
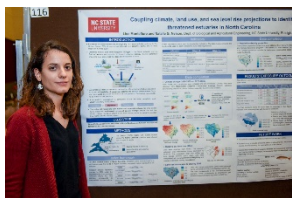
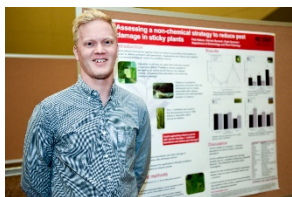




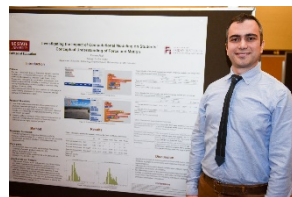

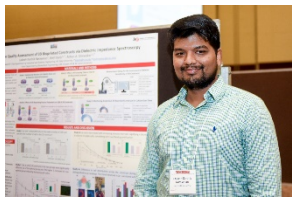

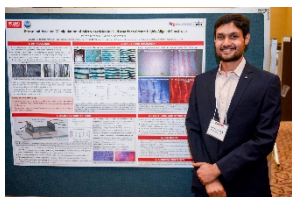
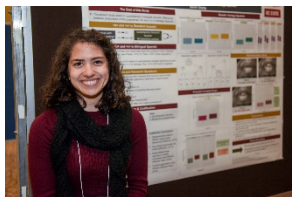
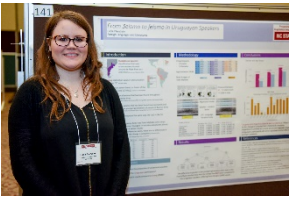

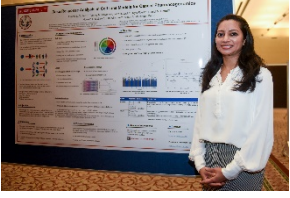
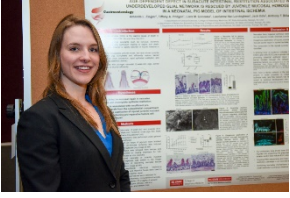
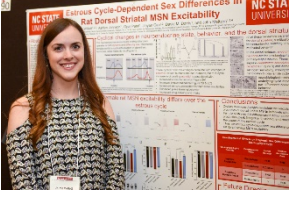
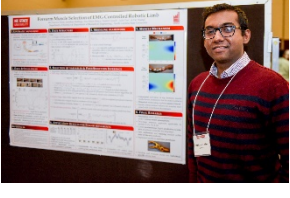



Thirteenth Annual Graduate Student Research Symposium

Congratulations to the winners of the Thirteenth 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 21, 2018 at the McKimmon Center. First-, second-, and third-place winners have been announced in eight categories.

AGRICULTURAL SCIENCES & NATURAL RESOURCES	
	1st Place: Sophia Webster-Tostenson - Entomology <u>Gene Drive in the Zika Mosquito Aedes aegypti: A Killer-Rescue Gene Drive System for Mosquito Population Replacement</u>
	2nd Place: Lise Montefiore – Biological and Agricultural Engineering <u>Coupling climate, land use, and sea level rise projections to identify threatened estuaries in North Carolina</u>
	3rd Place: Pete Nelson - Entomology <u>Assessing a non-chemical strategy to reduce pest damage in sticky plants</u>
DESIGN	
	1st Place: Katie Ainook McCracken - Industrial Design <u>SIGNAL: Service Design and Product Design for Social Innovation</u>
	2nd Place: Joshua Wall - Industrial Design <u>Manumit Cymbals: Footwear and apparel brand to spark worldview curiosity in millennials</u>
	3rd Place: Rachael Paine - Graphic Design <u>Designing Customizable Interfaces for User Cognitive State: how intelligent human-computer interfaces can present unambiguous answers to information-seekers by responding to change in cognitive state</u>

EDUCATION	
	<p>1st Place: Casey Medlock Paul - Curriculum & Instruction</p> <p><u>Critical Literacy Pedagogy: Establishing the Factors of Critical Literacy Instruction Using Mixed Methods</u></p>
	<p>2nd Place: Osman Aksit – STEM Education</p> <p><u>Investigating the Impact of Computational Modeling on Students' Conceptual Understanding of Force and Motion</u></p>
	<p>3rd Place: Nicholas Fortune - Mathematics Education</p> <p><u>Supporting A Mathematician's Instructional Change in Undergraduate Mathematics Through Faculty Collaboration</u></p>
ENGINEERING	
	<p>1st Place: Lokesh Karthik Narayanan- Industrial and Systems Engineering</p> <p><u>Non-Destructive Quality Assessment of 3D Bioprinted Constructs via Dielectric Impedance Spectroscopy</u></p>
	<p>2nd Place: Anurodh Tripathi – Chemical and Biomolecular Engineering</p> <p><u>Recipe to synthesize aerogels with tunable properties: from design principles to application</u></p>
	<p>3rd Place: Parth Chansoria – Industrial and Systems Engineering</p> <p><u>Ultrasound-Assisted Manipulation of Micro-particles in Fluid Matrix to Create Highly Aligned Constructs</u></p>
HUMANITIES	
	<p>1st Place: Sarah Rebekah Chetty – Foreign Languages and Literatures</p> <p><u>To /b/ or not to /b/: On the Production of Graphemes <bv> in Heritage Spanish</u></p>

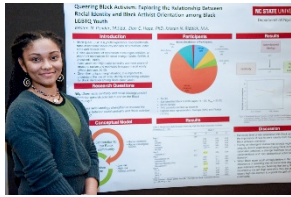
	<p>2nd Place: Lucía Planchón – Hispanic Linguistics</p> <p><u>From Zeísmo to feísmo in Uruguayan Speakers</u></p>
	<p>3rd Place: Karey Danielle Wall - Anthropology</p> <p><u>Faster and Cheaper than Histology? A Test of the Modified Rapid Manual Method on Sus scrofa Teeth</u></p>
<p>LIFE SCIENCES</p>	
	<p>1st Place: Farida S. Akhtari - Genetics</p> <p><u>Dose Response Analysis in Cell Line Models for Cancer Pharmacogenomics</u></p>
	<p>2nd Place: Amanda L. Ziegler – Comparative Biomedical Sciences</p> <p><u>Age-Dependent Defect in Subacute Intestinal Restitution Associated with Underdeveloped Glial Network is Rescued by Juvenile Mucosal Homogenate in a Neonatal Pig Model of Intestinal Ischemia</u></p>
	<p>3rd Place: Jaime Anna Willett - Physiology</p> <p><u>Estrous Cycle-Dependent Sex Differences in Rat Dorsal Striatal MSN Excitability</u></p>
<p>MATHEMATICAL AND PHYSICAL SCIENCES</p>	
	<p>1st Place: Md Nazmul Islam - Statistics</p> <p><u>Forearm Muscle Selection of EMG Controlled Robotic Limb</u></p>
	<p>2nd Place: Mostakima Mafruha Lubna – Fiber & Polymer Science</p> <p><u>Polymer Reinforced Multifunctional Ultralight Carbon Nanotube Foams with Tunable Properties for Real-world Applications</u></p>



3rd Place: Patrick C. Barry – Physics

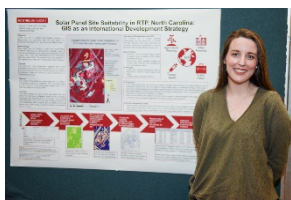
[First Pion Parton Distribution Function at High- and Low-x](#)

SOCIAL SCIENCES AND MANAGEMENT



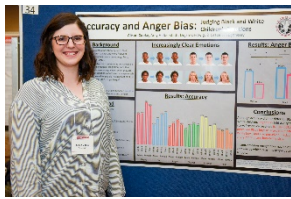
1st Place: Kristen N. Pender – Community Psychology

[Queering Black Activism: Exploring the Relationship Between Racial Identity and Black Activist Orientation among Black LGBTQ Youth](#)



2nd Place: Maureen Catlow – International Studies

[Solar Panel Site Suitability in RTP, North Carolina: GIS as an International Development Strategy](#)



3rd Place: Alison N. Cooke - Psychology

[Accuracy and Anger Bias: Judging Black and White Children's Emotions](#)