

**Agriculture
February 2010
Proposal Submissions**

Principal Investigator	Sponsor	Title	Department	Total Amount Requested
Artiushin, Sergey	KY Science and Technology Co Inc	Variation in Amino Acid Sequence of Protective Antigens of Streptococcus Equi	Veterinary Science	\$66,263
Bewley, Jeffrey	KY Science and Technology Co Inc	Smart Floors for Precision Dairy Farming	Animal and Food Sciences	\$49,692
Bullock, Kevin	University of Nebraska	Comprehensive Beef Education	Animal and Food Sciences	\$0
Coolong, Timothy	National Institute of Food and Agriculture	Developing Integrated Management Tools for Organic Vegetable Growers using the eOrganic Platform	Horticulture	\$960,759
Cox, John	KY Department of Fish and Wildlife	Raven Habitat 2011	Forestry	\$0
Durham, Richard	North Carolina State University	Consumer Horticulture Community of Practice: Using Social Media to Engage Military Families	Horticulture	\$0
Ghabrial, Said	KY Soybean Promotion Board	Use of a Novel Virus-Based Vector in Search for Resistance to the Soybean Cyst Nematode and Other Important Soybean Pathogens	Plant Pathology	\$30,563
Hanley, Carol	National Fish and Wildlife Foundation	Wetland Restoration Projects in Fayette County	Center for the Environment	\$27,500
Hanley, Carol	National Science Foundation	Scaling Up Community-Based Investigations through 3-D Modeling and Geospatial Technologies	Center for the Environment	\$2,498,951
Hanley, Carol	KY Council on Postsecondary Education	Science Literacy Project for Middle School Teachers, Year 8	Center for the Environment	\$140,000
Harwood, James	KY Science and Technology Co Inc	Impact of Predator Bioersivity on Pest-Suppression in Kentucky Wheat: A Denaturing Gradient Gel Electrophoresis Approach	Entomology	\$99,396
Haynes, Kenneth	National Institute of Health	Exploiting Traumatic Insemination for Bed Bug Management	Entomology	\$1,731,650
Herbek, James	KY Soybean Promotion Board	Optimum Planting Date for Soybean	Plant & Soil Sciences	\$5,000
Hershman, Donald	KY Soybean Promotion Board	2010 Kentucky Soybean Rust Monitoring and Early Warning System	Plant Pathology	\$36,110
Hershman, Donald	KY Soybean Promotion Board	Can Foliar Applied Fungicides Reduce Yield Loss in Soybean Caused by Soybean Cyst Nematode?	Plant Pathology	\$13,625

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Hershman, Donald	North Carolina State University	Workshop for Developing a Cost-Effective Strategy to Detect Soybean Rust in the United States	Plant Pathology	\$14,956
Higgins, Stephen	Natural Resources Conservation Service	Cane Run	Biosystems & Ag Eng	\$360,000
Hildebrand, David	KY Soybean Promotion Board	Development of Soybean Oil as a Renewable Lubricant	Plant & Soil Sciences	\$0
Hildebrand, David	KY Soybean Promotion Board	Yield Evaluation and Further Increasing Oil & Protein in Soybeans	Plant & Soil Sciences	\$0
Horohov, David	KY Science and Technology Co Inc	Is the Mechanism of Action of Resveratrol and Dietary Restriction the Same in Equine Metabolic Syndrome Horses?	Veterinary Science	\$49,979
Houtz, Robert	National Institute of Food and Agriculture	New Crop Opportunities, KY, Phase XI	Horticulture	\$488,601
Hunt, Arthur	KY Science and Technology Co Inc	Polyadenylation of Stored mRNA During Seed Germination	Plant & Soil Sciences	\$99,995
Husband, Andrea	Purdue University	The EDEN Strengthening Community Agrosecurity Planning (S-CAP) Train-the-Trainer Project: Phase 3	Agr Programs	\$94,117
Jackson, Vanessa		An Online Collaborative Certificate Program, International, Economic and Entrepreneur Development	Merchandising, Apparel & Textiles	\$0
Jackson, Vanessa	University of Georgia	Engaging Students in the Business of Advancing the Global Competitiveness of Food and Fiber Retailers: Business Partnerships and Experiential Educational Models	Merchandising, Apparel & Textiles	\$94,595
Kachroo, Aardra	National Science Foundation	Towards Understanding the Mechanism of Plant Extreme Resistance to Viruses	Plant Pathology	\$411,287
Kachroo, Aardra	KY Soybean Promotion Board	Engineering Resistance to Bean Pod Mottle Virus in Soybean	Plant Pathology	\$65,518
Kachroo, Aardra	National Science Foundation	TRMS: Functional Characteristics of Fatty Acid Biosynthesis Genes in Soybean	Plant Pathology	\$1,421,536
Kachroo, Pradeep	KY Science and Technology Co Inc	RNA Silencing Machinery and Resistance Protein-Mediated Plant Defense	Plant Pathology	\$99,990
Lee, Chad	KY Soybean Promotion Board	SOY MVP: Kentucky Soybean Management Verification Program, Year 3	Plant & Soil Sciences	\$86,016
Littleton, John	National Institute of Health	Nicotinic Receptors in Alcohol/Nicotine Co-Dependence	Ky Tobacco Research & Dev Center	\$0

**Agriculture
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Littleton, John	National Institute of Health	Novel NMDA Receptor Modulators for Alcoholism Treatment	Ky Tobacco Research & Dev Center	\$0
Lucas, Patricia	Southern Region Pesticide Impact Assessment Pgm	IPM Documents for Kentucky	Entomology	\$0
MacLeod, James	Morris Animal Foundation	Orthopaedic Pathology and Genetic Associations in Cervical Stenotic Myelopathy	Veterinary Science	\$100,000
McCulley, Rebecca	National Science Foundation	Supplement: Decomposition in Drylands: Soil Erosion and UV Interactions	Plant & Soil Sciences	\$11,000
Miller, Robert	Philip Morris International Management SA	Burley Tobacco Breeding and Genetics	Plant & Soil Sciences	\$975,000
Miller, Robert	RJ Reynolds Tobacco Co	Tobacco Breeding and Cultural Practices Agreement	Plant & Soil Sciences	\$1,000,000
Obrycki, John	Animal and Plant Health Inspection Service	Emerald Ash Borer Survey and Outreach in Kentucky	Entomology	\$708,657
Pearce, Robert	Philip Morris International Management SA	Cadmium Uptake by Selected Lines of Tobacco	Plant & Soil Sciences	\$462,295
Pushkarskaya, Helen	National Institute of Food and Agriculture	Quantitative Essentials for Undergraduate and Graduate Students in Agricultural Economics	Agr Economics	\$330,319
Rentfrow, Gregg	KY Governor's Office of Agricultural Policy	Food Production Research and Development for Kentucky's Small Food Processors	Animal and Food Sciences	\$358,904
Rieske-Kinney, Lynne	Forest Service	Post-Invasion Forests: Composition and Structure Following Invasive Species Establishment	Entomology	\$90,000
Saghaian, Sayed	Agricultural Marketing Service	Targeting and Expanding Markets for U.S. Pork Exports	Agr Economics	\$46,990
Schardl, Christopher	National Institute of Food and Agriculture	Advanced Genetic Technologies	Plant Pathology	\$0
Smalle, Jan	KY Science and Technology Co Inc	The Uptake and Intracellular Fate of TiO2 Nanoparticles and TiO2 Nanoconjugates in Arabidopsis Thaliana	Plant & Soil Sciences	\$100,000
Tanaka, Keiko	National Science Foundation	Doctoral Disertation Research: Talking Food: Home Food Preservation in a Era of Industrialized	Community & Leadership Devel	\$0
Timoney, Peter	KY Science and Technology Co Inc	Efficacy of Tonsil Binding Protein Se 19.9 of Streptococcus Equi as an Intranasal Strangles Vaccine	Veterinary Science	\$39,518

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Unrine, Jason	Environmental Protection Agency	Environmental behavior and toxicity of Ag and CeO ₂ nanoparticles: the role of surface functionalization and interaction with natural organic substances and iron oxohydroxides	Plant & Soil Sciences	\$599,840
Van Sanford, David	Agricultural Research Service	U.S. Wheat and Barley Scab Initiative's Networking and Facilitation Office and Website	Plant & Soil Sciences	\$153,049
Van Sanford, David	Agricultural Research Service	Accelerating the Development of FHB-Resistant Soft Red Winter Wheat Varieties	Plant & Soil Sciences	\$57,768
Vanzant, Eric	Agricultural Research Service	Grazing Strategies to Optimize Production in Endophyte-Infected, Tall Fescue Pasture Systems	Animal and Food Sciences	\$86,819
Vanzant, Eric	Agricultural Research Service	Grazing Strategies to Optimize Production in Endophyte-Infected, Tall Fescue Pasture Systems	Animal and Food Sciences	\$86,819
Woods, Timothy	Agricultural Marketing Service	Strategies and Impact Measures of Sampling for Direct Markets	Agr Economics	\$0
Xiong, Youling	National Science Foundation	International Collaboration in Chemistry: Molecular Modification of Microbial Transglutaminase for Regulating Cross-Linking of Muscle Food Proteins	Animal and Food Sciences	\$0
Yuan, Ling	KY Science and Technology Co Inc	Development of Hyperactive DNA Transposases by Directed Evolution	Plant & Soil Sciences	\$49,686
Zhu, Hongyan	KY Soybean Promotion Board	Genetic Control of Pod Dehiscence in Soybean	Plant & Soil Sciences	\$99,000
Zhu, Hongyan	KY Science and Technology Co Inc	Genetic Control of Pod Shattering in Soybean	Plant & Soil Sciences	\$50,050