

UAB-CORD CARSEF Winners

March 9, 2013

CARSEF Top Honors & Intel Winners

Will Pannell

10th Grade

Altamont School

Project Title – *Exploring Magnetohydrodynamic Propulsion: Using Magnetohydrodynamic Propulsion to Propel a Vessel*

Payton Walker

12th Grade

Alabama School of Fine Arts

Project Title – *Stay "Kinected": A Home Monitoring System Combining Safety and Comfort*

Jessica Maya

12th Grade

Alabama School of Fine Arts

Project Title – *The Use of Metabolic Profiling to Diagnose Obesity in Mice*

Lakshmi Raju

12th Grade

Alabama School of Fine Arts

Project Title – *A Novel Pulsed LED Excitation Device for Optical Mapping of Transmembrane Potential in Cardiac Muscle*

CARSEF Category Winners

Senior Division

Behavioral & Social Science

1st Place

Priya Shah
10th Grade

Alabama School of Fine Arts

Project Title – *An Examination of the Factors that Effect Common Misconceptions of Obesity*

2nd Place

Amy Strong
11th Grade

Jefferson County International Baccalaureate

Project Title – *The Effects of Technology on Memory*

3rd Place

Keenah Mays
10th Grade

Altamont School

Project Title – *How do Tragedies Affect a City's Crime Rate?*

Honorable Mention

Elizabeth Brown
11th Grade

Altamont School

Project Title – *Autoshaping in the American Toad (Bufo americanus): The Classical Conditioning Paradigm with Light as the Conditional Stimulus*

Honorable Mention

Olivia Jones
10th Grade

Altamont School

Project Title – *Loop the Stroop: Warped Words and the Stroop Effect*

Honorable Mention

Larissa Ramos
10th Grade

Pell City High School

Project Title – *Suggestive Memory: Sight vs. Hearing*

Biology

1st Place

Mihir Limdi

9th Grade

Altamont School

Project Title – *Influence of Interleukin-8 and proline-glycine-proline on Macrophage Phenotype*

2nd Place

Hunter Hollis

12th Grade

Jefferson County International Bacculaureate

Project Title – *Attack Behavior of Solenopsis invicta Against the Influence of Salvia officinalis*

3rd Place

Zhichun Li

12th Grade

Alabama School of Fine Arts

Project Title – *Protein Kinase C (PKC) Mediated Kainate-Induced Glycine Receptor Endocytosis*

Honorable Mention

Laure Bender

11th Grade

Altamont School

Project Title – *Expression of Na⁺/K⁺ Regulatory Proteins in the Brain*

Honorable Mention

David Gamlin

11th Grade

Jefferson County International Bacculaureate

Project Title – *The Effects of pH in Food Acid on the Erosion of Teeth*

Honorable Mention

Payton Davis, Allyson Bailes and Jay Rucks

12th Grade

Hewitt Trussville High School

Project Title – *An Alternative Method for Creating a Waste Treatment System*

Chemistry

1st Place

Cailan Bevel

9th Grade

Thompson High School

Project Title – *Investigation of Anti-Corrosive Agents for Aluminum*

2nd Place

Dylan Fullilove

9th Grade

Altamont School

Project Title – *SPF: Appearance of Reality?*

3rd Place

Kimmy Wise

10th Grade

Jefferson County International Bacculaureate

Project Title – *The Effects of Magnesium of Foxfire Fungus*

Honorable Mention

Alexandria Hawkins

11th Grade

Woodlawn High School

Project Title – *Flavor that Food!*

Honorable Mention

Katherine Young

10th Grade

Altamont School

Project Title – *The Use of Naturally Occurring Lactose as a Beverage Sweetener*

Honorable Mention

Charles Lampman

10th Grade

Pell City High School

Project Title – *Dissolution of Vitamins*

Energy & Transportation

1st Place

Will Pannell

10th Grade

Altamont School

Project Title – *Exploring Magnetohydrodynamic Propulsion: Using Magnetohydrodynamic Propulsion to Propel a Vessel*

2nd Place

Adam Smith

11th Grade

Pell City High School

Project Title – *Wind Tunnel vs. Actual Flight Results for Paper Airplanes*

3rd Place

Kaylea Lott

10th Grade

Pell City High School

Project Title – *Magnetic Levitating Train*

Honorable Mention

Caroline Borden and Jaylan Jacobs

9th Grade

Indian Springs School

Project title – *Excrement to Eggs*

Engineering

1st Place

Muna Al-SafarJalani

12th Grade

Alabama School of Fine Arts

Project title – *Optimizing Green Concrete Strength and Cost*

2nd Place

William Tang

9th Grade

Altamont School

Project Title – *Noise Barrier Design Based on Sound Spectrum Analysis*

3rd Place

Darby Franklin and Bella Goubeaux

12th Grade

Hewitt Trussville High School

Project Title – *Sip and Puff Robotic Arm Exoskeleton for a Quadriplegic*

Honorable Mention

Lauren Luker

10th Grade

Pell City High School

Project Title – *M & M Sorter*

Honorable Mention

Chase Tollison

11th Grade

Pell City High School

Project Title – *Which Type of Bridge Will Withstand the Most Weight Capacity*

Honorable Mention

Andrew Cox, Jaden Cowan and Taylor Allen

12th Grade

Hewitt Trussville High School

Project Title – *A 21st Century Modification to the Insulin Pump*

Environmental & Earth Science

1st Place

Alexander Nelson

12th Grade

Alabama School of Fine Arts

Project Title – *The Effects of Endomycorrhizal Fungi on Growing a Health Lawn*

2nd Place

Quinn McCormick

9th Grade

Jefferson County International Bacculaureate

Project Title – *The Effect of Bisphenol A (BPA) on Artemia Salina Survival*

3rd Place

Jack Vogt

12th Grade

Alabama School of Fine Arts

Project Title – *The Effect of Soil Contaminants on the Growth of Wisconsin Fast Plants*

Honorable Mention

Alexandria VanDall

10th Grade

Pell City High School

Project Title – *The Effects of E.Coli on Warm Water Fish Species*

Honorable Mention

Margaret Hunt

11th Grade

Altamont School

Project Title – *The Effectiveness of Water Purification Methods*

Honorable Mention

Justin Nail

11th Grade

Jefferson County International Bacculaureate

Project Title – *Hydroponics: Using Ionic Compounds in Place of Soil to Enhance Radish Seedling Growth*

Mathematics & Computer Science

1st Place

Payton Walker

12th Grade

Alabama School of Fine Arts

Project Title – *Stay “Kinected”: A Home Monitoring System Combining Safety and Comfort*

2nd Place

Jefferson Zou

12th Grade

Alabama School of Fine Arts

Project Title – *Numerical Studies of Existence for A Singular Boundary Value Problem of Ordinary Differential Equations*

3rd Place

Casey Barnette

12th Grade

Alabama School of Fine Arts

Project Title – *CLIP: Learning Language for Beginning Programmers*

Honorable Mention

Jonathan Hurowitz

11th Grade

Altamont School

Project Title – *Will You Win? A Look Into Lotteries*

Honorable Mention

Nate Tumlin

10th Grade

Alabama School of Fine Arts

Project Title – *Using Battling Virtual Robots to Teach the Basics of Artificial Intelligence and Programming*

Medicine & Health Science

1st Place

Jessica Maya

12th Grade

Alabama School of Fine Arts

Project Title – *The Use of Metabolic Profiling to Diagnose Obesity in Mice*

2nd Place

Karyn Ding

12th Grade

Alabama School of Fine Arts

Project Title – *Targeting the Dual Survival Signaling Pathway in Pancreatic Cancer Cells*

3rd Place

Ramsha Farrukh

12th Grade

Alabama School of Fine Arts

Project Title – *O-GlcNAc Expression is Reduced in Alzheimer's Disease Post Mortem Human Hippocampus*

Honorable Mention

Karan Jani

12th Grade

Alabama School of Fine Arts

Project Title – *Covalent Modification of Melphalen Increases its Anticancer Effects*

Honorable Mention

Tara Market

11th Grade

Indian Springs School

Project Title – *Gliomas' Temozolomide Resistance Can Be Overcome With Cytochrome C Oxidase Inhibitors*

Honorable Mention

Yuyang Ye

11th Grade

Vestavia Hills High School

Project Title – *The Role of Alcohol on Connexin43 Expression*

Physical Science

1st Place

Lakshmi Raju

12th Grade

Alabama School of Fine Arts

Project Title – *A Novel Pulsed LED Excitation Device for Optical Mapping of Transmembrane Potential in Cardiac Muscle*

2nd Place

Deanna Abrams

12th Grade

Alabama School of Fine Arts

Project Title – *A Dynamical Systems Analysis of Monodisperse Aerosol Coagulation Model*

3rd Place

Jasmin Revanna

10th Grade

Alabama School of Fine Arts

Project Title – *Using A Digital Camera to Measure Pollution*

Honorable Mention

Ashlyn Perrigin

11th Grade

Pell City High School

Project Title – *Variable Luminosity of Algol*

Honorable Mention

Hanna Noah

10th Grade

Jefferson County International Caccalaurate

Project Title – *Average Levels of Microwave Emissions From Cell Phones and Microwave Ovens*

Honorable Mention

Wesley Biddie

11th Grade

Evangel Christian School

Project Title – *Wireless Electricity Transfer Through Various Materials*

CARSEF Category Winners

Junior Division

Behavioral & Social Sciences

1st Place

Max Klapow

8th Grade

Indian Springs School

Project Title – *Down The Rabbit Hole*

2nd Place

Guru Arjun

8th Grade

Altamont School

Project Title – *A Randomized Placebo-Controlled Study of the Efficacy of an Ultrasonic Dog Deterrent*

3rd Place

Aishah Duha

6th Grade

Islamic Academy of Alabama

Project Title – *Teaching, Are You Doing It Right?*

Honorable Mention

Isabel Coleman

7th Grade

Altamont School

Project Title – *Addicted to Technology?*

Honorable Mention

Allison Epperson

8th Grade

O.D. Duran Junior High School

Project Title – *Does the Color of Text Affect Someone's Ability to Retain Information*

Honorable Mention

Waleed Abdelqader

6th Grade

Islamic Academy of Alabama

Project Title – *Can Our Eyes Trick Our Taste Buds?*

Biology

1st Place

Aaron Miller

7th Grade

Altamont School

Project Title – *Regeneration of Brown Planaria in Alabama River Water*

2nd Place

Mariah Cobbin

8th Grade

W.J. Christian School

Project Title – Don't Do Da Dew!

3rd Place

Halle Bakir

7th Grade

Altamont School

Project Title – *Birdseed Showdown*

Honorable Mention

Malik El-Husari

7th Grade

Islamic Academy of Alabama

Project Title – *Nature vs. Bleach*

Honorable Mention

Jackson White

8th Grade

Indian Springs School

Project Title – *Fish Trapping*

Chemistry

1st Place

Imani Richardson

8th Grade

Altamont School

Project Title – *Is Premium Worth the Price? An Analysis of Vitamin C Concentration in Orange Juice*

2nd Place

Vivek Sasse

6th Grade

Altamont School

Project Title – *Hydrolysis Catalysts*

3rd Place

Dasia Primus

7th Grade

Phillips Academy

Project Title – *How Sweet!*

Honorable Mention

Kelci Marable

8th Grade

Holy Family Catholic Academy

Project Title – *The Magnificent Glowing Powers of Sodium*

Honorable Mention

Grace Spencer

5th Grade

Our Lady of the Valley

Project Title – *Let it Glow*

Honorable Mention

Abbie Brown

5th Grade

Williams Intermediate School

Project Title – *Does the Storage Temperature Affect the Amount of Popcorn?*

Energy and Transportation

1st Place

Ali Carter
8th Grade

Childersburg Middle School

Project Title – *Who Has the Best Brown Energy?*

2nd Place

William Randall
7th Grade

Altamont School

Project Title – *Increasing Electricity Output of Wind Turbine by Adding a Brim*

3rd Place

Hanna Becerra
8th Grade

St. Francis Xavier Catholic School

Project Title – *Use of Enzymes in the Production of Biogas*

Honorable Mention

Samantha Sinak
8th Grade

St. Francis Xavier Catholic School

Project Title – *Waterwheel Efficiencies*

Honorable Mention

Zachary Hamby
7th Grade

Everest Academy

Project Title – *Parachutes: How Slow Can You Go?*

Engineering

1st Place

Ariel Herren
8th Grade

O.D. Duran Junior High School
Project Title – *You're Getting Warmer*

2nd Place

John Simmons
8th Grade
Indian Springs

Project Title – *Auditory Guidance for the Visually Impaired Dog*

3rd Place

Aarthi Namasivayam
8th Grade
Altamont School

Project Title – *Which Materials and Shapes are Most Invisible*

Honorable Mention

Carolyn Clearly
8th Grade
Altamont School

Project Title – *Comparison of Geodesic Domes to Flat Roots*

Honorable Mention

Sydney Calhoun
8th Grade
Altamont School

Project Title – *What is the Safest Playground Surface Material*

Honorable Mention

Josh Evans
8th Grade

O.D. Duran Junior High School
Project Title – *Heat Loss*

Environmental and Earth Sciences

1st Place

Mohammad Hamo

7th Grade

Islamic Academy of Alabama

Project Title – *Water For All*

2nd Place

Derrin Wilson

6th Grade

W.J. Christian School

Project Title – *Does Vitamin C Lead to Plant Growing Spree and the Effect of Vitamin D on Plant Growth*

3rd Place

Wamda Eltoun

6th Grade

Islamic Academy of Alabama

Project Title – *Earth Box vs. Regular Pot*

Honorable Mention

Cameron Brown, Nicholas Adams and Myranda Bell

6th Grade

W.J. Christian School

Project Title – *Plant Hard Grow Hard*

Honorable Mention

Arjun Lakhanpal

8th Grade

Altamont School

Project Title – *The Effect of Moisture on Soil Strength*

Honorable Mention

Truitt Bridgewater

5th Grade

Williams Intermediate School

Project Title – *How Does the Soil Temperature Affect the Germination of a Bean Seed?*

Mathematics & Computer Science

1st Place

Hunter Scott

8th Grade

Altamont School

Project Title – *Comparing Data Types and Mathematical Computation Times on CPUs*

2nd Place

Ashlin Tyler

8th Grade

O.D. Duran Junior High School

Project Title – *Fun or Frustrated?*

Medicine & Health Sciences

1st Place

Nivedita Rao

7th Grade

Altamont School

Project Title – *Vitamins as Antioxidants!*

2nd Place

Danna Rafai

7th Grade

Islamic Academy of Alabama

Project Title – *Sugar Rush*

3rd Place

JaMarcus Ellison and Jarian Lee

8th Grade

W.J. Christian School

Project Title – *Sniff This*

Honorable Mention

Williams Denniston

6th Grade

Altamont School

Project Title – *Where's the Dot? Group Testing for Color Blindness*

Honorable Mention

Lauren Shields and Jackson Shields

8th Grade and 6th Grade

Our Lady of the Valley

Project Title – *Clean Water Solutions for Personal Consumption*

Honorable Mention

Seema Mallon

6th Grade

Islamic Academy of Alabama

Project Title – *Effects of Drinks on Teeth*

Physical Sciences

1st Place

Jason Lucas and Dylan Ebert

7th Grade

Columbiana Middle School

Project Title – *The Physics of Cheating in Baseball*

2nd Place

Will Roberts and Will Morris

6th Grade

Columbiana Middle School

Project Title – *Bombs Away – A Ping Pong Catapult*

3rd Place

Peter Kolar

7th Grade

St. Rose Academy

Project Title – *Rain of Arrows, Distance of Arrows*

Honorable Mention

Ezra Vaughn

5th Grade

Williams International School

Project Title – *Which Fruit Can Produce the Most Electricity?*

Honorable Mention

Kristine Golden

8th Grade

O.D. Duran Junior High School

Project Title – *Does the Same Paint Color on Different Surfaces Appear Warmer Under Incandescent Light Than Fluorescent Light*

Honorable Mention

Mollie Parker

7th Grade

St. Rose Academy

Project Title – *Flame vs. Fabric*