

**Agriculture  
December 2014  
Proposal Submissions**

<b>Principal Investigator</b>	<b>Department</b>	<b>Sponsor</b>	<b>Title</b>	<b>Total Amount Requested</b>
Davis, Alison	Agr Economics	Pennsylvania State University	AMS Grant Writing Workshops	\$4,987
Mark, Tyler	Agr Economics	National Science Foundation	NSF EPSCoR: Powering the Kentucky Bioeconomy for a Sustainable Future	\$30,798
Dvorak, Joseph	Biosystems & Ag Eng	KY Science and Technology Co Inc	KSEF RDE: Multivehicle Coordination Algorithm Development for Agricultural Area Coverage for Both Arial and Ground Vehicles	\$29,725
Pearce, Robert	Biosystems & Ag Eng	Council for Burley Tobacco	Enhancing Burley Tobacco Production Labor Efficiency	\$30,000
Sama, Michael	Biosystems & Ag Eng	KY Science and Technology Co Inc	KSEF RDE: Identifying Water Stress in Agricultural Row-Crop Production Using Narrow-Band Multispectral Sensing	\$30,000
Davies, H. Maelor	Plant & Soil Sciences	Council for Burley Tobacco	An Updated and Revised Survey of 'GM' Technology Appropriate to Traditional Uses, and Prospective New Uses, of Tobacco.	\$15,882
Fisher, Colin	Plant & Soil Sciences	Council for Burley Tobacco	Topping Height of High Leaf Potential Hybrids	\$13,759
Fisher, Colin	Plant & Soil Sciences	Council for Burley Tobacco	TSNA Accumulation in Controlled Curing Environment	\$12,720
Fisher, Colin	Plant & Soil Sciences	Council for Burley Tobacco	Pale Yellow Dark Burley	\$16,784
Fisher, Colin	Plant & Soil Sciences	Council for Burley Tobacco	Sample Size for Testing TSNA's in Farmer Bales	\$14,225
Hildebrand, David	Plant & Soil Sciences	KY Science and Technology Co Inc	KSEF RDE: Increasing the Market Value of Industrial Hemp Seed	\$28,576
Miller, Robert	Plant & Soil Sciences	Council for Burley Tobacco	Addition of Blue Mold Resistance to KTTII Burley Tobacco Varieties	\$75,000
Miller, Robert	Plant & Soil Sciences	Council for Burley Tobacco	Evaluation and Control of Ground Sucker Formation in Burley Tobacco Varieties	\$0
Yang, Shengming	Plant & Soil Sciences	Council for Burley Tobacco	Controlling Endophyte Colonization to Reduce TSNA in Tobacco Leaves	\$0

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Yang, Shengming	Plant & Soil Sciences	Council for Burley Tobacco	Development of User-friendly Markers for Disease Resistance to Potato Virus Y (PVY) and Black Root Rot (BRR) in Burley Tobacco	\$30,000
Perry, Sharyn	RCTF-1-Plant Sciences-Agronomy	KY Science and Technology Co Inc	KSEF RDE: Investigation of Regulatory Networks to Enhance Plant Regeneration by Somatic Embryogenesis.	\$30,000
Bewley, Jeffrey	Animal and Food Sciences	20/20 Gene Systems Inc	Temperature monitoring and genetics	\$9,500
Hennig, Bernhard	Animal and Food Sciences	National Institute of Environmental Health Sciences	2016 Central and Eastern European Conference on Health and the Environment	\$45,000
Matthews, James	Animal and Food Sciences	National Institute of Food and Agriculture	Program Income: Regulation of EAAC1 Controllers to Enable Efficient Nutrient Metabolism	\$373,544
Dobson, Stephen	Entomology	MosquitoMate Incorporated	Mosquito Mass Production and Tool Development	\$13,000
Dobson, Stephen	Entomology	Bill and Melinda Gates Foundation	Development of Artificial Blood for Mosquitoes	\$99,800
Harwood, James	Entomology	KY Science and Technology Co Inc	KSEF RDE: Developing an integrated approach to organic cucurbit production in Kentucky	\$30,000
Obrycki, John	Entomology	KY Science and Technology Co Inc	KSEF RDE: Population Genetics and Evolutionary History of a Predatory Ladybird Beetle	\$30,000
Barton, Christopher	Forestry	KY Science and Technology Co Inc	KSEF RDE: Toward rapid detection of Phytophthora cinnamomi and Phytophthora ramorum in Appalachian streams	\$30,000
Cox, John	Forestry	KY Science and Technology Co Inc	KSEF RDE: Using Landscape Genetics to Investigate Forest Fragmentation Impacts on the Northern Copperhead	\$30,000
Price, Steven	Forestry	KY Science and Technology Co Inc	KSEF RDE: Dispersal Congruency and Population Structure Within Imperiled Host-parasite Systems	\$30,000
Archbold, Douglas	Horticulture	KY Science and Technology Co Inc	KSEF RDE: Characterization of a Newly-Discovered Pathway Critical to Drought Tolerance	\$30,000
DeBolt, Seth	Horticulture	Council for Burley Tobacco	Characterization of the Functional Microbiome of Tobacco	\$20,000
Ingram, Dewayne	Horticulture	KY Horticulture Council	Kentucky Horticulture Council Grant VII	\$1,085,000

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Farman, Mark	Plant Pathology	National Science Foundation	Bet Hedging as a Mechanism of Pathogenic Variation in the Rice Blast Fungus	\$92,255
Kachroo, Aardra	Plant Pathology	KY Science and Technology Co Inc	KSEF RDE: Illustrating a Role for Brassinosteroid Signaling in Plant-Virus Interactions	\$29,999
Kachroo, Pradeep	Plant Pathology	National Science Foundation	REU: Glycerol Metabolism and Its Role in Biotrophy Versus Necrotrophy in an Arabidopsis/fungal Hemibiotrophic Interaction.	\$6,000
Kachroo, Pradeep	Plant Pathology	National Science Foundation	REU: Molecular, Genetic, and Biochemical Characterization of Oleate-regulated Defense Gene Expression in Plants	\$6,000
Schardl, Christopher	Plant Pathology	KY Science and Technology Co Inc	KSEF RDE: Remodeling Alkaloid Architecture in Forage Grass Endophytes	\$30,000
Vincelli, Paul	Plant Pathology	KY Science and Technology Co Inc	KSEF RDE: Role of Light in Plant Growth and Disease Physiology	\$29,997
Nagy, Peter	RCTF-1-Plant Sciences-PlantPath	KY Science and Technology Co Inc	KSEF RDE: Allosteric Inhibitors of Cellular Hsp70 to Inhibit Virus Replication	\$0
Higdon, Andrea	Agr Programs	Purdue University	EDEN Agrosecurity Program Area Work Group (PAWG) I	\$7,000
Easter, Elizabeth	Merchandising, Apparel & Textiles	Cotton Incorporated	2015 Cotton Incorporated Laundry Study	\$50,000
Mihaylova-Kroumova, A	Kentucky Tobacco Research & Dev Ctr	Council for Burley Tobacco	Black Shank Suppression: The Suppression of Black Shank in Burley Tobacco in the Floatbed by Treatment with Tobacco Natural Products	\$0
Mundell, Richard	Kentucky Tobacco Research & Dev Ctr	Council for Burley Tobacco	Varieties and Production Practices to Maximize Nicotine to be Utilized in Emerging Tobacco Products	\$16,902
Yuan, Ling	Kentucky Tobacco Research & Dev Ctr	Council for Burley Tobacco	Identification of Topping- and Suckercide- Responsive Genes in Tobacco by Next-Generation Gene Sequencing	\$22,052
Yuan, Ling	Kentucky Tobacco Research & Dev Ctr	KY Science and Technology Co Inc	KSEF RDE: Developing a Tissue Culture and Gene Transformation Platform for Industrial Hemp	\$30,000
Yuan, Ling	Kentucky Tobacco Research & Dev Ctr	Naprogenix	STTR: Directed evolution of inhibitors of D-amino acid oxidase for cognitive enhancement	\$73,416