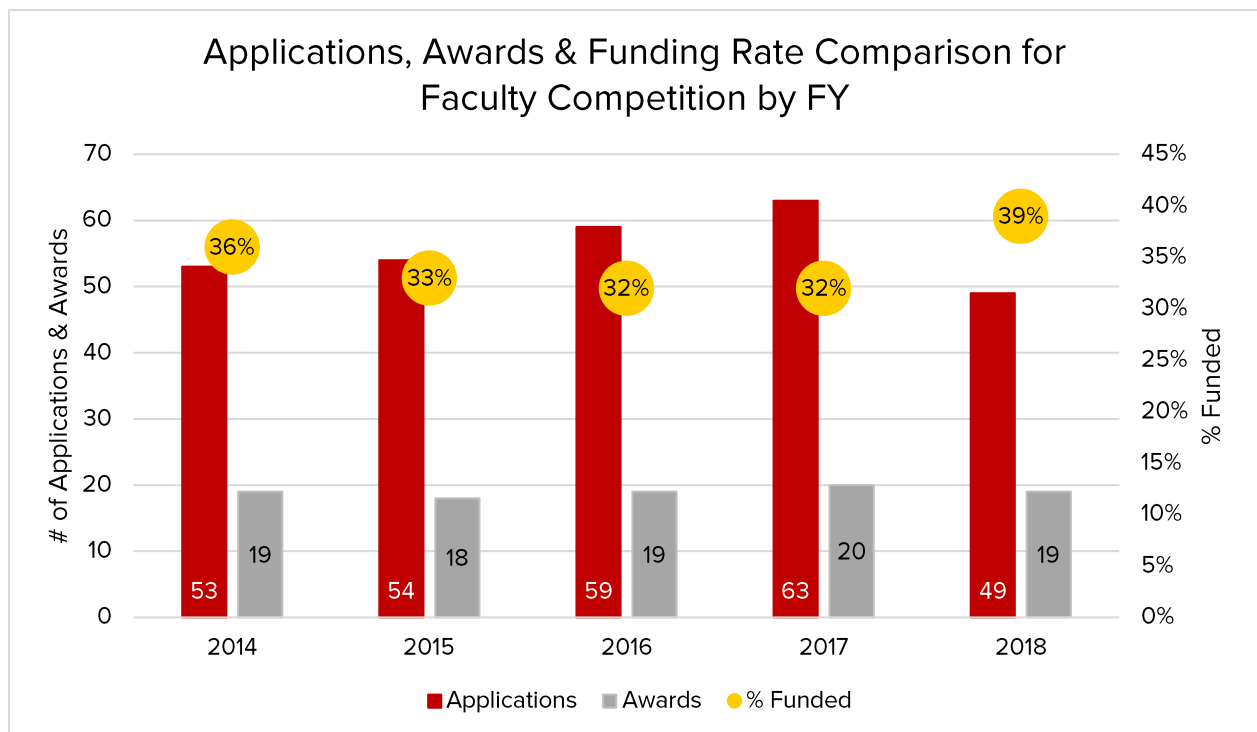
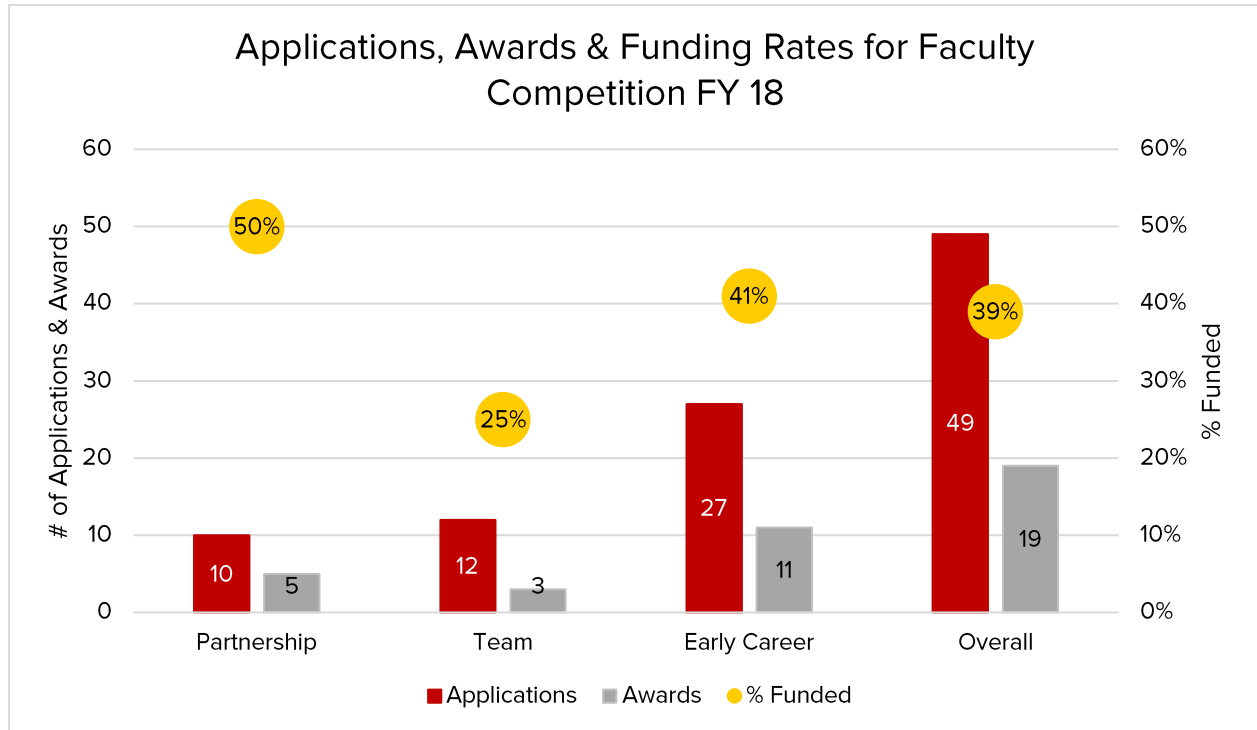


SEEDS: The CFAES Research Competitive Grants Program

Fiscal Year 2018 Report



Fiscal Year 2018 Report

Competition	# of Awards	Total Funding
Partnership	5	\$115,000
Team	3	\$239,846
Early Career	11	\$539,899
	#19	\$894,745

Competition	# of Awards	Total Funding
Graduate	20	\$98,182
Undergraduate	3	\$9,397
	#	\$107,579

Maria Benitez Ponce, Plant Pathology **Partnership** **\$25,000**

Arbuscular mycorrhizal inoculation effects on soybean cyst nematode infestation: Modes of action

Katrina Cornish, Horticulture & Crop Science **Partnership** **\$25,000**

Improving natural rubber yield in TK Dandelion: Demonstration of a novel, rapid crop improvement technology in rubber dandelion

David Francis, Horticulture & Crop Science **Partnership** **\$25,000**

Pre-breeding to combine resistances to multiple foliar diseases into processing and fresh-market tomato

Andrew Kirk, Ashtabula Outlying Research Station **Partnership** **\$15,000**

Functional Terroir in Ashtabula County & Beyond

Feng Qu, Plant Pathology **Partnership** **\$25,000**

A platform for fast and cost-effective gene editing in soybean

Dennis Heldman, Food Science & Technology **Team** **\$79,999**

Brian Roe, Agricultural, Environmental, & Development Economics

Assessing impacts of a novel milk labeling technology on sustainability

Jyan-Chyun Jang, Horticulture & Crop Science **Team** **\$79,915**

Venkat Gopalan, Biochemistry

Genome-wide mapping of plant tandem zinc finger protein-RNA interactions for crop improvement

Zhongtang Yu, Animal Sciences **Team** **\$79,932**

Lisa Bielke, Animal Sciences

Development of phage lysins as non-antibiotic alternatives to control necrotic enteritis in poultry

Michael Betz, Human Sciences **Early Career** **\$46,435**

Lauren Jones, Human Sciences

Stagnant wages and drug deaths: Investigating the role of local labor markets on opioid overdoses

Emmanuel Chatzakis, Food Science & Technology **Early Career** **\$49,000**

Michael Bailey, Department of Pediatrics

From waste products to colon health: Producing prebiotics from apple and grape pomace.

Fiscal Year 2018 Report

Shaoqing Cui, Food, Agricultural & Biological Engineering Harold Keener, Food, Agricultural & Biological Engineering Production of green bio-plastics from soybean oil and CO2 for food packaging applications	Early Career	\$49,982
Luis Ferraz Dias de Moraes, Animal Sciences Development of a modeling framework for simultaneous economic and environmental optimization of dairy farms	Early Career	\$48,918
Alvaro Garcia Guerra, Animal Sciences Development of a model with ewes for the identification of a second signal for maternal recognition of pregnancy in ruminants	Early Career	\$46,255
Margaret Kalcic, Food, Agricultural & Biological Engineering Tackling uncertainty of nutrient load drivers in western Lake Erie watersheds: a two-pronged approach through retrospective analysis and parameter equifinality	Early Career	\$49,990
Chia-Hua Lin, Entomology Reed Johnson, Entomology Honey Bees and Soybeans: Better Together?	Early Career	\$49,526
Laura Lindsey, Horticulture & Crop Science Agronomic Management of Ohio Winter Malting Barley	Early Career	\$49,889
Keeley Pratt, Human Sciences Sabrena Noria, General Surgery Christopher Taylor, Medical Dietetics Colleen Spees, Medical Dietetics Preventing obesity among children of parents enrolled in weight management programs	Early Career	\$49,904
Ajay Shah, Food, Agricultural & Biological Engineering Evaluating wet torrefaction for effective anaerobic digestate management and value addition	Early Career	\$50,000
Victor Ujor, Bioenergy, Agricultural Technical Institute Thaddeus Ezeji, Animal Sciences Engineering a microbial consortium for efficient nitrogen removal from anaerobic digestion wastewater	Early Career	\$50,000
Corinne Bocci, Agricultural, Environmental, & Development Economics Evaluating Ethics: an analysis of consumer preferences for environmentally friendly and ethically responsible production practices	Doctoral	\$5,000
Katherine D'Amico, Horticulture & Crop Science Assessment of the association between telomere length and aging in perennial plants	Doctoral	\$5,000
Rachael Glover, School of Environment & Natural Resources Using disturbance and plant functional types to improve restoration success of a prairie on reclaimed mine land in Southeastern, Ohio.	Doctoral	\$4,950

Fiscal Year 2018 Report

Brian Hodge, Plant Pathology Investigation of a Novel Phenotype Induced by Brome Mosaic Virus in Mature Wheat	Doctoral	\$5,000
Yixuan Hou, Food Animal Health Research Program Engineering a recombination-resistant, attenuated vaccine candidate for porcine epidemic diarrhea virus via manipulating viral transcriptional regulatory sequences	Doctoral	\$5,000
Alejandra Jimenez Madrid, Plant Pathology Detection and Management of Downy Mildew Disease of Blackberry in Ohio	Doctoral	\$5,000
Stephanie Karhoff, Horticulture & Crop Science Identifying stages of Phytophthora sojae pathogenesis affected by a major quantitative resistance locus in soybean	Doctoral	\$4,000
Rongkun Liu, Environmental Science Traditional or Scientific?: Knowledge Hybridization in the Making of Resilient Communities in the Himalayas	Doctoral	\$4,550
Fallys Masambuka, Agricultural Communication, Education, & Leadership Agricultural communication: Whose voices, for who and for what?	Doctoral	\$4,900
Gonzalo Miyagusuku Cruzado, Food Science & Technology Color enhancement and stabilization of natural pigments with whey proteins	Doctoral	\$5,000
Nathan Nordstedt, Horticulture & Crop Science Whole-genome sequencing of bacterial isolates with the ability to alleviate drought stress in floriculture crops	Doctoral	\$5,000
Christopher Riley, Entomology Examining the distributional equity and value of tree canopy across a shrinking Midwest county	Doctoral	\$5,000
Alex Tebbe, Animal Sciences Oscillating Dietary Crude Protein for Dairy Cattle	Doctoral	\$5,000
Alex Turo, Horticulture & Crop Science The Role of Plant Aquaporin Regulation in Bacterial Pathogenesis	Doctoral	\$5,000
Jennifer Braden, Animal Sciences The Effects of a Simultaneous Thermal and Nutrient Challenge on Broiler Muscle Growth, Meat Quality, and Underlying Cellular Mechanisms	Masters	\$5,000
Carrie Ewing, Environmental Science Identifying the Causal Agent of the Emerging Beech Leaf Disease Epidemic	Masters	\$5,000
Megan Kesler, Food Science & Technology Investigation of the Suitability of Fermented Dairy Products for the Growth of Probiotics That Are Beneficial for Treatment of Recurrent Clostridium difficile Infection	Masters	\$4,847
Lauren Ross, Animal Sciences Self-Selection of High Calcium Diets by Laying Hens to Prevent Keel Breakage	Masters	\$5,000

Fiscal Year 2018 Report

Emily Trejo Sypolt, Entomology	Masters	\$4,935
Soil properties in urban vacant lots and farms: Investigating their potential to support crop productivity and defense		
Hongrui Wang, Horticulture & Crop Science	Masters	\$5,000
Exogenous Abscisic Acid Increases Freezing Tolerance in Grapevines by Modifying ABA Content and Expression of Key Genes in the ABA Metabolic Pathway		
Levon Bajakian, School of Environment & Natural Resources	Undergraduate	\$2,800
Stress Response of a Common Fish to Changing Stream Temperatures		
James Constantino, Animal Sciences	Undergraduate	\$3,297
High Fecundity Trio Allele and its Effect on Pre-Antral Follicle Count and Size		
Andrew Oppliger, School of Environment & Natural Resources	Undergraduate	\$3,300
Differential effects of algal and sedimentary turbidity on visual sensitivity thresholds of two Lake Erie game fish		