

Request for Draft Letters of Intent (DLOI)

To facilitate discussion at our Barley CP meeting in May, each person planning to participate in the CP pre-proposal should submit a 'draft' letter of intent (DLOI) no later than May 18. NOTE: This DLOI is not part of the USWBSI's formal Request for Pre-Proposals. The current CP includes projects that fall under the four USWBSI research areas (VDHR, GDER, PBG and MGMT). Within each of these research areas, we have defined a total of ten objectives (see below). The outputs of projects carried out under the current objectives are expected to ultimately lead to impacts defined in Barley CP flow chart (see below). The goal of the Barley CP is to coordinate barley related FHB research either by including it in the CP proposal or by coordinating with barley research funded in other USWBSI research areas or with FHB research funded outside the USWBSI.

Please submit one DLOI for each proposed research project that will be submitted to the USWBSI's BAR-CP. If you have several experiments that fall in one objective, then include them all in the same DLOI. A PI may submit more than one DLOI. Please use the following guidelines for developing your DLOI:

- One page (single spaced) maximum.
- Indicate if this is a continuing or new project.
- Identify the research area in which your project fits. If it fits in Food Safety, Toxicology and Utilization of Mycotoxin-contaminated Grain (FSTU), then indicate that.
- Identify the research objective in which your project fits. If it does not fit in one of the ten objectives below, then suggest a new objective.
- Briefly describe the problem addressed, rationale, approaches.
- Specifically identify the outputs of the project and how those outputs will be used by researchers, extension educators, or stakeholders to accomplish the overall goal of the USWBSI.
- If this is a continuation of a currently funded project, then comment on the relevant milestones that are in the milestone matrix for the Barley CP.
- Provide a budget estimate for direct costs: salary and fringe, supplies, travel, equipment, other.

Barley Coordinated Project - FY08-FY09 (approx. May 2008-April 2010)

I Variety Development and Host Resistance (VDHR)

Objective 1. Screen available *Hordeum* germplasm for novel sources of resistance.

Objective 2. Map novel QTL for resistance to FHB in barley.

Objective 3. Validate and fine map FHB resistance QTL.

Objective 4. Develop new barley varieties with enhanced resistance to FHB and lower DON

II. Gene Discovery and Engineering Resistance (GDER)

Objective 5. Identify barley genes differentially regulated in the barley-*Fusarium* interaction.

Objective 6. Evaluate promising transgenes in adapted genetic backgrounds in regional nurseries.

III. Pathogen Biology and Genetics (PBG)

Objective 7. Investigate host genotype x pathogen chemotype/genotype interaction for FHB and DON

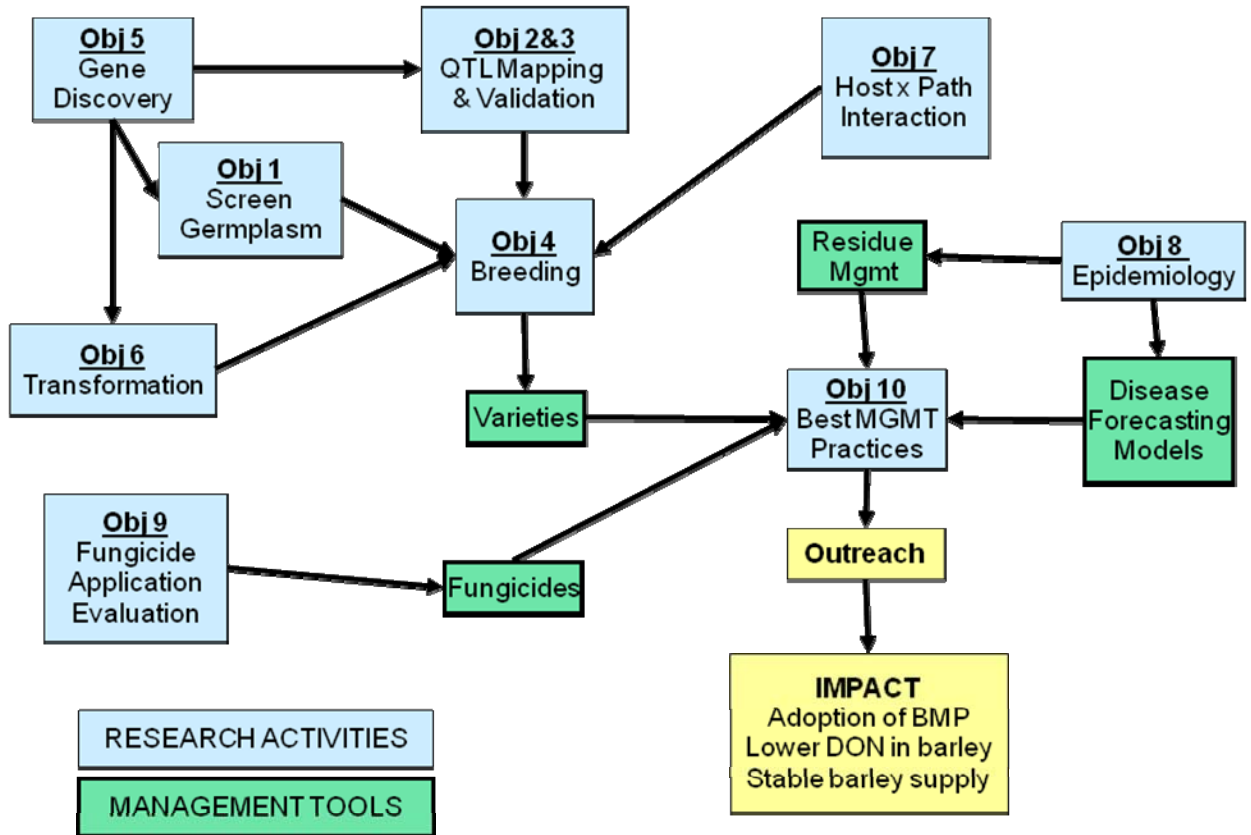
IV. FHB Management (MGMT)

Objective 8. Elucidate the epidemiology of colonization and survival of *Fusarium graminearum* on host tissue, disease development, and toxin accumulation.

Objective 9. Develop and evaluate chemical/biological management strategies that reduce FHB and/or DON in barley.

Objective 10. Develop and promote best management strategies through integrated management.

USWBSI Barley CP



From Barley CP proposal submitted in 2007.