Ryan Dunaway, Jackson Ferrell, Rob Edwards, & Nathan Beeten
Environmental Science
School for Science and Math at Vanderbilt, Nashville
“Remote Sensing of Carbon Dioxide in the Lower Atmosphere”

Petra Byl & Diana Neculcea
Microbiology
Hume-Fogg High School, Nashville
“Natural Antibiotic Resistance in Cave Stream Bacterial Communities”

Victoria Dolan & Jordan Lee
Zoology
Pope John Paul II High School, Hendersonville
“The Effects of Lithium Chloride on the Feeding Habits of the Elimia Snail”

Taylor Cook
Botany
Northwest High School, Clarksville
“The Good and Bad Effects of Fertilizer on Sunflowers”

Lachlan Hassman & Eliza Gooding
Physics
St. Andrew's-Sewanee School, Sewanee
“The Effects of Angle of Attack on the Lift Created by an Airfoil”

Kathryn Pickrell & John Crenshaw
Zoology
Hume-Fogg High School, Nashville
“Water Turbidity Has No Effect on Pheromone Communications in Aquatic Flatworms”

Regan Givens
Engineering
Pope John Paul II High School, Hendersonville
“The Effects of Varying Glucose Concentrations on Cellular Glycolytic Rates”

Jansen Gibson, Thomas Metke, Sabrina Brewer & Cristian Vera
Environmental Science
School for Science and Math at Vanderbilt, Nashville
“The Long-Term Effects of Airport Runoff on Urban Stream Quality and Habitability in Nashville, Tennessee”

Katherine Watson & Skyler Cochrane
Chemistry
School for Science and Math at Vanderbilt, Nashville
“Testing the Effectiveness of Luminol in the Dating of Skeletal Remains”
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PROGRAM

Friday, April 19th, 2013

9:00-9:30a.m........................................Registration
9:30-9:40a.m..............................................Welcome
9:40-11:30a.m..............................................Paper Presentations
11:35-noon.................................................Special Presentations
12:00-1:00p.m..............................................Lunch
1:00-4:00p.m..............................................Paper Presentations
4:00p.m...................................................Adjournment

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Papers to be Presented
Student’s Name, School, City, and Title of Paper

Darby Schumacher...........Environmental Management
Baylor School, Chattanoooga
“A Filter Today Keeps Pollutants Away: A Study of Nanofiber Based Stormwater Filtration”

Rachel Baker...........Environmental Management
Camden Central High School, Camden
“Biomass to Biofuels: New Sources to Make Ethanol in the Place of Corn”

Jada Hampton..............Chemistry
Cleveland High School, Cleveland
“The Effects of High Chlorine on the Five Senses before and After Physical Activity”

Elizabeth Li, Michelle Lu, Oge Onuh, & Shu Zhang..............Cell Biology
School for Science and Math at Vanderbilt, Nashville
“The Role of the Mannose Receptor and Toll-like Receptor 2 in TNFα and IL-6 Production”

Qiaozhi Guo, Tiannan Zhou, Jennifer Peek, & Michael Kessler..............Biology
School for Science and Math at Vanderbilt, Nashville
“Genetic and Functional Characterization of β-glucosidase in Fungal Species under Assorted Conditions”

Benjamin D. Firth.................Astronomy
Sullivan South High School, Kingsport
“A Possible Confirmation of a Planet Orbiting Star K015475431”

Zheer Ahmed........................Microbiology
Martin Luther King Academic Magnet High School, Nashville
“Biodegradation of Quaternary Ammonia Compounds by Biofilm and Free-Living Bacteria”

Reeta Bandopadhyay, Angelica Coleman, Young-Hun Kim, & Brennan Steele..............Computer Science
School for Science and Math at Vanderbilt, Nashville
“Determining Plant Species by Use of an Android Application”

Sam Hedge...............Environmental Management
Camden Central High School, Camden
“Water Quality in Selected Watersheds in Benton County, Tennessee”

Megan Gerstner & Katie Swaringen...Botany
Pope John Paul II High School, Hendersonville
“Allelopathic Effects of the Juglans nigra (black walnut) on the Pea Plant”

Chloe Kilpatrick & Emily McRen.....Forensics
Pope John Paul II High School, Hendersonville
“The Effects of Temperature on Insect Activity during Flesh Decomposition”