Jacob Utley ..............................................Computer Science
Stratford STEM School, Nashville
"Augmented Reality Mirror: Using Xbox Kinect to Overlay Realistic Organ Images in Real Time"

Kenwood High School, Clarksville
"Can Cooking Foods Decrease Their Vitamin C Level?"

Khorey Williams .......................................Chemistry
Kenwood High School, Clarksville
"The Correlation Between the Fruit Maturity and Glucose"

Brandon Boykin .......................................Physics
Kenwood High School, Clarksville
"The Most Effective Trajectory for a Free Throw"

Jacob Brack .........................................Engineering
· Kenwood High School, Clarksville
  "How Citrus Juice Affects Gratzel Cell Efficiency"

Kelsey Thornton ......................................Chemistry
Kenwood High School, Clarksville
"The Effectiveness of Propylene Glycol Substitutes in Lotions with Plant-Derived Ingredients"

Ryne Montoya, Michael Montoya & Anna Cooper .........................Biology
Siegel High School, Murfreesboro
"The Effects of Disturbance on Invertebrate Diversity in Cedar Glade Habitats"

James Simmons & Matthew Watts ..............Biology
Siegel High School, Murfreesboro
"Soil Composition Related to Development and Invertebrate Biodiversity of Cedar Glade Habitats in Middle Tennessee"

Tobias Roberts & Mudi Yang .................Physics
School for Science and Math at Vanderbilt, Nashville
"Automation of Pulsar Detection from a 350 MHz Radio Telescope Drift-Scan"

Eghosa Eguakun, Kevin Gomez & Austin Lu .................................Biology
School for Science and Math at Vanderbilt, Nashville
"Design and Implementation of a Neuroprosthetic Hand Using Electromagnetic Input"

Katelyn Sutherland, Youli Yao & Lu Zheng .................................Microbiology & Earth Sciences
School for Science and Math at Vanderbilt, Nashville
"An Analysis of Microbial Diversity in Natural vs. Mitigation Wetlands in Relation to Wetland Functionality"

Emily Earls ..............................................Biology
Hillsboro High School, Nashville
"Assessing the Effect of Vitamin C on Superoxide Dismutase’s Ability to Treat Cancer"

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BELMONT UNIVERSITY
Nashville, Tennessee
FRIDAY, APRIL 21ST, 2017
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Dr. Mari Weller .............................Middle Tennessee State University

PROGRAM

Friday, April 21st, 2017

9:00 - 9:30 am..........................Registration
9:30 - 9:40 am............................Welcome
9:40 - 12 noon .........................Paper Presentations
12:00 noon - 1:00 pm....................Lunch
1:00 pm - 4:00 pm......................Paper Presentations
4:00 pm..............................Adjournment

TENNESSEE JUNIOR ACADEMY OF SCIENCE

Papers to be Presented
Student's Name, Research Classification,
School, City, and Title of Paper

Kaytlyn Jones & Haley Tranum ..........Astronomy
Sullivan South High School, Kingsport
"The Rotation Period of the Asteroid 6729 Emiko"

Connor Chase & Katie Beyersdorf ....Botany
Sullivan South High School, Kingsport
"The Effects of X-Ray Radiation on Plant Growth and Development"

Elizabeth Gaviria, Grayson Peters & Lexi Sheeler ..................Computer Science
School for Science and Math at Vanderbilt, Nashville
"Developing a Vanderbilt University-Based Carbon Footprint Calculator Web Application"

Megan Dernberger, Chaitu Konjeti, Taylor Smith & Casey Van Kaer ........Computer Science
School for Science and Math at Vanderbilt, Nashville
"Development of Basketball Metrics Using SportVU, an Advanced Optical Recognition System"

Adia Bulawa .............................Astrobiology
Greeneville High School, Greeneville
"Panspermia"

Elisabeth Ellis ............................Biology
Christ Presbyterian Academy, Nashville
"The Effects of Over-the-Counter Medications on the Phenotypic Expression of Drosophila melanogaster"

Jackson Cedzich-Grant ............Electrical Engineering
Hillsboro High School, Nashville
"The Development of a Low-Cost and Efficient Electric Guitar Effects System"

Connor High ............................Biology
Hillsboro High School, Nashville
"Determining the Effects of Turmeric and Dandelion Root Extract on Cancer Cells"

Sahil Goklaney .................Chemistry
Kenwood High School, Clarksville
"Can Cooking Foods Decrease Their Vitamin C Level?"

Chloe Freake ..................Environmental Science
Cleveland High School, Cleveland
"Short-Term Effects of Anthropogenic Sonar and Industrial Sounds on Fish"

Lunch Break!