# 2015 Blue Ridge Highlands Regional Science Fair March 6 - 7, 2015 – Radford University

# VIRGINIA STATE SCIENCE AND ENGINEERING FAIR DELEGATES

#### **Animal Sciences (ANIM)**

102 Sarah Hope Cartee *Equine Prosthetic Model* Southwest Virginia Governor's School Sponsor: Rebecca Phillips

103 Blake Hall *Calf Starter Preference and Comparison* Home School Sponsor: Mark McCann

#### **Behavioral and Social Sciences (BEHA)**

201 Griffin McAvoy *Objective and Subjective Comparisons of the Frequency Analyses of MP3 and Compact Disc Musical Recordings* Tazewell High School Sponsor: Greg Deskins

202 Wesley Meredith *Preschool's Effect on Students' Educational Superiority* Southwest Virginia Governor's School Sponsor: Greg Riffe

302 Justin Davis *Effect of Soccer Headgear on Impact Forces* Southwest Virginia Governors' School Sponsor: Krista Stith

#### **Biomedical and Health Sciences (BMED)**

305 Alaa Ragab *Mechanism of Calcium Cardiac Transport Modulation by the Novel Drug Nitroxyl* Southwest Virginia Governors' School Sponsor: Krista Stith

### **Chemistry (CHEM)**

402 Samuel Christoffer Mogen *The Use of Layer-by-layer Techniques to Aid in the Protection of Antimicrobial Films* Southwest Virginia Governors' School Sponsor: Jared Brown

403

Mark Sahyouni and Kyle Stiltner A Comparison of Dissolution Rates in Varying Conditions of Oral Soluble Medications Richlands High School Sponsor: Tiffany Stillwell

## Earth and Environmental Sciences (EAEV)

501

Canaan Addison and Chace Collins Comparison of Water Purification Methods: Ions, Chlorine, or "Old Fashioned" Boiling? That is the Question! Richlands High School Sponsor: Melissa Addison

502 Emily Llaneras Slaying the "Destructor": The Effectiveness of Alternative Varroa Mite Treatments Southwest Virginia Governors' School Sponsor: Krista Stith

#### Materials Science (MATS)

601 Whatley Ozer *Measuring the Effects of Softening Techniques on Pointe Shoes* Southwest Virginia Governors' School Sponsor: Sherry Pugh

#### Microbiology (MCRO) and Plant Sciences (PLNT)

802 Ella Reeves *Comparing a Manure-Based Fertilizer to Synthetic Fertilizer* Southwest Virginia Governors' School Sponsor: Rebecca Phillips

## **Physics and Astronomy (PHYS)**

901 Ashley Jordan and Austin Owen *The Correlation Between Surface Temperature and Arctic Sea Ice Thickness* Southwest Virginia Governors' School Sponsor: Daniel Blake

902 Jade Murray *How Leadoff Stances Affect Speeds in Softball* Southwest Virginia Governors' School Sponsor: Daniel Blake