



CALL FOR PROPOSALS

PREFACE – This is the 16th year of the Sclerotinia Research Initiative. The Initiative is leading a process to continue development of a comprehensive *Sclerotinia sclerotiorum* research plan with related budgetary considerations that is passed on to the USDA-ARS as a recommendation. The Steering Committee of the Initiative seeks pre-plans of work for Fiscal Year 2017 (FY17) to address important research areas related to managing this disease. **Based on comments by the Scientific Reviewers and Steering Committee Members, instructions have been modified for FY17; potential principal investigators (PIs) should carefully read the instructions, etc. and ensure that their pre-plans of work conform exactly to the described format(s)!**

INTRODUCTION – The goal of the Sclerotinia Initiative is to use cooperative research to expeditiously discover economic solutions in the area of crop management, crop protection and enhanced plant varieties to combat the disease of Sclerotinia or white mold. The Initiative is guided by a Steering Committee that includes commodity group and ARS representatives. Each year, the Steering Committee submits to the USDA-ARS a comprehensive and optimized research plan designed to achieve the Initiative's goals. That plan is the Initiative's recommendation for how the USDA-ARS can most effectively employ the funds appropriated by the U.S. Congress for collaborative *Sclerotinia sclerotiorum* research. **Funding for the FY17 Initiative is contingent on appropriations being approved by the U.S. Congress.**

The Initiative is now asking for pre-plans of work for potential research projects for funding in FY17. Depending on your institution's requirements, the authorized organizational representative's signature may not be required at this stage. Submitted pre-plans of work will be evaluated by both an independent Scientific Review Panel and by Affiliated (commodity) Group review committees. Those judged to have scientific merit will be asked to prepare final plans containing authorized organization signatures, revised budgets, and any required changes in the proposed research, within 60 days from receipt of notification. Participating Sclerotinia Initiative commodity groups include: 1) canola, 2) dry bean, 3) pea, lentil & chickpea, 4) soybean, and 5) sunflower. Pre-plans of work addressing one or all of these crop areas will receive priority during the review/funding process. Pre-plans of work that include collaborations with scientists working on other crops will be accepted provided one of the five participating crop groups remains the primary focus of the collaboration. Additionally, basic research on *Sclerotinia sclerotiorum* that is not related to any crop, but substantially advances scientific knowledge of the disease will be considered.

Pre-plans of work will be accepted according to the three following **GOALS**:

1. Germplasm Resources & Translational Genomics
2. Pathogen Biology & Mechanisms of Resistance
3. Disease Management & Crop Production

Based on the Sclerotinia Initiative Strategic Plan, the following areas are priorities/**MILESTONES** for FY17 funding:

1. Identify new sources of resistance in plant germplasm.
2. Use of interspecific resources to transfer resistance genes into cultivated plant germplasm.
3. Generate high-density genetic maps with validated markers for quantitative trait loci (QTL) that confer resistance to Sclerotinia.
4. Pyramid white mold resistance in plant germplasm and release germplasm/cultivars with enhanced resistance.



Priorities/Milestones Cont'd

5. Characterize migration/population structure and ecological variability of genotypes.
6. Characterize virulence/aggressiveness within the population, identify isolates for use in screening, and monitor durability of host resistance.
7. Identify environmental and genetic factors involved in myceliogenic and carpogenic germination of sclerotia.
8. Identify genes that are functional at specific growth and infection stages of *Sclerotinia*.
9. Identification and verification of candidate genes involved in *Sclerotinia* pathogenicity.
10. Optimize fungicide application programs.
11. Develop bio-control alternatives for disease management.
12. Develop disease-warning systems to optimize management of *S. sclerotiorum*.
13. Optimize cultural practices for disease management.

A single PI may submit multiple pre-plans of work; however, each pre-plan (i.e., project) will be handled as a distinct, autonomous and complete submission. Submitted pre-plans of work should be for a finite duration in time, typically 3 to 5 years as the Steering Committee encourages the conceptual development of multi-year projects to address long-term research needs. However, funds will only be distributed to cooperators for 12 month periods. Funding decisions for the continuation of multi-year projects will be based on progress made as defined in the following section, on fund availability and scientific priorities, as well as the current Status-of-Funds (Federal Financial Status Report prepared by the institution's accounting office) of any prior NSI award(s) to the receiving project. The long-range goal of the Steering Committee is to make the Initiative an annually funded program based on need to ensure multi-year project continuity. During the FY17 cycle, new Non-Assistance Cooperative Agreement (NACA's) (formerly called Specific Cooperative Agreements (SCA's)), those receiving funds for the first time in FY17, will be in effect July 1, 2017 through September 30, 2018, and, where applicable, existing NACA's receiving funds in FY17 will be in effect June 1, 2017 through December 31, 2018. *NACA's are limited to five years maximum by Federal statute. PI's should ensure all funding is expended at least 30-60 days prior to the five year Term Date listed on the REE-451 cover sheet of the agreement.*

REVIEW PROCESS - The deadline for submitting pre-plans of work (Application Packet) is **December 9, 2016**. Pre-plans of work postmarked on or before that date will be initially reviewed by the Administrative Office (ARS, Fargo, ND) of the Sclerotinia Initiative and then forwarded to an independent Scientific Review Panel and to Affiliated Group review committees from each participating commodity organization. Funding recommendations will be made following the review process identified in the Sclerotinia Initiative By-laws, located at: <http://www.ars.usda.gov/Research/docs.htm?docid=20122>

The Scientific Review Panel(s) will judge each submitted pre-plan of work using the following criteria:

1. **Scientific Merit, Conceptual Adequacy & Innovation** – is the work well conceived? Is the planned work novel? Does it include an innovative approach to answering the objectives? Are the methods and procedures appropriate? Are hypotheses and objectives clearly delineated? Is the work feasible as defined? What is the probability that the described research will be completed within stated time frames? Does the work duplicate existing or previously conducted research?
2. **Institutional Qualifications** – are the researchers qualified to conduct the proposed study? Are researchers aware of current literature on the proposed area of study? Are available facilities,



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instrumentation, equipment, personnel, and existing funding adequate to provide proper augmentative support of the proposed study? Is the amount of requested dollars adequate, excessive, or too low to complete the study?

3. **Relevance and/or Progress** – does the proposed study address the prioritized needs of the Initiative based on guidance provided by the Sclerotinia Initiative Steering Committee? Does the study directly relate to action items determined from the Initiative Strategic Plan? Will the work lead to development of new knowledge or new technology to manage the disease? Is reasonable progress being made if the submitted pre-plan of work is a continuation of a previously funded study? (Plans of Work funded for three consecutive years must show quantitative progress before additional funding will be considered. Examples of progress include: germplasm release, publications, patents, etc.)

If you have any questions regarding the web-based submission process, forms, etc., please contact: Kim Swanson, USDA-ARS, Fargo, ND; 701-239-1370; kimberly.swanson@ars.usda.gov

For research-related questions, please contact: Mike Foley, USDA-ARS, Fargo, ND; 701-239-1322; michael.foley@ars.usda.gov

For questions regarding Non-Assistance Cooperative Agreement (NACA's), please contact: Marcie Currie-Gross, USDA-ARS, Ft. Collins, CO; 970-492-7022; marcie.currie-gross@ars.usda.gov

Please note that pre-plans of work will be regarded as confidential documents. Distribution will be limited to parties involved with the review process. **A single hard copy and one electronic copy (submitted as a PDF file via email) of each pre-plan of work must be received at the following address postmarked no later than December 9, 2016:**

M.E. Foley, C/O Kim Swanson, USDA-ARS Red River Valley Agricultural Research Center, 1605 Albrecht Boulevard N., Fargo, ND 58102-2765 (for FedEx, UPS delivery address), 701-239-1370. The electronic copy of the pre-plan of work may be forwarded to: kimberly.swanson@ars.usda.gov