



**Sixth Annual NC OPT-ED Alliance Day**  
Friday, September 26, 2008  
Greensboro Coliseum Complex • Greensboro, NC  
**ORAL ABSTRACT AGENDA: 2:00pm-3:30pm**

LOCATION	PRESENTER	School	TIME
Meeting Room 5	<b>Amira Carter</b> <i>Design and Synthesis of Functionalized Isoprene Used In Gene Delivery</i>	Hillside High School	2:00PM
	<b>Amanda Reams</b> <i>Non-Linear Imaging and Spectroscopy of Zinc Oxide (ZnO) Nanostructures</i>	Chapel Hill High School	2:15PM
	<b>Brandi C. Bugg</b> <i>The Effect of Morphology on Biologically-Inspired Artificial Light Harvesting Complexes</i>	City of Medicine Academy	2:30PM
	<b>Maclan Masese</b> <i>Development of a Computational Model of Human Hair</i>	North Carolina Central University	2:45PM
	<b>Ernest Edward Hooper</b> <i>Flexibility of Novel Gemini Surfactants</i>	Fayetteville State University	3:00PM
	<b>Aja V.M. Moore</b> <i>Air and Water Quality Measurements in an Environmental Justice Community</i>	North Carolina Central University	3:15PM
	Meeting Room 6	<b>Warch Downing</b> <i>Conformational Change in Cell Surface Receptors</i>	Duke University/Plymouth High School
<b>Dalana Mack</b> <i>Synthesis of a Hydrogen Bonding Donor-Acceptor Oligomer to Model Optical Behavior for Conjugated Polymers in Solar Cells</i>		Josephine Dobbs Clement Early College High School	2:15PM
<b>Shara Weaver</b> <i>The Effect of Activation in the Brain's Reward Pathway on Dopamine Concentrations and Motivated Behavior</i>		Josephine Dobbs Clement Early College High School	2:30PM
<b>Juan Wilkins</b> <i>Measuring the Potential Toxicity of A Novel Series of Disinfectants</i>		Hillside High School	2:45PM
<b>Shaina Whitworth</b> <i>Synthesis and Properties of Constrained Pyrrole and Pyrrolizine Keto Acids</i>		North Carolina Central University	3:00PM
<b>Jo-sette L. Wilkes</b> <i>Synthesis and Analysis of N-substituted-(8-methoxy-10,11-dihydro-dibenzo[b,f]thiepin-10-yl)-piperazine derivatives</i>		North Carolina Central University	3:15PM
Meeting Room 3B		<b>Zaria Shields</b> <i>The Synthesis of S-Dichlorovinylmercapturic Acid</i>	Hillside High School
	<b>Racheal Johnson</b> <i><math>\beta</math>-hairpin Peptides as Receptors for DNA</i>	Josephine Dobbs Clement Early College High School	2:15PM
	<b>Grant A. Wilson</b> <i>The Synthesis and Reactions of Silyl Glyoxylates</i>	Hillside High School	2:30PM
	<b>Algernon Finley, III</b> <i>Correlation between Ambient Particulate Matter (PM 2.5) Monitored and Ultrafine PM Levels Deposited in Lung Alveolar Surface Areas</i>	North Carolina Central University	2:45PM
	<b>Alicia Eley</b> <i>Speciation of Manganese (Mn) in Falls Lake and Its Tributaries</i>	North Carolina Central University	3:00PM
	<b>Benjamin Moore</b> <i>Man made Limestone and Granite Composites</i>	North Carolina A&T State University	3:15PM
	Meeting Room 4B	<b>Fadi Ahmad Deeb</b> <i>Web Application Vulnerabilities in Drupal's Content Management System</i>	North Carolina State University
<b>Donovan Bradley</b> <i>Automatic Database Population and Solar Cell Characterization Using Visual Basic 6.0 and FileMaker 5.5</i>		North Carolina Central University	2:15PM
<b>Robert E. Parker</b> <i>A direct assessment of conversion of diesel engine to operate on straight vegetable oils</i>		North Carolina A&T State University	2:30PM
<b>Richard Shoge</b> <i>Analytic and In-vitro Study of Impact Joint Loading of Cartilage</i>		North Carolina State University	2:45PM
<b>Liesel K. Jeffers</b> <i>BK virus and salivary gland disease: creating an in-vitro model</i>		University of North Carolina at Chapel Hill	3:00PM
<b>Lauren A. Lawrence</b> <i>Deposition Patterns of Ultrafine Particles (UFPs) in Human Lung Alveolar Surface during Indoor Cooking</i>		North Carolina Central University	3:15PM
Meeting Room 4A		<b>Anthony E. Hagler, III</b> <i>Data Reduction Evidence of Climate Change</i>	North Carolina A&T State University