# 33rd BLUE RIDGE HIGHLANDS REGIONAL SCIENCE FAIR MARCH 1 - 2, 2024 RADFORD UNIVERSITY

## VIRGINIA STATE SCIENCE AND ENGINEERING FAIR DELEGATES

#### 102 Xavier Gitre

Organic Mercury and Avian Foraging: The Impact of Methylmercury Exposure on the Feeding Efficiency of Invertivorous Passerines

Blacksburg High School Sponsor: Katharine Davis

#### 204 Molly Morris

The Correlation Between Color Cues and Human Perception of Flavors Southwest Virginia Governor's School

Sponsor: Greg Riffe

#### 205 Sophie Perdue

Comfort Level Discussing Medical Topics Based on Parental Education Level Southwest Virginia Governor's School

Sponsor: Megan Arnold

#### 302 Ashley Layne

The Effects of a Specific Rest Interval on Different Levels of Physical Exertion, and How the Interval Affects Bat Speed

Southwest Virginia Governor's School

Sponsor: Matt Frazier

#### 306 Ethan Ririe

Investigating the Impact of Parasitic Worm Secretions on Anaphylaxis as Novel Treatment for Food Allergies

Blacksburg High School Sponsor: Katharine Davis

#### 401 Laken Barnette

A Nutritional Assessment of Plant-Based Milk Alternatives: Comparing Common Plant-Based Milk Alternatives to Cow's Milk Using Chemical Analyses

Southwest Virginia Governor's School

Sponsor: Jared Brown

#### 502 Connor Beasley

Metagenomic Analysis of the Microbial Biodiversity in Soil of Mountain Balds in Appalachia

Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

#### 601 Alexander Li

Enhancing Driving Safety via Real-Time Suppression of Vehicle Radar Interference

Blacksburg High School

Sponsor: Katharine Davis

#### 903 Sriya Sridhar

Enzymatic Engineering for Enhanced Plastic Degradation in a Novel Plasmid System

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#### 1001 Charlotte Phillips

Investigating Degradation of Polyhydroxyalkanoate Straws in Saltwater Environments with Varying Temperature, and in the Presence of Turbo mamoratus and Lysmata wurdemanni

Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

#### 1102 Derek Dunford

Anticipating Bridge Refurbishment Cost Using Bridge Characteristics Southwest Virginia Governor's School

Sponsor: Greg Riffe

#### 1106 Lishu Wang

The Economic Impact of California's Recent Out-Migration on its Neighboring States

Blacksburg High School Sponsor: Katharine Davis

#### 1201 Cole Abbott

Effects of Temperature and Humidity on the Timbre of Stringed Instruments Southwest Virginia Governor's School

Sponsor: Matt Frazier

#### 1301 Sage Lahmers

Relationship between below ground biomass and soil organic matter: case study in Mt Tabor Blacksburg

Blacksburg High School Sponsor: Katharine Davis

### 1403 Radia Lu

Systematic Assessment of Large Language Model's Correctness and Biases for Minority Health

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