## Research for project periods beginning in 2015

- Breeding High Yielding Bioenergy Sorghum for the New Bioenergy Belt. Lead PI: <u>Stephen Kresovich</u>. Sep 30, 2015 - Sep 29, 2018. Funded by the DOE ARPA-E TERRA (\$6,600,000)
- <u>Building a Better Peach</u>. Co PI: <u>Ksenija Gasic</u>, <u>Stephen Kresovich</u>, <u>Amy Lawton-Rauh</u>, <u>Greg Reighard</u>, <u>Chris Saski</u>, <u>Guido Schnabel</u>. Funded by Wells Fargo (\$150.000)
- Comparative Transcriptomics of Sweet and Grain Sorghum to Understand the
   Mechanism and Timing of Sugar Accumulation in an Important Bioenergy Crop.
   Lead PI: Elizabeth Cooper. Oct 2015 Oct 2016. Supported by the DOE Joint Genome Institute's Community Sequencing Program
- <u>Drought, Heat and Flood Tolerant Varieties for the Midwest and South: Building on Success</u>. Co PI: <u>Ben Fallen</u>. Jan 1, 2015 Dec 31, 2015. Funded by the United Soybean Board
- Evaluation of the Effects of Commercially Available Products on Soybean Pod <u>Retention</u>. Lead PI: <u>Ben Fallen</u>. June 1, 2015 - May 30, 2016. Funded by the South Carolina Soybean Board (\$9,868)
- Evaluation of South Carolina Soybean Breeding Lines in 2015. Lead PI: Ben Fallen. June 1, 2015 May 30, 2016. Funded by the South Carolina Soybean Board (\$14,140)
- Identification of Host Plant Resistance Mechanisms in Soybean to the Invasive Megacopta cribraria (Hemiptera: Plataspidae). Co PI: Ben Fallen, Jeremy Greene, Francis Reay-Jones. Oct 1, 2015 Sep 30, 2019. Funded by the USDA-NIFA
- Incorporation of the Roundup Resistance Gene into Soybean Forage Varieties.
  Lead PI: Ben Fallen. Aug 1, 2015 July 31, 2016. Funded by Specialty Seed Company (\$14,174)
- Management of a New Strain of Alternaria alternata Resistant to Key Fungicides.
  Lead PI: <u>Guido Schnabel</u>. Jan 1, 2015 Dec 31, 2016. Funded by SCDA SC Fruit, Vegetable, & Specialty Crop Association (\$25,000)
- A Reference Phenotyping System for Energy Sorghum. Co PI: Stephen Kresovich.
  Sep 15, 2015 Sep 14, 2018. Funded by the DOE ARPA-E TERRA through the Donald Danforth Plant Science Center (\$213,750)

- Southeastern US Sorghum Breeding, Genetics, and Germplasm Evaluation and <u>Advancement Program</u>. Lead PI: <u>Stephen Kresovich</u>. April 1, 2015 - March 31, 2018. Funded by the United Sorghum Checkoff Program (\$300,000)
- Strategic Management of Multiple Diseases in Strawberry Nurseries and Production Fields in the Eastern U.S.. Co PI: Guido Schnabel. Jan 1, 2015 Dec 31, 2019. Funded by the USDA Specialty Crops Research Initiative (\$3,000)
- Systems Analysis of the Physiological and Molecular Mechanisms of Sorghum
   Nitrogen Use Efficiency, Water Use Efficiency, and Interactions with the Soil

  Microbiome. Co PI: Stephen Kresovich. Sep 1, 2015 Aug 31, 2020. Funded by the US DOE BER through the University of Nebraska (\$616,632)
- Understanding the Genetic Basis of Key Sorghum Traits to Improve Quality Grain Production in the Mid-Atlantic. Lead PI: <u>Stephen Kresovich</u>. June 1, 2015 - May 20, 2016. Funded by the NC Biotechnology Center (\$52,531)