

## **Senior Grand Awards**

**Amie Gilligan**, Sound Off!

**Tony Oblen**, Dead Zones: How to Save the Chesapeake

## **Junior Grand Awards**

**Hailey Dodges**, The Greater Gear

**Alex Ragland**, Aeroponics vs. Hydroponics

## **Category Awards**

### **Animal Science**

#### **Junior**

First Place, Ellie Brookbank, Homemade Fruit Fly Traps

Second Place, Mary Kate Morgan, Ant Circles

Honorable Mention, Elizabeth Fazio, Population...Explosion?

### **Behavioral and Social Sciences**

#### **Junior**

First Place, Molly McGowan, Personalities on Parade

Second Place, Katelyn Mattingly, Double-Take

Honorable Mention, Amelia Kracinovich, What Factors Affect, Seventh Graders the Most?

Honorable Mention, Keith Oliver, Remember the Details

### **Biochemistry**

#### **Senior**

First Place, Tony Oblen, Dead Zones: How to Save the Chesapeake?

#### **Junior**

First Place, Hannah Bear, What Type of Peanut Contains the Most Energy?

### **Cellular and Molecular Biology**

#### **Senior**

First Place, Aparna Sajja, Effects of Oxidized Lipids on RBC's

### **Chemistry**

#### **Senior**

First Place, David Galanie, Flash and No Ash

Second Place, David Rodriguez, Don't Get Between Me and My Gasoline!

Honorable Mention, Claire Weber, The Baghdad Battery

#### **Junior**

First Place, Elizabeth LaFave, Citrus Certainty

Second Place, Emma Frank, Flaming Ink

Honorable Mention, Sara Moore, Law & Order: Ransom Note Mystery

Honorable Mention, Preston Dabbs, Effect of Various Light on Dental Material

### **Computer Science**

**Junior** First Place, Andrew Herbig, Internet Browser?

### **Earth and Planetary Science**

**Senior**

First Place, Rachel Bishop, Predicting the Weather

**Junior**

First Place, Alina Myers, Bands of Time – Cycles of Erosion

Second Place, Hannah Raley, Effect of Sunlight on Rubber

**Engineering: Materials and Bioengineering****Senior**

First Place, Amie Gilligan, Sound Off!

Second Place, Melissa Boughton, Swimsuit Science

Honorable Mention, Austin Searles, Cove Point Bridge/Tunnel

Honorable Mention, James Moderski, Paintin' the Town

**Junior**

First Place, Sarah Orr, The Heat is On! Comparing Insulation

Second Place, Lawrence Forte, Which Bridge is Stronger?

Honorable Mention, Allison Johnson, When Does Size Really Matter?

**Engineering: Electrical and Mechanical****Senior**

First Place, Julie Walker, What a MES – Mars Environmental Simulator II

Second Place, Danielle Wilkin, Truth or Dare

**Junior**

First Place, Hailey Dodges, The Greater Gear

Second Place, Lexi Glockner, Lifting Heavy Weights with Pulleys

Honorable Mention, Jeff Wilhelm, High on Hovercrafts

Honorable Mention, Madison Taylor, Interfering with My Signal

**Energy and Transportation****Senior**

First Place, Andrew Rohland, Harnessing the Sun's Rays

Second Place, Bobby Carlson, Hydrogen Fuel Cell Power

Second Place, Michael Stepp, Cleaner Car = Better Mileage

Honorable Mention, Robert Holland, Energy from Electromagnetic Radiation

**Junior**

First Place, Kyle Bergeron, Quest for Best Keel

Second Place, Amber Winslow, Beat the Heat

Honorable Mention, Christopher Cullison, Hull Design and Hydrodynamics

**Environmental Science****Senior**

First Place, Shefali Shah, The Big, The Bad, and the Small

Second Place, Alison Devine, Displacement of Soil and Sediments

Honorable Mention, Caitlan Webster, How Low Can It Go? A Study of Buffer Capacity.

**Junior**

First Place, Kelles Gordge, Global Meltdown!

Second Place, Jacob Cullison, Which Toilet Paper Breaks Down Easiest?

Honorable Mention, Kenneth Gill, Great Green Grass

Honorable Mention, Sharlene Demehri, The Heat is On!

Honorable Mention, Claire Reining, Patuxent River Water Quality

## **Environmental Management**

### **Senior**

First Place, Elizabeth Thompson, Eroding Farm Fields

Second Place, Darren Reed, Energy Savers

### **Junior**

First Place, Kathryn Jahn, Shhh!!! Don't Scare the Fish!

Second Place, Madeleine Taylor, Every Drop Counts

## **Mathematical Sciences**

### **Senior**

First Place, Elizabeth Davis, Is it Really in the Cards?

Second Place, Kristi Engel, Black Hole Discoveries

### **Junior**

First Place, Benjamin Allen, What Makes it Swish?

Second Place, Ryan Morgan, Statistics of Weather Accuracy

## **Medicine and Health Science**

### **Senior**

First Place, Justine Yu, A New Angioplastic Device with Smart Materials

Second Place, Jessica Howard, Which Drink is Worse for Your Teeth?

### **Junior**

First Place, Philip Scassero, Stomach Acid Solution – A Sequel

Second Place, Sara Nelson, Which Product Neutralizes the Most Acid?

Honorable Mention, Nicholas Jones, How Far Can a Band-Aid Go?

## **Microbiology**

### **Senior**

First Place, Morgan Hoey, The Dirt on Antibacterials

### **Junior**

First Place, Courtney Springer, Yeastly Beasties

## **Physics and Astronomy**

### **Senior**

First Place, Lauren Jones, Jumping to Conclusions

Honorable Mention, Alexandra Moderski, Jump? ...What Honorable Mention, David Mason, Propeller Pitch

### **Junior**

First Place, Todd Roberts, Wind Skating

First Place, Matthew Johnson, Electromagnet Shapes

Second Place, Jessica Miles, Rocket Stability: Exploring Various Stability Devices

Honorable Mention, Michael Lopez, Reflecting Sound

Honorable Mention, Daniel Morris, Laser Reflection

## **Plant Science**

### **Senior**

First Place, Shane Pasch, Plants and Music

Honorable Mention, Jennifer Denham, Do Different Types of Music Effect Plant Growth?

### **Junior**

First Place, Alex Ragland, Aeroponics vs. Hydroponics

Second Place, Sonia Lee, Growth of Bean Sprouts

Honorable Mention, Elizabeth Schachterle, Is Grass Greener on the Other Side?

### **Team Awards**

First Place, Kristen Dronenburg and Bethany Schaeffer, Punching Out Won't Hurt So Bad

Second Place, Kaitlyn Lindsay and Margaret Waldron, How Will Different Liquids Effect Plant Growth?

Second Place, Kaitlyn Fernald and Tiffany Kennedy, Are Water Bottles Really Safe?

## **Special Awards:**

### **Enrichment Awards**

Best Use of Inexpensive Materials, Mary Kate Morgan, Ant Circles

Best Presentation, Alex Ragland, Aeroponics vs. Hydroponics

Best Correlation of Data, Philip Scassero, Stomach Acid Solution – A Sequel

Mike Moses Award for Best Teaching Aid, Kelles Gordge, Global Meltdown!

### **The Patuxent Partnership**

Best Aeronautics/Aerospace Project Award, David Mason, Propeller Pitch

Best Electrical/Electronics Project Award, Bobby Carlson, Hydrogen Fuel Cell Power

Best Environmental/Biological Project Award, Shefali Shah, The Big, the Bad, and the Small

Best Physical/Life-Sciences Project Award, Lauren Jones, Jumping to Conclusions

### **Wyle Laboratories**

Senior First Place, David Mason, Propeller Pitch

Senior Second Place, Kristina Dronenburg and Bethany Schaeffer, Punching Out Won't Hurt That Bad

Junior First Place, Jessica Miles, Rocket Stability: Exploring Various Stability Devices

Junior Second Place, Max Gaston, Wing Span...Is Bigger Better?

### **Naval Science Award**

Senior Award, James Moderski, Paintin' the Town

Senior Award, Amie Gilligan, Sound Off!

Junior Award, Christopher Cullison, Hull Design and Hydrodynamics

Junior Award, Sara Moore, Law & Order: Ransom Note Mystery

Junior Award, Elizabeth Schachterle, Is Grass Greener on the Other Side?

Junior Award, Elizabeth Fazio, Population...Explosion!

### **St. Mary's Soil Conservation District**

Senior First Place, Elizabeth Thompson, Eroding Farm Fields

Junior First Place, Claire Reining, Patuxent River Water Quality

### **Southern Maryland Resource Conservation and Development Board, Inc.**

Senior First Place, Tony Oblen, Dead Zones: How to Save the Chesapeake Bay

Senior Second Place, Alison Devine, The Displacement of Soils and Sediments

Junior First Place, Madeleine Taylor, Every Drop Counts

Junior Second Place, Alex Ragland, Aeroponics vs. Hydroponics

### **Town Creek Garden Club**

Senior First Place, Shane Pasch, Plants and Music

Junior First Place, Elizabeth Schachterle, Is Grass Greener on the Other Side?

### **INCOSE**

Senior First Place, Julie Walker, What A MES (Mars Environmental Simulator II)

Senior Second Place, Andrew Rohland, Harnessing the Sun's Rays

Senior Awards, Amie Gilligan, Sound Off!, Justine Yu, A New Angioplastic Device with Smart Materials

Junior First Place, Kelles Gordge, Global Meltdown!

Junior Second Place, Alex Ragland, Aeroponics vs. Hydrodynamics

Junior Awards, Christina Labows, Stick to it!, Matthew Johnson, Electromagnetic Shapes

### **Southern Maryland Audubon Society**

Senior First Place, Madeleine Taylor, Every Drop Counts

Junior First Place, Shefali Shah, The Big, the Bad, and the Small

### **St. Mary's Hospital Awards**

Justine Yu, A New Angioplastic Device with Smart Materials

David Galanie, Flash and No Ash

Tony Oblen, Dead Zones: How to Save the Chesapeake?

Morgan Hoey, The Dirt on Antibacterials

Aparna Sajja, Effects of Oxidized Lipids on RBCs

Philip Scassero, Stomach Acid Solution - A Sequel

Elizabeth LaFave, Citrus Certainty

Hannah Bear, What Types of Peanut Contains the Most Energy?

Courtney Springer, Yeasty Beasties

### **Southern Maryland Realtor's Association**

Senior Scholarship Award, Andrew Rohland, Harnessing the Sun's Rays

### **St. Mary's College of Maryland**

Senior Scholarship Award, Julie Walker, What a MES Mars Environmental Simulator II

### **College of Southern Maryland, Sparkle Awards**

Junior Division:

Alex Ragland, Aeroponics vs. Hydroponics

Nicholas Jones, How Far Can a Band-Aid Go?

Kenneth Gill, Great Green Grass

Kathryn Jahn, Shhh!!!! Don't Scare the Fish!

Laura Pagliarulo, Does Colored Light Affect Plant Growth?

Jessica Miles, Rocket Stability: Exploring Various Stability Devices

Emma Frank, Flaming Ink

Senior Division:

Apama Sajja, Effects of Oxidized Lipids on RBCs

Bobby Carlson, Hydrogen Fuel Cell Power

Jennifer Denham, Do Different Types of Music Effect Plant Growth?

David Mason, Propeller Pitch

Courtney Sparr, Water Refraction

**St. Mary's County Amateur Radio Station Award**

Andrew Herbig Internet Browser

**Wastewater Operator's Association**

Junior Division - Kelles Gordge, Global Meltdown!

Senior Division - Elizabeth Thompson: Eroding Farm Fields

**Bytes for Bits Junior Computer Science Award**

Andrew Herbig,