Sclerotinia Initiative Funded Projects – 2019

1. Characterizing pathogenicity effectors of *Sclerotinia sclerotiorum* preferentially expressed under acidic conditions and during plant infection

Weidong Chen USDA-ARS, Pullman, WA \$50,000

2. Screening for resistance sources to *Sclerotinia* white mold in recently acquired germplasm of cool season grain legumes

Weidong Chen USDA-ARS, Pullman, WA \$49,771

3. Biological control of white mold using the Mycovirus SsHADV-1-infected hypovirulent strain DT-8 of *Sclerotinia sclerotiorum*

Weidong Chen USDA-ARS, Pullman, WA \$42,500

4. Improving resistance to *Sclerotinia sclerotiorum* in spring canola

Luis del Rio North Dakota State University, Fargo, ND \$52,699

5. Improved white mold resistance in dry and snap beans through multi-site screening and pathogen characterization throughout major production areas

Sydney Everhart University of Nebraska, Lincoln, NE \$79,742

6. Refining genomic tools for *Sclerotinia* resistance and agronomic breeding of sunflower – towards dissection of the resistance phenotype

Brent S. Hulke USDA-ARS, Fargo, ND \$49,900

7. Understanding how sunflower soil microbiome impacts resistance to Sclerotinia stalk rot

Brent S. Hulke USDA-ARS, Fargo, ND \$59,964 8. Targeting essential genes in *Sclerotinia sclerotiorum* to achieve Sclerotinia stem rot resistance in soybean

Mehdi Kabbage University of Wisconsin, Madison, WI \$44,540

9. Developing environmental friendly fungicides for managing white mold

Shin-Yi Marzano South Dakota State University, Brookings, SD \$69,481

10. Developing gemycircularvirus-based pesticide for the control of *Sclerotinium sclerotiorum*

Shin-Yi Marzano South Dakota State University, Brookings, SD \$42,500

11. White mold resistance QTL: identification, interactions, and fine mapping in common bean

Phil McClean North Dakota State University, Fargo, ND \$52,297

Phillip N. Miklas USDA-ARS, Prosser, WA \$42,625

James Myers Oregon State University, Corvallis, OR \$53,346

12. QTL mapping of Sclerotinia basal stalk rot resistance derived from sunflower wild species

Lili Qi USDA-ARS, Fargo, ND \$74,149

13. Enhancing basal resistance to Sclerotinia sclerotiorum in Brassica

Jeffrey Rollins University of Florida, Gainesville, FL \$52,363 14. Role of WRKY transcription factors in quantitative resistance to *Sclerotinia sclerotiorum*

William R. Underwood USDA-ARS, Fargo, ND \$35,424

15. Validation and characterization of cultivated sunflower lines with resistance to *Sclerotinia* basal stalk rot

William R. Underwood USDA-ARS, Fargo, ND \$38,824

16. Enhancing soybean for resistance to *Sclerotinia* stem rot

Dechun Wang Michigan State University, East Lansing, MI \$59,875