Category 3

Research Area Individual Projects

Category 3 Instructions
Research Area Individual Projects

Research Alignment

Does my proposed research belong in the Research Area Individual Project Category? Yes, if your research is in one the following research areas, and if the primary focus is <u>not</u> on Barley or Integrated Management Studies, or was not accepted by one of the Coordinated Projects, you should complete your pre-proposal using the instructions and forms provided in this section of the FY22 RFP.

Research Area Individual Projects	FHB Management (MGMT)
	Food Safety and Toxicology (FST)
	Gene Discovery and Engineering Resistance (GDER)
	Pathogen Biology and Genetics (PBG)
	Other – Pre-proposals that do not fit into a specific research area or coordinated project may also be submitted in this Category

Category 3 Contact Information (Research Area Chairs)

Research Area Individual Projects		
FHB Management (MGMT)	Erick DeWolf, Kansas State Univ	Dewolf1@ksu.edu
Food Safety and Toxicology (FST)	Dave Kendra, BASF, NC	david.kendra@basf.com
Gene Discovery and Engineering Resistance (GDER)	Jyoti Shah, Univ of North Texas	Jyoti.shah@unt.edu
Pathogen Biology and Genetics (PBG)	Martha Vaughan, USDA, IL	martha.vaughan@usda.gov

Key Deadlines

Category 3: **Research Area Individual Projects**	USWBSI EPS System Opens	**August 3, 2021**
	Deadline for PIs to submit FY22 Pre-Proposal(s) and supporting documents via EPS System	**September 21, 2021**
	Pre-Proposal Review and Funding Determinations	**Oct-Dec 2021**
	PIs Notified of Awards	**January 2022**

PI Steps for Category 3 Submission Process

Individual Pre-proposals will be submitted using the USWBSI's Electronic Pre-Proposal Submission (EPS) System. PIs are encouraged to review the form once it is available to familiarize yourself with all the required components. PIs will also be able to start the submission process, save and return as needed until the deadline for submission is reached. Requirements for this online submission tool must include and adhere to the following:

Principal Investigator Contact Information
- Last Name
- First Name
- Email Address
- Institution
- Department
- Address
- Work Phone

Sponsored Programs Contact Information
- Last Name
- First Name
- Email Address

Project Title of Proposed Research
The title of the project pre-proposal must be brief (**85-character maximum** including spaces and punctuation), yet represent the major thrust of the project. Because this title will be used to provide information to those who may not be familiar with the proposed project, highly technical words or phraseology should be avoided where possible. In addition, phrases such as "investigation of" or "research on" should not be used. Keep in mind titles should be **broad in scope**, allowing for **changes in project objectives annually** as needed if awarded.

Research Category
Select the Research Area whose description and priorities your project is designed to address. Research Area Program Descriptions and Research Priorities can be accessed through the USWBSI's Website at https://scabusa.org/research.

Project Type
Indicate if this is a new project or a continuing project that was previously or currently awarded.

Project Duration
New this year (for FY22), PIs will have the option to select the duration of the project for either a 2-year or 4-year term. The USWBSI is encouraging longer term (4-year) projects to reduce the significant processing requirements for the USDA-ARS, USWBSI-NFO, University Sponsored Programs Offices and PIs to establish new agreements. Please note, the USWBSI has always awarded funding annually and will continue to do so, providing your project duration, if awarded, does not commit the USWBSI to the full-term budget. Annual performance reports and renewal review/approval will continue to be required for each year of the project. The submitted duration simply allows the USDA-ARS to establish the agreement with those terms in place, allowing for continual amendments for the duration of the term. If you have questions about determining the term length of your project please contact the USWBSI Networking and Facilitation Office for assistance, nfo@scabusa.org or call 517.290.5023.

PI and Co-Investigator Background Information – Upload Required
To assist peer reviewers in assessing the competence and experience of the proposed collaborators. The items listed below should be included for the PI and Co-Investigators who are expected to work on the project in a significant fashion (e.g. expectation of co-authorship on ensuing publications), whether or not funds are sought for this support. (**Note:** Accommodations may be requested if one of your Co-PIs is a PI on a USWBSI pre-proposal and is unable to provide their CPS form to you prior to the pre-proposal submission deadline; contact the USWBSI-NFO for assistance.) The PI will need to upload the following items for the PI and Co-Investigators:
- *Curriculum Vitae (CV) with Publication List*
  Curriculum Vitae. The CV should be limited to a presentation of academic and research credentials, e.g., educational, employment and professional history, and honors and awards. Unless pertinent to the project, do not include meetings attended, seminars, or personal data.
  Publication List. A chronological list of all publications in refereed journals during the past five years, including those in press, should be included with each project members CV, non-refereed technical publications that have relevance to the proposed project may be included.
  NOTE: The CV and Publication List should be uploaded as one PDF file and must not exceed four pages per scientist. CV/Pubs for collaborators or sub-contractors are not required.
- *Current and Pending Support (CPS) Form Download the current CPS form from the FY22 RFP web page at https://scabusa.org/research_rfp-fy22/forms_templates. Other versions of Current and Pending Support forms will NOT be accepted.* All PIs submitting a Pre-Proposal must also submit completed Current and Pending Support Forms listing other current public or private support to which key personnel identified in

the PRP have committed portions of their time, whether or not salary support for person(s) involved is included in the budget. Analogous information must be provided for any pending proposals that are being considered by, or that will be submitted in the near future to, other possible sponsors, including other USDA Programs or agencies, and the USWBSI. Concurrent submission of identical or similar proposals to the other possible sponsors will not prejudice the review or evaluation by the USWBSI for this purpose. However, a PRP that duplicates or overlaps substantially with a **proposal already reviewed and funded (or to be funded)** by another organization or agency will not be recommended under this program.

⬆ **Project Pre-Proposal Materials** – Upload Required
The following materials should be developed and <u>uploaded as one PDF file</u> in the order noted and adhering to the requirements as specified. Begin by downloading the 'Project Pre-Proposal Form' from https://scabusa.org/research_rfp-fy22/forms_templates.

Project Summary
Fill in the Project Summary Page (limited to 2 pages), using Calibri or Times New Roman 12-point font, and must include the following:
- Project Title (same as what is included in the submission form)
- Project PI, Institution and Co-PI(s), Institution(s)
- Project Summary
  The text for this portion of the project summary **should not exceed 400 words** and should focus on the following **(all four bullets below must be addressed)**:
  - Overall project goal(s)
  - Project Objectives (list in numbered format) and Expected Outcome(s) for each objective
  - Approaches that will be used to accomplish project goal(s) within the period of proposed work
  - Statement of Mutual Interest (i.e. how will stakeholders/end-users benefit from this research)

  Additionally, you should include these items in the Project Summary section (this will not be counted toward the 400-word count requirement).
  - Abbreviated (but tentative) Project Schedule/Timeline for the full project duration (i.e. all years)
  - Total Estimated Requested Amount for each year of the project

Project Description
The Project Description should provide a clear statement of the work to be undertaken and must include: research objectives for the **period of the proposed work** and expected significance; relation to longer-term goals of the PI's project; and relation to the present state of knowledge in the field, to work in progress by the PI under other support and to work in progress elsewhere.

The Project Description should outline the general plan of work, including the broad design of activities to be undertaken, and, where appropriate, provide a clear description of experimental methods and procedures, and plans for preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products.

Format: Brevity will assist reviewers and USWBSI/NFO staff in dealing effectively with pre-proposals. **Therefore, the written text of the Project Description must be five pages or less (single spaced or equivalent); ten pages or less in total including figures and tables.** The Project Description should be formatted using Calibri or <u>Times New Roman, 12 point or higher, black colored font with one-inch margins</u>**.** Bold formatting should only be used for section headings or used minimally to emphasize importance or significance. Digital images inserted into the Project Description must only be included within the page limits (10 pages total). The **maximum size of images** to be included is <u>1200 x 1500</u> <u>pixels,</u> using 256 colors. Figures must be legible when printed on an 8.5" x 11" page (100% scale). <u>Conformance to the format requirements will be strictly enforced</u>.

Project Description Content
The following specific content items should be included in your project description.

Title. Same as what is included in the submission form and on the Project Summary page.

USWBSI Research Priority Alignment. Relevance of the project to the goals of the U.S. Wheat and Barley Scab Initiative with reference to the applicable priorities listed in the FY22 Program Descriptions and Research Priorities (PD-RP) should be clearly stated. Research Priorities can be accessed at https://scabusa.org/research.

Introduction. A clear statement of the goal(s) and supporting objectives or research questions of the proposed project should be included. The most significant published work in the field under consideration, including the work of key project personnel on the current application, should be reviewed. The current status of research in this field of science should also be described **including, but not limited to, any ongoing USWBSI-recommended work currently underway**. **Preliminary data pertinent to the proposed research may be included in this section**. Present and discuss published literature that is directly related to, and supports, the proposed research (research objectives, materials and methods).

Rationale and Significance. It is understood that head scab is a devastating disease. Acknowledgment of this fact should require no more than one sentence. Concisely present the rationale behind the proposed research; identify the gaps in the knowledge base that your pre-proposal is trying to fill.
If applicable, please indicate if the research proposed here could lead to successful acquisition of grant funds from other agencies.

Research Materials and Methods. Specifically, this section must include:
- The hypotheses or questions being asked
- A description of the investigations and/or experiments proposed in the sequence in which the investigation or experiments are to be performed
- Techniques and methodologies to be used in carrying out the proposed project, including the feasibility of the techniques. (Describe in step by step fashion exactly what techniques, materials and methods will be used.)
- Results expected
- Means by which experimental data will be analyzed or interpreted
- Means of applying results or accomplishing technology transfer, where appropriate
- Pitfalls that may be encountered
- Limitations to proposed procedures
- A detailed (but tentative) schedule/timeline for conducting major steps involved in these investigations and/or experiments for Year 1 (in alignment with Year 1 Budget).

NOTE: Failure to address each of the issues in the bullet list will diminish the likelihood of the success of your pre-proposal being recommended for funding.

References to Project Description
Reference information is required of references cited in the Project Description. PIs must follow accepted scholarly practices in providing citations for source materials. While there is no established page limitation for the references, this section must include bibliographic citations only, and must not be used to provide parenthetical information outside of the project description**.**

Facilities and Equipment
All facilities and major items of equipment available for use or assignment to the proposed project during the requested period of support should be described. In addition, items of nonexpendable equipment necessary to conduct and successfully conclude the proposed project should be listed (including dollar

amounts), and, if funds are requested for their acquisition, justification should be included in the Budget Justification Worksheet.

Collaborative or Sub-contractual Arrangements
If the nature of the proposed project requires collaboration or contractual arrangements with other research scientists, corporations, organizations, agencies, etc., the applicant must identify the collaborator(s) and provide a **detailed explanation of the nature** of the collaboration. Evidence in the form of a letter of intent (may be in the form of an e-mail) from <u>all</u> collaborators <u>must</u> be provided to assure reviewers that collaborators or sub-contractors involved have agreed to render the indicated services. **The letter of intent must include specific details describing the services the collaborator will provide.**

Budget Materials
PIs will need to provide the following detailed budget documentation. New this year, an Excel template with built-in formulas, space for your justification narrative, and auto-generation of the Budget Summary page has been created. Double checking that all of your details transferred as intended and all totals match is advised.

Budget Type
Select 'Single Budget' if award would be going to only one individual (i.e. PI). Select 'Multi-PI Budget' if award from ARS would be going to multiple individuals (i.e. separate agreements/awards). Please note, two templates for developing either a single or multi-PI Budget Justification Worksheet & Budget Summary are available, make sure to select the one that matches with your budget type.

Budget Request
You will need to enter the final budget requested dollar amount for Year 1 of your project, as well as an estimated budget for the duration of the project term (depending on your selection of a 2-year or 4-year project). The full duration amount is just an estimate and can be a multiplication of first year for the term or if you anticipate adjustments we encourage the PI to adjust as expected. A detailed Budget Justification Worksheet & Budget Summary will not be required beyond the first year.

Budget Justification Worksheet & Budget Summary – Upload Required
Utilizing one of the **Excel** '**Budget Justification Worksheet & Budget Summary' Templates** (available at https://scabusa.org/research_rfp-fy22/forms_templates), complete all the relevant sections and follow the instructions included in the file. Once finalized, upload the Excel Template into your submission. **NOTE:** For all line item categories and subcategories where funds are requested, **descriptive details must be provided** (in the blue segments of the template) that justify the amount being requested.

Make sure to select the appropriate template for your situation, template options include:
- **Budget Justification Worksheet & Budget Summary Template – Single PI version;** single PI/single project
- **Budget Justification Worksheet & Budget Summary Template – Multi-PI version;** for a pre-proposal with multiple PIs on a single project that will be awarded out to multiple PI institutions. The 'Multi-PI' version allows for up to five (5) different PIs to each have a separate budget justification worksheet that will transfer automatically into a single cumulative Budget Summary page. In such cases, if a 'Multi-PI' proposed research project is recommended for funding, the awards will go directly to the individuals' institutions from USDA-ARS. If your pre-proposal has more than five (5) Co-PIs, contact the USWBSI-NFO for instructions.

Tuition Remission: Tuition remission is **permitted** under USDA-ARS **research grant agreements** with any type of recipient organization (i.e. universities). However, for PI's currently funded under a Non-assistance Cooperative Agreement (NACA), tuition remission is NOT allowed.

Indirect Cost (IDC) Limitation Policy*:* Because Fusarium head blight is such a severe problem for the U.S. wheat and barley industries, the USWBSI's review process focuses on the **competitiveness of total project costs** to maximize total funding used for research.

As part of the 2018 Farm Bill - Agriculture Improvement Act of 2018 – signed into law (Public Law 115-334) on 12/20/18, a fixed Indirect Cost Limitation of 10% has been set for the USWBSI ([See Title VII, Subtitle C, Section 7303](), page 332 of bill; page 336 of PDF). This is a limitation on the reimbursement of indirect costs and represents the maximum amount of grant dollars available to recover indirect costs. PIs must calculate the allowable IDC % per their institutions NICRA/F&A rate agreement to determine which calculation generates the lowest IDC amount for reimbursement, in accordance with the 10% limitation of Total Federal Funds Awarded. Universities may voluntarily elect to use a percentage below 10% for pre-proposals submitted to the USWBSI, however they **cannot charge a rate higher than 10%**. A formula is included in the template to determine the 10% limitation amount, PIs will need to enter their allowable NICRA/F&A rate for comparison, the lower amount will automatically carry forward.

NOTE: Indirect Costs are not applicable to ARS Scientists and PIs currently funded under Non-Assistance Cooperative Agreements (NACAs).

Small Business Innovated Research (SBIR) Fee*:* In the event your proposed research is recommended for funding, the SBIR Fee will be assessed prior to the award being made by USDA-ARS. The SBIR fee is mandated by Congress under [Public Law 112-81, Subtitle A, SEC. 5102 (a) (1) (I)]() in support of the Small Business Act. The current rate for the SBIR fee is 3.2%.

This fee is charged only to projects that are funded through a research grant agreement or a NACA with USDA-ARS (i.e. not applicable to ARS PIs). When applicable, PIs are advised to incorporate the Small Business Innovated Research (SBIR) fee into their budget request. The formula to calculate the fee is included in the template.

SUBMIT	**Submission Deadline:**	The Pre-Proposal must be submitted via the USWBSI EPS system by **September 21, 2021**.
	Submission Link:	[Access the USWBSI EPS Pre-Proposal Submission Form]()

PI Required Items Checklist for the Category 3 Submission Process

- ☐ Initiate Pre-Proposal Submission via the USWBSI EPS System
- ☐ Use the templates and forms provided for required uploads
- ☐ Prepare materials for submission upload per specifics outlined in instructions
    - ☐ PI Contact Information
    - ☐ Sponsored Programs Contact Information
    - ☐ Project Title (keep broad in scope, 85 character maximum)
    - ☐ Research Category
    - ☐ Project Type (note if new or continuing project)
    - ☐ Project Duration (new this year select either a 2-year or 4-year project)
    - ☐ PI and Co-Investigator Background Information (collect from your Co-PIs and upload)
        - ☐ CV(s)/Publication List(s)
        - ☐ Current & Pending Support Forms
    - ☐ Pre-Proposal Materials (upload as one PDF meeting requirements noted)
        - ☐ Project Summary (should not exceed 400 words)
        - ☐ Project Description (should not exceed five pages of text, 10 pages including tables and figures)
        - ☐ References to Project Description
        - ☐ Facilities and Equipment
        - ☐ Collaborative or Sub-contractual Agreements
            - ☐ Letters from Collaborators
    - ☐ Budget Materials
        - ☐ Budget Type
        - ☐ Budget Request
        - ☐ Budget Justification & Budget Summary Template(s) (prepare in Excel template and upload; justification narrative details required for all sections <u>and</u> subsections where funds are being requested; e-signature required on the Budget Summary page)
          NOTE: Make sure to use appropriate template either Individual or Multi-PI

Category 3: **Research Area Individual Projects**	USWBSI EPS System Opens	**August 3, 2021**
	Deadline for PIs to submit FY22 Pre-Proposal(s) and supporting documents via EPS System	**September 21, 2021**
	Pre-Proposal Review and Funding Determinations	**Oct-Dec 2021**
	PIs Notified of Awards	**January 2022**

Pre-Proposal Submission Link: Access the USWBSI EPS Pre-Proposal Submission Form
Forms & Templates for Upload: All USWBSI FY22 RFP Forms & Templates to Prepare & Upload