. Domestic institution is country_seq_num in external_org_addresses_t = 231 (for the external_org_id where addr_type_code='MLG'). Higher education is external_orgs_t.org_type_code=10.
		For a revision, provide a warning if it doesn't represent the same organization as the parent grant.	The parent grant may be associated with a different organization (based on the Organization DUNS provided on the SF 424 RR Cover page). Revisions should only be submitted for the same organization as the parent grant. This application will be accepted by the agency, but may be delayed in the peer review process.	
SF424 (R&R)	Applicant Information, Legal Name	None	•	Display in grant image as submitted; store in database as reflected in IPF associated with PI Commons account and org. DUNS. Long-term, change length in eRA db to 120 characters.

Component	Field	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	If either line>50 characters, truncate. (Other Agency)		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	Required if country is US. (Other Agency)	The Applicant Information State on the SF 424 RR Cover page must be supplied for US addresses.	
		If country not US must be blank. (Other Agency)	The Applicant Information State on the SF 424 RR Cover page should be blank for all countries other than the United States.	
		Transform to 2-char abbreviation before validating and storing. If state name can't be transformed, give error. (Other Agency)	The Applicant Information State on the SF 424 RR Cover page is not a valid state name.	
SF424 (R&R)	Applicant Information, Province	Required if country is Canada. (Other Agency)	The Applicant Information province on the SF 424 RR Cover page must be supplied for Canadian addresses	Province should be mapped into the same database location as state.
		If country not Canada, must be blank. (Other Agency)	The Applicant Information Province on the SF 424 RR Cover page should be blank for all countries other than Canada	
		Transform to 2-char abbreviation before validating and storing. If province name can't be transformed, give error. (Other Agency)	The Applicant Information Province on the SF 424 RR Cover page is not a valid province name.	
SF424 (R&R)	Applicant Information, Zip Code	Required if country is US. (Other Agency) Must be 5 or 9 numeric digits if country is US. (Other Agency)	The Applicant Information Zip Code on the SF 424 RR Cover page was not entered. The Applicant Information Zip Code on the SF 424 RR Cover page must be entered in 5-digit or 9-digit format.	Long-term, change in eRA db to 13 characters.

Component	Field	Validation	Error Message	Notes & Tips
		For country other than US, if >9 characters, truncate (remove any dashes before truncating). (Other Agency)		
SF424 (R&R)	Applicant Information, Country	For an R13 application (activity code on funding opportunity = 'R13' or 'U13'), provide a warning if country is not US	The Applicant Organization for a Conference Grant should be located in the US. This application will be accepted by the agency, but may be delayed in the peer review process.	
		For an R15 application (activity code on funding opportunity = 'R15') return an error if country is not US	The Applicant Organization for an AREA Grant must be located in the US.	
		For an S10, C06, UC6, or G20 application, return an error if country is not US	The Applicant Organization for this application must be located in the US.	
		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.	
		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.	
		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>	
SF424 (R&R)	Person to be Contacted	If the combination of all items in this component is more than 30 characters, truncate. Display in grant image as submitted. (Other Agency)		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		

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Person to be Contacted, Fax Number	None	-	·
SF424 (R&R)	Person to be Contacted, e- mail	e-mail is required Must contain a '@', with at least 1 and at most 64 chars preceding and following the '@'. Control characters (ASCII 0 through 31 and 127), spaces and special chars <> () []; : are not valid.	The e-mail address for the Person to Be Contacted, listed on the SF 424 RR Cover page, is required. The submitted e-mail address for the Person to Be Contacted, (listed on the SF 424 RR Cover page,) <email>, is invalid. Please enter email addresses in the format username@domainname.com</email>	
SF424 (R&R)	Employer Identification	If >12 characters, truncate (no warning). (Other Agency) If <13 characters, must be either 9 characters or 12 characters (after dashes are removed). If 12 characters, provide warning if EIN number doesn't exist in eRA database. Strip off dashes before doing comparison. If 9 characters, add a '1' to the beginning of the number and 'A1' to the end (for a total of 12 characters), then provide warning if EIN number doesn't exist in eRA database. Strip off dashes before doing comparison.	The Employer Identification Number on the SF 424 RR Cover page must be a length of 9 characters or 12 characters. The Employer Identification Number that has been entered on the SF 424 RR Cover page does not match what the agency has on file. The application will be accepted by the agency, but may be delayed in later processing. The Employer Identification Number that has been entered on the SF 424 RR Cover page does not match what the agency has on file.	If warning is generated, do not map EIN number to the database. If warning is generated, do not map EIN number to the database.
SF424 (R&R)	Type of Applicant (other, woman owned, disadvantage d)	For an SBIR/STTR application, must be 'Small Business'.	For an SBIR/STTR application, the Type of Applicant (SF 424 RR Cover page, item 7) must be 'Small Business'.	Design/mapping note: when the applicant type is "O - Small Business", set small_business_code to 'N', but do not supersede any value that is the result of mapping the women-owned or socially-economically-disadvantaged qualifiers. In other words, default when applicant type is "O" should be 'N" instead of "null". This should be overwritten if the women-owned and socially-economically-disadvantaged indicators need to record either a W, M, or B in this field.

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Type of Application (New, Resub, Renewal, Contin, Revision)	Must be either New, Revision, Resubmission, or Renewal (Other Agency) Renewal is not a valid type for a Phase I SBIR/STTR, X01, X02, R03, R21, R34, C06, UC6 or G20 application. Provide warning if renewal is submitted for an R21/R33 combination. Revision is not a valid type for an S10, X01, or an X02 application. For a DP1 application, must be New.	<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 continuation) cannot be submitted for this application. Renewal (competing continuation) applications are accepted if specifically allowed in the Funding Opportunity Announcement (FOA). If the FOA does not explicitly allow renewals, this application may be delayed in the review process or rejected. A revision (supplement) cannot be submitted for this application. Resubmissions, renewals, and revisions cannot be submitted for Pioneer Award applications. This is indicated in the Type of Application on the SF 424 RR Cover page.</type>	 You must select one of the following: New, Amended, Resubmission (for revisions/amendments) or Renewal (for competing continuations). Note: Renewal is not valid for Phase I SBIR/STTR applications. A Continuation is equivalent to a Progress Report. However, NIH and other PHS agencies will not use the Continuation box. A Amended is somewhat equivalent to a Competing Supplement. If you are submitting an SBIR/STTR application, select "Small Business." For a revision, define parent grant by finding the most recent type 1, type 2, or type 9 that matches on the IC and serial number provided in the Federal Identifier, where the Project Start Date on the parent is earlier than or equal to the revision's Project Start Date, and the Project End Date on the parent is later than or equal to the revision's Project End Date. Subprojects and other revisions should be excluded from consideration as parent grants. Map type of application to database.
SF424 (R&R)	If revision, increase award, decrease, etc.	None		
SF424 (R&R)	Name of Federal Agency			

Component	Field	Validation	Error Message	Notes & Tips
SF424 (R&R)	Catalog of Federal Domestic Assistance Number			The CFDA number and title are filled in based on the specific announcement.
SF424 (R&R)	Submitted to other agencies?			
SF424 (R&R)	Descriptive Title	Truncate if >81 characters (Other Agency) For a revision, must be the same as the project title on the parent grant. Do not include leading or trailing spaces or any punctuation in the comparison.	The project title for this revision (SF 424 RR Cover page, item 11) is not the same as the project title on the parent grant. For a revision, the project title must be the same as the project title on the parent grant.	Long-term, expand eRA db to 200 chars
SF424 (R&R)	Areas Affected by Project			
SF424 (R&R)	Proposed project start date	Must be later than current date (Other Agency)	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	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	
		For an R03 (LV), R21 (LV), or R36 application, return warning if project period is more than two years long. Define project period by time span between project period start date and project period end date as entered on the SF424 (R&R) Face Page. For an R15, R33 (LV), or R34 (LV) application, return warning if project period is more than three years long. Define project period by time span between project period end date as entered on the SF424 (R&R) Face Page.	The project period for this type of application is limited to two years. 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. The project period for this type of application is limited to three years. The application will be accepted, but may be delayed in the peer review process. 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.	

Component	Field	Validation	Error Message	Notes & Tips
		For an R01 (LV) or R21/R33 pair (LV) application, return warning if project period is more than five years long. Define project period by time span between project period start date and project period end date as entered on the SF424 (R&R) Face Page.	The project period for this type of application is limited to five years. The application will be accepted, but may be delayed in the peer review process. 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. The project period for a Pioneer Award	
		period must be exactly five years long. Define project period by the number of <i>years</i> only between the project start date and the project end date.	application must be five years. This is determined by the proposed Project Start Date and the Proposed Project Ending Date on the SF 424 RR Cover page.	
SF424 (R&R)	Congressional districts of applicant	Must be a valid congressional district code (after truncating). Truncation logic: Parse from left to right, and take the first two digits encountered, skipping leading zeroes (return error if no digits are encountered, but no error if only zeroes are encountered). Before validating, pad out with a leading zero if less than 2 digits are extracted in this way. Display in grant image as truncated. (Other Agency)	Congressional district <congressional district=""> (SF 424 RR Cover page, item 14) is invalid. If the applicant organization is a foreign institution, enter all zeros. To locate your district visit http://congress.org/congressorg/dbq/officials/? lvl=L.</congressional>	Long-term, expand eRA database to 6 chars.
	Congressional districts of project			
SF 424 (R&R)	PD/PI Contact Information, name (prefix, first name, middle name, last name, suffix)	Required. (Other Agency) 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>	

Component	Field	Validation	Error Message	Notes & Tips
		If this and Commons Account provided, provide warning if last name or first name on account doesn't match provided last name or first name, and/or if the first initial of the middle name on the account doesn't match the first initial of the middle name that has been provided. Comparison to ignore case and embedded spaces, but not embedded punctuation.	The name provided for the PD/PI, <first initial,="" last="" middle="" name="" name,="">, listed on the SF 424 RR Cover, does not match the name listed on the eRA Commons account: <first initial,="" last="" middle="" name="" name,="">. The grant image will display the name as submitted here. If the name listed in the eRA Commons is not current, please update it in the eRA Commons. Instructions on updating profile information are available at https://commons.era.nih.gov/commons-help/216.htm.</first></first>	Post-testing solution: If validation fails, provide warning that the Commons name (or position title) is 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.
SF 424 (R&R)	PD/PI Contact Information, Position/Title	If title doesn't appear on an employment record for this person and organization in Commons, provide warning message and display the submitted position/title in the grant image.	The PD/PI position/title, <position title="">, listed on the SF 424 RR Cover, does not match those listed on the eRA Commons account: <pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></position>	
		Truncate if greater than 40 characters, before comparing to title stored in database. No warning message is needed to the submitter. (Other Agency)		
SF 424 (R&R)	PD/PI Contact Information, Organization Name			
SF 424 (R&R)	PD/PI Contact Information, Department	Provide a warning if not entered.	If appropriate for your organization, please supply a department for the PD/PI on the SF 424 RR Cover.	
SF 424 (R&R)	PD/PI Contact Information, Division	Provide a warning if not entered.	If appropriate for your organization, please supply a division for the PD/PI on the SF 424 RR Cover.	

Component	Field	Validation	Error Message	Notes & Tips
SF 424 (R&R)	PD/PI	Transform province name to 2	The PD/PI Profile Province on the SF 424 RR	Long-term, change in ERA db for zip code
	Contact	char. abbreviation before storing. If	Cover is not a valid province name.	to 13 characters
	Information,	province name can't be		
	Street 1 and	transformed, give an error. (Other		Map the role-level HOM address for the
	2, city, state,	Agency)		PD/PI based on the address submitted for
	province, zip,	Transform state name to 2 char.	The PD/PI Profile State on the SF 424 RR	the PD/PI on the 424 RR Cover, instead of
	country,	abbreviation before storing. If state	Cover is not a valid state name.	creating it based on the profile.
	phone	name can't be transformed, give an		
	number, fax number, e- mail	error. (Other Agency)		
SF 424 (R&R)	PD/PI			
21 /2/ (Iteat)	Contact			
	Information,			
	County			
SF 424 (R&R)	Total estimated project funding	For an S10 application, display a warning if this is greater than 500k.	The direct cost request found on item 16 of the SF 424 RR Cover page is greater than 500k. The application will be processed, but a concern may be raised during review.	Design note: mapping for S10s and X02 and DP1 for budget figures should come from this element instead of from budget components. It should be mapped to
		Required for a C06, UC6, or G20 application.	Total Estimated Project Funding (SF 424 RR Cover, item 16a) is required for this application.	appl_periods_t and to the following columns in appls_t: direct_cost_requested_amt,
		Must be non-zero for a C06, UC6, or G20 application.	Total Estimated Project Funding (SF 424 RR Cover, item 16a) cannot be zero.	total_cost_requested_year1_amt, total_cost_requested_amt.
		For an X01 or X02 application, provide an error if non-zero values are entered.	Total Estimated Project Funding in section 16 on the SF 424 RR Cover page must be zero.	(indirect_cost_requested_amt should be 0). For X02, all values will be zero. For DP1, there should be five appl periods set up in
		For a DP1 application, provide an error if not 2,500,000.	For a Pioneer Award application, Total Estimated Project Funding (SF 424 RR Cover, item 16a) must be 2.5 million.	appl_periods_t, and the direct_cost_amt in each of the five years should be set as 500,000.
SF 424 (R&R)	Total federal	For an X01 or X02 application,	Total Federal and non-Federal Funds in	
	and non-	provide an error if non-zero values	section 16 on the SF 424 RR Cover page must	
	federal funds	are entered.	be zero.	
		Required for a C06, UC6, or G20	Total Federal & Non-Federal Funds (SF 424	
		application.	RR Cover, item 16b) is required for this	
			application.	
		Must be non-zero for a C06, UC6,	Total Federal & Non-Federal Funds (SF 424	
		or G20 application.	RR Cover, item 16b) cannot be zero.	
		For a DP1 application, provide an	For a Pioneer Award application, Total	
		error if not 2,500,000.	Federal & Non-Federal Funds (SF 424 RR	
			Cover, item 16b) must be 2.5 million.	

	Field	Validation	Error Message	Notes & Tips
SF 424 (R&R)	Estimated	For an X01 or X02 or DP1	Total Estimated Program Income in section 16	-
	program	application, provide an error if	on the SF 424 RR cover page must be zero.	
	income	non-zero values are entered.		
		Required for a C06, UC6, or G20	Estimated Program Income (SF 424 RR	
		application.	Cover, item 16c) is required for this	
		D 004 1104 000	application.	
SF 424 (R&R)	Subject to	For C06, UC6, or G20	A response must be included to the question	
	state executive	applications, a response is required in either 17a or b.	'Is application subject to review by state	
	order review?	in either 17a or b.	executive order 12372 process' (SF 424 RR Cover page, item 17)	
CE 424 (D 8-D)	State	Required if answer to 'Subject to	A date must be entered on the SF 424 RR	
SF 424 (R&R)	executive	state executive order review' is	Cover page, item 17, if the answer to the	
	order review	'Yes'	'Subject to state executive order review' is	
	date	165	'Yes'.	
SF 424 (R&R)	Agreement		100.	
	and			
	certification			
SF 424 (R&R)	Authorized	Truncate if first or last name>30	The Authorized Representative <element< th=""><th>Long-term, change in eRA db to 60 chars</th></element<>	Long-term, change in eRA db to 60 chars
	representative	chars, or if suffix>5 chars. Display	name> (SF 424 RR Cover page, item 19)	for last name, 35 for first name, 10 for
	name	warning. (Other Agency)	exceeds the agency character limit. The grant	suffix (all names in db)
			image will display the name as submitted; the	
			agency will store the first <database length=""></database>	
			characters in the eRA database.	
SF 424 (R&R)	Authorized	Truncate if >30 chars. Display	The Authorized Representative position/title	Long-term, change in eRA db to 45 chars
	representative	warning. (Other Agency)	(SF 424 RR Cover page, item 19) exceeds the	
	position/title		agency character limit. The grant image will	
			display the name as submitted; the agency will	
			store the first 30 characters in the eRA	
CE 424 (D 0 D)	A4h o mio d		database.	
SF 424 (R&R)	Authorized			
	representative organization			
SF 424 (R&R)	Authorized			
51' 424 (NXN)	representative			
	department			
SF424 (R&R)	Authorized			
51 121 (Ran)	representative			
	division			
SF424 (R&R)	Authorized	If either line 1 or 2 > 50 characters,		Long-term, change in eRA db for zip code
(12021)	representative	truncate. (Other Agency)		to 13 characters

Component	Field	Validation	Error Message	Notes & Tips
	street 1 & 2,	Transform province to 2-char	The Authorized Representative Province (SF	
	city, state,	abbreviation for province before	424 RR Cover page, item 19) is not a valid	Province should be mapped into same
	province, zip	validating and storing. If province	province name.	database location as state.
	code, country,	can't be transformed, give error.		
	phone	(Other Agency)		
	number, fax,	Transform state to 2 char	The Authorized Representative State (SF 424	
	e-mail	abbreviation for state before	RR Cover page, item 19) is not a valid state	
		validating and storing. If state	name.	
		name can't be transformed, give		
		error. (Other Agency)		
		If zip>9 characters, truncate.		
		Remove dashes before truncating		
		and/or storing (Other Agency)		
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	Validation	Error Message	Notes & Tips
Project/	Primary	Allow applications to come in		
Performance	Location,	without this component.		
<i>Site</i> (<i>R&R</i>)	Organization			
	Name			
Project/	Primary			
Performance	Location,			
Site (R&R)	Street 1 and 2			
Project/	Primary			
Performance	Location, City			
<i>Site</i> (<i>R&R</i>)				
Project/	Primary			
Performance	Location,			
Site (R&R)	County			
Project/	Primary			
Performance	Location,			
Site $(R\&R)$	State			
Project/	Primary			Province should be mapped into same
Performance	Location,			database location as state.
Site (R&R)	Province			
Project/Perform	Primary			
ance Site (R&R)	Location, Zip			
, ,	code			
Project/Perform	Primary			
ance Site (R&R)	Location,			
	Country			
Project/	Location 1,			
Performance	Organization			
Site (R&R)	Name			
Project/	Location 1,			
Performance	Street 1 and 2			
Site $(R\&R)$				

Component	Field	Validation	Error Message	Notes & Tips
Project/	Location 1,			
Performance	City			
<i>Site</i> (<i>R&R</i>)				
Project/	Location 1,			
Performance	County			
<i>Site</i> (<i>R&R</i>)				
Project/Perform	Location 1,			
ance Site (R&R)	State			
Project/Perform	Location 1,			Province should be mapped into same
ance Site (R&R)	Province			database location as state.
Project/Perform	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	Validation	Error Message	Notes & Tips
Other Project	Human	Either ExemptionNumber or	Either Exemption Number or Assurance	• If you click Yes that <i>human subjects</i> are
Info (R&R)	Subjects Involved?	AssuranceNumber must be specified if HumanSubjectsUsedQuestion is true. DP1 applications are exempt from this validation.	Number must be provided if Human Subjects is "Yes" (Other Project Information, item 1).	 involved, you must provide either an exemption number or assurance number. If you click Yes that <i>vertebrate animals</i> are involved, you must provide one of the
		If HumanSubjectsUsedQuestion is false, ExemptionNumber must not be specified. DP1 applications are exempt from this validation.	When Human Subjects is "No", Exemption Number must not be specified (Other Project Information, item 1).	following: - Assurance number AND IACUC approval date
		If HumanSubjectsUsedQuestion is false, provide a warning if AssuranceNumber is specified. DP1 applications are exempt from this validation.	When Human Subjects is "No", Assurance Number does not apply (Other Project Information, item 1).	Assurance number AND IACUC approval pendingIACUC approval pending
		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".	
		For S10 or DP1 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.	
		For DP1, do not map the answer to this question to the database.		
Other Project Info (R&R)	IRB review pending?			
Other Project Info (R&R)	IRB approval date	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.	
Other Project Info (R&R)	Exemption number	Must be "E1" through "E6"	The Exemption Number (Other Project Information, item 1a) must be within the range of E1 to E6.	
		For DP1, do not map this data to the database.		

Component	Field	Validation	Error Message	Notes & Tips
Other Project Info (R&R)	Human subject assurance number	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, prefix the string with 'FWA' before validating and storing in the database. For DP1, do not map this data to	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.	
Other Project Info (R&R)	Vertebrate animals used?	the database. 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.	When Vertebrate Animals is "Yes", you must provide either (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).	
		For S10 or DP1 applications, display a warning if this is true. For DP1 applications, do not map the answer to this question to the database.	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)	IACUC review pending?	Provide a warning if Vertebrate Animals Used is 'N' For DP1, do not map this data to	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	the database. Provide a warning if VertebrateAnimalsUsedQuestion is false For DP1, do not map this data to the database.	When Vertebrate Animals is "No", IACUC Approval Date does not apply (Other Project Information, item 2).	

Component	Field	Validation	Error Message	Notes & Tips
•		The date can't be in the future	The IACUC Approval Date (Other Project	·
			Information, item 2) cannot be in the future.	
Other Project	Animal	Provide a warning if	When Vertebrate Animals is "No", Assurance	
Info $(R\&R)$	Welfare	VertebrateAnimalsUsedQuestion is	Number does not apply (Other Project	
	Assurance #	false	Information, item 2).	
		For DP1, do not map this data to the database.		
		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	Proprietary	chered.		
Info (R&R)	or privileged info?			
Other Project	Impact on			
Info $(R\&R)$	environment?			
Other Project	Activities			
Info (R&R)	outside US?			
Other Project	Project	For non-C06, UC6, or G20	The Project Summary/Abstract in Other	
Info (R&R)	Summary	applications, limited to one page	Project Information, item 6 is limited to 30 lines of text.	
Other Project Info (R&R)	Project Narrative	For non-S10 and non-C06, UC6, DP1, or G20 applications, limit to 1 page	The Public Health Relevance Statement (labeled 'Project Narrative' in Other Project Information, item 7) should be no longer than 2 or 3 sentences.	The project narrative should be used for the Public Health Relevance Statement and should be no longer than 2 or 3 sentences.
		Required for C06, UC6, or G20 applications.	Please attach the Program Narrative as the Project Narrative attachment on the Other Project Information component.	
		Limited to 40 pages for C06, UC6, or G20 applications.	The Program Narrative (Other Project Information, Project Narrative attachment) is limited to 40 pages.	
		Limited to 5 pages for DP1 applications.	The essay (Other Project Information, Project Narrative attachment) is limited to 5 pages for Pioneer Award applications.	

Component	Field	Validation	Error Message	Notes & Tips
Other Project Info (R&R)	Bibliography and References	Provide error if attached for a DP1 application	The Bibliography and References attachment on the Other Project Information page may not be included for a Pioneer Award application.	·
Other Project Info (R&R)	Facilities and other resources	Provide error if attached for a DP1 application	The Facilities and Other Resources attachment on the Other Project Information page may not be included for a Pioneer Award application.	
Other Project Info (R&R)	Equipment	Required for S10 applications. Provide error if attached for a DP1	The Equipment Attachment on the Other Project Information page is required for S10 applications. The Equipment attachment on the Other	
		application	Project Information page may not be included for a Pioneer Award application.	
Other Project Info (R&R)	Other attachments	For S10 applications, provide warning if at least one attachment has not been included for this.	At least one attachment should be provided as an 'Other Attachment' on the Other Project Information page. Please consult the funding opportunity announcement to which you are responding, for the type(s) of information to be attached. The application will be processed if you have not included an 'Other Attachment', but a concern may be raised during review.	Note that multiple attachments may be received with Other Attachments. They should all be processed.
		For DP1 applications, provide error if there is not one and only one attachment for this.	For a Pioneer Award application, one and only one attachment should be provided as an 'Other Attachment' on the Other Project Information page. This should be used for the description of the applicant's most significant research accomplishment.	
		For DP1 applications, limited to one page.	For a Pioneer Award application, the description of the applicant's most significant research accomplishment (submitted as 'Other Attachment' on the Other Project Information page) is limited to one page.	

Research & Related: Senior/Key Person Profile

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key	PD/PI Profile	Pulled from SF 424 RR Cover		Note: identify this Senior/Key Person as the
Person (R&R)	Information	component		contact PI if multiple PI roles are defined.
Senior/Key	PD/PI Profile,	Must be specified for the PD/PI	The eRA Commons Username must be	
Person (R&R)	credential	(Other Agency)	submitted for the PD/PI in the PD/PI	
			Credential field on the Senior/Key Person	
			page.	
		Truncate if greater than 30		
		characters, before comparing to		
		account stored in database. No		
		warning message is needed to the		
		submitter. (Other Agency)		
		If specified, must be a valid	The eRA Commons Username < Credential>	
		Commons account. (Other	in the PD/PI Credential field on the	
		Agency)	Senior/Key Person page is not a recognized	
			eRA Commons account.	
		For the PD/PI, this account must	The eRA Commons account indicated for the	
		be affiliated with the organization	PD/PI in the Credential field on the	
		submitting the application and	Senior/Key Person page, is not affiliated with	
		have the PI role (Other Agency)	the applicant organization. Check with your	
			eRA Commons Account Administrator to	
			make sure you have been affiliated with the	
			applicant organization.	

Component	Field	Validation	Error Message	Notes & Tips
•		For a revision, the PI should be	Warning: The eRA Commons account for the	
		assigned to the parent grant. If the	PI in the Credential field on the Senior/Key	
		person profile for this Commons	Person page does not include the parent grant	
		account is not the same person	of this submission in its support history.	
		profile assigned as the PI to the		
		parent grant, and the last name of	Error: The parent grant that has been entered	
		the PI assigned to the parent grant	is not associated with this PI.	
		matches the last name that is		
		submitted for the PI on the current		
		application, provide the indicated		
		warning. This match must not be		
		case-sensitive, and should compare		
		only the non-blank, non-		
		punctuation characters that appear		
		in the last name. If neither the		
		profile nor the last name match,		
		provide the indicated error.		
		Provide a warning if there is both	The eRA Commons account has 'SO' and 'PI'	
		an SO and a PI role associated with	roles. Please create a separate eRA Commons	
		the Commons account.	account for the SO/AOR, then delete the 'SO'	
			role from the account included in the	
			submission. You do not need to send a	
			changed/corrected application.	
		Provide a warning if the single role	The eRA Commons account included for the	
		associated with the Commons	PD/PI is for an SO/AOR. Please add a PI role	
		account is an SO 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.	
		For a DP1 application, the	The PD/PI for a Pioneer Award application	
		citizenship question on the	must indicate 'citizen' or 'permanent resident'	
		Commons account must be	on the Citizenship question on their Commons	
		answered.	account.	
		For a DP1 application, the	The PD/PI for a Pioneer Award application	
		citizenship question on the	must indicate 'citizen' or 'permanent resident'	
		Commons account must not have	on the Citizenship question on their Commons	
		'non-resident' indicated.	account. 'Non-resident' is not a valid	
		non resident indicated.	citizenship choice.	

Component	Field	Validation	Error Message	Notes & Tips
		For a DP1 application, the PD/PI must not have been a PD/PI on a previously awarded DP1.	A Pioneer Award application cannot be submitted for a PD/PI who has previously received a Pioneer Award.	
Senior/Key Person (R&R)	PD/PI Profile, other project role category			
Senior/Key Person (R&R)	Biosketch	Limited to four pages	The Senior/Key Person Biosketch for the PD/PID, <first last="" name="">, is longer than four pages.</first>	
		Limited to two pages for a DP1 application.	The Senior/Key Person Biosketch for the PD/PI is limited to two pages for a Pioneer Award application.	
Senior/Key Person (R&R)	Current and Pending Support	Attachment is required for a DP1 application.	For a DP1 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	Truncate if first or last name>30 chars, or suffix>5 chars. Display warning. (Other Agency)	The Senior/Key Person <element name=""> for <first last="" name=""> (Senior/Key Person page) exceeds the agency limit. The grant image will display the name as submitted; the agency will store the first <database length=""> characters only.</database></first></element>	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)
		If this <i>and</i> Commons Account provided, provide warning if any component of name on account doesn't match provided name. Comparison to ignore case and embedded spaces, but not embedded punctuation.	The name provided for Key Person <submitted components="" name=""> on the Senior/Key Person page does not match the eRA Commons account name (<commons components="" name="" profile="">). The grant image will display the name as submitted.</commons></submitted>	Post-testing solution: If validation fails, provide warning that Commons name is xxxx and name submitted through grants.gov is yyyy and we will be displaying the Commons data. Provide ability for the submitter to update their Commons account and to regenerate the image to display the
		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.	updated information from the Commons account.
		For DP1 applications, provide error if any senior/key persons included (other than the PD/PI on the SF 424 RR Cover)	For a Pioneer Award, the only Senior/Key Person who should be included is the PD/PI who is listed on the SF 424 RR Cover page.	
Senior/Key Person (R&R)	Profile, senior & key person x, position title	Truncate if greater than 40 characters. No warning message is needed to the submitter. (Other Agency)		

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key	Profile, senior	Needs to be enforced as	The organization name for Key Person < Key	
Person (R&R)	& key person	mandatory.	Person First Name Last Name> must be	
, , ,	x,		provided on the Senior/Key Person page.	
	organization			
	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			
, , ,	x, county			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
, , ,	x, state			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, province			
Senior/Key	Profile, senior			Long-term, change in eRA db to 13
Person (R&R)	& key person			characters.
	x, zip code			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
, , ,	x, country			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
	x, phone			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
, ,	x, fax			
Senior/Key	Profile, senior			
Person (R&R)	& key person			
(/	x, e-mail			

Component	Field	Validation	Error Message	Notes & Tips
Senior/Key	Profile, senior	If specified for a key person with a	The eRA Commons Username <credential>,</credential>	
Person (R&R)	& key person	PD/PI role, must be a valid	specified on the Senior/Key Person page, for	
	x, credential	Commons account. (Other	PD/PI <first last="" name="">, is not a</first>	
		Agency)	recognized eRA Commons account.	
		Truncate if greater than 30		
		characters, before comparing to		
		account stored in database. No		
		warning message is needed to the		
		submitter. (Other Agency)		
		If specified for a key person with a	The Commons account associated with	
		PD/PI role, the Commons account	<credential> does not have a PI role. Please</credential>	
		must have a PI role associated with	add a PI role to this account before submitting	
		it (may have other roles as well).	a changed/corrected application.	
		Must be specified if project role is	The eRA Commons Username has not been	
		'PD/PI'. (Other Agency)	specified in the 'Credential' field on the	
			Senior/Key Person page for PD/PI <first< td=""><td></td></first<>	
			Name Last Name>	
Senior/Key	Profile, senior	For an R36 application (activity	A mentor must be identified for an R36	
Person (R&R)	& key person	code on funding opportunity =	application. List the mentor as a key person on	
	x, project role	'R36'), there must be at least one	the Senior Key Person page.	
		key person included in addition to		
		the PD/PI identified in the PD/PI		
		component.		
		For a C06, UC6, or G20	A Facilities Person must be identified for this	
		application, there must be at least	application. Please provide the information for	
		one key person identified with a	this person after the PD/PI on the Senior/Key	
		project role of 'Other' or 'Other	Person page. Specify a project role of 'Other'	
		Professional'.	or 'Other Professional', and an Other Project	
			Role Category of 'Facilities Person'.	
		Provide an error if project role is	PD/PI <first last="" name=""> has been</first>	
		'PD/PI' and credential is the same	identified in both the PD/PI portion and in the	
		as the PD/PI credential.	Senior/Key Person Profile portion of the	
			Senior/Key Person page.	
		For applications that are not from	The role of 'Co-PI,' indicated for Senior/Key	
		other agencies, provide a warning	Person <first last="" name=""> on the</first>	
		if the 'Co-PI' role has been	Senior/Key Person page is not used by NIH.	
		indicated	For multiple Principal Investigators, use the	
			PD/PI role. Otherwise, select another role.	

Component	Field	Validation	Error Message	Notes & Tips
		If project role is 'PD/PI', identify in database as Multiple PI.		Need to create role record for multiple PIs. Also need to set multi_pi_indicator_code in appls_t. Populate affiliation data in person_involvements_t.external_org_id with the org identified as the default account affiliation. Should be indicated in mapping document.
Senior/Key Person (R&R)	Profile, senior & key person x, other project role category	Accept "Other Project Role Category" only when "Project Role" is "Other" or "Other Professional"	For key person <first last="" name=""> on the Senior/Key Person page, an 'Other Project Role Category' was submitted for a project role of <pre></pre></first>	
Senior/Key Person (R&R)	Senior & key person x, Biosketch	Limited to four pages	The Biosketch for Senior/Key Person <first last="" name=""> 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	For S10 applications, provide warning if no attachment is provided for any three senior/key persons with project role of 'Other (specify)' or with project role of 'PD/PI'.	Less than 3 Current and Pending Support attachments have been included for the major user group cohort on the Senior/Key Person page. The application will be processed, but a concern may be raised during review.	This attachment can be received for a PD/PI, or for a senior/key person with a role of 'Other (specify)'. We need to make sure that at least 3 of these attachments are submitted, whether 1 is submitted for the PD/PI and 2 for the senior/key person (with role of 'Other (specify)'), or 3 are submitted for the senior key person (with role of 'Other (specify)').
Senior/Key Person (R&R)	Additional Senior/Key Person Profiles	For version 1.0 of Key Person component, accept only if eight key personnel have been submitted on the Senior/Key Person page. For the Research & Related Senior/Key Person Expanded version of Key Person component, accept only if 40 key personnel have been submitted on the Senior/Key Person page.	An Additional Senior/Key Person Profiles attachment may be submitted only if eight senior/key person profiles have been submitted on the Senior/Key Person page. An Additional Senior/Key Person Profiles attachment may be submitted only if 40 senior/key person profiles have been submitted on the Senior/Key Person page.	Additional Senior/Key Person profiles can be submitted only if you've submitted eight key personnel in the Senior/Key Person Profile section.
		Provide error if included for a DP1 application.	The Additional Senior/Key Person Profiles attachment cannot be submitted for a Pioneer Award application.	
Senior/Key Person (R&R)	Additional Senior/Key Person Biosketch	Accept only if an Additional Senior/Key Person Profiles attachment has been submitted and accepted.	An Additional Senior/Key Person Biosketch attachment may be submitted on the Senior/Key Person page only if an Additional Senior/Key Person Profiles attachment has been submitted and accepted.	

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

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

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B, Year x (R&R)		Accept submission of modular budget or detailed budget, but not both (Other Agency)	Both a modular and a detailed budget have been included with this submission. One or the other may be submitted.	Budget information is necessary for all applications. Some applications will list both the modular and detailed budget
		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 (Other Agency)	You must include a budget component with this application.	components as "optional". This is to allow the appropriate component to be chosen. Choose one or the other, but not both. In mapping, assign a budget period ID based on the year of the budget.
		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.	If you are submitting an STTR application, you must include a Research Institution
		An application in response to an R03, R15, R21, or R34 opportunity (but not R21/R33) must be submitted with a modular budget. Other Agency 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, and R34 applications submitted by domestic institutions (U.S.) must use the PHS 398 Modular Budget Form and not the SF 424 R&R Budget Form.	Budget page for each year of the project (submitted using the Subaward budget type on the budget page).
		For a revision, if the parent grant budget is modular, only a modular budget component may be submitted.	The parent grant for this revision uses the modular format; therefore, this application may include a modular budget only.	
		For an STTR submission, there must be at least one budget included with budget type of subaward/ consortium for each year of the STTR (project) budget.	A Research Institution Budget page must be included for each year of an STTR submission	
Budget, A&B, Year x (R&R)	Organization al DUNS	Required for budget type 'Subaward/Consortium'	The Organizational DUNS has not been included for Sections A&B for <name of="" organization=""> on the 424 RR Budget page.</name>	
		One and only one budget should contain the DUNS of the applicant organization.	The Project budget must contain the DUNS number for the applicant organization on the 424 RR Budget page.	

Component	Field	Validation	Error Message	Notes & Tips
		This must be a budget that has been identified as 'Project'	A Subaward budget has been identified for the applicant organization. Budgets for the applicant organization should have the 'Project' budget type.	
Budget, A&B, Year x (R&R)	Budget type (project, subaward/ consortium)	If a detailed budget is included, there must be one and only one occurrence with a value of 'Project'.	Only one budget with a budget type of 'Project' for Sections A&B may be submitted on the 424 RR Budget page.	You can submit only one budget with the budget type "Project" for Sections A&B.
Budget, A&B, Year x (R&R)	Name of organization (for subaward/ consortium)	If multiple detailed budgets have been included in the submission, all budget and warning messages should include the name of the organization for which the budget validation has failed.		Since there is a limit of 250 characters for the error message, put the organization name at the end of the message, and truncate if necessary.
Budget, A&B, Year x (R&R)	Start Date	For budget year 1, for Budget Type 'Project', for new applications and resubmissions, must be the same as the Proposed Project Start Date listed on the SF 424 RR Face Page.	For new applications and resubmissions, the start date for the first budget year on the 424 RR Budget pages must be the same as the proposed project start date listed on the SF424 RR Cover page.	Remember to check start and end dates. For new applications and revisions/amendments to new applications, the start date for the first budget year on the 424 RR Budget page-must be the same as the proposed project start date listed on the SF424 (R&R) Cover page.
		For budget years after budget year 1, must be greater than or equal to the Proposed Project Start Date listed on the SF 424 RR Face Page.	The start date for budget year budget year must be equal to or later than the proposed project start date listed on the SF 424 RR Cover page.	
Budget, A&B, Year x (R&R)	End Date			
Budget, A&B, Year x (R&R)	Senior/Key Person Name (prefix, first name, middle name, last name, suffix)	Truncate if first or last name>30 chars, or if suffix>5 chars. Display warning. (Other Agency)	The <order (first,="" in="" list="" second)=""> Senior/Key Person <element name=""> for budget year budget year> on the 424 RR Budget page (section A&B) exceeds the agency character limit. The grant image will display the name as submitted; the agency will store the first <database length=""> characters in the eRA database.</database></element></order>	Long-term, change in eRA db to 60 chars for last name, 35 for first name, 10 for suffix (all names in db)
		For Project Role of PD/PI (for the PI listed on the SF 424 RR Cover only), must match Senior/Key Person form last name and first name.	The < name> given for the PD/PI for budget year <budget year=""> on the 424 RR Budget page (section A&B) does not match the name given for the PD/PI on the SF 424 RR Cover.</budget>	

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B, Year x (R&R)	Senior/Key Person Project Role	For budgets of type 'Project', there must be at least one record for the budget year with a project role of PD/PI. Validation does not apply to STTR submissions.	There must be a Personnel entry (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			
Budget, A&B, Year x (R&R)	Senior/Key Person Cal. Mos	For non-R13 submissions, a non-zero value for calendar months, academic months, or summer months is required for each senior/key person.	Senior/Key Person <first last="" name="">, listed on the 424 RR Detailed Budget Page for budget year <budy> 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></budy></first>	
		For an R13 submission, a value for calendar months, academic months, or summer months is required for each senior/key person. The value may be zero.	Senior/Key Person <first last="" name="">, listed on the 424 RR Detailed Budget Page for budget year budget year 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.</first>	Need to confirm that a zero is treated differently from a null value, also that a system to system submission with an empty tag will not result in a zero value being inserted in that element
Budget, A&B, Year x (R&R)	Senior/Key Person acad. mos	Provide warning if both academic and calendar months have been provided for a person for a budget year.	Both academic and calendar months have been included for <senior first="" key="" last="" name="" person="">, for budget year <budy> budget year> on the 424 RR Budget page (section A&B). Please use either calendar months or a combination of academic and summer months. If effort does not change throughout the year, use the calendar months column. If effort varies between academic and summer months, leave the calendar months column blank and use only the academic and summer months' columns.</budy></senior>	

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B,	Senior/Key			·
Year x (R&R)	Person			
	summer mos			
Budget, A&B,	Senior/Key			
Year x (R&R)	Person			
	Requested			
	Salary			
Budget, A&B,	Senior/Key			
Year x (R&R)	Person Fringe			
	benefits			
Budget, A&B,	Senior/Key	Must be equal to the sum of	The Funds Requested for <senior key="" person<="" td=""><td></td></senior>	
Year x (R&R)	Person Funds	Requested Salary and Fringe	First Name Last Name on the 424 RR	
	Requested	Benefits for the Senior/Key Person	Budget page (section A&B) for Budget Year	
		for the budget year.	<budget year=""> does not equal the sum of the</budget>	
			Requested Salary and the Fringe Benefits for	
			the corresponding budget year.	
Budget, A&B,	Total funds	Required if Additional Senior Key	If the Additional Senior Key Persons	
Year x (R&R)	requested for	Persons Attachment is included.	Attachment is included, the total funds that are	
	Senior Key		requested in the attachment must be provided	
	Persons in		on the 424 RR Budget Page.	
	attachment			
Budget, A&B,	Total Funds	Must be equal to the sum of Funds	The Total Funds Requested for Budget Year	
Year x (R&R)	requested for	Requested for the budget year.	<budget year=""> on the 424 RR Budget page</budget>	
	all senior/key		(section A&B) does not equal the sum of	
	persons		Funds Requested for all Senior/Key Persons	
			for the corresponding budget year.	
Budget, A&B,	Additional	Accept only if eight key personnel	An Additional Senior/Key Person attachment	
Year x (R&R)	Senior Key	have been submitted on the budget	may be submitted on the 424 RR Budget page	
	Persons	page for this year.	(section A&B) for budget year <budget year=""></budget>	
	attachment		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)			

Component	Field	Validation	Error Message	Notes & Tips
Budget, A&B,	Other			
Year x (R&R)	Personnel			
	(acad.mos)			
Budget, A&B,	Other			
Year x (R&R)	Personnel			
	(summer			
	mos)			
Budget, A&B,	Other			
$Year \ x \ (R\&R)$	Personnel			
	(Requested			
	salary)			
Budget, A&B,	Other			
$Year \ x \ (R\&R)$	Personnel			
	(Fringe			
	benefits)			
Budget, A&B,	Other	Must be equal to the sum of	The Funds Requested for Other Personnel	
Year x (R&R)	Personnel	Requested Salary and Fringe	Project Role < Project Role > for Budget Year	
	(Funds	Benefits for the project role for the	<budget year=""> on the 424 RR Budget page</budget>	
	Requested)	budget year.	(section A&B) does not equal the sum of the	
			Requested Salary and the Fringe Benefits for	
			the corresponding budget year.	
Budget, A&B,	Total number	Must equal the sum of number of	The total number of Other Personnel on the	
$Year \ x \ (R\&R)$	other	personnel for all project roles	424 RR Budget page (section A&B) does not	
	personnel	under Other Personnel.	equal the sum of the number of other	
			personnel for all project roles.	
Budget, A&B,	Total Funds	Must be equal to the sum of Funds	The Total Funds Requested for Other	
$Year \ x \ (R\&R)$	Requested	Requested for Other Personnel for	Personnel for Budget Year <budget year=""> on</budget>	
	other	the budget year.	the 424 RR Budget page (section A&B) does	
	personnel		not equal the sum of Funds Requested for all	
			Other Personnel for the corresponding budget	
			year.	
Budget, A&B,	Total salary,	Must equal the sum of Total Funds	The Total Salary, Wages and Fringe Benefits	
$Year \ x \ (R\&R)$	wages and	requested for all senior/key persons	for Budget Year < Budget Year > on the 424	
	fringe	and Total Funds Requested other	RR Budget page (section A&B) does not	
	benefits	personnel	equal the sum of Total Funds requested for all	
			senior/key persons and Total Funds Requested	
			for other personnel	

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

Component	Field	Validation	Error Message	Notes & Tips
Budget, C, D, E,	Equipment			
Year x (R&R)	description,			
	equipment			
	item			
Budget, C, D, E,	Equipment			
Year x (R&R)	description,			
	funds req			
Budget, C, D, E,	Equipment			
Year x (R&R)	description,			
	total funds			
	requested in			
	attachment			
Budget, C, D, E,	Equipment	Must be equal to the sum of Funds	The Total Funds Requested for Equipment for	
Year x (R&R)	description,	Requested for equipment for the	Budget Year < Budget Year> on the 424 RR	
	total	budget year.	Budget page (section C, D & E) does not	
	equipment		equal the sum of Funds Requested for all	
			Equipment Items for the corresponding budget	
			year.	
Budget, C, D, E,	Additional			
Year x (R&R)	equipment			
	attachment			
Budget, C, D, E,	Travel,			
Year x (R&R)	domestic			
	travel costs			
Budget, C, D, E,	Travel,			
Year x (R&R)	foreign travel			
	costs			
Budget, C, D, E,	Total travel	Must be equal to the sum of	The Total Travel Cost for Budget Year <	
Year x (R&R)	cost	domestic travel costs and foreign	Budget Year> on the 424 RR Budget page	
		travel costs for the budget year.	(section C, D & E) does not equal the sum of	
			Domestic Travel Costs and Foreign Travel	
D. I. C. D. E.	D 411		Costs for the corresponding budget year.	
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	tuition			

Component	Field	Validation	Error Message	Notes & Tips
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	stipends			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	travel			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
	subsistence			
Budget, C, D, E,	Participant/			
Year x (R&R)	trainee			
	support costs:			
D. J. C.D. F.	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			
Tear x (Ran)	support costs:			
	number of			
	Participants/			
	Trainees			
Budget, C, D, E,	Participant/	Must be equal to the sum of	The Total Participant/Trainee Support Costs	
Year x (R&R)	trainee	participant/trainee support costs for	for Budget Year <budget year=""> on the 424</budget>	
	support costs:	the budget year.	RR Budget page (section C, D & E) does not	
	Total		equal the sum of Participant/trainee support	
	Participant/		costs for the corresponding budget year.	
	Trainee			
	Support Costs			

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

$\begin{array}{lll} Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Costs} \\ (materials \& supplies) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Costs} \\ (Publication & \text{Costs}) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Costs} \\ (Consultant & \text{Services}) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Costs (ADP' } \\ Computer & \text{Services}) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Costs} & \text{Costs} \\ (Subawards) & \text{Contractual} \\ Costs & \text{Subawards} \\ Cots & \text{Costs} & \text{Subawards} \\ \\ Cots & \text{Cotractual} \\ Costs & \text{Costs} \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Cost} & \text{Costs} \\ (Equipment or Facility Rental User Fees) \\ \\ Budget, F-K, & \text{Other Direct} \\ Costs & \text{Costs} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Costs} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Costs} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Other Direct} \\ Year x (R\&R) & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Budget, F-K, & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Cots & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Cots & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Cots & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Cots & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Cots & \text{Cots} & \text{Cots} \\ (Alterations and Renovations) \\ \\ Cots & Cot$	Component	Field	Validation	Error Message	Notes & Tips
Budget, F-K, Year x (R&R)	Budget, F-K,	Other Direct			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Year x (R&R)	Costs			
Budget, F-K, Costs (Publication Costs)					
Year x (R&R)					
Publication Costs					
Costs Cost	$Year \ x \ (R\&R)$				
Budget, F-K, Year x (R&R)					
Year x (R&R)					
Consultant Services					
Services Other Direct Other Direct Computer Services S	Year x (R&R)				
Budget, F-K, Year x (R&R) Year x (R&R) Subswards/ Consortium/ Contractual Costs) Budget, F-K, Year x (R&R) Costs (Alterations and Renovations) Budget, F-K, Year x (R&R) Costs (Alterations and Renovations) Budget, F-K, Year x (R&R) Costs (Other Direct Year x (R&R) Costs (Costs (
Year x (R&R) Costs (ADP/ Computer Services Budget, F-K, Year x (R&R) Costs (Subawards/ Consortium/ Contractual Costs Budget, F-K, Year x (R&R) Peer x (R&R) Budget, F-K, Year x (R&R) Costs (Alterations and Renovations) Budget, F-K, Year x (R&R) Costs (Alterations And Renovations) Budget, F-K, Year x (R&R) Costs (Other Direct Costs (Alterations And Renovations) Budget, F-K, Year x (R&R) Costs (Other Direct Costs (Other Direc					
Computer Services					
Services Budget, F-K, Other Direct Year x (R&R) Costs (Subawards/ Consortium/ Contractual Costs	Year x (R&R)				
Budget, F-K, Year x (R&R)		Computer			
Year x (R&R) Costs (Subawards/ Constrium/ Contractual Costs) Costs Budget, F-K, Year x (R&R) Other Direct Costs (Equipment or Facility Rental/ User Fees) Costs (Equipment or Facility Rental/ User Fees) Budget, F-K, Year x (R&R) Other Direct (Alterations and Renovations) Costs (Alterations and Renovations) Budget, F-K, Year x (R&R) Other Direct Costs (other					
Subawards Consortium Contractual Costs					
Consortium/Contractual Costs Costs	Year x (R&R)				
Contractual Costs					
Costs					
Budget, F-K, Year x (R&R)					
Year x (R&R) Costs (Equipment or Facility Rental/ User Fees) 6 Budget, F-K, Year x (R&R) Other Direct (Alterations and Renovations) Costs (Alterations and Renovations) Budget, F-K, Year x (R&R) Other Direct Costs (other Costs (other	D. J. of E.V.				
(Equipment or Facility Rental/ User Fees) Budget, F-K, Year x (R&R) Budget, F-K, (Alterations and Renovations) Budget, F-K, Year x (R&R) Costs (other Direct Costs (other					
Or Facility Rental/ User Fees	rear x (K&K)				
Rental/User Fees					
Fees					
Budget, F-K, Year x (R&R)					
Year x (R&R) Costs (Alterations and Renovations) Costs (Alterations and Renovations) Budget, F-K, Year x (R&R) Other Direct Costs (other	Rudget F K				
(Alterations and Renovations) Budget, F-K, Year x (R&R) Costs (other					
and Renovations) Budget, F-K, Other Direct Year x (R&R) Costs (other	Tour A (Hall)				
Renovations) Renovations Budget, F-K, Year x (R&R) Other Direct Costs (other					
Budget, F-K, Year x (R&R) Costs (other					
Year x (R&R) Costs (other	Budget, F-K.				
UCDC11DHUH 1/	(22222)	description 1)			

Component	Field	Validation	Error Message	Notes & Tips
Budget, F-K,	Other Direct			·
Year x (R&R)	Costs (other1			
	funds			
	requested)			
Budget, F-K,	Other Direct			
$Year \ x \ (R\&R)$	Costs (other			
	description 2)			
Budget, F-K,	(other2 funds			
Year x (R&R)	requested)			
Budget, F-K,	Other Direct			
Year x (R&R)	Costs (other			
	description 3)			
Budget, F-K,	(other3 funds			
Year x (R&R)	requested)			
Budget, F-K,	Other Direct	Must be equal to the sum of other	The Total Other Direct Costs for Budget Year	
Year x (R&R)	Costs, Total	direct costs for the budget year.	<budget year=""> on the 424 RR Budget page</budget>	
	Other Direct		(section F-K) does not equal the sum of other	
	Costs		direct costs for all categories for the	
			corresponding budget year.	
Budget, F-K,	Total Direct	Required.	The Total Direct Costs Funds Requested for	
Year x (R&R)	Costs (A-F)		Year <i>x</i> is required on the 424 RR Budget page	
			(section F-K).	
		Must be equal to the sum of total	The Total Direct Costs for A-F for Budget	
		salary, wages and fringe benefits,	Year <budget year=""> on the 424 RR Budget</budget>	
		total funds requested for	page (section F-K) does not equal the sum of	
		equipment, total travel cost, total	direct costs for Sections A-F.	
		participant/trainee support costs,		
		and total other direct costs		
		For R01, R03, R15, R21, and R34	R01, R03, R15, R21and R34 direct cost	
		submissions that are not from	requests of \$250K or less each year on the 424	
		another agency, provide warning if	RR Budget page (section F-K) must be in	
		subtotal direct costs for every	modules of \$25K, using the PHS 398 Modular	
		budget year is \leq = \$250K.	Budget Form and not the R&R Budget Form.	
		Applications where the applicant	Incorrect applications may be delayed in the	
		organization is foreign are exempt	peer review process or rejected.	
		from this validation. Calculate		
		subtotal direct costs as follows:		
		Total Direct Costs (A-F) minus the		
		sum of Total Indirect Costs for all		
		budgets for the corresponding year		
		with budget type		
		'subaward/consortium'.		

Component	Field	Validation	Error Message	Notes & Tips
•		For non-SBIR/STTR submissions and for submissions that are not in response to an RFA, provide warning if subtotal direct costs for <i>any</i> budget year is >= 500K (LV for R01, R18, U18, R25). Calculate subtotal direct costs as follows: Total Direct Costs (A-F) <i>minus</i> the sum of Total Indirect Costs for all budgets for the corresponding year with budget type 'subaward/consortium'.	Direct cost requests (on the 424 RR Budget page section F-K) >=\$500k a year need agreement from ICs, except for RFAs or PAs with budgetary limits. Applications without such approval may be delayed in the peer review process or rejected. Warning message for 'opt out' announcements: Be sure that you have complied with the allowable direct cost limitations for this FOA. Otherwise, your application may be delayed and rejected in the review process.	Design note: RFA announcements have rfa_pa_notices_t.notice_type_code='R'
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Type	Allow submissions to come in with no indirect costs.		
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Rate	Provide warning if less than 1.	The Indirect Cost Rate (on the 424 RR Budget page, section F-K) is less than 1 for budget Year <budget year="">. Please note that this figure represents a percentage (e.g., '25.5', not '.255').</budget>	
Budget, F-K, Year x (R&R)	Indirect Costs, Indirect Cost Base			
Budget, F-K, Year x (R&R)	Indirect Costs, Funds Requested			
Budget, F-K, Year x (R&R)	Indirect Costs, Cognizant Federal Agency			
Budget, F-K, Year x (R&R)	Total Indirect Costs	Must be equal to funds requested for all indirect cost types	The Total Indirect Costs for Budget Year <budget year=""> on the 424 RR Budget page (section F-K) does not equal the sum of indirect costs for each indirect cost type.</budget>	
Budget, F-K, Year x (R&R)	Total Direct and Indirect Costs	Required	The Total Direct and Indirect Costs Funds Requested for Year <i>x</i> is required on the 424 RR Budget page (section F-K).	

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

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

Research & Related Budget: Cumulative Budget

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Section A,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Senior/Key	
Budget (R&R)	Senior/Key	Funds Requested for all senior/key	Person Total does not equal the sum of Total	
	Person Total	persons for every budget year for	Funds Requested for all senior/key persons for	
		this budget.	all budget years.	
Cumulative	Section B,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Other	
Budget (R&R)	Other	Funds Requested for Other	Personnel Total does not equal the sum of	
	Personnel	Personnel for every budget year for	Total Funds Requested for Other Personnel	
	Total	this budget.	for all budget years.	
Cumulative	Total Number	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total	
Budget (R&R)	other	Number Other Personnel for every	Number Other Personnel does not equal the	
	personnel	budget year for this budget.	sum of Total Number Other Personnel for all	
			budget years.	
Cumulative	Total Salary,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Salary,	
Budget (R&R)	Wages, and	Salary, Wages, and Fringe Benefits	Wages, and Fringe Benefits do not equal the	
	Fringe	for every budget year for this	sum of Total Salary, Wages, and Fringe	
	Benefits	budget.	Benefits for all budget years.	
Cumulative	Section C,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Funds	
Budget (R&R)	Equipment	Funds Requested For Equipment	Requested For Equipment does not equal the	
	Totals	for every budget year for this	sum of Total Funds Requested For Equipment	
		budget.	for all budget years.	
Cumulative	Section D,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Travel	
Budget (R&R)	Travel, Total	Travel Cost for every budget year	Cost does not equal the sum of Total Travel	
		for this budget.	Costs for all budget years.	
Cumulative	Section D,	Must be equal to the sum of	The 424 RR Cumulative Budget Domestic	
Budget (R&R)	Travel,	Domestic Travel Cost for every	Travel Cost does not equal the sum of	
	Domestic	budget year for this budget.	Domestic Travel Costs for all budget years.	
Cumulative	Section D,	Must be equal to the sum of	The 424 RR Cumulative Budget Foreign	
Budget (R&R)	Travel,	Foreign Travel Cost for every	Travel Cost does not equal the sum of Foreign	
	Foreign	budget year for this budget.	Travel Costs for all budget years.	
Cumulative	Section E,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total	
Budget (R&R)	Participant/	Participant/Trainee Support Costs	Participant/Trainee Support Costs does not	
	Trainee, Total	for every budget year for this	equal the sum of Total Participant/Trainee	
		budget.	Support Costs for all budget years.	

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

Component	Field	Validation	Error Message	Notes & Tips
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	•
Budget (R&R)	Other Direct	Direct Costs, Consultant Services,	Costs, Consultant Services, does not equal the	
	Costs,	for every budget year for this	sum of Consultant Services for all budget	
	Consultant	budget.	years.	
	Services			
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, ADP/Computer	Costs, ADP/Computer Services, does not	
	Costs, ADP/	Services, for every budget year for	equal the sum of ADP/Computer Services for	
	Computer	this budget.	all budget years.	
	Services			
Cumulative	Section F,	Must equal the sum of Other Direct	The 424 RR Cumulative Budget Section F,	
Budget (R&R)	Other Direct	Costs, Subawards/Consortium/	Other Direct Costs, Subaward/Consortium/	
	Costs, sub,	Contractual Costs, for every	Contractual, does not equal the sum of Other	
	consortium,	budget year for this budget.	Direct Costs, Subawards/Consortium/	
	contractual		Contractual Costs for all budget years.	
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Equipment or	Costs, Equipment or Facility Rental, does not	
	Costs, Equip	Facility Rental, for every budget	equal the sum of Equipment or Facility Rental	
	or facility	year for this budget.	for all budget years.	
G 1 1	rental		THE MALER OF THE STATE OF THE S	
Cumulative	Section F,	Must be equal to the sum of Other	The 424 RR Cumulative Budget Other Direct	
Budget (R&R)	Other Direct	Direct Costs, Alterations and	Costs, Alterations and Renovations, does not	
	Costs,	Renovations, for every budget year	equal the sum of Alterations and Renovations	
	Alterations	for this budget.	for all budget years.	
	and			
Cumulative	Renovations Section F	Must be equal to the sum of Other	The 424 DD Compulative Dudget Other Direct	
Budget (R&R)	Section F, Other Direct	Must be equal to the sum of Other Direct Costs, Other, for every	The 424 RR Cumulative Budget Other Direct Costs, Other, does not equal the sum of Other	
Buagei (K&K)	Costs, other	budget year for this budget.	Direct Costs, Other for all budget years.	
Cumulative	Section G,	Required.	The 424 RR Cumulative Budget Direct Costs	
Budget (R&R)	Direct Costs	required.	is required.	
Buugei (Ran)	(A-F), total	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Direct	
	(11 1), (01411	Direct Costs for every budget year	Costs does not equal the sum of Total Direct	
		for this budget.	Costs for all budget years.	
Cumulative	Section H,	Must be equal to the sum of Total	The 424 RR Cumulative Budget Total Indirect	
Budget (R&R)	Indirect Costs	Indirect Costs for every budget	Costs does not equal the sum of Total Indirect	
Zinger (Harr)		year for this budget.	Costs for all budget years.	
Cumulative	Section I,	Required	The 424 RR Cumulative Budget Total Direct	
Budget (R&R)	Total Direct	rioquirou	and Indirect Costs are required.	
Danger (Man)	I Juni Dil CCt		and mancet costs are required.	

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

Construction Budget

Component	Field	Validation	Error Message	Notes & Tips
Construction	Administratio			May occur up to 11 times
Budget (R&R)	n and Legal			
	Expenses,			These will have one budget period only. It
	Total Cost			should be mapped with the same start and
				end date as the project period.
Construction	Administratio			May occur up to 11 times
Budget (R&R)	n and Legal			
	Expenses,			
	Costs Not Allowable for			
	Participation			
Construction	Administratio	Provide error if not equal to	The Total Allowable Costs for Administration	May occur up to 11 times
Budget (R&R)	n and Legal	column A (Total Cost) minus	and Legal Expenses (line e e of	way occur up to 11 times
Buager (Rech)	Expenses,	column B (Costs Not Allowable	the Construction Budget) must be equal to the	
	Total	for Participation).	difference of columns A (Total Cost) and B	
	Allowable	,	(Costs Not Allowable for Participation)	
	Costs		1 /	
Construction	Subtotal 1,	Provide error if not equal to the	The Total Cost Subtotal on the Construction	
Budget (R&R)	Total Cost	sum of lines 1-11, Total Cost	Budget must be equal to the sum of total costs	
			for all Administration and Legal Expenses	
			entries	
Construction	Subtotal 1,	Provide error if not equal to the	The Costs Not Allowable for Participation	
Budget (R&R)	Costs Not	sum of lines 1-11, Costs Not	Subtotal on the Construction Budget must be	
	Allowable for	Allowable for Participation	equal to the sum of all Administration and	
Construction	Participation Selection	Provide error if not equal to	Legal Expenses entries The Total Allowable Costs Subtotal on the	
	Subtotal 1, Total	column A (Total Cost) minus	Construction Budget must be equal to the	
Budget (R&R)	Allowable	column B (Costs Not Allowable	difference of columns A (Total Cost) and B	
	Costs	for Participation).	(Costs Not Allowable for Participation)	
	0000	Provide error if not equal to the	The Total Allowable Costs Subtotal on the	
		sum of lines 1-11, Total Allowable	Construction Budget must be equal to the sum	
		costs	of all Administration and Legal Expenses	
			entries	
Construction	Contingencies			
Budget (R&R)	, Total Cost			

Component	Field	Validation	Error Message	Notes & Tips
Construction	Contingencies			
Budget (R&R)	, Costs Not			
	Allowable for			
	Participation	D :1		
Construction	Contingencies	Provide error if not equal to	The Total Allowable Costs for Contingencies	
Budget (R&R)	, Total Allowable	column A (Total Cost) minus column B (Costs Not Allowable	on the Construction Budget must be equal to the difference of columns A (Total Cost) and	
	Costs	for Participation).	B (Costs Not Allowable for Participation)	
Construction	Subtotal 2,	Provide error if not equal to the	The Total Cost Subtotal on the Construction	
Budget (R&R)	Total Cost	sum of lines 12 and 13, Total Cost	Budget must be equal to the sum of	
Buagei (K&K)	Total Cost	sum of fines 12 and 13, Total Cost	Contingencies and the subtotal of all	
			Administration and Legal Expenses entries	
Construction	Subtotal 2,	Provide error if not equal to the	The Costs Not Allowable for Participation	
Budget (R&R)	Costs Not	sum of lines 12 and 13, Costs Not	Subtotal on the Construction Budget must be	
g. (=====)	Allowable for	Allowable for Participation	equal to the sum of Contingencies and the	
	Participation	1	subtotal of all Administration and Legal	
	_		Expenses entries	
Construction	Subtotal 2,	Provide error if not equal to	The Total Allowable Costs Subtotal on the	
Budget (R&R)	Total	column A (Total Cost) minus	Construction Budget must be equal to the	
	Allowable	column B (Costs Not Allowable	difference of columns A (Total Cost) and B	
	Costs	for Participation).	(Costs Not Allowable for Participation)	
		Provide error if not equal to the	The Total Allowable Costs Subtotal on the	
		sum of lines 12 and 13, Total	Construction Budget must be equal to the sum	
		Allowable Costs	of Contingencies and the subtotal of all	
G i	D 1 4		Administration and Legal Expenses entries	
Construction Budget (R&R)	Project (Program)			
Buagei (K&K)	Income, Total			
	Cost			
Construction	Project			
Budget (R&R)	(Program)			
	Income, Costs			
	Not Allowable			
	for			
	Participation			
Construction	Project	Provide error if not equal to	The Project (Program) Income, Total	
Budget (R&R)	(Program)	column A (Total Cost) minus	Allowable Costs on the Construction Budget	
	Income, Total	column B (Costs Not Allowable	must be equal to the difference of columns A	
	Allowable	for Participation).	(Total Cost) and B (Costs Not Allowable for	
	Costs		Participation)	

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

SBIR/STTR Information

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

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR (NIH)	Question 3. Located in	Required.		Store response in database.
	HUBZone (Y/N)			
SBIR/STTR (NIH)	Question 4. Research to be Performed in US? (Y/N)	Required.		Store response in database.
SBIR/STTR (NIH)	Explanation of Foreign Performance	Must be included if answer to 'work to be performed in US' question is 'no'.	If Question 4 on the SBIR/STTR Information Component indicates that research is not to be performed in the US, an explanation attachment must be provided.	
		Cannot be included if answer to 'work to be performed in US' question is 'yes'.	If Question 4 on the SBIR/STTR Information Component indicates that research is to be performed in the US, an explanation attachment cannot be provided.	
SBIR/STTR (NIH)	Question 5. Equivalent Submissions (Y/N)	Required.		Store response in database.
SBIR/STTR (NIH)	Names of other Federal agencies for equivalent work	Required entry if answer to 'submittal of equivalent work to other agencies' question is 'yes'. Cannot be included if answer to 'submittal of equivalent work to		Store response in database.
SBIR/STTR (NIH)	Question 6. Disclosure Permission Statement (Y/N)	other agencies' question is 'no'. Required		Map response to appls_t, disclosure_permission_code
SBIR/STTR (NIH)	Commercializ ation Plan Attachment	Required for Phase II and Fast Track submissions	The Commercialization Plan is required on the SBIR/STTR Information Component for Phase II and Fast Track submissions	
		Cannot be submitted for anything other than Phase II or Fast Track submissions	A Commercialization Plan can only be submitted for Phase II and Fast Track submissions on the SBIR/STTR Information Component.	
		Limited to 15 pages.	The Commercialization Plan on the SBIR/STTR Information Component is limited to 15 pages	

Component	Field	Validation	Error Message	Notes & Tips
SBIR/STTR	Question 8.	Required for SBIR		Store response in database.
(NIH)	Receipt of			
	Phase II SBIR			
	Awards (Y/N)			
SBIR/STTR	Company			
(NIH)	Commercializ			
	ation History			
	Attachment			
SBIR/STTR	Question 9.	Required for SBIR		Store response in database.
(NIH)	SBIR PD/PI			
	Primary			
	Employment			
	(Y/N)			
SBIR/STTR	Question 10.	Required for STTR		Store response in database.
(NIH)	STTR PD/PI			
	Commitment			
	(Y/N)			
SBIR/STTR	Question 11.	Required for STTR		Store response in database.
(NIH)	STTR work			
	percentages			
	(Y/N)			

PHS 398 Cover Page Supplement

Component	Field	Validation	Error Message	Notes & Tips
Cover Page (NIH)	PD/PI Information (prefix, first, middle, last, suffix)	Read only, pulled from R&R		
Cover Page (NIH)	PD/PI New Investigator Question	On an R01 submission, if 'Yes', PD/PI (and multiple PIs) should not have a PI or multiple PI role on any awarded R01.	For an R01 submission to be considered a New Investigator application, the PD/PI must not have received agency R01 funding in the past. All PIs (including multiple PIs) must meet the definition of New Investigator for this box to be checked.	
Cover Page (NIH)	PD/PI Degrees	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 role. (Other Agency)	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 grant image will display the degrees as submitted. If the degrees listed in the eRA Commons are not current, please update them in the eRA Commons. Instructions on updating profile information are available at https://commons.era.nih.gov/commons-help/216.htm.</list></degree>	Be sure to include your educational degrees (by code) as listed in the eRA Commons. The system will compare your application with the information in the eRA Commons profile. If the degrees don't match, the degrees you submit in the application will be displayed in the grant image but the top 3 degrees listed in the Commons account will be saved in the database.
		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.	

Component	Field	Validation	Error Message	Notes & Tips
		Provide a warning if no degrees have been included.	No degrees have been submitted for the PD/PI. If you want the degrees to be displayed on the face page of the grant image, you should include them on the PHS 398 Cover Page Supplement.	·
Cover Page (NIH)	Human Subjects Clinical Trial (Y/N)	An answer is required if the answer to 'Human Subjects Involved' is "Yes".	The Human Subjects Clinical Trial question on the PHS 398 Cover Page Supplement must be answered if the answer to 'Human Subjects Involved' on the Other Project information page is "Yes".	
		If Human Subjects NIH-Defined Phase III Clinical Trial is true, must be true.	The Human Subjects Clinical Trial question on the PHS 398 Cover Page Supplement must be "Yes" if the answer to Human Subjects NIH-Defined Phase III Clinical Trial is "Yes".	
		For S10 application, provide a warning if this is true.	The answer to the Human Subjects Clinical Trial question on the PHS 398 Cover Page Supplement should not be 'Yes'. The application will be processed, but a concern may be raised during review.	
Cover Page (NIH)	Human Subjects NIH-Defined Phase III Clinical Trial	An answer is required if the answer to 'Human Subjects Clinical Trial' is "Yes".	The Human Subjects NIH-Defined Phase III Clinical Trial question on the PHS 398 Cover Page Supplement must be answered if the answer to the Human Subjects Clinical Trial question is "Yes".	
	(Y/N)	If Human Subjects Clinical Trial is false, must be false	The Human Subjects NIH-Defined Phase III Clinical Trial on the PHS 398 Cover Page Supplement must be "No" if the answer to the Human Subjects Clinical Trial question is "No".	
Cover Page (NIH)	Applicant Organization Contact Information	Read only, pulled from R&R		
Cover Page (NIH)	Applicant Organization Contact Title			
Cover Page (NIH)	Applicant Organization Contact Street Address (1 and 2)	If either line>50 characters, truncate (Other Agency)		

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

Component	Field	Validation	Error Message	Notes & Tips
Cover Page (NIH)	HESC Involved (Y/N)	For S10 application, display a warning if this is true.	The answer to the HESC Involved question on the PHS 398 Cover Page Supplement should be 'No'. The application will be processed, but a concern may be raised during review.	Change mapping: set Special Topic code to 13 if HESC Involved is 'yes'. This code is set in appl_special_topics_t.
		A response is required for this element.	A response of 'Yes' or 'No' is required for the HESC Involved (Y/N) element on the PHS 398 Cover Page.	Although the element is required by the PureEdge form, the schema does not currently require it for system to system submissions.
Cover Page (NIH)	HESC Cell Lines	If HESC involved='Y', must include this or 'Can't be Referenced'	If the answer to 'HESC involved' is "Yes" on the PHS 398 Cover Page Supplement, HESC Cell Lines must be included or the 'Can't be Referenced' checkbox must be checked.	For the Human Embryonic Stem Cells (HESC) section, if you answer Yes, you must list the cell lines in the boxes provided or check the box "Specific stem cell line cannot be referenced at this time. One from the registry will be used."
		If HESC involved='N', can't include this or 'Can't be Referenced'	If the answer to 'HESC involved' is "No" on the PHS 398 Cover Page Supplement, HESC Cell Lines may not be included and the 'Can't be Referenced' checkbox must not be checked.	
		If specific stem cell line is included, must be a valid stem cell line in eRA database. Comparison should not be case-sensitive. (Other Agency)	Stem cell line <cell line="" number=""> on the PHS 398 Cover Page Supplement is not a valid stem cell line number.</cell>	
		If 'Can't Be Referenced' is checked, no other cell lines may be entered.	If the 'Can't be Referenced' checkbox is checked on the PHS 398 Cover Page Supplement, no other stem cell lines may be entered.	
Cover Page (NIH)	HESC 'can't be referenced' checkbox	If HESC involved='Y', must include this or 'HESC Cell Lines'	If the answer to 'HESC involved' is "Yes" on the PHS 398 Cover Page Supplement, HESC Cell Lines must be included or the 'Can't be Referenced' checkbox must be checked.	
		If HESC involved='N', can't include this or 'HESC Cell Lines'	If the answer to 'HESC involved' is "No" on the PHS 398 Cover Page Supplement, HESC Cell Lines may not be included and the 'Can't be Referenced' checkbox must not be checked.	

PHS 398: Modular Budget

Component	Field	Validation	Error Message	Notes & Tips
Modular Budget, Years 1-5 (NIH)		Accept submission of modular budget or detailed budget, but not both	Both a modular and a detailed budget have been included with this submission. One or the other may be submitted.	
		Do not accept a modular budget for R13 applications (activity code on funding opportunity = 'R13' or 'U13')	Modular budgets may not be submitted for Conference Grant applications.	
		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.	
		For a revision, if the parent grant budget is non-modular, only a detailed budget component may be submitted.	The parent grant for this revision uses the non-modular format; therefore, this application may include a detailed R&R budget component only.	
		For an R15 application (activity code on funding opportunity = 'R15'), return warning if more than one budget period has been included.	An AREA grant should be submitted for one budget period only (see the PHS 398 Modular Budget).	
		Do not accept a modular budget for SBIR/STTR applications	Modular budgets may not be submitted for SBIR/STTR submissions.	
Modular Budget, Years 1-5 (NIH)	Start Date	For budget period 1, 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 (Other Agency)	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.	
		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.	
Modular Budget, Years 1-5 (NIH)	End Date	Budget period end date must be greater than budget period start date.	The modular budget year <budget year=""> end date must be later than the modular budget year <budget year=""> start date.</budget></budget>	

Component	Field	Validation	Error Message	Notes & Tips
Modular	Direct Costs,	Must be <= 250K, must be a	The total direct costs for modular budget year	
Budget, Years	Direct Cost	multiple of 25K for each budget	<pre><budget year=""> are greater than \$250K, or are</budget></pre>	
1-5 (NIH)	Less	year	not in increments of \$25K.	
	Consortium,	For R15 submissions, provide	Direct cost requests are limited to \$150k a	
	F&A	warning if this value for any	year for AREA grants (PHS 398 Modular	
		budget year is >= 150K.	Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A). Applications that exceed	
			this limit may be delayed in the peer review	
			process or rejected.	
		For R03 submissions, provide	Direct cost requests are limited to \$50k a year	
		warning if this value for any	for this application (PHS 398 Modular	
		budget year is >50K (LV).	Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A). Applications that exceed	
			this limit may be delayed in the peer review	
			process or rejected.	
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable direct cost	
			limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
		E 201 1 : : : :1	review process.	
		For R21 submissions, provide	Direct cost requests are limited to \$200k a	
		warning if this value for any	year for this application (PHS 398 Modular	
		budget year is >200K (LV).	Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A). Applications that exceed	
			this limit may be delayed in the peer review	
			process or rejected.	
			Warning message for 'opt out' announcements: Be sure that you have	
			complied with the allowable direct cost	
			limitations for this FOA (PHS 398 Modular	
			Budget, Direct Costs, Direct Cost Less	
			Consortium, F&A). Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
		For R34 submissions, provide	Direct cost requests are limited to \$225k a	
		warning if this value for any	year for this application (PHS 398 Modular	
		budget year is >225K (LV).	Budget, Direct Costs, Direct Cost Less	
		ouaget your is - 2231x (ET).	Consortium, F&A). Applications that exceed	
			this limit may be delayed in the peer review	
			process or rejected.	
	1		process or rejected.	

Component	Field	Validation	Error Message	Notes & Tips
Modular	Direct Costs,	Must be less than 10,000,000,000	Warning message for 'opt out' announcements: Be sure that you have complied with the allowable direct cost limitations for this FOA. Otherwise, your application may be delayed and rejected in the review process. For NIH processing, the Consortium F&A	Grants.gov accepts up to 14 bytes
Budget, Years 1-5 (NIH)	Consortium, F&A		amount on the PHS 398 Modular Budget must be less than 10,000,000,000.	(including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Direct Costs, Total Direct Costs	Must equal sum of Direct Cost Less Consortium, F&A and Consortium, F&A for the corresponding budget year (if both are submitted). If only Direct Cost Less Consortium, F&A is submitted for that budget year, must equal that.	The total direct costs for modular budget year dudget year> in the PHS 398 Modular Budget do not equal the sum of Direct Cost Less Consortium, F&A and Consortium, F&A	
		Must be less than 10,000,000,000	The Total Direct Costs amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Indirect Cost Type 1-4			
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Indirect Cost Rate 1-4	Provide warning if greater than 0 and less than 1.	Indirect Cost Rate is less than 1 for budget year budget year> (PHS 398 Modular Budget). Please note that this figure represents a percentage.	
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Indirect Cost Base 1-4	Must be less than 10,000,000,000	The Indirect Cost Base amount in the PHS 398 Modular Budget for budget year budget year> must be less than 10,000,000,000.	Grants.gov accepts up to 14 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Funds Requested 1-4	Must be less than 10,000,000,000	The Funds Requested amount on the PH 398 Modular Budget must be less than 10,000,000,000.	Grants.gov accepts up to 14 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Years 1-5 (NIH)	Indirect Costs, Cognizant Agency			

Component	Field	Validation	Error Message	Notes & Tips
Modular	Indirect			
Budget, Years	Costs,			
1-5 (NIH)	Indirect Cost			
	Rate			
	Agreement			
	Date			
Modular	Indirect	Must equal sum of Indirect Costs,	The Total Indirect Costs do not equal the sum	
Budget, Years	Costs,	Funds Requested 1-4 for the	of Funds Requested for budget year <budget< th=""><th></th></budget<>	
1-5 (NIH)	Total Indirect	corresponding budget year, if any	year> (PHS 398 Modular Budget).	
	Costs	Indirect Costs were entered.		
		Must be less than 10,000,000,000	The Total Indirect Costs amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular	Total Direct	Must be greater than 0 for first	For Modular Budget Year 1, Total Direct and	
Budget, Years	and Indirect	budget period.	Indirect Costs must be greater than zero (PHS	
1-5 (NIH)	Costs, Funds		398 Modular Budget)	
	Requested	Must be equal to the sum of Total	For Modular Budget Year <budget year=""></budget>	
		Direct Costs and Total Indirect	(PHS 398 Modular Budget), the Total Direct	
		Costs for the corresponding budget	and Indirect Costs must be equal to Total	
		period.	Direct Costs plus Total Indirect Costs	
		26 1 1 1 10 000 000 000	requested for that budget year.	
		Must be less than 10,000,000,000	The Total Direct and Indirect Costs on the	Grants.gov accepts up to 15 bytes
			PHS 398 Modular Budget amount must be less than 10,000,000,000.	(including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.

PHS 398 Modular Budget: Period 5 and Cumulative

Component	Field	Validation	Error Message	Notes & Tips
Modular	Total Direct	Must be equal to the sum of all	The Total Direct Cost less Consortium F&A	•
Budget,	Cost less	Total Direct Cost less Consortium	for Entire Project Period in the PHS 398	
Cumulative	Consortium	F&A values for all budget years	Modular Budget must be equal to the sum of	
(NIH)	F&A for		Total Direct Cost Less Consortium F&A	
	Entire Project		values for all budget years.	
	Period	For R03 submissions, provide	Cumulative direct cost requests on the PHS	
		warning if this value is >100K	398 Modular Budget are limited to a total of	
		(LV).	\$100k for this application. Applications that	
			exceed this limit may be delayed in the peer	
			review process or rejected.	
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable cumulative direct	
			cost limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
		For R21 submissions, provide	Cumulative direct cost requests on the PHS	
		warning if this value is >275K	398 Modular Budget are limited to a total of	
		(LV).	\$275k for this application. Applications that	
			exceed this limit may be delayed in the peer	
			review process or rejected.	
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable cumulative direct	
			cost limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
		For R34 submissions, provide	Cumulative direct cost requests on the PHS	
		warning if this value is >450K	398 Modular Budget are limited to a total of	
		(LV).	\$450k for this application. Applications that	
			exceed this limit may be delayed in the peer	
			review process or rejected.	
			Warning message for 'opt out'	
			announcements: Be sure that you have	
			complied with the allowable cumulative direct	
			cost limitations for this FOA. Otherwise, your	
			application may be delayed and rejected in the	
			review process.	

Component	Field	Validation	Error Message	Notes & Tips
Modular	Total	Must be equal to the sum of all	The Total Consortium F&A for Entire Project	
Budget,	Consortium	Consortium F&A values for all	Period must be equal to the sum of	
Cumulative	F&A for	budget years	Consortium F&A values for all budget years	
(NIH)	Entire Project		(PHS 398 Modular Budget).	
	Period	Must be less than 10,000,000,000	The Total Consortium F&A for Entire Project Period amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular	Total Costs,	Must be equal to the sum of Total	The Total Direct Costs for the Entire Proposed	
Budget, Cumulative (NIH)	Total Direct Costs for Entire Project	Direct Costs for all budget years	Project Period must be equal to the sum of the Total Direct Costs for all budget years (PHS 398 Modular Budget).	
	Period	Must be less than 10,000,000,000	The Total Direct Costs for Entire Project Period amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular Budget, Cumulative	Total Costs, Total Indirect Costs for	Must be equal to the sum of Total Indirect Costs for all budget years	The Total Indirect Costs Requested for Entire Project Period must be equal to the sum of Total Indirect Costs for all budget years (PHS	
(NIH)	Entire Project		398 Modular Budget).	
	Period	Must be less than 10,000,000,000	The Total Indirect Costs for Entire Project Period amount (PHS 398 Modular Budget) must be less than 10,000,000,000.	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular	Total Costs,	Must be equal to the sum of all	The Total Direct and Indirect Costs for Entire	
Budget,	Total Direct	Total Direct and Indirect Costs	Project Period must be equal to the sum of all	
Cumulative	and Indirect	values for all budget years	Total Direct and Indirect Costs values for all	
(NIH)	Costs for		budget years (PHS 398 Modular Budget).	
	Entire Project Period	Must be less than 10,000,000,000	The Total Direct and Indirect Costs for Entire Project Period amount must be less than 10,000,000,000 (PHS 398 Modular Budget).	Grants.gov accepts up to 15 bytes (including 2 decimal places); NIH accepts no more than 10. Long-term db change is recommended.
Modular	Budget	Provide a warning if this	In most cases, a Personnel Justification	
Budget,	Justifications,	attachment hasn't been included	attachment should be included if a Modular	
Cumulative	Personnel	with a modular budget.	Budget is being submitted.	
(NIH)	Justification			
Modular	Budget			
Budget,	Justifications,			
Cumulative	Consortium			
(NIH)	Justification			

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

PHS 398 Checklist

Component	Field	Validation	Error Message	Notes & Tips
Checklist (NIH)	Type of	Read only, pulled from R&R		
	Application	Allow a submission with no		
		Checklist component.		
Checklist (NIH)	Federal	Read only, pulled from R&R		
	Identifier			
Checklist (NIH)	Change of	Not accepted for revisions.	A revision may not be submitted if a Change	
	Investigator/		of PI has been indicated on the PHS 398	
	Change of		Checklist. Revisions must have the same PI as	
	Inst.; Change of PI		the parent grant.	
Checklist (NIH)	Change of	Must be included if application is	The name of the former PI must be included if	If there has been a change in the Principal
Checklist (MH)	Investigator/	for change of PI	there has been a Change of PI indicated on the	Investigator, you must include the name of
	Change of	for change of 11	PHS 398 Checklist.	the former PI so that the grant can be
	Inst.: Name of		THE 576 CHECKISE.	matched correctly.
	former PI			
	(Prefix, First			
	Name, Middle			
	Name, Last			
	Name, Suffix)			
Checklist (NIH)	Change of			
	Investigator/			
	Change of			
	Inst.: change			
	of grantee inst.			
Checklist (NIH)	Change of	If >40 characters, truncate. (Other		Grants.gov length is 120, our db length is
Checkiisi (19111)	Investigator/	Agency)		40. Consider long-term db change.
	Change of	rigency)		40. Consider long term do change.
	Inst.: name of			
	former inst.			
Checklist (NIH)	Inventions			
	and Patents,			
	Yes			
Checklist (NIH)	Inventions			
	and Patents,			
	No			

Component	Field	Validation	Error Message	Notes & Tips
Checklist (NIH)	Inventions and Patents, Previously	Must be answered if response to Inventions and Patents is 'Yes'	Inventions and Patents, Previously Reported on the PHS 398 Checklist must be answered if the answer to Inventions and Patents is 'Yes.'	
	Reported (Yes or No)	Should not be answered if response to Inventions and Patents is 'No'	Inventions and Patents, Previously Reported on the PHS 398 Checklist should not be answered if the answer to Inventions and Patents is 'No'	
Checklist (NIH)	Program Income Anticipated (Y/N)			
Checklist (NIH)	Program Income, Budget Period 1-5	Should only be completed if answer to Program Income Anticipated question was 'Y'. Provide error if provided for S10 application. The number of program income budget periods must be less than or equal to the number of budgets provided in the budget component.	If answer to Program Income Anticipated on the PHS 398 Checklist question is 'N', no program income detail may be entered. No program income may be included on the PHS 398 Checklist for S10 applications. Anticipated amount for program income has been provided for <x> budget years on the PHS 398 Checklist. Only <y> years of budgets were provided with this application.</y></x>	
Checklist (NIH)	Program Income, Anticipated Amount 1-5	Must be less than 10,000,000,000	The Program Income Anticipated Amount (PHS 398 Checklist) for budget period dudget period> must be less than 10,000,000,000.	Grants.gov accepts up to 14 bytes (including 2 decimal places); NIH accepts no more than 10, with 2 decimal places. Long-term db change is recommended.
Checklist (NIH)	Program Income, Sources 1-5			
Checklist (NIH)	Assurances/ Certification: Explanation			

PHS 398 Research Plan

Component	Field	Validation	Error Message	Notes & Tips
Research Plan	Type of	Read only, pulled from R&R		
(NIH)	Application	Allow applications to come in		
		without this component.		
Research Plan	Research	Required for resubmission for non-	An Introduction must be included for	
(NIH)	Plan	S10 applications.	resubmissions on the PHS 398 Research Plan.	
	Attachments:	Required for revisions.	An Introduction must be included for	
	Introduction		revisions on the PHS 398 Research Plan	
		Limited to 1 page for revisions.	The Introduction for a revision is limited to	
			one page on the PHS 398 Research Plan	
		Limited to 3 pages for non-	The Introduction is limited to three pages on	
		SBIR/STTR and non-R36	the PHS 398 Research Plan.	
		resubmissions (except as explicitly		
		listed below).		
		Introduction limited to 1 page for	The Introduction is limited to one page for this	
		Phase I SBIR/STTR, R03 (LV),	submission on the PHS 398 Research Plan.	
		R13, U13, R21 (LV), and R36 resubmissions.	Warning message for 'opt out'	
		resubmissions.	announcements: Be sure that you have	
			complied with the allowable page limitations for the Introduction for this FOA (see PHS	
			398 Research Plan). Otherwise, your	
			application may be delayed and rejected in the	
			review process.	
		Introduction limited to 3 pages for	The Introduction (see PHS 398 Research Plan)	
		Phase II and Fast Track	is limited to three pages for this submission.	
		SBIR/STTR, R01, R18, U18, R25,	is inniced to times pages for this suchinssion.	
		R33, R21/R33, and R34		
		resubmissions, as well as for R03		
		and R21 resubmissions that have		
		opted out.		
Research Plan	Research	Provide warning if Research Plan	The Research Plan is limited to 25 pages. This	
(NIH)	Plan	Attachments 2-5 together are	may span 28 pages due to page breaks. If the	
	Attachments:	greater than 25 pages and less than	total space occupied by text does not exceed	
	Specific Aims	or equal to 28 pages (applies to all	25 pages then no action is needed.	

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

Component	Field	Validation	Error Message	Notes & Tips
		For R13 or U13 applications submitted to AHRQ, Research Plan Attachments 2-5 together must be less than or equal to 15 pages	The Conference Plan for an AHRQ Conference Grant application is limited to 15 pages (PHS 398 Research Plan).	AHRQ applications can be identified by a value of 'HS' in rfa_pa_notices_t.phs_org_code.
		For R36, X01, and R03 (LV) applications, provide warning if Research Plan Attachments 2-5 together are greater than 10 pages and less than or equal to 13 pages.	The Research Plan is limited to 10 pages. This may span 13 pages due to page breaks. If the total space occupied by text does not exceed 10 pages then no action is needed.	
			Warning message for 'opt out' announcements: Be sure that you have complied with the allowable page limitations for the Research Plan for this FOA. Otherwise, your application may be delayed and rejected in the review process.	
		For R36, X01, and R03 (LV) applications, Research Plan Attachments 2-5 together must be less than or equal to 13 pages.	The Research Plan is limited to 10 pages. This may span 13 pages due to page breaks. If the total space occupied by text does not exceed 10 pages then no action is needed. Warning message for 'opt out'	
			announcements: Be sure that you have complied with the allowable page limitations for the Research Plan for this FOA. Otherwise, your application may be delayed and rejected in the review process.	
Research Plan (NIH)	Research Plan Attachments: Background and Significance			
Research Plan (NIH)	Research Plan Attachments: Preliminary Studies/ Progress Report	Must be included for renewals, revisions, and Phase II SBIR. Exceptions to this validation are S10 and R13.	A Progress Report attachment must be included for renewals (competing continuations), revisions (supplements), and Phase II SBIR/STTR applications (see the PHS 398 Research Plan).	For grant image, bookmark should be set based on whether this is a new (should show Preliminary Studies) or a resubmission, revision, or renewal (should show Progress Report)

Component	Field	Validation	Error Message	Notes & Tips
Research Plan	Research	Required for all submissions	The Research Design and Methods section of	
(NIH)	Plan	except S10.	the PHS 398 Research Plan must be attached	
	Attachments:		to the application.	
	Research			
	Design and			
	Methods			
Research Plan	Research			Will only be included in Research Plan for
(NIH)	Plan			versions 1.1 and forward
	Attachments:			
	Inclusion			
	Enrollment			
D 1 D1	Report			Will 1 1 : 1 1 1: D 1 D C
Research Plan	Research			Will only be included in Research Plan for versions 1.1 and forward
(NIH)	Plan Attachments:			versions 1.1 and forward
	Progress			
	Report			
	Publication			
	List			
Research Plan	Research	Required for non-S10 and non-	A Protection of Human Subjects attachment	
(NIH)	Plan	DP1 applications, if Human	must be included on the PHS 398 Research	
,	Attachments:	Subjects is 'yes'.	Plan page if the response to the Human	
	Protection of		Subjects question on the Other Project	
	Human		Information page is 'Yes'.	
	Subjects			
Research Plan	Research	Required for non-S10 applications	The Inclusion of Women and Minorities	
(NIH)	Plan	if Human Subjects is true and	Attachment must be included on the PHS 398	
	Attachments:	Exemption is not E4	Research Plan page if the response to the	
	Inclusion of		Human Subjects question on the Other Project	
	Women and		Information Page is 'Yes' and if the	
n	Minorities	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Exemption Number is not 4.	
Research Plan	Research	Required for non-S10 applications	The Targeted/Planned Enrollment Table	
(NIH)	Plan	if Human Subjects is true and	Attachment must be included on the PHS 398	
	Attachments:	Exemption is not E4	Research Plan page if the response to the	
	Targeted/ Planned		Human Subjects question on the Other Project	
	Enrollment		Information Page is 'Yes' and if the	
	Table		Exemption Number is not 4.	
	Table			

Component	Field	Validation	Error Message	Notes & Tips
Research Plan (NIH)	Research Plan Attachments: Inclusion of Children	Required for non-S10 applications if Human Subjects is true and Exemption is not E4	The Inclusion of Children Attachment must be included on the PHS 398 Research Plan page if the response to the Human Subjects question on the Other Project Information Page is 'Yes' and if the Exemption Number is not 4.	
Research Plan (NIH)	Research Plan Attachments: Data and Safety Monitoring Plan	For schema version 1.0, required for non-S10 applications if Human Subjects is true and Clinical Trial question is true.	The Data and Safety Monitoring Plan Attachment must be included on the PHS 398 Research Plan if the response to the Human Subjects question is 'Yes' and the response to the Clinical Trial question is 'Yes'	Will not be included in Research Plan component for versions later than 1.0
Research Plan (NIH)	Research Plan Attachments: Vertebrate Animals	Required for non-S10 and non-DP1 applications if VertebrateAnimalsUsedQuestion is Y	A Vertebrate Animals attachment must be included on the PHS 398 Research Plan page if the response to the Vertebrate/Animals Subject Used Question on the Other Project Information page is 'Yes'	
Research Plan (NIH)	Research Plan Attachments: Select Agent Research			Will only be included in Research Plan for versions 1.1 and forward
Research Plan (NIH)	Research Plan Attachments: Multiple PI Leadership Plan	Required if multiple PIs are included with the submission	The Multiple PI Leadership Plan attachment on the PHS 398 Research Plan must be included if multiple PIs have been included on the Senior/Key Person page.	Will only be included in Research Plan for versions 1.1 and forward
Research Plan (NIH)	Research Plan Attachments: Consortium/ Contractual Arrangement s			
Research Plan (NIH)	Research Plan Attachments: Letters of Support	Required for an R36 application (activity code on funding opportunity = 'R36')	An R36 application must include a Letters of Support attachment on the PHS 398 Research Plan. Certification Letters should be included in this attachment.	

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

PHS 398 Cover Letter

Component	Field	Validation	Error Message	Notes & Tips
Cover Letter	Cover Letter	For an R13 application (activity	For NIH applications only, a cover letter	
(NIH)	attachment	code on funding opportunity =	should be attached in the PHS 398 Cover	
		'R13' or 'U13'), provide warning	Letter section indicating NIH institute	
		if the cover letter is not attached.	approval for a Conference Grant application.	
		For an application responding to a	This funding opportunity allows submission	Will need to add indicator to database to
		collaborative announcement,	of a collaborative group of applications. A	identify collaborative announcement,
		provide a warning if this	Cover Letter attachment must be included	defaulted to 'no'
		attachment is not 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.	