Research for project periods beginning in 2021

- Characterization of Day-Neutral Landrace Cotton Lines by Analyzing Fiber-Specific Genes under Drought Conditions. Lead PI: Wonkeun Park. 2021. Funded by Cotton Incorporated (\$20,000)
- Combing Genomics-Enabled Breeding with Coordinated Regional Testing to Accelerate Wheat Genotype to Market. Lead PI: Richard Boyles. 2021-2024. Funded by USDA (\$300,000)
- Deciphering the Molecular Mechanisms of FOV4 Resistance using Genetics, In Vitro Biology, and Genome Engineering Approaches in Upland and Pima Cottons. Lead PI: <u>Chris Saski</u>. 2021. Funded by Cotton Incorporated (\$50,000)
- Developing First Strategies to Manage Bronzing, a Major Factor Impairing the Quality of SC Peaches. Lead PI: <u>Guido Schnabel</u>. 2021-2023. Funded by SC Dept of Agriculture (\$50,000)
- Evaluation of Unmanned Ground Vehicle (Husky) for Cotton Weed Control and Development of New Harvesting Module. Lead PI: <u>Joe Maja</u>. 2021. Funded by Cotton Incorporated (\$60,000)
- Functional Characterization of Reniform Nematode Target Genes with CRISPR. Lead PI: Chris Saski. 2021. Funded by Cotton Incorporated (\$30,000)
- Genome Editing for New Industrial Uses of Cotton: Biomedical, Military and Beyond. Lead PI: Chris Saski. 2021. Funded by Cotton Incorporated (\$22,500)
- Mapping of Regenerability on the Cotton Genome. Lead PI: <u>Chris Saski</u>. 2021. Funded by Cotton Incorporated (\$15,000)
- Phytochemical-Mediated Stress Hormesis and Priming as a Mechanism of Resilience in Weeds and Negating These Stress Adaptations. Lead PI: <u>Nishanth</u> <u>Tharayil</u>. 2021-2024. Funded by USDA (\$307,950)