

Project FY22-EC-002: Management of the USWBSI Networking & Facilitation Office

1. What are the major goals and objectives of the research project?

The objectives of the Networking and Facilitation Office (NFO) are to:

- 1) Maintain and enhance the management and accountability of USWBSI's resources
- 2) Facilitate and enhance communication within the Initiative and with its stakeholders
- 3) Administer the process of developing the Initiative's annual research plan and budget
- 4) Manage and implement all meetings and conferences

2. What was accomplished under these goals or objectives? (For each major goal/objective, address these three items below.)

What were the major activities?

Objective 1 – Management and accountability of USWBSI resources

- Facilitated Executive Committee (EC) and Steering Committee (SC) funding and strategy meetings and coordinated all onsite meeting logistics in December 2024, April 2025, and all virtual meetings throughout the year. (Table 1)
- Facilitated the USWBSI Action Plan review process with research area leaders and Steering Committee for stakeholder input, collated all required updates/adjustments and posted revised version in May 2025.
- Coordinated FY26 Working Cap review and polling process for revised distribution to be used in FY26 application review process.
- Reviewed processes and facilitated grant and database management protocols to ensure efficient and effective approach in alignment with USDA-ARS requirements.
- Held RA/CP Chair Funding Cycle Overview Zoom sessions in September 2024 to offer guidance and discuss processes as well as answer questions for chairs in preparation of review panel discussions.
- Implemented mycotoxin (deoxynivalenol or DON) Lab Annual Report for consistent and comprehensive reporting of DON sample processing. Included sample testing statistics in Performance Report process.
- Managed 2024 USWBSI leadership online nomination and election process.
- Coordinated new onboarding Zoom session for all new Steering Committee (SC) members to offer high level overview of USWBSI and operational components prior to first SC meeting in December.
- Facilitated the USWBSI Policies & Procedures updates and operational recommendations. Outlined recommendation for improved committee structure/term process. Detailed revision of related section of Policies & Procedures developed and approved by EC/SC. Implementation initiated in January 2025.
- Conducted financial tracking for NFO budget, monitoring expenses and assessing utilization for budget requests.

Objective 2 – Enhance communications

- Coordinated implementation of outreach communications plan focused on extension, crop consultants and grower groups. Advisory Team guidance incorporated. Efforts included:
 - Publishing periodic FHB Tool Talk emails to amplify key messages to stakeholders
 - Redesigned all outreach online Resources, based on user feedback, created new site aligned with top search site URL with simplified look and readily available key resources for farmers. https://scabusa.org/Ext_Grower_Conslt
- Published *FHB Disease Impact Update* in November 2024.
- Published *Fusarium Focus* Newsletters - distributed three times/year.
- Published updated USWBSI Impacts - one-pager for key stakeholders.

- Updated USWBSI infographics on critical data points for stakeholders.
- Published monthly feature articles on researchers and advocates highlighting contributions.
- Promoted recorded versions of Scabinar (USWBSI webinar) for farmers, crop consultants and extension personnel on current FHB management techniques, offered continuing education credits (CEU).
- Offered a series of Graduate Student/Post-Doc/Early Career webinars and activities to provide educational, career and social opportunities for new FHB researchers.
- Maintained ScabSource, a database for tracking relevant FHB research publications.
- Facilitated the opening of FHB Risk Tool for the 2025 season, incorporating enhancements and early opening in February 2025. The tool is available free to farmers in 36 states.
- Updated the USWBSI's YouTube channel, with available recordings/content.
- Regularly enhanced the scabusa.org website to better present and store key content. Monitored Google Analytics tracking of website for accurate and useful usage data. Scripts and web pages were updated with new security features, better error reporting, and interface improvements. Additional keywords for Search Engine Optimization (SEO) metadata were implemented.
- The scabusa.org server was moved from the InMotion hosting service to a new Virtual Private Server (VPS) host named HostWinds and switched our security certificate service to increase reliability.
- Started work on a new unified project/funding/login system. Previously several databases were used to address funding requests, the projects database, and user login. These have been redesigned in a single database and codebase. This work is ongoing, but users/contacts, projects, institutions, and login are fully functional. At the end of this fiscal year, funding requests in this new system were 95% functional.

Objective 3 – Administer Research Plan & Budget

- Developed the USWBSI's FY25 Research Plan & Budget in December 2024, established new process with two recommendation levels submitted by the Review Panels. The Executive Committee moved their recommendations forward to the Steering Committee for consideration. Awaiting the Federal Budget approval, PI notices were held, until a year-long Continuing Resolution was approved in March 2024 and notices were distributed for preparation of FY25 Continuation applications and were submitted in April 2025. The research plan submitted to USDA-ARS included 126 research projects across multiple research areas including: FHB Management; Food Safety & Toxicology; Gene Discovery & Engineering Resistance; Pathogen, Biology & Genetics; Variety Development & Host Resistance (that includes 3 sub-groups Spring Wheat, Northern and Southern Winter Wheat Coordinated Projects)), three commodity-based coordinated projects (Barley, Durum, and Hard Winter Wheat), and the USWBSI Headquarters (NFO/Website). The recommended funding amount totaled \$7,655,897 (same as FY24).
- Updated FY25 Continuation process for PIs, added in award history and additional notation to clarify funding options for FY25. Modified rating system for assessment of summary reports.
- Revised the review recommendation process with materials and communications for budget recommendations for FY25 continuation submissions. Clearly delineated steps for review panel consensus recommendations and facilitated the coordination of budget options for all categories compiled for EC consideration. Integrated review system for seamless viewing by review panels, including one click access to prior year performance reports (rather than having to search in reports database).
- Responded to shifting parameters with FY25 funding, prepared special reports as requested, prepared outlined abbreviated project descriptions and negative impact statements, required for review by USDA-ARS following the change in administration.

- Implemented consistent communication with USDA-ARS contacts, a new administrative contact was assigned when multiple staff assigned to USWBSI took early resignation option. Prepared documentation outlining USWBSI system and defined key terminology/processes for new USDA-ARS staff to better understand program.
- Distributed regular communications with PIs after continuations were submitted while awaiting processing of FY25 continuations given ongoing funding delays, notified on current status.
- Given delayed funding process, implemented early distribution of FY24 Performance Progress Report solicitation and submissions.
- Distributed communication with university financial contacts to encourage prompt completion of the financial reports required for agreements.
- Based on Executive Committee feedback, developed new FHB Outreach category for FY26 RFP with a focus on enhancing FHB awareness and mitigation with a new generation of farmers.
- Built out the FY26 Request for Pre-Proposals (RFP) documentation and instructional website and forms/templates, worked with USDA-ARS on review of content and incorporation of all requirements; publication and promotion of the RFP delayed awaiting USDA-ARS approval.
- Monitored PI agreement spending status through March 2025 (based on December 2024 data). Worked with PIs on needed budget reallocations as needed.

Objective 4 – Manage meetings and conferences

- Managed 2024 National Fusarium Head Blight (NFHB) Forum onsite planning and logistics in Austin, TX. More than 200 attendees from three countries participated. Two opening presentations, one of which was an industry perspective, and 16 invited presentations provided valuable updates. In addition, two poster sessions facilitated 65 scientific poster presentations allowing for both onsite interactions and offsite access through a virtual poster room. Other key elements accomplished:
 - Worked with the Forum Organizing Committee to develop onsite program model.
 - Built out registration payment system via a University of Minnesota (UMN) tool incorporating added and required features for onsite meeting.
 - Built out a new Breakthrough Breakfasts concept, with table topics collected from attendees as a new method for building interactions and engagement during the NFHB Forum.
 - Solicited and managed all elements for financial sponsors and in-kind donations to support event; confirmed new sponsors.
 - Held an Early Career Networking Social for Graduate Students and Post-docs to encourage and build professional connections.
 - Coordinated poster judging competition, with in-person assessments conducted as part of the “Flash-and-Dash” presentation structure.
 - Modified Abstract submission system to allow later submission of poster file for virtual poster room per request from submitters.
 - Outlined all logistics of onsite meeting planning, from room setup/utilization, AV, food/beverage, service, third-party vendor selection, report tracking, staffing needs; provided guidance/tracking for smooth onsite implementation, responded to unexpected issues.
 - Conducted survey of attendees to track interests/adjustments for future planning.
- Finalized negotiations and contracting for 2025 National FHB Forum venue in Denver, CO.
- Solicited and investigated venue options for 2026 NFHB Forum.
- Upon recommendation by the EC, implemented a High-throughput Phenotyping Workshop to better understand technologies and expertise available and develop a recommendation for a coordinated USWBSI effort. Workshop was held in Fargo, ND, September 26-27, 2024; identified scientific facilitators, organized planning meetings, developed initial agenda/approach, coordinated all logistics, invited presenters, handled onsite details and processed all expenses.

What were the significant results?

- The FY25 Research Plan & Budget was finalized with a second year at a reduced budget total amount of \$7.6M, Continuation application materials with USWBSI recommendations were submitted to USDA-ARS for the annual agreement amendment process.
- The USWBSI Action Plan was evaluated and updated by FHB experts to ensure goals align with cutting edge technologies and critical needs. The Action Plan will drive the FY26 RFP solicitations.
- The USWBSI Research Area Working Caps were evaluated, input was gained from stakeholders and all levels were established for the FY26 Funding cycle.
- Several USWBSI website pages and menu items were consolidated, with an improved user interface, additionally a new site to help Extension, Crop Consultant and Farmer users quickly find the information they need to communicate FHB management strategies was implemented. Users report an improved experience and easier navigation.
- A more intuitive committee structure was implemented, the same structure for both Research Area and Coordinated Project Committees was incorporated allowing for more simplified tracking and increasing involvement from FHB community.
- A targeted High-Throughput Phenotyping Workshop, which included a broad range of expertise to better understand the various phenotyping technologies available and identify new methods for consideration, was implemented. Development of an integrated phenotyping approach for the USWBSI was achieved.
- The National FHB Forum was held successfully with attendees providing high ratings on content value and networking to increase USWBSI efforts.
- Visibility of top FHB graduate students/post-doc research was continued with the poster competition featuring the finalist presentations; winners were again highlighted during Monday's poster session.
- Instead of running the website, databases, and custom scripts inside of an application called cPanel, controlled by InMotion, we now have our own virtual server. This enables us full control over all aspects of the website. We are no longer limited to the capabilities of cPanel. The improvements so far have been an increase in system reliability, as measured by total downtime, much greater control over our scripts and their capabilities, improved performance, and the ability to use the server as a backup mail server.
- We moved to a new certificate host service in order to improve our encryption services for the website and email. Site uptime has improved for all users.
- The user interface was improved to make the script easier to use and more intuitive. We also automated more of the steps to reduce user error and improve security by limiting user input.
- USWBSI databases, scripts, and systems were all designed separately over the years, and in some instances up to a decade, apart. Unifying the systems helped improve maintenance, security, and ease the creation of new features and scripts. It has also improved database performance through data optimization and reduced database connections. Administrative work has been eased by reducing the amount of manual data entry required to link data from the different databases. Once the system is complete we plan to develop an improved user interface.

List key outcomes or other achievements.

A summary of committee meetings, conference calls, research-based workshops and committee nominations, appointments and elections that were organized, facilitated and/or supported by the NFO are provided in Tables 1 and 2.

Table 1. Summary of Administrative Meetings and Research-based Workshops/Planning meetings facilitated or supported by the Networking & Facilitation Office (NFO).[‡]

Committee/Group	# of Meetings	Description/Purpose of Meeting
Steering Committee (SC)	3 Meetings	05-14-24: SC Open Forum for Revised FY24 Budget Discussion 05-15-24: SC Open Forum for Revised FY24 Budget Discussion 11-20-24: SC New Member Meet & Greet (Virtual) 12-10-24: SC Meeting – Review and approval of EC’s recommended FY25 Research Plan and Budget 04-17-25: SC Meeting (Virtual) Action Plan Review/Reports
Executive Committee (EC)	17+ Meetings	05-01-24: EC Meeting FY24 Funding Response to Budget Modification 09-04-24: EC Meeting FY25 Funding Approach for Review Panels 12-02-24: EC Meeting with BAR-CP Committee Chair EC Meeting with DUR-CP Committee Chair EC Meeting with HWW-CP Committee Chair EC Meeting with VDHR-SPR Committee Chair EC Meeting with VDHR-NWW Committee Chair EC Meeting with VDHR-SWW Committee Chair 12-03-24: EC Meeting with MGMT Committee Chairs EC Meeting with IM-CP Committee Chair EC Meeting with PBG Committee Chairs EC Meeting with FST Committee Chairs EC Meeting with GDER Committee Chairs 12-07-24: EC Meeting – Discussion on FY24 Projects; FY24 Research Plan and Budget developed 04-14-24: EC Strategy Meeting (in Minnesota) 04-15-24: EC Strategy Meeting (in Minnesota) 05-08-25: EC Meeting Working Cap Review/Discussion Monthly: USWBSI Co-Chair Meetings – Priorities
FY25 Review Panels (RP)	13	09-19-24: EC w/ RA-CP Chair Funding Cycle Overview 09-24-24: EC w/ RA-CP Chair Funding Cycle Overview 11-24: Review panel consensus recommendation meetings
Special Workshop – High Throughput Phenotyping Workshop	6	03-14-24: Planning Meeting for HTP Workshop 07-30-24: Planning Meeting for HTP Workshop w/ Keynote 08-07-24: Planning Meeting for HTP Workshop Logistics 09-06-24: Final Prep Meeting for HTP Workshop 09-26-24: High Throughput Phenotyping Workshop – Presentations 09-27-24: High Throughput Phenotyping Workshop – Strategy Session
Forum Organizing Committee (FOC) Planning Meetings	5	06-14-24: FOC Co-Chair 2024 Draft Program Review 07-08-24: Opening Session Planning – USDA-ARS Intramural Lineup 11-08-24: FOC Prep for onsite 12-08-24: FOC Co-Chair Practice Session 02-18-25: FOC Co-Chair 2025 Planning Meeting 03-13-25: FOC 2025 Kick-off Meeting
Comm Plan Advisory Team	2	08-28-24: Advisory Team Meeting website reorganization meeting 11-18-24: Advisory Team Meeting prep for website demo at Forum
Graduate Student and Post Docs in FHB (GPFHB) Organizers	5	06-26-24: Prep/Planning for Webinar 10-23-24: Social Media for Science Webinar (J. Rutkoski) 12-08-24: Networking Social Event during NFHB Forum 01-17-25: Organizer Webinar Planning for Year 03-26-25: Transformation/Gene Editing Facility (H. Trick)

Table 2. Summary of USWBSI Nominations and Elections during award period. ‡

Executive Committee	1 Appointment	Executive Committee Appointments: Grower Co-Chair. Elected.
Steering Committee	2 Appointments	Steering Committee Appointments: Crop Protection Representative and Malting & Brewing Industry Representatives. Both were elected.
Research Committees	9 Appointments	Research Committees appointments/re-appointments: MGMT: vice chair FST: vice chair GDER: 2 members, chair and vice chair PBG: 1 member, chair and vice chair
Coordinated Project Committees	18 Appointments	Coordinated Project Committees appointments/re-appointments: BAR-CP: 3 members, chair and vice chair DUR-CP: 3 members, vice chair HWW-CP: vice chair VDHR-NWW CP: 3 members, chair and vice chair VDHR-SPR CP: vice chair VDHR-SWW CP: 1 member, vice chair

‡ BAR-CP – Barley Coordinated Project
DUR-CP – Durum Coordinated Project
FST – Food Safety & Toxicology
GDER – Gene Discovery & Engineering Resistance
HWW-CP – Hard Winter Wheat Coordinated Project

IM-CP – FHB Management – Integrated Management Coordinated Project
MGMT – FHB Management
PBG – Pathogen Biology & Genetics
VDHR NWW – Variety Development & Uniform Nurseries Northern Soft Winter Wheat Region
VDHR SPR – Variety Development & Uniform Nurseries Spring Wheat Region
VDHR SWW – Variety Development & Uniform Nurseries Southern Soft Red Winter Wheat Region

3. What opportunities for training and professional development has the project provided?

Engaging students/post-docs during the 2024 National FHB Forum as well as year-round continues to be a priority. NFHB Forum activities included a poster competition offering additional visibility of graduate student and post-doc work and serving as a preparatory tool for their interactions. A “Nuts & Bolts” workshop during the NFHB Forum again aided newer scientists in the technical basics of inoculation methods, FHB rating and DON analysis for grain samples. Additionally, an onsite networking event was a professional development highlight, with nearly 25 students and post-docs attending to informally connect. Two student volunteers organized the activities and targeted communications encouraged participation. This past year, two educational webinars were held, one featuring tips for how to best utilize social media for promoting FHB science and the other on the centralized wheat transformation/gene editing facility available for USWBSI researchers. A High Throughput Phenotyping (HTP) Workshop held at North Dakota State University, also provided a professional development opportunity for NDSU students, post-docs and technicians who were invited to participate in the first day of presentations highlighting the variety of projects currently underway and experts working in HTP.

4. How have the results been disseminated to communities of interest?

Information is disseminated through the USWBSI’s listservs, website, emails, blogs, FHB-alerts, online articles, Forum proceedings, extension-based materials, press releases, social media and newsletters.

5. What do you plan to do during the next reporting period to accomplish the goals and objectives?

The comprehensive USWBSI NFO workplan will be executed consistently for all the expected activities and requirements, while being responsive to unanticipated circumstances.