

UAB-CORD CARSEF Winners

March 3, 2012

CARSEF Top Honors & Intel Winners

Oliva Dure

11th Grade

Alabama School of Fine Arts

Project Title – *Brain Plasticity: The Effect of Age (A Three Year Study)*

Ashby Marriott

12th Grade

Alabama School of Fine Arts

Project Title – *Exploring Motion Triggered Audio Permutation in iOS*

Ian Black

9th Grade

Jefferson County International Baccalaureate

Project Title – *Amount of Lift Generated by Different Wine Shapes*

Lakshmi Raju

11th Grade

Alabama School of Fine Arts

Project Title – *Development of a Low Cost Infrared Spectrophotometer and a Matlab Program to Detect Terrestrial and Extraterrestrial Water Vapor*

CARSEF Category Winners

Senior Division

Behavioral & Social Science

1st Place

Arrix Ryce

10th Grade

Jefferson County International Baccalaureate

Project Title – *Memories: Eating, Runnies and Singing on Your Avenue*

2nd Place

Kimmy Wise

9th Grade

Jefferson County International Baccalaureate

Project Title – *The Effects of Being Color Blind on Seeing Optical Illusions*

3rd Place

Kathleen Doran

9th Grade

Jefferson County International Baccalaureate

Project Title – *What is the Effect of Designer Labels on the Number of Items Selected by Consumers?*

Honorable Mention

Kendall Smith

9th Grade

Pell City High School

Project Title – *Are You Smarter than a First Born... Does Birth Order Affect GPA?*

Honorable Mention

Nasma Mekdad

9th Grade

Islamic Academy of Alabama

Project Title – *When Left is Right*

Honorable Mention

Moriah Burbank

12th Grade

Spring Valley School

Project Title – *Examining Effects Caused by Visual and Audio Bullying*

Biology

1st Place

Alisha Patel
11th Grade

The Altamont School

Project Title – *The Effect of Garlic and Tulsi Seed Extract on the Growth of Cells Containing Latent Tuberculosis Genes*

2nd Place

Alexander Arora
11th Grade

Jefferson County International Baccalaureate

Project Title – *Targets of Non-Canonical Notch 1 Signaling Pathway of KLF4 and Expression in Breast Cancer Cells*

3rd Place

Stephon Seward
12th Grade

Parker High School

Project Title – *The Effects of Stimulus Contrast on the Human Visual Cortical Evoked Potential*

Honorable Mention

Danah Mekdad
9th Grade

Islamic Academy of Alabama

Project Title – *Crystal Clear*

Honorable Mention

Trention Weis
11th Grade

Jefferson County International Baccalaureate

Project Title – *The Effects of Antioxidants on the Lifespan of Acheta Domesticus (House Crickets)*

Honorable Mention

Samantha Miller
12th Grade

Alabama School of Fine Arts

Project Title – *Comparing Plasma Cortisol Levels and Heart Rates of Barrel Racing Horses*

Chemistry

1st Place

Courtney Fancher
12th Grade

Alabama School of Fine Arts

Project Title – *The Effect of Theobromine in Dark Chocolate on Reducing Tooth Erosion*

2nd Place

Supraja Sridhar
11th Grade

Jefferson County International Bacculaureate

Project Title – *The Effect of the Hormone Recombinant Bovine Somatotropin (rBST) on the Protein Content of Skim, 1%, 2% and Whole Milk*

3rd Place

Breanna Johnson, Jykiria Zimmerman and Zana Wallace
11th and 12th Grade

Talladega County Central High School

Project Title – *Crime Scene Chemistry – The Cool Blue Light of Luminol*

Honorable Mention

Gi yun Lee and David Namkoong
11th and 12th Grade

Indian Springs and Oak Mountain High School

Project Title – *If You Want to See, Glutathione It Should Be*

Honorable Mention

Victoria String Fellow
12th Grade

Jefferson County International Bacculaureate

Project Title – *The Effect of Actinomycin D and Ethidium Bromide on the Physical Properties of Calf Thymus DNA*

Honorable Mention

Abdallah Nassar
10th Grade

Ramsay High School

Project Title – *Does the Pollution in Water Get Worse as it Gets Deeper*

Energy & Transportation

1st Place

Larry Patterson
12th Grade

Pell City High School

Project Title – *Coke Can Stirling Engine*

2nd Place

Ayah Eltoum
9th Grade

Islamic Academy of Alabama
Project Title – *Green Gold*

3rd Place

Kevin Hubbard
9th Grade

Jefferson County International Bacculaureate
Project Title – *Effect of Focused Light on the Energy Output of a Solar Panel*

Honorable Mention

Esme' Shields
10th Grade

Jefferson County International Bacculaureate
Project title – *Quality of Biodiesel Processed from Water Vegetable Oils*

Honorable Mention

Zachary Barkley
10th Grade

Jefferson County International Bacculaureate
Project title – *The Energy Output of Various Fuel Rations in a Internal Combustion Engine*

Honorable Mention

Jessica Birdyshaw
10th Grade

Jefferson County International Bacculaureate
Project title – *To Charge by Outlet or to Charge by Turbine, That is the Question*

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| Engineering |
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1st Place

Ian Black
9th Grade

Jefferson County International Bacculaureate
Project title – *Amount of Lift Generated by Different Wing Shapes*

2nd Place

Jordan Turner
9th Grade
Huffman High School

Project Title – *Which Fence Design Protects Against High Winds*

3rd Place

Jacob Hollingsworth

10th Grade
Bessemer Academy
Project Title – *What is the Strongest Knot for Fishing Line?*

Honorable Mention
Matthew McCrory
9th Grade
Pell City High School
Project Title – *Future Robotic Arm*

Environmental & Earth Science

1st Place
Hannah Noah
9th Grade
Jefferson County International Bacculaureate
Project Title – *The Optimization of Arthrospira Plantensis Culture Growth*

2nd Place
Monica Pasala
9th Grade
Alabama School of Fine Arts
Project Title – *The Effects of Zn Contaminated Soil on Wisconsin Fast Plants*

3rd Place
Krishna Shah
9th Grade
Alabama School of Fine Arts
Project Title – *The Amounts of Iron, Sulfate and Manganese in the Black Warrior River*

Honorable Mention
Sophie Vogt
12th Grade
Alabama School of Fine Arts
Project Title – *The Relationship between Pleurotus ostreatus and Pollution Level of Nitrogen Dioxide Commonly Found in Industrial Environments*

Honorable Mention
Sarah Webster
10th Grade
Jefferson County International Bacculaureate
Project Title – *Energy: Recycling vs Landfilling*

Honorable Mention
John Michael Middleton

11th Grade
Jefferson County International Baccalaureate
Project Title – *Effects of Rust and Salt in Water Used to Hydrate *Viola Wittrockiana**

Mathematics & Computer Science

1st Place

Ashby Marriott
12th Grade
Alabama School of Fine Arts
Project Title – *Exploring Motion Triggered Audio Permutation in iOS*

2nd Place

Nath Tumlin
9th Grade
Alabama School of Fine Arts
Project Title – *Tracking People and Objects with a User Customizable Interface*

3rd Place

Anshuman Bansal
12th Grade
Alabama School of Fine Arts
Project Title – *Modeling High Volume Networks with Dynamically Assigned Node Structures*

Honorable Mention

Jefferson Zou
11th Grade
Alabama School of Fine Arts
Project Title – *Mobile Image Analysis*

Honorable Mention

Alex Atwood
12th Grade
Alabama School of Fine Arts
Project Title – *Algorithmic Information Gathering with Rubik's Cubes*

Honorable Mention

Jonathan Hurowitz
10th Grade
The Altamont School
Project Title – *The Permutations Triangle*

Medicine & Health Science

1st Place

Oliva Dure

11th Grade

The Altamont School

Project Title – *Brain Plasticity: The Effect of Age (A Three Year Study)*

2nd Place

Karyn Ding

11th Grade

Alabama School of Fine Arts

Project Title – *Transforming Growth Factor – Beta 1 Induces Cytoskeleton Change During Epithelial-to-Mesenchymal Transition*

3rd Place

Will Pannell

9th Grade

The Altamont School

Project Title – *Will a Pomegranate a Day Keep Forgetfulness Away? Assessing the Effects of Pomegranate Supplementation on Working Memory*

Honorable Mention

Caitlin Thoms

12th Grade

Alabama School of Fine Arts

Project Title – *The Roles of C3 in An Alpha-Synuclein-Based Model of Parkinson Disease*

Honorable Mention

Alexis Vance

12th Grade

Alabama School of Fine Arts

Project Title – *The Role of Pannexin-2 as a Novel Appetite Controller*

Honorable Mention

Georgia Smith

12th Grade

Alabama School of Fine Arts

Project Title – *Mechanisms of Visual Training that Reduce the Risk of Motor Vehicle Collisions of Older Adults*

Physical Science

1st Place

Lakshmi Raju

1th Grade

Alabama School of Fine Arts

Project Title – *Development of a Low Cost Infrared Spectrophotometer and a Matlab Program to Detect Terrestrial and Extraterrestrial Water Vapor*

2nd Place

Wesley Biddie

10th Grade

Thompson High School

Project Title – *Variation of Output of Various Dyes in Dye-Sensitized Solar Cells as the Sun Moves*

3rd Place

Jasmin Revanna

9th Grade

Alabama School of Fine Arts

Project Title – *How can Concave Mirrors Intensify Light Rays?*

Honorable Mention

Frederick Safyanov

10th Grade

Jefferson County International Baccalaureate

Project Title – *Static Shockers: Which Ones are the Best?*

Honorable Mention

Marwa Mekdad

9th Grade

Islamic Academy of Alabama

Project Title – *Color Me Confused*

Honorable Mention

Paul Nelson

9th Grade

Pell City High School

Project Title – *The Duel Nature of Light*

CARSEF Category Winners

Junior Division

Behavioral & Social Sciences

1st Place

Rozan El-Qishawi

6th Grade

Islamic Academy of Alabama

Project Title – *The “BLIDEF” Language: A Computer Guide to a Global Standard Deaf and Blind English Alphabet*

2nd Place

Jameelah Wright

8th Grade

Islamic Academy of Alabama

Project Title – *Sent-Sational!*

3rd Place

Graeme Baxley

6th Grade

Advent Episcopal School

Project Title – *Pretty Pleases*

Honorable Mention

Raleigh Bruce

7th Grade

Advent Episcopal School

Project Title – *Will Phiten Make Me Faster?*

Honorable Mention

Will Rosensteil

7th Grade

Advent Episcopal School

Project Title – *Game State Heart Rate*

Honorable Mention

Lia Barnes

7th Grade

W. J. Christina

Project Title – *Gender’s Effect on Memory*

Biology

1st Place

Sam Newton
8th Grade
Advent Episcopal School
Project Title – *Walking in Circles*

2nd Place

Mohammad Hamo
6th Grade
Islamic Academy of Alabama
Project Title – *Ow!! Hot!!*

3rd Place

Cole Cassady
8th Grade
Indian Springs School
Project Title – *Effects of Temperature on Herpes Virus*

Honorable Mention

John Hall
7th Grade
St. Rose Academy
Project Title – *The Effects of Glyphosate on Plant Health*

Honorable Mention

Archana Yarlagadda
6th Grade
The Altamont School
Project Title – *Tumeric: Does it Have Anti-bacterial Properties?*

Honorable Mention

Samantha Slaughter
7th Grade
Columbiana Middle School
Project Title – *Killing Bacteria*

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| Chemistry |
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1st Place

Landon Bentley
8th Grade
Columbiana Middle School
Project Title – *Forgery Forensics: Chromatography Classification: The Case of the School Bus Scandal*

2nd Place

Dina Abdelqader
8th Grade
Islamic Academy of Alabama
Project Title – *Raw vs. Heated?*

3rd Place

Robert Denniston
8th Grade
The Altamont School
Project Title – *Guacamole Now! Ethylene Production in Fruits*

Honorable Mention

Ahas Zaqut
6th Grade
Islamic Academy of Alabama
Project Title – *Last Longer!*

Honorable Mention

Khaled Nassar
7th Grade
Martha Gaskins Middle School
Project Title – *I'm Freezing!!!*

Honorable Mention

Jeremiah Whatley
5th Grade
W. J. Christian
Project Title – *Acids Bases*

Energy and Transportation

1st Place

Thomas Barr and Charlotte Benedict
8th Grade
Indian Springs School
Project Title – *Wind Energy*

2nd Place

Quen Parson
6th Grade
Advent Episcopal School
Project Title – *Steam Power: Dry Ice Vs. Steam*

3rd Place

Nick Bruno
7th Grade

The Altamont School

Project Title – *The Effect of Temperature on the Viscosity of Automobile Fluids*

Honorable Mention

Jess Carr
8th Grade

O. D. Duran Junior High School

Project Title – *What Makes the Most Aerodynamic Design for a Paper Glider*

Honorable Mention

Clairion DuBose
7th Grade

St. Francis Xavier School

Project Title – *Using Fruits and Vegetables as a Possible Energy Source*

Honorable Mention

Matthew Steele and Nicholas Somers
7th Grade

Our Lady of the Valley

Project Title – *Fly, Rocket, Fly*

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|--------------------|
| Engineering |
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1st Place

Jackie Lee
8th Grade

Columbiana Middle School

Project Title – *Radon Activity*

2nd Place

Matthew Braden
8th Grade

O.D. Duran Junior High School

Project Title – *Which Bridge to You Trust?*

3rd Place

Whitney Mims
6th Grade
Graham Elementary

Project Title – *Which D Size Battery Lasts the Longest*

Honorable Mention

Scout Phillips
5th Grade

Advent Episcopal School

Project Title – *The Aerodynamics of Paper Airplanes*

Honorable Mention

Nicholas Kearley
6th Grade

Graham Elementary

Project Title – *Lemon-Light Using Lemons to Produce Electricity*

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| Environmental and Earth Sciences |
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1st Place

Rowan Elqishawi
8th grade

Islamic Academy of Alabama

Project Title – *BP... Are You Waking the SLEEPING GIANT?*

2nd Place

Bailey Smith
6th Grade

Advent Episcopal School

Project Title – *The Impact of Dispersant on the Natural Filtration of Wetlands*

3rd Place

Cailan Bevel
8th Grade

Thompson Middle School

Project Title – *Reduction of Nitrate Levels in Water Using Denitrifying Bacteria*

Honorable Mention

Quinn McCormick
8th Grade

Prince of Peace Catholic School

Project Title – *Effect of Bamboo (Bambus Schreb) Extracts on Seed Growth*

Honorable Mention

Josh Fording
5th Grade

Tuscaloosa Magnet

Project Title – *Do Steel Mills Negatively Affect the Environment*

Honorable Mention

Maya Cassady

5th Grade

Advent Episcopal School

Project Title – *Organic and non-organic Soil, Who's Really the Best?*

Mathematics & Computer Science

1st Place

Hanna Becerra

7th Grade

St. Francis Xavier

Project Title – *C# or Java?*

2nd Place

Jesus Zubia

8th Grade

O.D. Duran Junior High School

Project Title – *Using a Laser Pointer to Measure the Data Track Spacing on CDs and DVDs Will Work?*

3rd Place

JoAnna Lackey

6th Grade

Graham Elementary

Project Title – *“Skittles” Taste the Rainbow*

Medicine & Health Sciences

1st Place

Ryan Harmon

8th Grade

Columbiana Middle School

Project Title – *Using a Mechanical Model to Measure Patellar Tendon Strain in Knee Bends*

2nd Place

Jamarcus Ellison

7th Grade

W. J. Christian

Project Title – *Pump, Pump, Pump it up! The Effect of Caffeine on the Blood Pressure*

3rd Place

Lauren Shields

7th Grade

Our Lady of the Valley

Project Title – *Solar Disinfection/SODIS: How to Disinfect Contaminated Water*

Honorable Mention

Josie Niedermeier

8th Grade

The Altamont School

Project Title – *Is Your Cell Phone Cleaner than a Toilet*

Honorable Mention

Julia Fleisig

8th Grade

Indian Springs School

Project Title – *The Effect of Age on Visual Accommodation*

Honorable Mention

Malik El-Husari

6th Grade

Islamic Academy of Alabama

Project Title – *Put the Fire Out*

Physical Sciences

1st Place

Katie Stahlhut

8th Grade

O. D. Duran Junior High School

Project Title – *Can You Make a Ball of Lighting from Materials At Home*

2nd Place

Cody Roberts

8th Grade

O.D. Duran Junior High School

Project Title – *How Does Position of the Pickup on a Guitar, Relative to the End of the String, Affect the Tone*

3rd Place

Crandall Hillhouse

7th Grade

St. Francis Xavier

Project Title – *The Effects of Different Temperatures on the Viscosity of Glycerin, Honey and Water*

Honorable Mention

Amrita Lakhanpal and Ashley Johnson

5th Grade

The Altamont School

Project Title – *Hanging by a Thread*

Honorable Mention

Adam Pittman

6th Grade

Advent Episcopal School

Project Title – *Operation Levitation: Creating Diamagnetic Levitation with Liquid Magnets*

Honorable Mention

Danah Refai

6th Grade

Islamic Academy of Alabama

Project Title – *Got Sun Protection?*