2009 UAB-CORD Central Alabama Regional Science & Engineering Fair

Intel International Science & Engineering Fair Winners

(These winners will be able to compete in the Intel International Science & Engineering Fair in Reno, Nevada on May 10-15, 2009)

Rakesh Goli 9th Grade

The Altamont School

Project Title: Can A Bacterial Pigment Kill Cancer Cells?

James Lecroy 11th Grade

Jefferson County International Baccalaureate School *Project Title: Kudzu Calorimetry*

> Lydia McCormick 11th Grade

Jefferson County International Baccalaureate School
Project Title: The Effect of Honey Hydrogen Peroxide Concentration on Small Hive
Beetle (Aethina tumida) Survival

Mason McFarland 11th Grade

Jefferson County International Baccalaureate School
Project Title: The Evidence of and Potential Roles of Allelopathic Agents Present in
Sweet Potatoes

2009 UAB-CORD Central Alabama Regional Science & Engineering Fair Senior Division Category Winners

2nd Place **Behavioral and Social Sciences** 1st Place Peter Johnson Sara Feldman The Altamont School The Altamont School Title – Vaska's Complex 3rd Place Title – Internet Access: Racist? 2nd Place Arina Ghosh Anne Wheless AL School of Fine Arts The Altamont School *Title – The Effect of Heavy* Metals on Porphyrin Ring *Title – The Major Importance of* Immediate Testing in the Compounds Learning Process 3rd Place **Energy and Transportation** 1st Place Alexis Vance Pranav Krishnan Alabama School of Fine Arts The Altamont School *Title – Teen Driving:* Conversations Slow You Down? Title - Go Green! 2nd Place **Biology** Ellen Price 1st Place Jefferson County IB School Lydia McCormick Title – The Geothermal Jefferson County IB School Thermocouple: Applications of *Title – The Effect of Honey* Thermocouples in Renewable Hydgrogen Peroxide Energy Technologies 3rd Place Concentration on Small Hive Beetle (Aethina tumida) Survival Shawn Tuteja 2nd Place The Altamont School Rakesh Goli *Title – Maximizing the* The Altamont School Efficiency of a Dye-Sensitized Solar Cells Title – Can a Bacterial Pigment Kill Cancer Cells? 3rd Place Engineering, Mathematics, and Winston Joe **Computer Sciences** The Altamont School 1st Place *Title – Snaring the Invaders:* Alex Chapman How PMNs Set the Trap The Altamont School Pneumococci Title – Construction of a **Chemistry** Downdrift Wood Gasifier 2nd Place 1st Place Mary Esther Machen Christine McBride Jefferson County IB School Shades Mt. Independent **Christian School** Title – The Bionic Ear

(Cochlear Implants)

Title – Can Hair Stand the Heat

2009 UAB-CORD Central Alabama Regional Science & Engineering Fair Senior Division Category Winners

3rd Place 3rd Place **Brett Kirkland** Giacomo Barbone Jefferson County IB School The Altamont School *Title – The Withdrawal Title – Orienteering: Finding* Strengths of Screws in a the Winning Path Polymer **Physical Sciences Environmental and Earth Sciences** 1st Place 1st Place James Lecroy Mason McFarland Jefferson County IB School Jefferson County IB School Title – Kudzu Calorimetry 2nd Place Title - The Evidence of and Potential Roles of Allelopathic Wesley Lewis Agents Present in Sweet Jefferson County IB School **Potatoes** Title – Using Magnetism to Stop 2nd Place an Elevator in Free Fall 3rd Place **Emily Duke** Jefferson County IB School Erica Scott Title – Germicidal Effects of Huffman High School Ultraviolet C Light on Water Title – Color Absorption: Which 3rd Place Color Absorbs the Most Heat? **Emily Kirkpatrick** Jefferson County IB School <u>Teams</u> 1st Place Title – The Effects of Sidestream Cigarette Smoke on Brocolli Lindsey Henson & **Plants** Zach Dison Jefferson County IB School **Medicine and Health Sciences** Title – Adolescent Concepts of 1st Place Death Joshua Ng 2nd Place AL School of Fine Arts Julia Murray & Title – The Effect of Antibiotic Cece Pless Ointments on E. coli Bacteria The Altamont School Growth Title – A Forensic Study of DNA 2nd Place 3rd Place Anya Glandon Robert Smyly & Mountain Brook High School Oliver White Title – Mapping the Coxsackie Mountain Brook High School & Adenovirus Receptor in the *Title – Virtual Navigation of* Mouse Brain for Parkinson

Multimedia Maps

2009 UAB-CORD Central Alabama Regional Science & Engineering Fair Junior Division Category Winners

Behavioral and Social Sciences	2 nd Place
1 st Place	Andrew Padgett
Alexis Kentros	Duran Jr. High School
The Altamont School	Title – The Melting Point Ice
$Title-2^{nd}$ to 4^{th} Digit Ratio	Investigation
Correlation with Mental	3 rd Place
Rotation Test	Sydney Rice
2 nd Place	Our Lady of the Valley School
C.J. Queen	Title – Soda Pop
Cathedral Christian School	Time Sound op
Title – Is it Possible to Predict	Energy and Transportation
the Outcome of an Election	1 st Place
Based on the Candidate's	Alok Deshane
Appearance?	The Altamont School
3 rd Place	Title – Magnetic Levitation –
lan English	Trains & the Future
The Altamont School	2 nd Place
Title – How the Color of a Drink	Oliver Marston
Effects Taste Perception	Advent Episcopal School
=3,5 c c c c c c c c c c c c c c c c c c c	Title – Airborn Angles – How
Biology	Does the Angle Attack of a Wing
1 st Place	Effect its Lift?
Lakshmi Raju	3 rd Place
Alabama School of Fine Arts	McKennon Kessler
Title – Hide & Seek with Fall	
Leaves – Leaf Pigment	The Altamont School
Chromatography	Title – Does a Hydrogen
2 nd Place	Generator Improve Your Gas Mileage?
Nejah Harhash	mneuge:
Islamic Academy of Alabama	
Title – Diluting Disinfectants	Engineering, Mathematics, and
and Bacteria	Computer Sciences
3 rd Place	1 st Place
Noon Eltoum	Sean Galvin
Islamic Academy of Alabama	Our Lady of the Valley School
Title – Searching for Antifungal	Title – Under Stress
and Antibiotics in Plant Extracts	2 nd Place
and introduces in I talk Extracts	J.T. Tudisco
<u>Chemistry</u>	
1 st Place	Our Lady of the Valley School
Aliyah Curry	<i>Title – Shake -n- Break</i> 3 rd Place
W.J. Christian K-8 School	
Title – Pop -N- Fizz	Noah Cartwright
1 mc 1 op 11 1 122	St. Rose Academy

Title – Weight and See

2009 UAB-CORD Central Alabama Regional Science & Engineering Fair Junior Division Category Winners

Environmental and Earth Sciences 1st Place Ayah Eltoum Islamic Academy of Alabama Title – Towards Natural Herbicides Teams 2nd Place Samih Eloubeidi Islamic Academy of Alabama Title - Organic or Conventional: Is There a Difference? 3rd Place Elexia Coleman W.J. Christian School *Title – Absorption of Water in* Soil **Medicine and Health Sciences** 1st Place Olivia Dure That Altamont School Title – Lead Levels in Costume Jewelry 2nd Place Andrew Kanatani Our Lady of the Valley School *Title – Blinded by the Light* 3rd Place Nada Abdelgader Islamic Academy of Alabama Title - Do Chemicals in a Bottle Really Work? **Physical Sciences** 1st Place Bryan Generette J.H. Phillips Academy Title – Air Pressure 2nd Place

Andrew Hall St. Rose Academy Title – Burn Baby Burn 3rd Place Addie Harchelrod Our Lady of the Valley School Title – Under Pressure! 1st Place Suzanne Berry & Susan Darby Thompson Middle School Title – Strongest Bridge 2nd Place Raven McDonald & Reginold McDonald W.J. Christian K-8 School Title - How Does Water Grow Plants? 3rd Place Alex Watts. Chili Mushalansby & Aric Weidenbach Thompson Middle School

Title – AC Generator Time

Lengths