# 2016 Blue Ridge Highlands Regional Science Fair March 4 - 5, 2016 – Radford University

# SPECIAL AWARDS

## **American Association of University Women Awards**

404

Taya Scott

Cell Migration Under an Applied Electric Field

Galax High School

Sponsor: Carmen Scott

403

Morgan Fisher

Effect of Water Source on Occurrence of Bacteria and Mycobacterium avium DNA in

Shower Heads

Southwest Virginia Governor's School

Giles High School Sponsor: Krista Stith

# American Chemical Society, Northeastern Tennessee Section Awards

First Place

103

**Emily Llaneras** 

Slaying the Destructor Part II: Dosage Optimization and Effects of Oxalic Acid on

Honeybee Hives

Southwest Virginia Governor's School

Sponsor: Krista Stith

Second Place

402

Noah Dabney

Sugar as Knowledge and Power: How Sugars Impact the Growth of Tree Roots

Home School

Sponsor: Eric Beers

Third Place 1303

Christopher Lockhart

I Scream for Ice Cream

Richlands Middle School

Sponsor: Kim Lawson

## American Chemical Society, Virginia Blue Ridge Section Award

502

Alexander E. Dunford

Detection of Nitrate and Nitrite in a Solution Through Electrochemical Cyclic

Voltammetry

Southwest Virginia Governor's School

Sponsor: Jared Brown

## **American Meteorological Society Awards**

1402

Caleigh Street

Meteorology vs. Almanac

Richlands Middle School

Sponsor: Kim Lawson

804

**Grace Turner** 

Purifying Wastewater with Carbon Absorption

Blacksburg High School

Sponsor: Benjamin Turner

# **American Psychological Association Award**

1203

Madison Vanover

Looks Can Be Deceiving- Continuation

Tazewell Middle School

Sponsor: Katherine Claytor

#### **American Red Cross Award**

301

Julian Elmasry

Revolutionary Blood Test Tube 2.0

Southwest Virginia Governor's School

Sponsor: Jared Brown

## **American Society of Mammalogists Awards**

203

Skylar Johnston

How Qualities of Urban Areas Affect Adoption Rates in Animal Shelters

Southwest Virginia Governor's School

Sponsor: Sherry Pugh

102

Kadie Hudson

The Genetic Influence of Coagulation on Fly Control in Dairy Cattle

Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

# **Arizona State University Walton Sustainability Solutions Initiatives**

103

**Emily Llaneras** 

Slaying the Destructor Part II: Dosage Optimization and Effects of Oxalic Acid on

Honeybee Hives

Southwest Virginia Governor's School

Sponsor: Krista Stith

801

Jonathan Tyler Neeble

Hydroelectric Power Generator

Southwest Virginia Governor's School

Sponsor: Matthew Frazier

#### **ASM Education Foundation Award**

301

Julian Elmasry

Revolutionary Blood Test Tube 2.0

Southwest Virginia Governor's School

Sponsor: Jared Brown

#### **Association of Women Geoscientists Award**

103

**Emily Llaneras** 

Slaying the Destructor Part II: Dosage Optimization and Effects of Oxalic Acid on

Honeybee Hives

Southwest Virginia Governor's School

Sponsor: Krista Stith

# **Biomedical Engineering Award – Virginia Tech**

306

Emma Stowe and Emma Strickland

Can We Build a Bone? BMP-2 Delivery for Osteoblastic Differentiation

Blacksburg High School

Sponsor: Katharine Davis

#### **Broadcom Masters Awards**

1302

Sarah Elmasry

The Effect of Cleaner on Graffiti

Galax High School

Sponsor: Kathryn Pakkidis

1502

Anna Haas

The Effects of Different Types of Flaps on Wing Lift

Auburn Middle School Sponsor: Carola Haas

1601

Meredith Dabney

A Burning Question: Which Friction-Based Fire Starter is the Most Effective?

Classical Conversations Sponsor: Phyllis Newbill

1602

Aidan Sparling
The Strength of Recycling
Richlands Middle School

Sponsor: Kim Lawson

# **Genius Olympiad Awards**

103

**Emily Llaneras** 

Slaying the Destructor Part II: Dosage Optimization and Effects of Oxalic Acid on

Honeybee Hives

Southwest Virginia Governor's School

Sponsor: Krista Stith

401

Leah Bianchi

Metagenomics Analysis of Phosphate Accumulating Microbial Consortium

Blacksburg High School Sponsor: Katharine Davis

# **Intel Excellence in Computer Science Award**

704

Patrick Thomas

Deciduous Tree Leaf Identification with Artificial Neural Networks

Southwest Virginia Governor's School

Sponsor: Rick Fisher

#### **Intel Science Talent Search**

305

Saumya Sharman

Bioinformatics Analysis of Proliferative Protein Clusters in Breast Cancer Cells

Southwest Virginia Governor's School

Sponsor: Krista Stith

303

Carly Porter

Acceptance of Fecal Transplant Therapy Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

102

Kadie Hudson

The Genetic Influence of Coagulation on Fly Control in Dairy Cattle

Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

802

Isaac Payne

Aerodynamic Camper Device

Southwest Virginia Governor's School

Sponsor: Greg Riffe

402

Noah Dabney

Sugar as Knowledge and Power: How Sugars Impact the Growth of Tree Roots

Home School

Sponsor: Eric Beers

#### **I-SWEEEP Award**

601

Canaan Addison and Chace Collins

"Going Bananas With Coal!" A Fossil Fuel/Biofuel Energy

Richlands High School

Sponsor: Melissa Addison

## **Manufacturing Technology Center Award**

802

Isaac Payne

Aerodynamic Camper Device

Southwest Virginia Governor's School

Sponsor: Greg Riffe

#### **Mount Tabor Ruritan Club Awards**

1301

Jonce Culbertson

The AA Battery Challenge

Richlands Middle School

Sponsor: Kim Lawson

1401

Ellie Currie

Human vs. Savings Catcher

Wallace Middle School

Sponsor: Shannon Mutter

103

**Emily Llaneras** 

Slaying the Destructor Part II: Dosage Optimization and Effects of Oxalic Acid on

Honeybee Hives

Southwest Virginia Governor's School

Sponsor: Krista Stith

209

Lucas White

Sodas: "To Drink or Not to Drink"

Richlands High School

Sponsor: Melissa Addison

## Mu Alpha Theta Award

702

Joseph Nielson

The Effects of Network Media on Congestion

Southwest Virginia Governor's School

Sponsor: Rick Fisher

#### **NASA Earth System Science Award**

801

Jonathan Tyler Neeble

Hydroelectric Power Generator

Southwest Virginia Governor's School

Sponsor: Matthew Frazier

## **National Oceanic and Atmospheric Administration Award**

802

Isaac Payne

Aerodynamic Camper Device

Southwest Virginia Governor's School

Sponsor: Greg Riffe

#### **National Weather Service Award**

1402

Caleigh Street

Meteorology vs. Almanac

Richlands Middle School

Sponsor: Kim Lawson

# Office of Naval Research Awards (U. S. Navy and U. S. Marine Corps)

1402

Caleigh Street

Meteorology vs. Almanac

Richlands Middle School

Sponsor: Kim Lawson

1502

Anna Haas

The Effects of Different Types of Flaps on Wing Lift

Auburn Middle School

Sponsor: Carola Haas

602

**Brayden Barnes** 

The Emission of Particles 1.0, 5.0, and 10.0 Microns ( $\mu$ m) in Diameter from Machines in a High School Machine Shop

Southwest Virginia Governor's School

Sponsor: Matthew Frazier

804

**Grace Turner** 

Purifying Wastewater with Carbon Absorption

Blacksburg High School Sponsor: Benjamin Turner

#### Radford University Sigma Xi Chapter Distinguished Award in Science

103

**Emily Llaneras** 

Slaying the Destructor Part II: Dosage Optimization and Effects of Oxalic Acid on

Honeybee Hives

Southwest Virginia Governor's School

Sponsor: Krista Stith

102

Kadie Hudson

The Genetic Influence of Coagulation on Fly Control in Dairy Cattle

Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

## **Ricoh Corporation Sustainable Development Award**

402

Noah Dabney

Sugar as Knowledge and Power: How Sugars Impact the Growth of Tree Roots

Home School

Sponsor: Eric Beers

## Society for In Vitro Biology Award

402

Noah Dabney

Sugar as Knowledge and Power: How Sugars Impact the Growth of Tree Roots

Home School

Sponsor: Eric Beers

## U. S. Air Force Distinguished Achievement Awards

704

Patrick Thomas

Deciduous Tree Leaf Identification with Artificial Neural Networks

Southwest Virginia Governor's School

Sponsor: Rick Fisher

702

Joseph Nielson

The Effects of Network Media on Congestion

Southwest Virginia Governor's School

Sponsor: Rick Fisher

603

Alex Tomiak

Gaussian Rifle: Relationship Between Distance and Magnetic Stages

George Wythe High School Sponsor: Delores Craig

#### **United States Metric Association Award**

801

Jonathan Tyler Neeble

Hydroelectric Power Generator

Southwest Virginia Governor's School

Sponsor: Matthew Frazier

#### U. S. Stockholm Junior Water Prize

First Place

403

Morgan Fisher

Effect of Water Source on Occurrence of Bacteria and Mycobacterium avium DNA in

Shower Heads

Southwest Virginia Governor's School

Giles High School Sponsor: Krista Stith

Second Place

804

**Grace Turner** 

Purifying Wastewater with Carbon Absorption

Blacksburg High School Sponsor: Benjamin Turner

#### **Virginia Dental Awards**

102

Kadie Hudson

The Genetic Influence of Coagulation on Fly Control in Dairy Cattle

Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

206

Griffin McAvoy

Making the Write Choice: A Notable Difference

Tazewell High School Sponsor: Greg Deskins

301

Julian Elmasry

Revolutionary Blood Test Tube 2.0 Southwest Virginia Governor's School

Sponsor: Jared Brown

403

Morgan Fisher

Effect of Water Source on Occurrence of Bacteria and Mycobacterium avium DNA in

Shower Heads

Southwest Virginia Governor's School,

Giles High School Sponsor: Krista Stith

503

Savanna Lumpkin

Swim Caps: Latex vs. Silicone

Galax High School

Sponsor: Trace Lumpkin

603

Alex Tomiak

Gaussian Rifle: Relationship Between Distance and Magnetic Stages

George Wythe High School Sponsor: Delores Craig

704

Patrick Thomas

Deciduous Tree Leaf Identification with Artificial Neural Networks

Southwest Virginia Governor's School

Sponsor: Rick Fisher

802

Isaac Payne

Aerodynamic Camper Device

Southwest Virginia Governor's School

Sponsor: Greg Riffe

## **Virginia Dental Grand Award**

801

Jonathan Tyler Neeble

Hydroelectric Power Generator

Southwest Virginia Governor's School

Sponsor: Matthew Frazier

# Virginia Lakes and Watersheds Association Award

401

Leah Bianchi

Metagenomics Analysis of Phosphate Accumulating Microbial Consortium

Blacksburg High School Sponsor: Katharine Davis

## Yale Science and Engineering Association Award

704

Patrick Thomas

Deciduous Tree Leaf Identification with Artificial Neural Networks

Southwest Virginia Governor's School

Sponsor: Rick Fisher

## **Emory and Henry Scholarship**

302

Stewart Merdian III

Biomechanics of Pitching
Galax High School

Sponsor: Patti Merdian

# **New River Community College Scholarship**

703

Catherine Shaffer

Usability of Mobile Applications to Control Interior Lighting

Blacksburg High School

Sponsor: Katharine Davis

# **Wytheville Community College Scholarship**

301

Julian Elmasry

Revolutionary Blood Test Tube 2.0

Southwest Virginia Governor's School

Sponsor: Jared Brown