



**Eighth Annual NC OPT-ED Alliance Day**  
**Friday, October 2, 2009**  
Greensboro Coliseum Complex • Greensboro, NC  
**ORAL ABSTRACT AGENDA: 11:00AM-12:30PM**

TIME	SESSION	LOCATION	
Meeting Room 1A	<b>Abriana Johnson</b> <i>The Synthesis and Characterization of Nitric-Oxide Releasing Nanoparticles</i>	East Chapel Hill High School 11:00AM	
	<b>Alexander Jackson</b> <i>Synthesis of Monolayer-Protected Silver Nanoclusters</i>	North Carolina Central University 11:15AM	
	<b>Alexandra Valladares</b> <i>Impacts of Environmental Nanoparticle Exposure at the Cellular Level</i>	North Carolina Central University 11:30AM	
	<b>Chelsea Sumner</b> <i>The Effect of Catalase on the Oxidation of Hydrogen Peroxide at Carbon Fiber Microelectrodes Using Fast Scan Cyclic Voltammetry</i>	Knightdale High School 11:45AM	
	<b>Cierra C. Carter</b> <i>Improving the Strength of Biodegradable Biopolymer Fiber via Core Sheath Spinning with Polypropylene and Styrenic-Rubber Diblock Copolymer</i>	Wake Early College of Health and Sciences 12:00PM	
	Meeting Room 1B	<b>Crystal Johnson</b> <i>Optimizing WRWR <math>\beta</math>-Hairpin Peptide For Binding With ssDNA</i>	Hillside High School 11:00AM
<b>Daniel Johnson</b> <i>The Effect of Charge Position Relative to the Aliphatic Chain on Microbial Inactivation by Porphyrins</i>		Orange High School 11:15AM	
<b>Darkus Elizabeth Jenkins</b> <i>Synthesis and spectroscopic studies of Gold(I) phosphines that may be used for the detection of volatile organic compounds</i>		North Carolina A&T State University 11:30AM	
<b>Diana Gorgy</b> <i>Predicting the Effect of Polybrominated Flame Retardants on the Endocrine System Using Molecular Modeling</i>		Wake Early College of Health and Science 11:45AM	
<b>Efrain E. Rivera-Serrano</b> <i>Virus-Induced Gene Silencing to Assign Roles of SNAREs on Tonoplast Protein Trafficking</i>		North Carolina State University 12:00PM	
<b>Grant Wilson</b> <i>Using a conjunctive reagent and isolating enantiomers through classical resolution</i>		Hillside High School 12:15PM	
Meeting Room 2		<b>Jerray Battle</b> <i>Impact of Highway Mitigation Walls on Particulate Matter Dispersion Patterns</i>	North Carolina Central University 11:00AM
		<b>John L. Daniel</b> <i>Regulation of Beta (<math>\beta</math>) Cell Growth: Understanding the Roles of Prolactin and FoxO1</i>	North Carolina School of Science and Mathematics 11:15AM
	<b>Joshua Womack</b> <i>The Effect of Diol Structure and Curing Conditions on Macromolecular Properties of Polyesters Derived From 4-Ketopimelic Acid and Citric Acid</i>	East Chapel Hill High School 11:30AM	
	<b>Kevin Hill</b> <i>Pervasive Computing in Motorsports</i>	North Carolina A&T State University 11:45AM	
	<b>Lauren Lawrence</b> <i>Human Exposure to Indoor Ultrafine and Nano Particulate Matters (PM) during Evening PM Spike and its Potential Health Effects</i>	North Carolina Central University 12:00PM	
	Meeting Room 3B	<b>Malika Rauf</b> <i>The Effect of Adenosine Triphosphate (ATP) on MutLa in DNA Mismatch Repair</i>	East Chapel Hill High School 11:00AM
<b>Masceline Petittlubin</b> <i>Creating Cathode Materials for Higher Capacity Lithium- Ion Batteries</i>		Fayetteville State University 11:15AM	
<b>Matthew Anwar Mickens</b> <i>White light-emitting phosphor thin films for application in multi-spectral UV sensors</i>		North Carolina A&T State University 11:30AM	
<b>Melony A. Ochieng</b> <i>The Effects of p65 of Telomerase RNA</i>		North Carolina Central University 11:45AM	
<b>Michaela Jones</b> <i>Phosphorylative Regulation of Nrf2-Mediated Antioxidant Response</i>		Knightdale High School 12:00PM	
Meeting Room 4A		<b>Mykellah Jarvis</b> <i>Host Range Mutations of the Sindbis Virus</i>	Knightdale High School 11:00AM
	<b>Sean Mobley</b> <i>Mobile Robot Navigation Using a Multi-Sensor Approach</i>	Fayetteville State University 11:15AM	
	<b>Tonisha Coburn</b> <i>The Differential Effects of Carbohydrates vs. Calories upon Prostate Cancer Tumor Growth in a Xenograft Murine Model</i>	Bennett College for Women 11:30AM	
	<b>Trenton Alford</b> <i>The Effects of Carbon Nanotube on Solar Cells</i>	Scotland High School of Math, Science and Technology 11:45AM	
	<b>Troi Nicole Robinson-Moss</b> <i>pH-dependent Study of the Kinetics and Spectroscopic Characterization of Dehaloperoxidase B from Amphitrite ornata</i>	Sanderson High School 12:00PM	
	Continued on back		

<b>TIME</b>	<b>SESSION</b>	<b>LOCATION</b>	<b>LOCATION</b>
<b>Meeting Room 4B</b>	<b>Malcolm L. Wilkins</b> <i>Nonlinear Optical Properties of Nanotube-Molecule Composites for Use in Future Telecommunications Materials</i>	Northampton County High School - East	<b>11:00AM</b>
	<b>Victoria C. Melbourne</b> <i>The Effect of a Residue 61 Mutation on the Structure of RAS GTPase</i>	Wake Early College of Health and Science	<b>11:15AM</b>
	<b>Victoria C. Nneji</b> <i>Locating the Relaxase Domain on the TraI Protein in Order to Identify Effective Enzyme-Specific Inhibitors</i>	North Carolina School of Science and Mathematics	<b>11:30AM</b>
	<b>Victoria Jones</b> <i>Modification of Transfer Ribonucleic Acid (tRNA): The Binding of tRNA by YrdC, a Putative Threonyl-tRNA Transferase: A Two Year Study</i>	North Carolina State University	<b>11:45AM</b>
	<b>William Belle</b> <i>Analysis of Genes Required for DNA Damage in RNase-H Deficient Mutants</i>	North Carolina School of Science and Mathematics	<b>12:00PM</b>
	<b>Zaria Shields</b> <i>The Oxidation of Guanosine</i>	Hillside High School	<b>12:15PM</b>