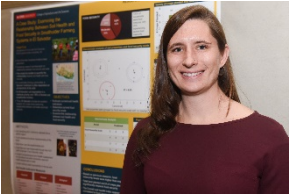
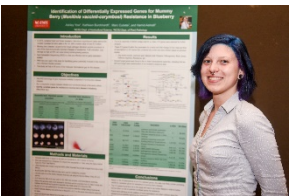
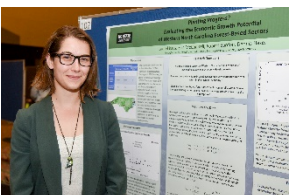
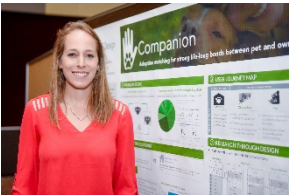
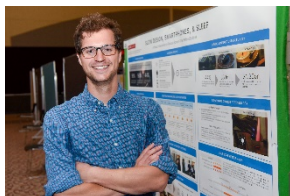

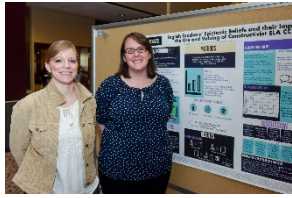


Twelfth Annual Graduate Student Research Symposium

Congratulations to the winners of the Twelfth Annual Graduate Student Research Symposium! Each year, the Symposium showcases the outstanding quality and diversity of graduate-level research at NC State. The Symposium was held on March 22, 2017 at the McKimmon Center. First-, second-, and third-place winners have been announced in eight categories.

AGRICULTURAL SCIENCES & NATURAL RESOURCES	
	<p>1st Place: Angel Cruz - Crop Science</p> <p>A Case Study: Examining the Relationship Between Soil Health and Food Security in Smallholder Farming Systems in El Salvador</p>
	<p>2nd Place: Ashley Yow - Horticultural Science</p> <p>Identification of Differentially Expressed Genes for Mummy Berry (<i>Monilinia vaccinii-corymbosi</i>) Resistance in Blueberry</p>
	<p>3rd Place: Laurel Kays - Forestry</p> <p>Planting Progress? Evaluating the Economic Growth Potential of Western North Carolina Forest-Based Sectors</p>
DESIGN	
	<p>1st Place: Nancy Rekhelman - Industrial Design</p> <p>Companion Adoption matching for strong life-long bonds between pet and owner</p>
	<p>2nd Place: John Cochran - Industrial Design</p> <p>Slow Design, Smartphones, & Sleep: A Product Intervention to Reduce Screen-Time Before Bedtime</p>
	<p>3rd Place: April Maclaga - Graphic Design</p> <p>Prompting In-Person Conversation Toward Empathy: Interaction Design in a Networked Environment</p>

EDUCATION



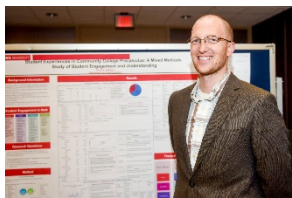
1st Place: Nicolette Filson & Charlotte Roberts - Curriculum & Instruction
(Right) (Left)

[English Teachers' Epistemic Beliefs and their Impact on the Use and Valuing of Constructivist ELA CCSS](#)



2nd Place: Angela White - Curriculum & Instruction

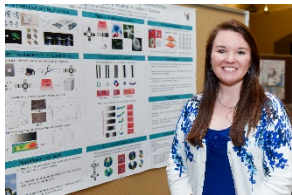
[Understanding the Relationships Between the Racial Identity, Science Identity, and Science Self-Efficacy Beliefs of African American Students at HBCU's](#)



3rd Place: Derek Williams - Mathematics Education

[Student Experiences in Community College Precalculus: A Mixed Methods Study of Student Engagement and Understanding](#)

ENGINEERING



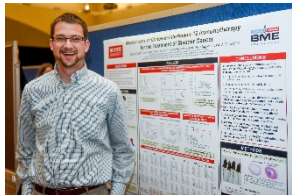
1st Place: Amber Hubbard - Chemical Engineering

[Curvature of Light Responsive, Shape Memory Polymers for the Production of Biologically-Inspired, Functional Devices](#)



2nd Place: Brett Pearce - Aerospace Engineering

[Autonomous Aerobatics: A Linear Algorithm and Implementation for a Slow Roll](#)



3rd Place: Sean Smith - Biomedical Engineering

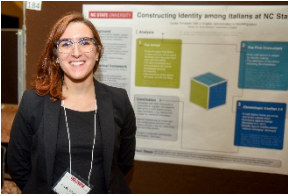
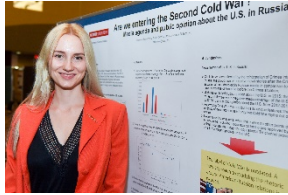
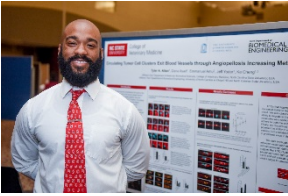
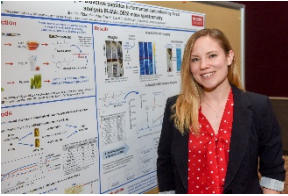
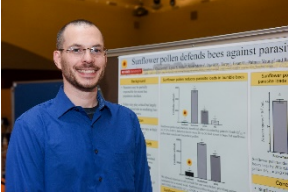
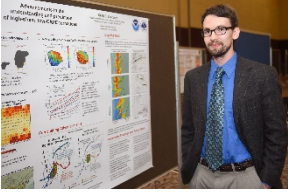
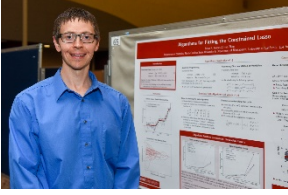
[Mechanisms of Chitosan/Interleukin-12 Immunotherapy for the Treatment of Bladder Cancer](#)

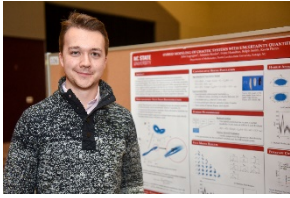
HUMANITIES



1st Place: Karen Eisenhauer - English

[Quantitative Analysis of Directives in Disney Princess Films](#)

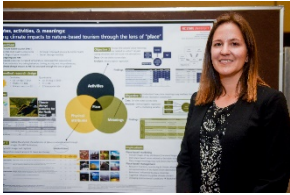
	<p>2nd Place: Cecilia Tomasatti - English</p> <p>Constructing Identity among Italians at NC State</p>
	<p>3rd Place: Ekaterina Bogomoletc - Communication</p> <p>Are we entering the Second Cold War? Media agenda and public opinion about the U.S. in Russia</p>
<p>LIFE SCIENCES</p>	
	<p>1st Place: Tyler Allen - Comparative Biomedical Sciences</p> <p>Circulating Tumor Cell Clusters Extravasate Through Angiogenesis Leading to Increased Secondary Tumor Formation</p>
	<p>2nd Place: Jennifer Fideler - Food Science</p> <p>Discovery of bioactive peptides in fermented cucumbers by direct analysis IR-MALDESI mass spectrometry</p>
	<p>3rd Place: Jonathan Giacomini - Zoology</p> <p>Sunflower pollen defends bees against parasites</p>
<p>MATHEMATICAL AND PHYSICAL SCIENCES</p>	
	<p>1st Place: Keith Sherburn - Marine, Earth, and Atmospheric Sciences</p> <p>Advancements in the understanding and prediction of high-shear, low-CAPE tornadoes</p>
	<p>2nd Place: Brian Gaines - Statistics</p> <p>Algorithms for Fitting the Constrained Lasso</p>



3rd Place: John Lagergren – Applied Mathematics

[Hybrid Modeling of Chaotic Systems with Uncertainty Quantification](#)

SOCIAL SCIENCES AND MANAGEMENT



1st Place: Allie McCreary - Parks, Recreation & Tourism Management

[Attributes, activities, & meanings: Exploring climate impacts to nature-based tourism through the lens of “place”](#)



2nd Place: Deniza Mulaj - Anthropology

[Navigating the Bridge: An ethnographic study of Kosovar-Albanian and Serbian Youth living in the divided city of Mitrovica, Kosov](#)



3rd Place: Matthew Jurjonas - Parks, Recreation & Tourism Management

[Rural Coastal Community Resilience: Developing and Testing a Framework for Evaluating Climate Change Vulnerabilities and Adaptive Capacities in Eastern North Carolina](#)