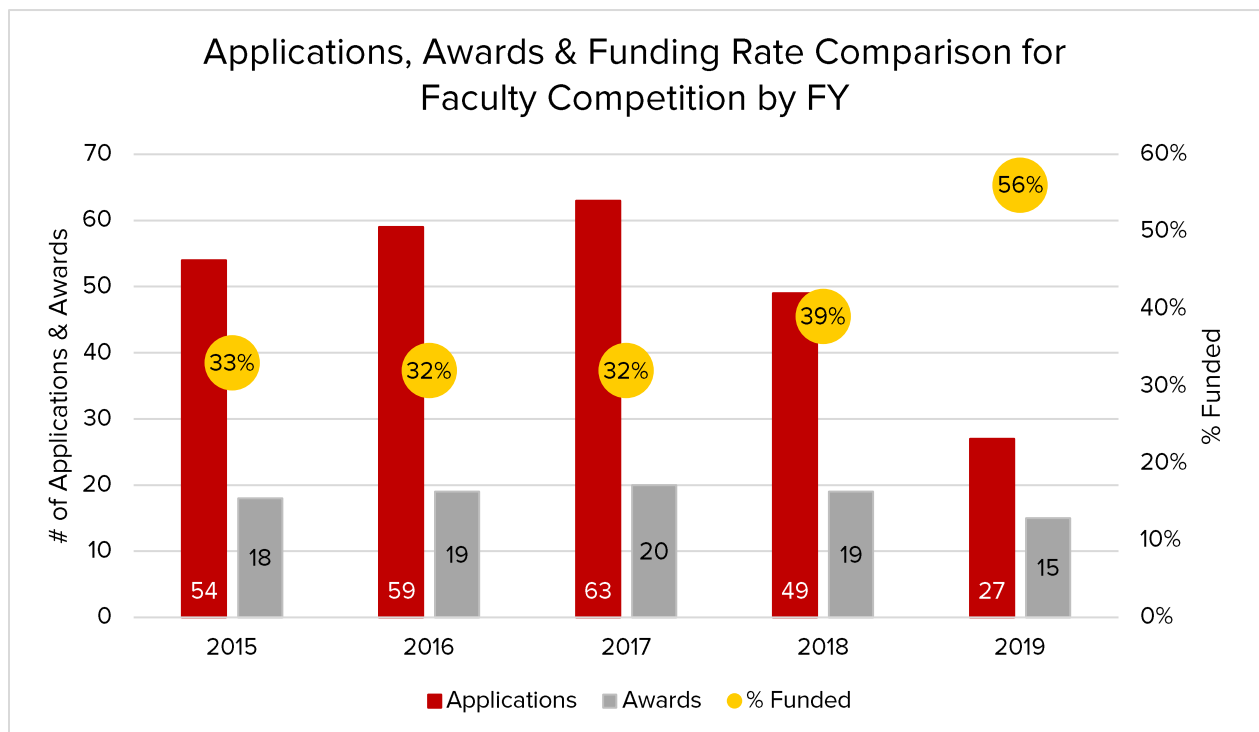
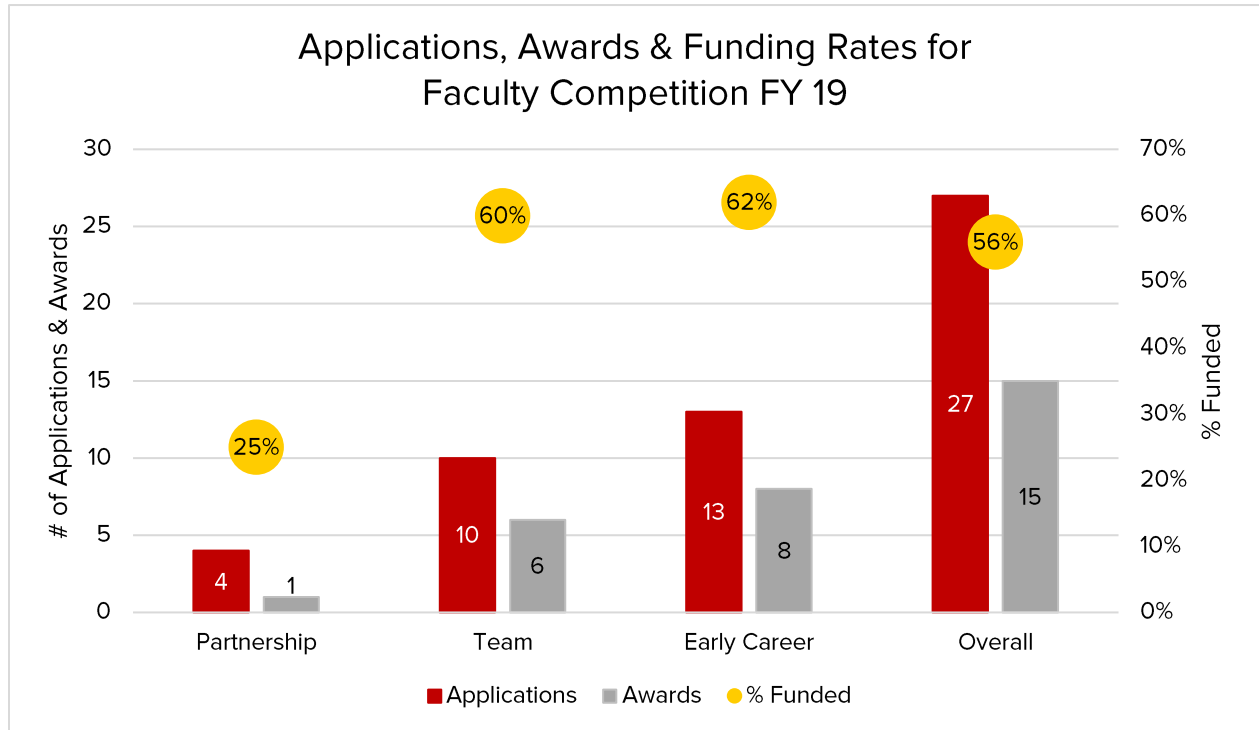


SEEDS: The CFAES Research Competitive Grants Program

Fiscal Year 2019 Report



Fiscal Year 2019 Report

Competition	# of Awards	Total Funding
Partnership	1	\$11,000
Team	6	\$447,660
Early Career	8	\$339,477
	15	\$888,137

Competition	# of Awards	Total Funding
Graduate	18	\$90,011
Undergraduate	4	\$13,200
	22	\$103,211

Peter Piermarini, Entomology Nanoparticle-based solutions to improve mosquito control	Partnership	\$11,000
Nicholas Basta, School of Environment & Natural Resources Mary Gardiner, Entomology Jeffory Hattey, School of Environment & Natural Resources Roman Lanno, Entomology Mary Rodriguez, Agricultural Communication, Education, & Leadership A Community-Driven Approach for Remediation of Urban Pb-Contaminated Soil to Improve Public and Ecological Health	Team	\$79,412
Jordan Clark, Food, Agricultural & Biological Engineering Peter Ling, Food, Agricultural & Biological Engineering Collaborative development of liquid desiccant humidity control solutions for indoor agricultural facilities	Team	\$79,978
Renukaradhya Gourapura, Food Animal Health Research Program Gireesh Rajashekara, Food Animal Health Research Program Gut-Lung Microbiota-Immune Axis in Pigs infected with Swine Influenza Virus	Team	\$80,000
Chanhee Lee, Animal Sciences William Weiss, Animal Sciences Reducing risk of ketosis and increasing feed efficiency in early lactation cows using a novel nutritional approach: low vitamin A supply	Team	\$79,763
Joy Rumble, Agricultural Communication, Education, & Leadership Sauna Brummet, BioHio Emily Buck, Human & Community Resource Development Wuyang Hu, Agricultural, Environmental, & Development Economics Curtis Knipe, Food Science & Technology Annie Specht, Human & Community Resource Development New Food Technology entering an Existing Marketplace: Balancing innovation and tradition.	Team	\$78,507
Guo-Liang Wang, Plant Pathology Pierce Paul, Plant Pathology Clay Sneller, Horticulture & Crop Science Molecular characterization of wheat blast and identification of resistant cultivars to the potentially devastating disease to USA wheat production	Team	\$80,000

Fiscal Year 2019 Report

Hardy Castada, Food Science & Technology	Early Career	\$47,000
Sheryl Barringer, Food Science & Technology		
Luis Rodriguez-Saona, Food Science & Technology		
Novel Detection of Adulteration and Authentication of Single-Origin Coffee Beans using Selected Ion Flow Tube-Mass Spectrometry Coupled with Portable IR and Raman Spectroscopy		
Matt Davies, School of Environment & Natural Resources	Early Career	\$49,997
Ben Wenner, Animal Sciences		
Roger Williams, School of Environment & Natural Resources		
PyroGoat – Prescribed fire and goat grazing as tools to control invasive species and restore productive oak forests		
Benjamin Enger, Animal Sciences	Early Career	\$49,982
Yan Zhang, Animal Sciences		
The mammary vasculature: An ignored system in mammary growth and development		
Jonathan Fresnedo Ramirez, Horticulture & Crop Science	Early Career	\$49,716
Interrogation of noninfectious bud-failure in almond as a model of aging in perennial crops		
Matthias Klein, Food Science & Technology	Early Career	\$49,966
Ahmed Yousef, Food Science & Technology		
Metabolomics characterization of bacterial spore germination		
Christine Sprunger, School of Environment & Natural Resources	Early Career	\$49,987
Rainfall extremes and rhizosphere dynamics: Implications for soil health and crop productivity		
Anastasia Vlasova, Food Animal Health Research Program	Early Career	\$50,000
Histo-blood group antigens and rotavirus A genotypes associated with vaccine breakthrough: a cohort study from Ethiopia		
Yuehan Ai, Food Science & Technology	Doctoral - Team	\$9,775
Angela Davis, Environmental Science		
Land application of harmful algal bloom-affected dredge material from Lake Erie: Impact on agriculture and the environment		
Benjamin Duran, Animal Sciences	Doctoral	\$4,976
Development of an approach for assessing the reason for pregnancy loss during the second month of gestation in cattle		
Meaghan Gade, School of Environment & Natural Resources	Doctoral	\$5,000
Evaluating the Physiological Responses of Terrestrial Salamanders to Climate Change		
Emily Justus, Entomology	Doctoral	\$4,995
Investigating carrot weevil host finding cues: Towards a novel management strategy		
Dipak Kathaya, Food Animal Health Research Program	Doctoral	\$4,916
Antimicrobial peptides as an alternative to antibiotics to control avian pathogenic <i>Escherichia coli</i> infection in poultry		
Asmita Khanal, Food, Agricultural & Biological Engineering	Doctoral	\$5,000
Environmental impact assessment of corn stover collection for biobased industries in Ohio		
Tae-Young Lee, Entomology	Doctoral	\$5,000
Investigating termite aggregation behavior at and away from food sources and the associated chemical cues		

Fiscal Year 2019 Report

Joonbum Lee, Animal Sciences Generation of HPS4 knockout quail using avian-specific CRISPR/Cas9 system	Doctoral	\$5,000
Adrian Pekarcik, Entomology Neonicotinoid seed treatment efficacy in different soil types	Doctoral	\$5,000
Edna Alfaro, Entomology Discovery of natural drimane sesquiterpenes from Madagascan medicinal plants (<i>Cinnamosma spp.</i>) with insecticidal and repellent activities against mosquitoes	Masters	\$3,830
Leanna DeJong, School of Environment & Natural Resources Impacts of Amur Honeysuckle (<i>Lonicera maackii</i>) Removal on Avian Assemblage Composition	Masters	\$4,991
Tianrui Dong, Food Science & Technology Microencapsulation of Kefir Grains for Potential Treatment of Recurrent Clostridium difficile Infection	Masters	\$4,937
Jeremy Evans, School of Environment & Natural Resources The effect of commercial dyes used to control aquatic vegetation on the health of Bluegill Sunfish (<i>Lepomis macrochirus</i>)	Masters	\$5,000
Lydia Fyie, Entomology Impact of Artificial Light at Night (ALAN) on Seasonal Responses in Culex pipiens	Masters	\$4,624
Mallory Goggans, Food Science & Technology Using Metagenomics to Assess the Effect of Tomato Consumption on the Gut Microbiome	Masters	\$5,000
Kendall King, Entomology Chemosensory Function and Morphology of Female Trissolcus basalis (<i>Hymenoptera: Scelionidae</i>) Antennal Sensilla	Masters	\$1,976
Stephanie Murray, Entomology The effects of propolis and old brood comb on Melissococcus plutonius growth: Using bee-made products to prevent the spread of microbial disease within the hive	Masters	\$4,995
Sarah Scott, Entomology Bees in the city: How heavy metal contamination and fragmentation impact bumble bee health and behavior	Masters	\$4,996
Paul Acheson, School of Environment & Natural Resources The Effects of Intraspecific Variation of Crayfish Behavior on Nutrient Cycling in Aquatic Environments	Undergraduate	\$3,300
Margaret Behan, School of Environment & Natural Resources The Effects of Translocation on Amphibian Demographics	Undergraduate	\$3,300
Rachael Birri, School of Environment & Natural Resources Assessing the Efficacy of Enzyme Assays as a Soil Health Indicator	Undergraduate	\$3,300
Luke Bobay, School of Environment & Natural Resources Toward understanding climate change impacts on Lake Erie yellow perch: the impact of early spring warming on foraging by larvae	Undergraduate	\$3,300