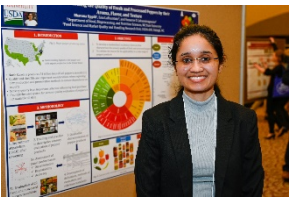
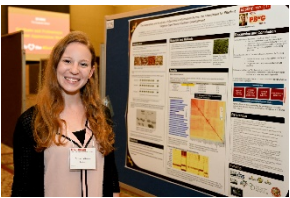

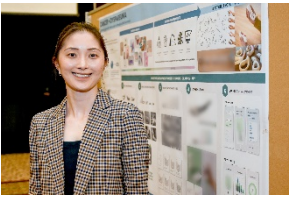
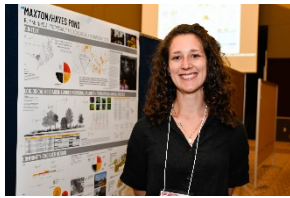
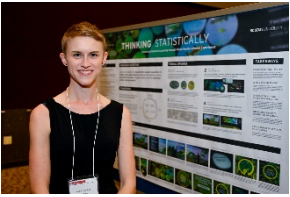
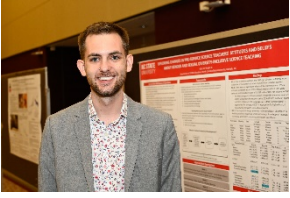
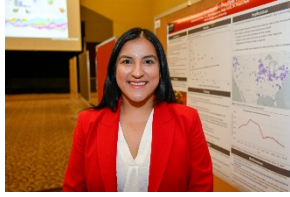

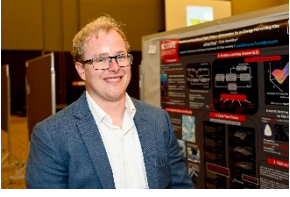
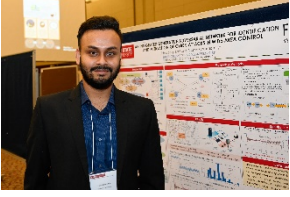
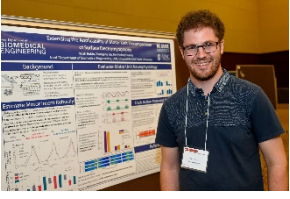
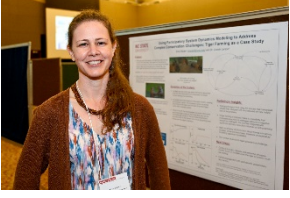
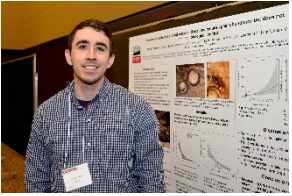
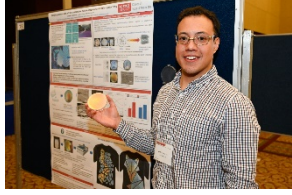

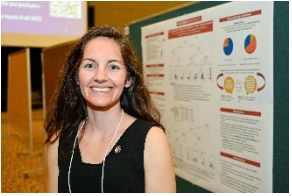
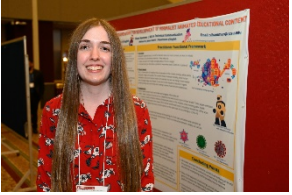
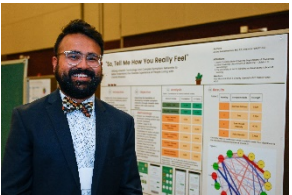
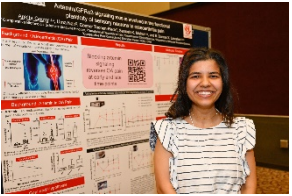


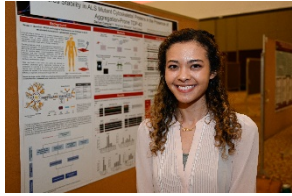
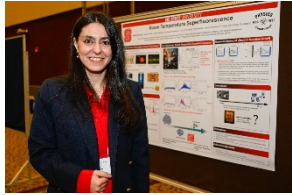
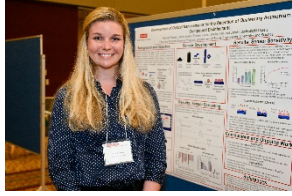
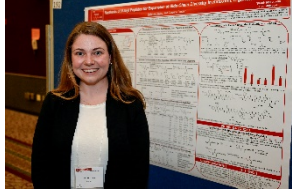



Fifteenth Annual Graduate Student Research Symposium

Congratulations to the winners of the Fifteenth 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 April 6, 2022 at the McKimmon Center. First-, second-, and third-place winners have been announced in nine categories.

AGRICULTURAL SCIENCES	
	<p>1st Place: Bhavana Uppili - Food Science</p> <p><u>Characterizing the Quality of Fresh and Processed Peppers by their Aroma, Flavor, and Texture</u></p>
	<p>2nd Place: Cassandra Newman - Crop Science</p> <p><u>The Generation and Analysis of Genomics Information Forms the Foundation for Efficient Virginia-Type Peanut Cultivar Development</u></p>
	<p>3rd Place: Camilo Parada Rojas - Plant Pathology</p> <p><u>Advancing our knowledge of sweetpotato disease resistance: one NLRome at a time</u></p>
DESIGN	
	<p>1st Place: Abby Scheer - Industrial Design</p> <p>Cancer and Dyspareunia: Decreasing Pain with Intercourse for Women</p>
	<p>2nd Place: Rebecca Asser - Landscape Architecture</p> <p><u>Maxton/Hayes Pond: Reimagining a Historically and Ecologically Significant Site</u></p>
	<p>3rd Place: Lauren Burnham - Graphic Design</p> <p><u>Thinking Statistically: Enhancing Statistical Learning through Mixed Reality Informal Experiences</u></p>

EDUCATION	
	<p>1st Place: Gary Wright - Science Education</p> <p>Exploring Changes in Pre-Service Science Teachers' Attitudes and Beliefs About Gender and Sexual Diversity-Inclusive Science Teaching</p>
	<p>2nd Place: Savannah Currens - Agricultural Education</p> <p>Does Teacher Professional Development in a Field Yield Increased Majors?</p>
	<p>3rd Place: Grace Carroll - Science Education</p> <p>Development and Initial Validation of the Knowledge of Models and Modeling in Science Teaching (KMM-ST) Survey</p>
ENGINEERING	
	<p>1st Place: James Reed - Mechanical Engineering</p> <p>Iterative Learning-Based Flight Pattern Optimization for an Energy-Harvesting Kite</p>
	<p>2nd Place: Jishnudeep Kar - Electrical Engineering</p> <p>An Integrated Generative Adversarial Network for Identification and Mitigation of Cyber-Attacks in Wide-Area Control</p>
	<p>3rd Place: Noah Rubin - Biomedical Engineering</p> <p>Extending the Applicability of Motor Unit Decomposition of Surface Electromyography</p>
ENVIRONMENTAL SCIENCES	
	<p>1st Place: Erica Rieder - Fisheries, Wildlife, and Conservation Biology</p> <p>Using Participatory System Dynamics Modeling to Address Complex Conservation Challenges: Tiger Farming as a Case Study</p>

	<p>2nd Place: Caleb Wilson - Entomology</p> <p>Tree species richness around urban red maples reduces pest abundance but does not enhance biological control</p>
	<p>3rd Place: Joseph Gutierrez - Forest Biomaterials</p> <p>Merging science and art for sustainable nature-inspired coloration patterning</p>
<p>HUMANITIES</p>	
	<p>1st Place: Matthew Champagne - Public History</p> <p>More Than Friends: Interpreting Same-Sex Relationships at Historic Sites</p>
	<p>2nd Place: Stevi Vaughn - Foreign Languages and Literatures</p> <p>Vos, ¿qué decís?: A study of the Spanish “voseo” in North Carolina</p>
	<p>3rd Place: Sloan Hammer - Technical Communication</p> <p>Practitioner Framework for Development of Minimalist Animated Educational Content</p>
<p>LIFE SCIENCES</p>	
	<p>1st Place: Arvind Subramaniam - Physiology</p> <p>“So, Tell Me How You Really Feel” – Utilizing mHealth Technology and Complex Symptom Networks to Better Understand the Disease Experience of People Living with Chronic Illnesses</p>
	<p>2nd Place: Ankita Gupta - Comparative Biomedical Sciences</p> <p>Artemin/GFRα3 signaling axis is involved in the functional plasticity of sensory neurons in osteoarthritis pain</p>

	<p>3rd Place: Darien Campisi - Physiology</p> <p>Altered Stability in ALS Mutant Cytoskeletal Proteins in the Presence of Aggregation-Prone TDP-43</p>
<p>MATHEMATICAL AND PHYSICAL SCIENCES</p>	
	<p>1st Place: Melike Biliroglu - Physics</p> <p>Room Temperature Superfluorescence</p>
	<p>2nd Place: Hannah Dewey - Fiber and Polymer Science</p> <p>Development of Optical Nanosensors for the Detection of Quaternary Ammonium Compound Disinfectants</p>
	<p>3rd Place: Hailey Young - Chemistry</p> <p>Chemoselective Functionalization of N-Arylglycyl Peptides with Boronic Acid Derivatives on Solid Support</p>
<p>SOCIAL SCIENCES AND MANAGEMENT</p>	
	<p>1st Place: Ciele Rosenberg - Anthropology</p> <p>Fluctuating Asymmetry & The Embodiment of Maternal Stress at Newton Plantation, Barbados</p>
	<p>2nd Place: Megan Flannery - Communication, Rhetoric and Digital Media</p> <p>Faces of an Anti-Sexual Violence Organization: A Visual Content Analysis</p>
	<p>3rd Place: Christopher Boyer and Danielle Smith - Parks, Recreation and Tourism Management</p> <p>Let's Talk Mental Health: Perceptions of ACC Sport Psychologists and Athletic Trainers on Mental Health Strategies for Student-Athletes</p>