U.S. Wheat & Barley Scab Initiative

FY24 Request for Pre-Proposals

Table of Contents

SUBMIT   USWBSI RFP: Submission links and information are also available on the [USWBSI FY24 RFP website](#).

Introduction & Overview
FY24 Request for Pre-Proposals (RFP)

New in this RFP!
- **FY24 Project Term**. In the FY22 RFP the USWBSI started the option for 4-year project pre-proposals, going forward this option will be available every 4 years with 2026 being the next funding cycle with 4-year terms available. At this time, new FY24 pre-proposals will only be available for 2-year term project pre-proposals.
- **Transformational Science Category Continued**. The USWBSI is again seeking new research approaches to enrich its portfolio with novel concepts and new PIs, check out Transformational Science - Category 4.
- **IDC Limitation**. As a reminder, the USWBSI adheres to an IDC limitation (10% of Total Federal Funds Awarded) rather than rate, see details in the category Budget Justification Worksheet & Budget Summary section.
- **Submission Portal.** Building on the new online interface from FY22, the FY24 Submission Portal includes additional enhancements for an improved user experience. All submissions must use the online system.

USWBSI Action Plan Research Priorities
The FY24 Request for Pre-Proposals is based on the recently updated USWBSI Action Plan, which is focused on increasing collaboration and communication for attainment of the Initiative's mission: **"To enhance food safety and supply by reducing the impact of Fusarium Head Blight (scab) on wheat and barley."** Make sure to review the USWBSI Action Plan to ensure your pre-proposal is aligned with the priorities of the Research Category for your project.

USWBSI Research Plan
The U.S. Wheat & Barley Scab Initiative is guided by a Steering Committee that includes producers, farm organizations, food processors (i.e., millers, pasta manufacturers, maltsters and brewers), scientists (from Land Grant universities, USDA, and private companies), and consumer groups. Each year, the Steering Committee submits to the USDA-ARS a comprehensive and optimized research plan designed to achieve the Initiative´s Action Plan goals. The annual Research Plan is the USWBSI's funding recommendation for how the USDA-ARS can most effectively employ the funds appropriated by the U.S. Congress for collaborative scab research.

Eligibility
USWBSI funding is awarded through Federal funds appropriated to the USDA Agricultural Research Service and authorized in the Farm Bill. Eligibility requirements specify that funding of research grants can only be made to eligible principle investigators at land-grant colleges and universities in the U.S. or to USDA-ARS scientists. All USDA-ARS awards for USWBSI (CFDA No. 10.001) are subject to 2 CFR 200, as adopted by the USDA at 2 CFR 400, compliance with all terms and conditions of the award are expected.

Funding Opportunities – USWBSI Research Categories
In alignment with the USWBSI Action Plan, USWBSI funding opportunities are available in four categories. PIs are encouraged to review the different options and select the category that best aligns with their research.
- **Category 1** – Commodity-based and VDHR-Uniform Nursery Coordinated Projects (CPs), see page 8
- **Category 2** – FHB Integrated Management Coordinated Projects (IM-CP), see page 17
- **Category 3** – Research Area Individual Projects, see page 25
- **Category 4** – Transformational Science Projects, see page 33

Collaborative Projects Encouraged
In addition to the Coordinated Projects (Category 1 and 2), other collaborative projects within or across research areas are encouraged. PIs in different institutions who intend to collaborate on pre-proposals with similar objectives, methods, etc. should coordinate their efforts to produce a single, unified (multi-PI) pre-proposal. If you are part of a collaborative project, and your proposed project is approved for funding, the funding will ultimately come in the form of a direct agreement between USDA-ARS and each of the collaborating PIs' institutions.

USWBSI Funding Category Representatives

PIs are encouraged to interact with any of the USWBSI contacts below to aid in identifying the appropriate area for their proposed work.

Category 1	Commodity-Based Coordinated Projects		
Barley (BAR-CP)	Tom Baldwin, ND State Univ	Thomas.t.baldwin@ndsu.edu
Durum (DUR-CP)	Andrew Friskop, ND State Univ	Andrew.j.friskop@ndsu.edu
Hard Winter Wheat (HWW-CP)	Jessica Rupp, Kansas State Univ	jrupp@k-state.edu
Category 1 | Variety Development & Host Resistance (VDHR) - Uniform Nursery Coordinated Projects		
Spring Wheat Region (VDHR-SPR)	Andrew Green, ND State Univ	andrew.j.green@ndsu.edu
Northern Soft Winter Wheat (VDHR-NWW)	Clay Sneller, Ohio State Univ	sneller.5@osu.edu
Southern Soft Red Winter Wheat (VDHR-SWW)	Rick Boyles, Clemson Univ	rboyles@clemson.edu
Category 2 | FHB Integrated Management Coordinated Project (IM-CP)		
Integrated Management Studies	Pierce Paul, Ohio State Univ	paul.661@osu.edu
Category 3 | Research Area Individual Projects		
FHB Management (MGMT)	Kaitlyn Bissonnette, Cotton Inc.	KBissonnette@cottoninc.com
Food Safety and Toxicology (FST)	Dave Kendra, Cibus	dkendra@cibus.com
Gene Discovery and Engineering Resistance (GDER)	Jyoti Shah, Univ of North Texas	Jyoti.shah@unt.edu
Pathogen Biology and Genetics (PBG)	Lisa Vaillancourt, Univ of Kentucky	vaillan@uky.edu
Category 4 | Transformational Science Projects		
New PIs with Novel Concepts	Michelle Bjerkness, USWBSI NFO Director of Operations	nfo@scabusa.org

Online Submissions

The USWBSI online Letter of Intent forms and the Submission Portal must be used for the submission of all FY24 LOIs and pre-proposals. General instructions for the letter of intent and pre-proposal requirements, and supporting documentation for uploads, is outlined in each Category section description. The Letter of Intent forms have a separate submission location from the pre-proposals. **Letter of Intent forms open on June 1.** The Submission Portal is for PI's with approved LOIs and those submitting a pre-proposal for Category 3. If this is your first time submitting a pre-proposal with the USWBSI, you will be prompted to create an account to gain access and login to the Submission Portal. **The Submission Portal for Pre-Proposals opens August 3.** PIs will be able to start the submission process, save and return as needed until the deadline for submission is reached on September 21.

Conformance with Instructions for Pre-Proposal Preparation

It is important that all letters of intent and pre-proposals conform to the instructions provided in the FY24 RFP. The USWBSI's Networking & Facilitation Office (NFO) may return, without further review, any letter of intent or pre-proposal that is not consistent with these instructions. The NFO must authorize any deviations from these instructions in advance of pre-proposal submission. Deviations must be authorized by written approval from the Researcher Co-Chair and Executive Director, Dr. Ruth Dill-Macky (ruthdm@umn.edu) or the Director of Operations, Michelle Bjerkness (nfo@scabusa.org). **NOTE:** We strongly encourage all individuals submitting a pre-proposal to review the Frequently Ask Questions (FAQs) which address common mistakes and omissions of required information from previous submitted pre-proposals.

Project Duration and Continuations

In the FY22 RFP, the option for 4-year project pre-proposals was started, going forward this option will be available every 4 years with 2026 being the next funding cycle available with 4-year terms available. For FY24, new pre-proposals will be submitted as 2-year projects only. Each year of a USDA-ARS/USWBSI multiple-year project is funded annually. The first increment of funding is issued with a new USDA-ARS agreement. The following years are each issued as a continuation award with amendments to the original agreement. Awards are funded in 12-month increments regardless of the agreement period of performance (4YR or 2YR). Awards are reviewed annually for successful outcomes on prior year funding and assessed against requirements and funding availability to determine funding amount. If awarded, the amount of a first year of funding may not be the same in Year 2, 3 or 4 of continuation awards, the funding level of each year should not be assumed and is not guaranteed. Annual performance reports and continuation request

	Pre-Proposals Accepted	4 Year Projects	2 Year Projects
2022		New FY22 Agreement	New FY22 Agreement
2023	FY24 RFP (Opens June 2023) – 2YR Projects Only	YR2 Continuation Amendment	YR2 Continuation Amendment
2024		YR3 Continuation Amendment	Potential New FY24 Agreement
2025	FY26 RFP (Opens June 2025) – 4YR and 2YR Projects Considered	YR4 Continuation Amendment	
2026		Potential New FY26 Agreement	

review/approval will be required for each year of the project. The submitted duration simply establishes the agreement with those terms in place, allowing for the option of continuation amendments for the duration of the term. PIs who are awarded funding, will be notified with details about the specific Continuation Funding Request process.

Sponsored Programs Office Signatures

The USWBSI does not require signatures by the Authorized Organizational Representatives (AORs) on Pre-Proposals. If the PI's institution requires approval from the AOR (i.e. Sponsored Programs Administration/Office) on pre-proposals, a form that can be used at the institutional level for obtaining approval by the PI's sponsored programs office is available at https://scabusa.org/research_rfp-fy24/forms_templates. If recommended for funding by USWBSI, PIs will be required to include a Letter of Support from their Institution with signature from the Authorized Organizational Representative as part of the funding application for the proposal to USDA-ARS.

Review Process, Funding Recommendations and Funding Applications

All pre-proposals received by the assigned deadline will be sent for review to one of the designated review panels (i.e. Research Area and Coordinated Project Committees). The Executive Committee will then evaluate the review panels' recommendations and if necessary, modify the pre-proposal requested amounts to conform to the FY24 budget appropriated by Congress and the overall objectives of the Initiative. More detailed information on the review process is available at https://scabusa.org/rfp/FY24/FY24_RFP_ReviewProcess.pdf. Please note that all pre-proposals will be regarded as confidential documents. Distribution will be limited only to parties involved with the review process. The Executive Committee's recommended Research Plan and Budget (RP&B) is then presented to the Steering Committee in early December, following the National FHB Forum. Upon approval by the Steering Committee, all PIs whose pre-proposals are recommended for funding by the USWBSI will be asked to compile and formalize their pre-proposal into a funding application by early February 2024. The USWBSI will submit the funding applications to the USDA-ARS as the recommended annual research plan.

Revisions to Pre-Proposals Made During the Review Process

In the event of a significant development (e.g., research findings, changed circumstances, unavailability of PI, etc.) that might materially affect the outcome of the review of a pending pre-proposal, the PI (or his/her representative) must contact the Executive Director (Ruth Dill-Macky, ruthdm@umn.edu) to discuss the issue. Depending on the outcome of the discussion, the PI may be allowed to submit a one-page update to the NFO. Submitting additional information must not be used as a means of circumventing page limitations or deadlines.

Questions? Need Assistance?

If you have any questions regarding the letter of intent or pre-proposal process, please contact the U.S. Wheat and Barley Scab Initiative's Networking and Facilitation Office by phone at 517.290.5023 or nfo@scabusa.org. If you have specific questions within one of the pre-proposal categories, please contact the associated USWBSI representative listed within the Category details.

FAQ To facilitate pre-proposal preparation, a Frequently Asked Questions (FAQs) site pertaining to preparation and submission of pre-proposals is available.

Networking & Facilitation Office (NFO)		
General Questions Regarding the RFP Process	Ruth Dill-Macky, Researcher Co-Chair and Executive Director	612-625-2227 ruthdm@umn.edu
	Michelle Bjerkness, NFO Director of Operations	517.290.5023 nfo@scabusa.org

Important USWBSI FY24 RFP Dates & Deadlines

	Key Actions	Deadline
Categories 1, 2 and 4 Letter of Intent [LETTER OF INTENT icon] Access LOI forms on Category pages at https://scabusa.org/research_rfp-fy24/LOI	Letter of Intent (LOI) online forms **open**, required for Category 1, 2 and 4	June 1, 2023
	Letter of Intent (LOI) online form **deadline**	**June 28, 2023**
	CP Chairs (Category 1 and 2) and NFO (Category 4) notify all PIs who submit Letters of Intent on status and next steps, accepted PIs move on to Pre-Proposal stage	July 31, 2023
All FY24 Pre-Proposals [SUBMIT icon] Access the USWBSI Pre-Proposal Submission Form at https://scabusa.org/submissions	USWBSI Submission Portal **opens** for Pre-Proposal Submissions	August 3, 2023
	Deadline for submission of Pre-Proposal(s) via USWBSI Submission Portal	**September 21, 2023**
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

Category 1

Commodity-based and VDHR-Uniform Nursery Coordinated Projects (CPs)

Category 1 Instructions
Commodity-based and VDHR-Uniform Nursery Coordinated Projects (CPs)

Research Alignment
Does my proposed research belong in a Commodity-based or VDHR-Uniform Nursery Coordinated Project? Yes, if the primary focus of your proposed research involves the following and your research aligns with the program descriptions listed below.

Commodity-based Coordinated Projects	Barley (BAR)
	Durum (DUR)
	Hard Winter Wheat (HWW)
VDHR-Uniform Nursery Coordinated Projects	Spring Wheat Region *States included in this CP: ID, MN, MT, ND, SD*
	Northern Soft Winter Wheat *States included in this CP: KY, IL, IN, MI, NY, OH*
	Southern Soft Red Winter Wheat *States included in this CP: AR, GA, LA, MD, NC, SC, TX, VA*

NOTE: If your state is not listed with one of the VDHR Uniform Nursery CPs, please contact the Networking and Facilitation Office (NFO) for guidance.

Barley Coordinated Project (BAR-CP)
Minimizing the impact of Fusarium head blight (FHB) on barley production in the U.S. requires a multi-dimensional coordinated research effort with focused outputs. The Barley Coordinated Project (BAR-CP) seeks to combine existing lines of productive research with new avenues of investigation to develop a set of tools and disease management strategies that will minimize disease risk and mycotoxin contamination to producers and end-users of barley. This toolbox will be developed in coordination with other research areas (see below) and will consist of: 1) varieties with enhanced levels of resistance to FHB, lower levels of mycotoxins, superior agronomic performance, and good end-use quality; 2) chemical and biological formulations, application procedures, and a disease forecasting model that maximize efficacy; 3) a set of best management practices that incorporate our current understanding of the tools available to combat this disease; and 4) new tools developed through emerging technology and understanding of the disease to reduce the impact of FHB on barley. The Barley CP is organized around goals outlined in the MGMT, GDER, PBG and VDHR sections of the USWBSI Action Plan.

Durum Coordinated Project (DUR-CP)
The Durum Coordinated Project's (DUR-CP) main objective is to develop FHB resistant durum wheat germplasm (lines/cultivars) with low DON levels, good agronomic traits, and good quality traits that will serve the producers, the domestic pasta industry, and the international export market. Reducing the impact of FHB requires a multidisciplinary effort and therefore the CP includes research conducted by plant breeders, pathologists, geneticists, agronomists and other individuals working in FHB management. The CP also has representation from stakeholders such as durum producers, millers, and pasta manufacturers. The Durum CP is organized around goals outlined in the VDHR and MGMT sections of the USWBSI Action Plan.

Hard Winter Wheat Coordinated Project (HWW-CP)
The Hard Winter Wheat Coordinated Project (HWW-CP) is an efficient coordinated project that will measure its success by reducing DON in the hard winter wheat grain supply to the food grade level acceptable in the European Union (EU). This level is currently lower than the US standard. Because half of our grain is exported and the majority of it shipped to the EU, the risk is that it can be sourced from high scab areas within the HWW region (e.g. the Eastern Great Plains). As the popularity of whole grain products increases, our goal is to ensure that the DON concentration in these products is also below established thresholds. Based upon the timelines expected for success in reducing DON, the HWW-CP includes the scientific activities of plant breeders, pathologists, geneticists, and supporting research programs. We coordinate with disease management efforts because we realize that in addition to improved varieties, improved management will optimize project success (as measured by reducing

DON) within expected timelines. HWW-CP germplasm and information are publicly available and made available to other participating researchers in other research areas of the USWBSI. The HWW-CP remains focused on reducing DON levels as quickly as possible and by using the most efficacious methods to do so (breeding and management). Membership in the HWW-CP includes all researchers currently funded within the CP, individuals designated as representatives from other research areas of the USWBSI, all interested FHB researchers who may or may not be funded by the USWBSI, stakeholders representing members from groups that fund our research (e.g. the KS, NE, SD, ND, TX and MT Wheat Commissions), and members of groups that are key to our industry and who non-monetarily support HWW-CP research. These are "independent" stakeholders, such as major mills and bakeries, private wheat breeders, and chemical company representatives. The HWW-CP is organized around goals outlined in the MGMT and VDHR sections of the USWBSI Action Plan.

Variety Development and Host Resistance (VDHR)
The VDHR research area for spring wheat and soft winter wheat will be organized around participation in the Uniform Nurseries. States will be aligned as follows: Uniform Regional Scab Nursery for Spring Wheat Parents (VDHR-SPR) - ID, MN, MT, ND, and SD; Uniform Northern Winter Wheat FHB Screening Nursery (VDHR-NWW) - KY, IL, IN, MI, NY, and OH; Uniform Southern Soft Red Winter Wheat FHB Screening Nursery (VDHR-SWW) - AR, GA, LA, MD, NC, SC, TX, and VA. VDHR research will be commodity-based in the case of barley, durum and hard winter wheat coordinated projects. Each Uniform nursery will be coordinated by an appointed chair and be advised by a regional committee. Nurseries will be conducted in collaboration with a pathologist wherever possible and a subset of promising entries may be grown at multiple locations in Integrated Management Trials. Uniform nurseries will also be evaluated for milling and baking quality, and haplotyped at the USDA regional genotyping labs. The most promising lines may be entered in the nurseries for a second year of testing at the lines originator's request. Collaborators will make crosses among promising entries to combine FHB QTL, and segregating populations derived from these crosses/populations may be shared. Mapping of new resistance sources will be accomplished through joint phenotyping of populations. Genomic estimated breeding values will be generated for all uniform nursery entries where available and appropriate. All collaborators will screen varieties and breeding lines entered into statewide performance trials for FHB resistance and provide this information to growers. See the VDHR section of the USWBSI Action Plan for research goals and needs.

Category 1 Contacts (Coordinated Project Committee Chairs)

Commodity-Based Coordinated Projects		
Barley (BAR-CP)	Tom Baldwin, ND State Univ	Thomas.t.baldwin@ndsu.edu
Durum (DUR-CP)	Andrew Friskop, ND State Univ	Andrew.j.friskop@ndsu.edu
Hard Winter Wheat (HWW-CP)	Jessica Rupp, Kansas State Univ	jrupp@k-state.edu
VDHR - Uniform Nursery Coordinated Projects		
Spring Wheat Region (VDHR-SPR)	Andrew Green, ND State Univ	andrew.j.green@ndsu.edu
Northern Soft Winter Wheat (VDHR-NWW)	Clay Sneller, Ohio State Univ	sneller.5@osu.edu
Southern Soft Red Winter Wheat (VDHR-SWW)	Rick Boyles, Clemson Univ	rboyles@clemson.edu

Key Deadlines

Category 1 **Commodity-based and VDHR-Uniform Nursery Coordinated Projects (CP)**	Letter of Intent (LOI) online form submitted by PIs	June 28, 2023
	CP Chairs notify all PIs who submit Letters of Intent to their Coordinated Project on status and next steps	July 31, 2023
	USWBSI Submission Portal Opens	August 3, 2023
	If accepted, deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

PI Steps for Category 1 Submission Process

STEP 1
Pre-Submission Letter of Intent (LOI) Requirements
If you plan to participate in one of the Coordinated Projects, you must submit a Letter of Intent form that includes the following:
- Proposed project title
- Name of PI and Co-PIs
- Identify the Research Area in which your project fits (applicable to Commodity-based CPs only)
- Synopsis that describes the following:
    - the Action Plan research priority with which your project fits (if it does not fit one of the stated Research Priorities, suggest a new objective)
    - the problem being addressed
    - approaches for solving the problem and the rationale for using these approaches
    - the outputs of the project and how those outputs will be used by researchers, extension educators, or stakeholders to accomplish the overall mission of the USWBSI
- Include a statement that demonstrates that the PI/Co-PI's are capable of carrying out the proposed research based on past research productivity and expertise in the relevant field(s) of research
- Projected total amount of budget request for Year 1 of project

> **LOI Deadline:**   Letter of Intent form must be submitted online by **June 28, 2023.**
> **LOI Link:**   USWBSI Letter of Intent Forms

Letters of Intent (LOI) Review & Notification
After committee review, the CP Committee Chair will notify all PIs who submitted Letters of Intent whether their proposed research has been accepted into the Coordinated Project.
NOTE: If your proposed research was not accepted by one of the CPs, you may submit an individual project pre-proposal for consideration following the instructions for Category 3 (page 25).

STEP 2
Pre-Proposal Submission Requirements
All PIs notified of acceptance to submit a pre-proposal into a Commodity-based or VDHR-Uniform Nursery Coordinated Project must complete the online pre-proposal submission via the USWBSI Submission Portal. 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
By logging into the USWBSI website, your name, email and institution will populate based on what is in your login account. You can edit if needed. PIs will need to add in their department, mailing address with zip+4 and work phone details.

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 specific Coordinated Project under Category 1 for which you have been approved for a pre-proposal.

Project Grain Class
Indicate which grain class(es) your new project will focus on; you can choose up to 3 options.

Project Type
All pre-proposals in FY24 will be new and will be automatically marked as such in the form.

Project Duration
As noted on page 5, for FY24, all projects will be considered for 2-years only and will be automatically marked in the form as such. In FY26, 4-year terms will again be considered. Please note, the USWBSI has always awarded funding annually and will continue to do so. Annual performance reports and continuation award review/approval will be required for each year of the project.

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. The PI will need to upload the following items for the PI and Co-Investigators:

- *Curriculum Vitae (CV) with Publication List.* The CV should be limited to two pages in length, excluding publications. A presentation of academic and research credentials, e.g., educational, employment and professional history, and honors and awards should be included. Unless pertinent to the project, do not include meetings, seminars, or personal data. A chronological list of all publications in refereed journals during the past five years, including those in press, should be included, non-refereed technical publications that have relevance to the proposed project may be included. The CV and Publication List should be uploaded as one PDF file. CV/Pubs for collaborators or sub-contractors are not required.
- *Current and Pending Support (CPS) Form.* Download the current CPS form from the FY24 RFP web page at https://scabusa.org/research_rfp-fy24/forms_templates. *The provided form is preferred, but o*ther USDA *versions of Current and Pending Support forms are accepted (i.e., NIFA/AFRI).* Current and Pending Support Forms listing other current public or private support to which key personnel identified in the Pre-Proposal have committed portions of their time are required, 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 Pre-Proposal 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 uploaded as one PDF file 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-fy24/forms_templates.

Project Summary
Fill in the Project Summary Page (limited to 2 pages), using Calibri or Times New Roman 12-point font, and 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)

Project Description
The Project Description should immediately follow the Project Summary. This plan must describe how your work specifically fits into the overall Coordinated Project and identify any linkages to other work plans that are part of the Coordinated Project. The Project Description should be formatted using Calibri or Times New Roman 12-point black colored font with one-inch margins. Bold formatting should only be used for section headings or used minimally to emphasize importance or significance. **NOTE:** Digital images inserted into the Project Description must fit within the five (5) page limit.

The Project Description should not exceed five (5) pages in length (including tables and figures) and should describe in clear, concrete terms the substance of your proposed research including the following:
Included within the 5-Page Limit (including figures and tables)
- *Title.* Same as what is included in the submission form and Project Summary
- *USWBSI Action Plan Alignment.* Relevance of the project to the goals of the U.S. Wheat and Barley Scab Initiative with specific reference to the applicable priorities listed in the Action Plan clearly stated. The Action Plan can be viewed at https://scabusa.org/pdfs/uswbsi_action-plan_web.pdf.
- *Rationale and Significance.* It is understood that FHB 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 proposed research is trying to fill.
- *Research Materials and Methods.* Specifically, this section must include:
  o The hypotheses or questions being asked
  o A description of the investigations and/or experiments proposed in the sequence in which the investigation or experiments are to be performed
  o 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.)
  o Results expected
  o Means by which experimental data will be analyzed or interpreted
  o Means of applying results or accomplishing technology transfer, where appropriate
  o Pitfalls that may be encountered
  o Limitations to proposed procedures
  o 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.

NOT Included within the 5-Page Limit – Supplemental Information for the Project Description
Additionally, the following items can be included to support the project description (these items will not be counted toward the five (5) page maximum).
- *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 acquisition, justification should be

included in the Budget Justification Worksheet and bid documentation should be noted and included in the project description.

- *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.

Special Category Forms

⬆ **Breeder Form** – Upload Required
If you are submitting a Pre-Proposal that focuses on the development of varieties, you must also complete and upload a 'Breeder Form'. This form can be downloaded from the USWBSI's Website at https://scabusa.org/research_rfp-fy24/forms_templates under Category 1 Forms.

⬆ **Pre-Breeding/Germplasm Form** – Upload Required
If the primary output for your proposed project is pre-breeding or development of germplasm, rather than a finished variety for commercial production, you must complete and upload a Pre-Breeding/Germplasm Form. This form can be downloaded from the USWBSI's Website at https://scabusa.org/research_rfp-fy24/forms_templates under Category 1 Forms.

NOTE: If you are completing a Pre-Breeding/Germplasm form, you also need to provide letters of support from your collaborators.

Budget Materials
PIs will need to provide the following detailed budget documentation. An Excel template with built-in formulas, space for your justification narrative, and auto-generation of the Budget Summary page is available. Make sure to double check that all of your details transferred as intended and all totals match.

Budget Type
Select type that matches the budget template you uploaded - Single Budget if award would be going to only one individual (i.e. PI) or Multi-PI Budget if project involves multiple PIs at different institutions (award from USDA-ARS would ultimately be set up with separate agreements/awards).

Budget Request
You will need to enter the final budget requested dollar amount from your Excel template for your project into the form.

⬆ **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-fy24/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:** Narrative budget justification for all line-items where funds are requested is required. The narrative descriptive details must be provided within the budget template to justify the request.

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;** use 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 two (2) 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 two (2) PIs, contact the USWBSI-NFO and a version can be provided to accommodate the number of Co-PIs involved.

When preparing your budget keep these items in mind:

- *Tuition Remission:* Tuition remission is **permitted** under USDA-ARS **research grant agreements** with any type of recipient organization (i.e. universities). However, for PIs currently funded under a Non-Assistance Cooperative Agreement (NACA), tuition remission is NOT allowed.
- *Equipment:* If you are including equipment in your budget, additional bid documentation needs to be included in your project description file. Equipment requests are intended for an article of tangible, nonexpendable, property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit per the federal definition. You should also include a justification for this equipment in the Budget Justification form.
- *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, or if lower amount that can be entered and 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 3.65%. 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 need to incorporate the SBIR fee into their budget request. The formula to calculate the fee is included in the template.

STEP 3
Pre-Proposal Submission
The USWBSI Submission Portal must be used for the submission of all FY24 pre-proposals. PIs will be able to start the submission process, save and return as needed until the deadline for submission is reached. If this is your first time submitting a pre-proposal with the USWBSI, you will be prompted to create an account to gain access and login to the submission form. **The Submission Portal opens August 3, 2023.**

PI Required Items Checklist for Category 1 Submission Process

STEP 1
- ☐ Submit Letter of Intent via online form

STEP 2
- ☐ If approved, prepare materials for submission per instructions and initiate Pre-Proposal Submission via the USWBSI Submission Portal
- ☐ Enter key details in Submission Form
  - ☐ PI Contact Information
  - ☐ Project Title (keep broad in scope, 85 character maximum)
  - ☐ Research Category
  - ☐ Project Grain Class
  - ☐ Project Type (will automatically be selected as new)
  - ☐ Project Duration (will automatically be selected as a 2-year project)
  - ☐ Enter and upload PI and Co-Investigator Information (collect from your Co-PIs)
    - ☐ CV(s)/Publication List(s)
    - ☐ Current & Pending Support Forms
- ☐ Enter Required Submission Uploads (use the templates and forms provided for required uploads)
  - ☐ Project Summary and Description (upload as one PDF meeting requirements noted)
    - ☐ Project Summary (should not exceed 400 words)
    - ☐ Project Description (should not exceed five pages including tables and figures)
      - ☐ Supplemental Project Description Items (if required, not included in five-page limit)
        - ☐ References to Project Description
        - ☐ Facilities and Equipment
        - ☐ Collaborative or Sub-contractual Agreements
        - ☐ Letters from Collaborators (required for all pre-breeding/germplasm development related Pre-Breeding Proposals)
  - ☐ Special Category Forms (if required)
    - ☐ Breeder Form (required for all variety development related Pre-Proposals)
    - ☐ Pre-Breeding/Germplasm Form (required for all pre-breeding/germplasm development related Pre-Proposals)
  - ☐ Budget Materials
    - ☐ Budget Type
    - ☐ Budget Request
    - ☐ Budget Justification Worksheet & Budget Summary Template(s) (prepare in Excel template and upload; justification narrative details required for all sections and 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

STEP 3
- ☐ Finalize and submit Pre-Proposal via the online Submission Portal

Category 1 **Commodity-based and VDHR-Uniform Nursery Coordinated Projects (CP)**	Letter of Intent (LOI) online form submitted by PIs	June 28, 2023
	CP Chairs notify all PIs who submit Letters of Intent to their Coordinated Project on status and next steps	July 31, 2023
	USWBSI Submission Portal Opens	August 3, 2023
	If accepted, deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

SUBMIT   **Letter of Intent Submission Link:**   USWBSI Letter of Intent Forms
Pre-Proposal Submission Link: Access the USWBSI Submission Portal
Forms & Templates for Upload: All USWBSI FY24 RFP Forms & Templates to Prepare & Upload

Category 2

FHB Integrated Management Coordinated Project (IM-CP)

Category 2 Instructions
FHB Integrated Management Coordinated Project (IM-CP)

Research Alignment

Does my proposed research belong in the FHB Integrated Management Coordinated Project? Yes, if the primary focus of your proposed research involves the following:

Integrated Management Studies	Integrated management strategies for FHB and DON including tillage practices, crop sequences, and other cultural practices targeting *Fusarium*-infested residues.

Category 2 Contact Information (Coordinated Project Coordinator)

FHB Integrated Management Coordinated Project (IM-CP)		
Integrated Management Studies	Pierce Paul, Ohio State Univ	paul.661@osu.edu

Key Deadlines

Category 2 **FHB Integrated Management Coordinated Project (IM-CP)**	Letter of Intent (LOI) online form submitted by PIs	June 28, 2023
	IM-CP Coordinator notifies all PIs who submit Letters of on status and next steps	July 31, 2023
	USWBSI Submission Portal Opens	August 3, 2023
	If accepted, IM-CP Coordinator sends protocols to PI's accepted into the IM-CP	August 18, 2023
	If accepted, deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

PI Steps for Category 2 Submission Process

STEP 1
Pre-Submission Letter of Intent (LOI) Requirements

If you plan to participate in the FHB Integrated Management Coordinated Project, you must submit a Letter of Intent form that includes the following:

- Proposed project title
- Name of PI and Co-PIs
- Synopsis that describes the following:
  - Reasons proposed component is needed
  - the Action Plan FHB Management research priorities with which your project fits
  - outputs of the project and how those outputs will be used by researchers, extension educators, or stakeholders to accomplish the overall mission of the USWBSI
- Include a statement that demonstrates that the PI/Co-PI's are capable of carrying out the proposed research based on past research productivity and expertise in the relevant field(s) of research
- Projected total amount of budget request for Year 1 of project

	LOI Deadline:	Letter of Intent form must be submitted online by **June 28, 2023.**
	LOI Link:	USWBSI Letter of Intent Forms

Letters of Intent (LOI) Review & Notification
After committee review, the CP Coordinator will notify all PIs who submitted Letters of Intent whether their proposed research has been accepted into the Coordinated Project.
If accepted into the IM-CP, the Coordinated Project Coordinator will send the standard protocols to all PIs by August 18, 2023. **NOTE**: If your proposed research was not accepted by the FHB Integrated Management Coordinated Project, you may submit an individual project pre-proposal for consideration following the instructions for Category 3 (page 25).

STEP 2

Pre-Proposal Submission Requirements

All PIs notified of acceptance to submit a pre-proposal to the FHB Integrated Management Coordinated Project must complete the online pre-proposal submission via the USWBSI Submission Portal. 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
By logging into the USWBSI website, your name, email and institution will populate based on what is in your login account. You can edit if needed. PIs will need to add in their department, mailing address with zip+4 and work phone details.

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 Category 2 FHB Integrated Management Coordinated Project (IM-CP).

Project Grain Class
Indicate which grain class(es) your new project will focus on; you can choose up to 3 options.

Project Type
All pre-proposals in FY24 will be new and will be automatically marked as such in the form.

Project Duration
As noted on page 5, for FY24, all projects will be considered for 2-years only and will be automatically marked in the form as such. In FY26, 4-year terms will again be considered. Please note, the USWBSI has always awarded funding annually and will continue to do so. Annual performance reports and continuation award review/approval will be required for each year of the project.

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. The PI will need to upload the following items for the PI and Co-Investigators:

- *Curriculum Vitae (CV) with Publication List.* The CV should be limited to two pages in length, excluding publications. A presentation of academic and research credentials, e.g., educational, employment and professional history, and honors and awards should be included. Unless pertinent to the project, do not

include meetings, seminars, or personal data. A chronological list of all publications in refereed journals during the past five years, including those in press, should be included, non-refereed technical publications that have relevance to the proposed project may be included. The CV and Publication List should be uploaded as one PDF file. CV/Pubs for collaborators or sub-contractors are not required.

- ***Current and Pending Support (CPS) Form.*** Download the current CPS form from the FY24 RFP web page at https://scabusa.org/research_rfp-fy24/forms_templates. *The provided form is preferred, but o*ther USDA *versions of Current and Pending Support forms are accepted (i.e., NIFA/AFRI).* Current and Pending Support Forms listing other current public or private support to which key personnel identified in the Pre-Proposal have committed portions of their time are required, 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 Pre-Proposal 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 underlined uploaded as one PDF file 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-fy24/forms_templates.

Project Summary
Fill in the Project Summary Page (limited to 2 pages), using Calibri or Times New Roman 12-point font, and 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)

Project Description
The Project Description should immediately follow the Project Summary. This plan must describe how your work specifically fits into the overall Coordinated Project and identify any linkages to other work plans that are part of the Coordinated Project. The Project Description should be formatted using Calibri or Times New Roman 12-point black colored font with one-inch margins**.** Bold formatting should only be used for section headings or used minimally to emphasize importance or significance. **NOTE:** Digital images inserted into the Project Description must fit within the five (5) page limit.

The Project Description should not exceed five (5) pages in length (including tables and figures) and should describe in clear, concrete terms the substance of your proposed research including the following:
Included within the 5-Page Limit (including figures and tables)
- *Title.* Same as what is included in the submission form and Project Summary
- *USWBSI Action Plan Alignment.* Relevance of the project to the goals of the U.S. Wheat and Barley Scab Initiative with specific reference to the applicable priorities listed in the Action Plan clearly stated. The Action Plan can be viewed at https://scabusa.org/pdfs/uswbsi_action-plan_web.pdf.

- *Rationale and Significance.* It is understood that FHB 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 proposed research is trying to fill.
- *Research Materials and Methods.* Specifically, this section must include:
  o The hypotheses or questions being asked
  o A description of the investigations and/or experiments proposed in the sequence in which the investigation or experiments are to be performed
  o 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.)
  o Results expected
  o Means by which experimental data will be analyzed or interpreted
  o Means of applying results or accomplishing technology transfer, where appropriate
  o Pitfalls that may be encountered
  o Limitations to proposed procedures
  o 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.

  NOT Included within the 5-Page Limit – Supplemental Information for the Project Description
  Additionally, the following items can be included to support the project description (these items will not be counted toward the five (5) page maximum).
- *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 acquisition, justification should be included in the Budget Justification Worksheet and bid documentation should be noted and included in the project description.
- *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 all collaborators must 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.

Special Category Form

IM-CP Trials Summary Form – Upload Required
If you are submitting a Pre-Proposal for Category 2 focusing on the integrated management strategies for FHB and DON including tillage practices, crop sequences, and other cultural practices targeting *Fusarium*-infested residues, you must also complete an IM-CP Trials Summary Form. The purpose of the form is that it will allow the review panel to readily see what site-specific decisions were made by the PI in developing their trials. This form can be downloaded from the USWBSI's Website at https://scabusa.org/research_rfp-fy24/forms_templates under Category 2 Forms.

Budget Materials

PIs will need to provide the following detailed budget documentation. An Excel template with built-in formulas, space for your justification narrative, and auto-generation of the Budget Summary page is available. Make sure to double check that all of your details transferred as intended and all totals match.

Budget Type

Select type that matches the budget template you uploaded - Single Budget if award would be going to only one individual (i.e. PI) or Multi-PI Budget if project involves multiple PIs at different institutions (award from USDA-ARS would ultimately be set up with separate agreements/awards).

Budget Request

You will need to enter the final budget requested dollar amount from your Excel template for your project into the form.

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-fy24/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:** Narrative budget justification for all line-items where funds are requested is required. The narrative descriptive details must be provided within the budget template to justify the request.

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;** use 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 two (2) 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 two (2) PIs, contact the USWBSI-NFO and a version can be provided to accommodate the number of Co-PIs involved.

When preparing your budget keep these items in mind:

- *Tuition Remission:* Tuition remission is **permitted** under USDA-ARS **research grant agreements** with any type of recipient organization (i.e. universities). However, for PIs currently funded under a Non-Assistance Cooperative Agreement (NACA), tuition remission is NOT allowed.
- *Equipment:* If you are including equipment in your budget, additional bid documentation needs to be included in your project description file. Equipment requests are intended for an article of tangible, nonexpendable, property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit per the federal definition. You should also include a justification for this equipment in the Budget Justification form.
- *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, or if lower amount that can be entered and 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 3.65%. This fee is charged <u>only to</u> projects that are funded through a <u>research grant agreement or a NACA</u> with USDA-ARS (i.e. not applicable to ARS PIs). When applicable, PIs need to incorporate the SBIR fee into their budget request. The formula to calculate the fee is included in the template.

STEP 3

Pre-Proposal Submission

⤴ The [USWBSI Submission Portal](#) must be used for the submission of all FY24 pre-proposals. PIs will be able to start the submission process, save and return as needed until the deadline for submission is reached. If this is your first time submitting a pre-proposal with the USWBSI, you will be prompted to create an account to gain access and login to the submission form. **The Submission Portal opens August 3, 2023.**

PI Required Items Checklist for Category 2 Submission Process

STEP 1
- ☐ Submit Letter of Intent via online form

STEP 2
- ☐ If approved, prepare materials for submission per instructions and initiate Pre-Proposal Submission via the USWBSI Submission Portal
- ☐ Enter key details in Submission Form
  - ☐ PI Contact Information
  - ☐ Project Title (keep broad in scope, 85 character maximum)
  - ☐ Research Category
  - ☐ Project Grain Class
  - ☐ Project Type (will automatically be selected as new)
  - ☐ Project Duration (will automatically be selected as a 2-year project)
  - ☐ Enter and upload PI and Co-Investigator Information (collect from your Co-PIs)
    - ☐ CV(s)/Publication List(s)
    - ☐ Current & Pending Support Forms
- ☐ Enter Required Submission Uploads (use the templates and forms provided for required uploads)
  - ☐ Project Summary and Description (upload as one PDF meeting requirements noted)
    - ☐ Project Summary (should not exceed 400 words)
    - ☐ Project Description (should not exceed five pages including tables and figures)
      - ☐ Supplemental Project Description Items (if required, not included in five-page limit)
        - ☐ References to Project Description
        - ☐ Facilities and Equipment
        - ☐ Collaborative or Sub-contractual Agreements
        - ☐ Letters from Collaborators
  - ☐ Special Category Forms
    - ☐ IM-CP Trials Summary Form
  - ☐ Budget Materials
    - ☐ Budget Type
    - ☐ Budget Request
    - ☐ Budget Justification Worksheet & Budget Summary Template(s) (prepare in Excel template and upload; justification narrative details required for all sections and 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

STEP 3
- ☐ Finalize and submit Pre-Proposal via the online Submission Portal

Category 2 **FHB Integrated Management Coordinated Project (IM-CP)**	Letter of Intent (LOI) online form submitted by PIs	June 28, 2023
	CP Chairs notify all PIs who submit Letters of Intent to their Coordinated Project on status and next steps	July 31, 2023
	USWBSI Submission Portal Opens	August 3, 2023
	If accepted, deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

SUBMIT
Letter of Intent Submission Link: USWBSI Letter of Intent Forms
Pre-Proposal Submission Link: Access the USWBSI Submission Portal
Forms & Templates for Upload: All USWBSI FY24 RFP Forms & Templates to Prepare & Upload

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 and aligns with the program descriptions listed below.

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

FHB Management (MGMT)

The FHB Management (MGMT) research area supports research to develop effective and economical disease management practices that reduce FHB severity and mycotoxins in small grain crops to meet the immediate and long-term needs of the wheat and barley industries. This research area involves: tillage practices, crop sequences, and other cultural practices targeting *Fusarium*-infested residues; fungicides and biocontrol agents with demonstrated field efficacy, and their application technologies; the refinement and deployment of disease prediction and forecasting models, and disease management decision tools; and studies of pathogen survival, inoculum production, dispersal, infection, colonization, mycotoxin production, fungicide sensitivity, and factors accounting for unacceptable levels of mycotoxins in symptomatic or asymptomatic grain. See the MGMT section of the USWBSI Action Plan for research goals and needs.

Food Safety and Toxicology (FST)

The Food Safety and Toxicology (FST) research area supports research on food safety and food processing issues related to the presence of *Fusarium* spp. mycotoxins in wheat and barley grain. Practical outcomes of research in this area include: 1) analytical tools that can be used by small grain producers, elevators, millers, and processors, to rapidly and reliably identify mycotoxin-contaminated grain; 2) develop appropriate strategies to deal with contaminated grain; and 3) diagnostic data on *Fusarium* spp. mycotoxins required for development of FHB resistant/tolerant varieties of wheat and barley. See the FST section of the USWBSI Action Plan for research goals and needs.

Gene Discovery and Engineering Resistance (GDER)

The Gene Discovery and Engineering Resistance (GDER) research area (RA) places its primary focus on understanding mechanisms of resistance to Fusarium head blight (FHB) and identification of wheat and barley gene variants that can be deployed to increase FHB resistance and/or reduce DON accumulation. The GDER RA also supports utilization of gene editing and transgenic strategies as methodologies to better understand resistance mechanisms with the goal to improve FHB resistance. However, GDER places priority on strategies that can be deployed without transgenesis; gene discovery and transformation of non-cereal systems will be supported only for the purpose of rapidly screening potential anti-*Fusarium* genes**.** See the GDER section of the USWBSI Action Plan for research goals and needs.

Pathogen Biology and Genetics (PBG)

Research in this area includes studies that address mycotoxin biosynthesis in vivo or in planta, host-pathogen interactions, pathogen natural diversity, and responses of the pathogen to host resistance mechanisms and pathogen control strategies. Research in PBG should complement and be linked to whole plant research that will lead to disease control and/or toxin reduction strategies. See the Pathogen Biology and Genetics (PBG) section of the USWBSI Action Plan for research goals and needs.

Category 3 Contact Information (Research Area Chairs)

Research Area Individual Projects		
FHB Management (MGMT)	Kaitlyn Bissonnette, Cotton Inc.	KBissonnette@cottoninc.com
Food Safety and Toxicology (FST)	Dave Kendra, Cibus	dkendra@cibus.com
Gene Discovery and Engineering Resistance (GDER)	Jyoti Shah, Univ of North Texas	Jyoti.shah@unt.edu
Pathogen Biology and Genetics (PBG)	Lisa Vaillancourt, Univ of Kentucky	vaillan@uky.edu

Key Deadlines

Category 3 Research Area Individual Projects	USWBSI Submission Portal Opens	August 3, 2023
	Deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

PI Steps for Category 3 Submission Process

STEP 1

Pre-Proposal Submission Requirements

All PIs must complete the online pre-proposal submission via the USWBSI Submission Portal. 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
By logging into the USWBSI website, your name, email and institution will populate based on what is in your login account. You can edit if needed. PIs will need to add in their department, mailing address with zip+4 and work phone details.

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 are provided on page 25 and corresponding research priorities can be accessed through the USWBSI's Action Plan.

Project Grain Class
Indicate which grain class(es) your new project will focus on; you can choose up to 3 options.

Project Type
All pre-proposals in FY24 will be new and will be automatically marked as such in the form.

Project Duration
As noted on page 5, for FY24, all projects will be considered for 2-years only and will be automatically marked in the form as such. In FY26, 4-year terms will again be considered. Please note, the USWBSI has always awarded funding annually and will continue to do so. Annual performance reports and continuation award review/approval will be required for each year of the project.

⬆ **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. The PI will need to upload the following items for the PI and Co-Investigators:

- *Curriculum Vitae (CV) with Publication List.* The CV should be limited to two pages in length, excluding publications. A presentation of academic and research credentials, e.g., educational, employment and professional history, and honors and awards should be included. Unless pertinent to the project, do not include meetings, seminars, or personal data. A chronological list of all publications in refereed journals during the past five years, including those in press, should be included, non-refereed technical publications that have relevance to the proposed project may be included. The CV and Publication List should be uploaded as one PDF file. CV/Pubs for collaborators or sub-contractors are not required.
- *Current and Pending Support (CPS) Form.* Download the current CPS form from the FY24 RFP web page at https://scabusa.org/research_rfp-fy24/forms_templates. *The provided form is preferred, but o*ther USDA *versions of Current and Pending Support forms are accepted (i.e., NIFA/AFRI).* Current and Pending Support Forms listing other current public or private support to which key personnel identified in the Pre-Proposal have committed portions of their time are required, 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 Pre-Proposal 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 uploaded as one PDF file 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-fy24/forms_templates.

Project Summary
Fill in the Project Summary Page (limited to 2 pages), using Calibri or Times New Roman 12-point font, and 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)

Project Description
The Project Description should immediately follow the Project Summary. 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 be formatted using Calibri or Times New Roman 12-point black colored font with one-inch margins. Bold formatting should only be used for section headings or used minimally to emphasize importance or significance.

Brevity will assist reviewers and USWBSI/NFO staff in dealing effectively with pre-proposals. The written text of the Project Description <u>must be five pages or less (single spaced or equivalent); ten pages or less in total including figures and tables</u> and should describe in clear, concrete terms the substance of your proposed research including the following:

Included within the 5-Page Text Limit (up to 10 pages with figures and tables)

- *Title.* Same as what is included in the submission form and Project Summary
- *USWBSI Action Plan Alignment.* Relevance of the project to the goals of the U.S. Wheat and Barley Scab Initiative with specific reference to the applicable priorities listed in the Action Plan clearly stated. The Action Plan can be viewed at https://scabusa.org/pdfs/uswbsi_action-plan_web.pdf.
- *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's, 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.
- *Rationale and Significance.* It is understood that FHB 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 proposed research 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, methodologies and procedures 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 and plans for preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products.)
  - 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.

NOT Included within the 5-Page Text Limit – Supplemental Information for the Project Description
Additionally, the following items can be included to support the project description (these items will not be counted toward the ten (10) page maximum).

- *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 acquisition, justification should be included in the Budget Justification Worksheet and bid documentation should be noted and included in the project description.
- *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. An Excel template with built-in formulas, space for your justification narrative, and auto-generation of the Budget Summary page is available. Make sure to double check that all of your details transferred as intended and all totals match.

Budget Type
Select type that matches the budget template you uploaded - Single Budget if award would be going to only one individual (i.e. PI) or Multi-PI Budget if project involves multiple PIs at different institutions (award from USDA-ARS would ultimately be set up with separate agreements/awards).

Budget Request
You will need to enter the final budget requested dollar amount from your Excel template for your project into the form.

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-fy24/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:** Narrative budget justification for all line-items where funds are requested is required. The narrative descriptive details must be provided within the budget template to justify the request.

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;** use 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 two (2) 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 two (2) PIs, contact the USWBSI-NFO and a version can be provided to accommodate the number of Co-PIs involved.

When preparing your budget keep these items in mind:

- *Tuition Remission:* Tuition remission is **permitted** under USDA-ARS **research grant agreements** with any type of recipient organization (i.e. universities). However, for PIs currently funded under a Non-Assistance Cooperative Agreement (NACA), tuition remission is NOT allowed.
- *Equipment:* If you are including equipment in your budget, additional bid documentation needs to be included in your project description file. Equipment requests are intended for an article of tangible, nonexpendable, property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit per the federal definition. You should also include a justification for this equipment in the Budget Justification form.
- *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, or if lower amount that can be entered and 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 3.65%. 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 need to incorporate the SBIR fee into their budget request. The formula to calculate the fee is included in the template.

STEP 2

Pre-Proposal Submission

The USWBSI Submission Portal must be used for the submission of all FY24 pre-proposals. PIs will be able to start the submission process, save and return as needed until the deadline for submission is reached. If this is your first time submitting a pre-proposal with the USWBSI, you will be prompted to create an account to gain access and login to the submission form. **The Submission Portal opens August 3, 2023.**

PI Required Items Checklist for the Category 3 Submission Process

STEP 1
- ☐ Prepare materials for submission per instructions and initiate Pre-Proposal Submission via the USWBSI Submission Portal
- ☐ Enter key details in Submission Form
    - ☐ PI Contact Information
    - ☐ Project Title (keep broad in scope, 85 character maximum)
    - ☐ Research Category
    - ☐ Project Grain Class
    - ☐ Project Type (will automatically be selected as new)
    - ☐ Project Duration (will automatically be selected as a 2-year project)
    - ☐ Enter and upload PI and Co-Investigator Information (collect from your Co-PIs)
        - ☐ CV(s)/Publication List(s)
        - ☐ Current & Pending Support Forms
- ☐ Enter Required Submission Uploads (use the templates and forms provided for required uploads)
    - ☐ Project Summary and Description (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)
            - ☐ Supplemental Project Description Items (if required, not included in page limit)
                - ☐ References to Project Description
                - ☐ Facilities and Equipment
                - ☐ Collaborative or Sub-contractual Agreements
                - ☐ Letters from Collaborators (required for all pre-breeding/germplasm development related Pre-Breeding Proposals)
    - ☐ Budget Materials
        - ☐ Budget Type
        - ☐ Budget Request
        - ☐ Budget Justification Worksheet & 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

STEP 2
- ☐ Finalize and submit Pre-Proposal via the online Submission Portal

Category 3 **Research Area Individual Projects**	USWBSI Submission Portal Opens	August 3, 2023
	Deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

SUBMIT	**Pre-Proposal Submission Link:**	Access the USWBSI Submission Portal
	Forms & Templates for Upload:	All USWBSI FY24 RFP Forms & Templates to Prepare & Upload

Category 4

Transformational Science Projects

Category 4 Instructions
Transformational Science Projects

Research Alignment

Does my proposed research belong in the Transformational Science Category? Yes, if the primary focus of your proposed research involves the following:

Transformational Science (TSCI)	The USWBSI is seeking <u>new research approaches to enrich its portfolio</u> with <u>novel concepts and new PIs</u>. If you have a concept for consideration, make sure to submit to this new Transformational Science category.

To help accelerate the development of new germplasm and technologies, the Transformational Science (TSCI) category's overall goals are to attract expertise of young scientists that are not part of the Initiative, recruit and explore new ideas and approaches, and develop integrated projects that leverage the strengths of the Initiative. The TSCI category spans all of the research areas of the Initiative.

Proposals should incorporate the following:
1. At least one of the PIs is a new scientist to the Initiative
2. The proposed work represents a novel approach to address FHB (currently funded projects can be viewed in the [USWBSI Project Database](#))

Proposals that include collaboration between scientists involved with two or more of the current research areas/coordinated projects are preferred.

Please note: PIs who have received TSCI funding in a prior funding cycle are not eligible to submit a pre-proposal for the same TSCI project again in the TSCI category, but are welcome to submit their project to one of the other USWBSI categories for consideration.

Category 4 Contact Information

Transformational Science Projects		
USWBSI NFO Director of Operations	Michelle Bjerkness	517.290.5023 | nfo@scabusa.org

Key Deadlines

Category 4 **Transformational Science (TSCI)**	Letter of Intent (LOI) online form submitted by PIs	June 28, 2023
	The NFO notifies all PIs who submit Letters of Intent to TSCI on status and next steps	July 31, 2023
	USWBSI Submission Portal Opens	August 3, 2023
	If accepted, deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

PI Steps for Category 4 Submission Process

STEP 1
Pre-Submission Letter of Intent (LOI) Requirements

If you plan to participate in the Transformation Science Category, you must submit a Letter of Intent form that includes the following:
- Proposed project title
- Name of PI and Co-PIs, along with titles and years of experience
- Identify the <u>research area(s), if any</u> (MGMT, FST, GDER, PBG, VDHR) with which your project aligns

- Synopsis that describes the following:
  - the problem being addressed
  - approaches for solving the problem and the rationale for using these approaches
  - unique aspects of this project that make it transformational
  - the outputs of the project and how those outputs will be used by researchers, extension educators, or stakeholders to accomplish the overall mission of the USWBSI
- Include a statement that demonstrates that the PI/Co-PI's are capable of carrying out the proposed research based on past research productivity and expertise in the relevant field(s) of research
- Projected total amount of budget request for Year 1 of project

> **LOI Deadline:** Letter of Intent form must be submitted online by **June 28, 2023.**
> **LOI Link:** USWBSI Letter of Intent Forms

Letters of Intent (LOI) Review & Notification

After Executive Committee review, the USWBSI Networking & Facilitation Office (NFO) will notify all PIs who submitted Letters of Intent whether their proposed research has been accepted to submit a pre-proposal. **NOTE**: If the reviewers determine your project doesn't meet the transformational science expectations, but is still deemed of interest to the USWBSI, you may be invited to submit an individual project pre-proposal following the instructions for Category 3 (page 25).

STEP 2

Pre-Proposal Submission Requirements

All PIs must complete the online pre-proposal submission via the USWBSI Submission Portal. 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

By logging into the USWBSI website, your name, email and institution will populate based on what is in your login account. You can edit if needed. PIs will need to add in their department, mailing address with zip+4 and work phone details.

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 Category 4 Transformational Science (TSCI).

Project Grain Class

Indicate which grain class(es) your new project will focus on; you can choose up to 3 options.

Project Type

All pre-proposals in FY24 will be new and will be automatically marked as such in the form.

Project Duration
As noted on page 5, for FY24, all projects will be considered for 2-years only and will be automatically marked in the form as such. In FY26, 4-year terms will again be considered. Please note, the USWBSI has always awarded funding annually and will continue to do so. Annual performance reports and continuation award review/approval will be required for each year of the project.

⬆ **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. The PI will need to upload the following items for the PI and Co-Investigators:

- *Curriculum Vitae (CV) with Publication List.* The CV should be limited to two pages in length, excluding publications. A presentation of academic and research credentials, e.g., educational, employment and professional history, and honors and awards should be included. Unless pertinent to the project, do not include meetings, seminars, or personal data. A chronological list of all publications in refereed journals during the past five years, including those in press, should be included, non-refereed technical publications that have relevance to the proposed project may be included. The CV and Publication List should be uploaded as one PDF file. CV/Pubs for collaborators or sub-contractors are not required.

- *Current and Pending Support (CPS) Form.* Download the current CPS form from the FY24 RFP web page at https://scabusa.org/research_rfp-fy24/forms_templates. *The provided form is preferred, but other USDA versions of Current and Pending Support forms are accepted (i.e., NIFA/AFRI).* Current and Pending Support Forms listing other current public or private support to which key personnel identified in the Pre-Proposal have committed portions of their time are required, 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 Pre-Proposal 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 uploaded as one PDF file 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-fy24/forms_templates.

Project Summary
Fill in the Project Summary Page (limited to 2 pages), using Calibri or Times New Roman 12-point font, and 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)

Project Description
The Project Description should immediately follow the Project Summary. 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 be formatted using Calibri or Times New Roman 12-point black colored font with one-inch margins**.** Bold formatting should only be used for section headings or used minimally to emphasize importance or significance.

Brevity will assist reviewers and USWBSI/NFO staff in dealing effectively with pre-proposals. The written text of the Project Description <u>must be five pages or less (single spaced or equivalent); ten pages or less in total including figures and tables</u> and should describe in clear, concrete terms the substance of your proposed research including the following:
Included within the 5-Page Text Limit (up to 10 pages with figures and tables)
- *Title.* Same as what is included in the submission form and Project Summary
- *USWBSI Action Plan Alignment.* Relevance of the project to the goals of the U.S. Wheat and Barley Scab Initiative with specific reference to the applicable priorities listed in the Action Plan clearly stated. The Action Plan can be viewed at https://scabusa.org/pdfs/uswbsi_action-plan_web.pdf.
- *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.
- *Rationale and Significance.* It is understood that FHB 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 proposed research 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, methodologies and procedures 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 and plans for preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products.)
  - 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.

NOT Included within the 5-Page Text Limit – Supplemental Information for the Project Description
Additionally, the following items can be included to support the project description (these items will not be counted toward the ten (10) page maximum).

- *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 acquisition, justification should be included in the Budget Justification Worksheet and bid documentation should be noted and included in the project description.
- *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
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Budget Type
Select type that matches the budget template you uploaded - Single Budget if award would be going to only one individual (i.e. PI) or Multi-PI Budget if project involves multiple PIs at different institutions (award from USDA-ARS would ultimately be set up with separate agreements/awards).

Budget Request
You will need to enter the final budget requested dollar amount from your Excel template for your project into the form.

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-fy24/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:** Narrative budget justification for all line-items where funds are requested is required. The narrative descriptive details must be provided within the budget template to justify the request.

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;** use 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 two (2) 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 two (2) PIs, contact the USWBSI-NFO and a version can be provided to accommodate the number of Co-PIs involved.

When preparing your budget keep these items in mind:

- *Tuition Remission:* Tuition remission is **permitted** under USDA-ARS **research grant agreements** with any type of recipient organization (i.e. universities). However, for PIs currently funded under a Non-Assistance Cooperative Agreement (NACA), tuition remission is NOT allowed.
- *Equipment:* If you are including equipment in your budget, additional bid documentation needs to be included in your project description file. Equipment requests are intended for an article of tangible, nonexpendable, property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit per the federal definition. You should also include a justification for this equipment in the Budget Justification form.
- *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, or if lower amount that can be entered and 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 3.65%. 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 need to incorporate the SBIR fee into their budget request. The formula to calculate the fee is included in the template.

STEP 3

Pre-Proposal Submission

The [USWBSI Submission Portal](#) must be used for the submission of all FY24 pre-proposals. PIs will be able to start the submission process, save and return as needed until the deadline for submission is reached. If this is your first time submitting a pre-proposal with the USWBSI, you will be prompted to create an account to gain access and login to the submission form. **The Submission Portal opens August 3, 2023.**

PI Required Items Checklist for Category 4 Submission Process

STEP 1
- ☐ Submit Letter of Intent via online form

STEP 2
- ☐ If approved, prepare materials for submission per instructions and initiate Pre-Proposal Submission via the USWBSI Submission Portal
- ☐ Enter key details in Submission Form
  - ☐ PI Contact Information
  - ☐ Project Title (keep broad in scope, 85 character maximum)
  - ☐ Research Category
  - ☐ Project Grain Class
  - ☐ Project Type (will automatically be selected as new)
  - ☐ Project Duration (will automatically be selected as a 2-year project)
  - ☐ Enter and upload PI and Co-Investigator Information (collect from your Co-PIs)
    - ☐ CV(s)/Publication List(s)
    - ☐ Current & Pending Support Forms
- ☐ Enter Required Submission Uploads (use the templates and forms provided for required uploads)
  - ☐ Project Summary and Description (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)
      - ☐ Supplemental Project Description Items (if required, not included in page limit)
        - ☐ References to Project Description
        - ☐ Facilities and Equipment
        - ☐ Collaborative or Sub-contractual Agreements
        - ☐ Letters from Collaborators
  - ☐ Budget Materials
    - ☐ Budget Type
    - ☐ Budget Request
    - ☐ Budget Justification Worksheet & Budget Summary Template(s) (prepare in Excel template and upload; justification narrative details required for all sections and 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

STEP 3
- ☐ Finalize and submit Pre-Proposal via the online Submission Portal

Category 4 **Transformational Science (TSCI)**	Letter of Intent (LOI) online form submitted by PIs	June 28, 2023
	The NFO notifies all PIs who submit Letters of Intent to TSCI on status and next steps	July 31, 2023
	USWBSI Submission Portal Opens	August 3, 2023
	If accepted, deadline for PIs to submit FY24 Pre-Proposal(s) and supporting documents via Submission Portal	September 21, 2023
	Pre-Proposal Review and Funding Determinations	Oct-Dec 2023
	PIs Notified of Pre-Proposal Decision	January 2024

SUBMIT	**Letter of Intent Submission Link:**	USWBSI Letter of Intent Forms
	Pre-Proposal Submission Link:	Access the USWBSI Submission Portal
	Forms & Templates for Upload:	All USWBSI FY24 RFP Forms & Templates to Prepare & Upload