Elizabeth Keylon, Sara Lewis & Matthew Pugh
Chemistry
Greenfield High School, Greenfield
"Analyzing Iron, Lead, and Cadmium Concentrations in Weakley County Soils"

Ella Halbert, Jaressa Hawkins, Nancy Hoang & Cecily Shi
Geology
School for Science and Math at Vanderbilt, Nashville
"Analysis of Rainfall, Speleothem Drip Rates, and Karst System Trace Elements at Blue Spring Cave"

Roshan Soni
Environmental Science
Cleveland High School, Cleveland
"Assessing the Presence of Microplastics in Mouse Creek, Cleveland, Tennessee"

Lauren Proctor
Environmental Science
Cleveland High School, Cleveland
"Constructed Wetlands: A Comparison of Inflowing and Outflowing Water Sources to Determine Effectiveness"

Jackson Hasty
Chemistry
Hillsboro High School, Nashville
"Teaching Renewable Energy in ISR through Biodiesel Production"

Sarah Cory
Nanoscience
Hillsboro High School, Nashville
"Improving Glass Surfaces' Hydrophobic Abilities with Carbon-based Nano Materials"

Julia An & Jack Allen
Physics
School for Science and Math at Vanderbilt, Nashville
"Determining Variation Periodicity of Pulsar Scintillation Utilizing Dynamic Spectra"

Cliff Syner
Engineering
Clarksville Christian School, Clarksville
"Arduino Eye"

Thomas Link
Biology
Hillsboro High School, Nashville
"Developing a Mobile Application for the Identification of Invasive Plants"

Tony Jeong
Biology
Davidson Academy, Nashville
"Effects of Flavonoids from Onion Extract on Planaria (Dugesia tigrina) Regeneration"

Jacob Reed, Celeste Davis, Natalie Shull, Hannah Brack, Raegan Van Wirt, Caroline Tracy, Britney Xiong, Cole Bozeman & Tyler Smith
Biology
Fred J. Page High School, Franklin
Fecal Coliform and Escherichia coli Levels in Water and Sand of a Beach on Percy Priest Reservoir"

Obang Lwangmianga
Mathematics Education
Hillsboro High School, Nashville
"Analyzing High School Senior's Familiarity and Notion of Statistics by Surveying"
PROGRAM
Friday, April 20th, 2018
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

Michael Montoya & Ryne Montoya........... Biology
Siegel High School, Murfreesboro
"The Effects of Disturbance on Invertebrate Diversity in Cedar Glade Habitats in the Fall and Spring Seasons"

Shaohannah Chapman....................... Biology
Christ Presbyterian Academy, Nashville
"The Effects of Natural and Artificial Sweeteners on the Mass and Reaction Time of Lumbricus terrestris"

Samuel Lee, Maria Osipovich & Briza Vazquez...... Biology
School for Science and Math at Vanderbilt, Nashville
"RIG-1 Activation in Neuroblastoma Cells with Retinoic Acid and Viral-Mimicking Derivatives"

Ana Delgado, Ruby Kinkel & Carlos Salas........ Computer Science
School for Science and Math at Vanderbilt, Nashville
"Analyzing Ball Movement in Basketball: Using Machine Learning to Predict Offensive Performance"

Matthew Collins........................Microbiology
Sullivan South High School, Kingsport
"The Presence of Bacteria on Packaged Meat"

Ben Smith & Grant Smith.................... Biology
The McCallie School, Chattanooga
"Total Sponge and Coral Proteins Show Promise for Slowing N2a Cancer Cell Division"

Brian Chong & Jamie Dethero........... Biology
McCallie School, Chattanooga
"Optimizing Husbandry and Spawning Conditions and Growing Primary Cell Cultures from the Apical Organs and Tentacle Bulbs of the Ctenophore Mnemiopsis leidyi"

Rebecca Firth.............................. Astronomy
Sullivan South High School, Kingsport
"The Age and Distance of the Open Cluster NGC 559"

Hanson Zhang .........................Computer Science
The McCallie School, Chattanooga
"Predicting Risk of Stroke using Artificial Neural Network and Logistic Regression in Big Health Data"

Allen Liu.(unavoidably absent).........Computer Science
The McCallie School, Chattanooga
"Neural Networks without Multiplications"

Max Yudkin.......................... Chemistry
Hillsboro High School, Nashville
"Detection of Ethoxyquin in Rawhide Dog Chews"

Lunch Break!