

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

AWARDS BY PROJECT

102

Kadie Hudson

The Genetic Influence of Coagulation on Fly Control in Dairy Cattle

Southwest Virginia Governor's School

Sponsor: Rebecca Phillips

Virginia State Science and Engineering Fair Delegate

Animal Sciences – First Place, Senior Division

American Society of Mammalogists Award

Intel Science Talent Search

Radford University Sigma Xi Chapter Distinguished Award in Science

Virginia Dental 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

Grand Award Winner

Virginia State Science and Engineering Fair Delegate

Animal Sciences – Second Place, Senior Division

American Chemical Society, Northeastern Tennessee Section Award – First Place

Arizona State University Walton Sustainability Solutions Initiatives

Association of Women Geoscientists Award

Genius Olympiad Award

Mount Tabor Ruritan Club Award

Radford University Sigma Xi Chapter Distinguished Award in Science

203

Skylar Johnston

How Qualities of Urban Areas Affect Adoption Rates in Animal Shelters

Southwest Virginia Governor's School

Sponsor: Sherry Pugh

Behavioral and Social Sciences – Second Place, Senior Division

American Society of Mammalogists Award

205

Elizabeth King

The Effects of Rearing Style on Negativism in Teenagers

Southwest Virginia Governor's School

Sponsor: Krista Stith
Behavioral and Social Sciences – Third Place, Senior Division

206
Griffin McAvoy
Making the Write Choice: A Notable Difference
Tazewell High School
Sponsor: Greg Deskins
Virginia State Science and Engineering Fair Delegate
Behavioral and Social Sciences – First Place, Senior Division
Virginia Dental Award

209
Lucas White
Sodas: “To Drink or Not to Drink”
Richlands High School
Sponsor: Melissa Addison
Behavioral and Social Sciences – Honorable Mention
Mount Tabor Ruritan Club Award

301
Julian Elmasry
Revolutionary Blood Test Tube 2.0
Southwest Virginia Governor’s School
Sponsor: Jared Brown
Grand Award Winner
Virginia State Science and Engineering Fair Delegate
Biomedical and Health Sciences; Biomedical Engineering; Computational Biology
and Bioinformatics – First Place, Senior Division
American Red Cross Award
ASM Education Foundation Award
Virginia Dental Award
Wytheville Community College Scholarship

302
Stewart Merdian III
Biomechanics of Pitching
Galax High School
Sponsor: Patti Merdian
Emory and Henry Scholarship

303
Carly Porter
Acceptance of Fecal Transplant Therapy
Southwest Virginia Governor’s School
Sponsor: Rebecca Phillips

Virginia State Science and Engineering Fair Delegate
Biomedical and Health Sciences; Biomedical Engineering; Computational Biology
and Bioinformatics – Third Place, Senior Division
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
Intel Science Talent Search

306

Emma Stowe and Emma Strickland
Can We Build a Bone? BMP-2 Delivery for
Osteoblastic Differentiation
Blacksburg High School
Sponsor: Katharine Davis
Virginia State Science and Engineering Fair Delegate
Biomedical and Health Sciences; Biomedical Engineering; Computational Biology
and Bioinformatics – Second Place, Senior Division
Biomedical Engineering Award – Virginia Tech

401

Leah Bianchi
Metagenomics Analysis of Phosphate Accumulating Microbial Consortium
Blacksburg High School
Sponsor: Katharine Davis
Virginia State Science and Engineering Fair Delegate
Cellular and Molecular Biology; Microbiology; Plant Sciences – Second Place,
Senior Division
Genius Olympiad Award
Virginia Lakes and Watersheds Association Award

402

Noah Dabney
Sugar as Knowledge and Power: How Sugars Impact the Growth of Tree Roots
Home School
Sponsor: Eric Beers
Virginia State Science and Engineering Fair Delegate
Cellular and Molecular Biology; Microbiology; Plant Sciences – Third Place,
Senior Division
American Chemical Society, Northeastern Tennessee Section Award – Second
Place
Intel Science Talent Search

**Ricoh Corporation Sustainable Development Award
Society for In Vitro Biology Award**

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

Grand Award Winner Alternate

Virginia State Science and Engineering Fair Delegate

Cellular and Molecular Biology; Microbiology; Plant Sciences – First Place, Senior Division

American Association of University Women Award

U. S. Stockholm Junior Water Prize – First Place

Virginia Dental Award

404

Taya Scott

Cell Migration Under an Applied Electric Field

Galax High School

Sponsor: Carmen Scott

American Association of University Women Award

405

Sarah Turner and Courtney Stone

The Effectiveness of PCR Testing to Identify Clavibacter Michigenesis

Southwest Virginia Governor's School

Sponsor: Krista Stith

Cellular and Molecular Biology; Microbiology; Plant Sciences – Honorable Mention

501

D. Jacob Clary and Wesley Meredith

Electronic Wristbands That Alarm When Separated

Southwest Virginia Governor's School

Sponsor: Jerri England

Virginia State Science and Engineering Fair Delegate

Chemistry; Materials Science – First Place, Senior Division

502

Alexander E. Dunford

Detection of Nitrate and Nitrite in a Solution Through Electrochemical Cyclic Voltammetry

Southwest Virginia Governor's School

Sponsor: Jared Brown

**Chemistry; Materials Science – Third Place, Senior Division
American Chemical Society, Virginia Blue Ridge Section Award**

503

Savanna Lumpkin

Swim Caps: Latex vs. Silicone

Galax High School

Sponsor: Trace Lumpkin

**Chemistry; Materials Science – Second Place, Senior Division
Virginia Dental Award**

601

Canaan Addison and Chace Collins

"Going Bananas With Coal!" A Fossil Fuel/

Biofuel Energy

Richlands High School

Sponsor: Melissa Addison

**Earth and Environmental Sciences, Physics and Astronomy – Second Place,
Senior Division
I-SWEEEP Award**

602

Brayden Barnes

*The Emission of Particles 1.0, 5.0, and 10.0 Microns (μm) in Diameter from Machines in
a High School Machine Shop*

Southwest Virginia Governor's School

Sponsor: Matthew Frazier

**Earth and Environmental Sciences, Physics and Astronomy – Third Place, Senior
Division
Office of Naval Research Award**

603

Alex Tomiak

Gaussian Rifle: Relationship Between Distance and Magnetic Stages

George Wythe High School

Sponsor: Delores Craig

**Virginia State Science and Engineering Fair Delegate
Earth and Environmental Sciences, Physics and Astronomy – First Place, Senior
Division
U. S. Air Force Distinguished Achievement Award
Virginia Dental Award**

702

Joseph Nielson

The Effects of Network Media on Congestion

Southwest Virginia Governor's School

Sponsor: Rick Fisher

***Embedded Systems; Robotics and Intelligent Machines; Systems Software –
Second Place, Senior Division***

Mu Alpha Theta Award

U. S. Air Force Distinguished Achievement Award

703

Catherine Shaffer

Usability of Mobile Applications to

Control Interior Lighting

Blacksburg High School

Sponsor: Katharine Davis

***Embedded Systems; Robotics and Intelligent Machines; Systems Software –
Third Place, Senior Division***

New River Community College Scholarship

704

Patrick Thomas

Deciduous Tree Leaf Identification with Artificial Neural Networks

Southwest Virginia Governor's School

Sponsor: Rick Fisher

Virginia State Science and Engineering Fair Delegate

***Embedded Systems; Robotics and Intelligent Machines; Systems Software – First
Place, Senior Division***

Intel Excellence in Computer Science Award

U. S. Air Force Distinguished Achievement Award

Virginia Dental Award

Yale Science and Engineering Association Award

705

Nicholas Wyers

3D Modeling of Historic Points in France

Blacksburg High School

Sponsor: Katharine Davis

***Embedded Systems; Robotics and Intelligent Machines; Systems Software –
Honorable Mention***

801

Jonathan Tyler Neeble

Hydroelectric Power Generator

Southwest Virginia Governor's School

Sponsor: Matthew Frazier

Virginia State Science and Engineering Fair Delegate

Engineering Mechanics; Environmental Engineering – Second Place, Senior

Division

Arizona State University Walton Sustainability Solutions Initiatives

NASA Earth System Science Award

United States Metric Association Award

Virginia Dental Grand Award

802

Isaac Payne

Aerodynamic Camper Device

Southwest Virginia Governor's School

Sponsor: Greg Riffe

Virginia State Science and Engineering Fair Delegate

Engineering Mechanics; Environmental Engineering – First Place, Senior Division

Intel Science Talent Search

Manufacturing Technology Center Award

National Oceanic and Atmospheric Administration Award

Virginia Dental Award

804

Grace Turner

Purifying Wastewater with Carbon Absorption

Blacksburg High School

Sponsor: Benjamin Turner

Engineering Mechanics; Environmental Engineering – Third Place, Senior Division

American Meteorological Society Award

Office of Naval Research Award

U. S. Stockholm Junior Water Prize – Second Place

1101

Cassidy Boyles

Plant Thirst

Galax High School

Sponsor: Kathryn Pakkidis

Animal Sciences, Plant Sciences – First Place, Junior Division

1201

Andrew Crowder and Julia Crowder

Does Music Effect Short Term Memory?

Wallace Middle School

Sponsor: Shannon Mutter

Behavioral and Social Sciences – Second Place, Junior Division

1202

Evan Nuckolls

Does Music Affect Memory?

Galax High School
Sponsor: Kathryn Pakkidis
Behavioral and Social Sciences – Third Place, Junior Division

1203
Madison Vanover
Looks Can Be Deceiving- Continuation
Tazewell Middle School
Sponsor: Katherine Claytor
Behavioral and Social Sciences – First Place, Junior Division
American Psychological Association Award

1301
Jonce Culbertson
The AA Battery Challenge
Richlands Middle School
Sponsor: Kim Lawson
Chemistry – Third Place, Junior Division
Mount Tabor Ruritan Club Award

1302
Sarah Elmasry
The Effect of Cleaner on Graffiti
Galax High School
Sponsor: Kathryn Pakkidis
Chemistry – Second Place, Junior Division
Broadcom Masters Award

1303
Christopher Lockhart
I Scream for Ice Cream
Richlands Middle School
Sponsor: Kim Lawson
Chemistry – First Place, Junior Division
American Chemical Society, Northeastern Tennessee Section Award – Third Place

1401
Ellie Currie
Human vs. Savings Catcher
Wallace Middle School
Sponsor: Shannon Mutter
Earth and Environmental Sciences; Mathematics – First Place, Junior Division
Mount Tabor Ruritan Club Award

1402

Caleigh Street

Meteorology vs. Almanac

Richlands Middle School

Sponsor: Kim Lawson

Earth and Environmental Sciences; Mathematics – Second Place, Junior Division

American Meteorological Society Award

National Weather Service Award

Office of Naval Research Award

1501

Nick Grande and Zach Smith

Deflate Gate- The Science Behind It

Wallace Middle School

Sponsor: Shannon Mutter

Engineering Mechanics; Physics and Astronomy – First Place, Junior Division

1502

Anna Haas

The Effects of Different Types of Flaps on Wing Lift

Auburn Middle School

Sponsor: Carola Haas

Engineering Mechanics; Physics and Astronomy – Second Place, Junior Division

Broadcom Masters Award

Office of Naval Research Award

1601

Meredith Dabney

A Burning Question: Which Friction-Based Fire

Starter is the Most Effective?

Classical Conversations

Sponsor: Phyllis Newbill

Materials Science – Second Place, Junior Division

Broadcom Masters Award

1602

Aidan Sparling

The Strength of Recycling

Richlands Middle School

Sponsor: Kim Lawson

Materials Science – First Place, Junior Division

Broadcom Masters Award

1701

Carson Noel

Got Germs II

Tazewell Middle School

Sponsor: Katherine Claytor
Microbiology – First Place, Junior Division