

28th Annual Coriell Institute Science Fair Winners

Behavioral and Social Sciences

Division	Award Name	Student Name	School	Project Title
A	1st Place	Sara	Cherry Hill High School West	The Naturalistic Observation of Student Assessment in the Absence of a Teacher in a High School Environment
A	2nd Place	Barbara	Gateway Regional HS	A Study of Human Interaction on Perception
A	Department of the Navy Award	Barbara	Gateway Regional HS	A Study of Human Interaction on Perception
B	1st Place	Josh	Cherokee High School North	Theft in The Eyes of Man
B	2nd Place	Jeremy	Camden Academy Charter HS	One vs. a Ton: Teenage Controversy Regarding Monogamy and Polygamy
B	Camden County College Scholarship	John	Cherokee High School North	The Effects of the Degree of Personal Contact and Accountability on Greed
C	1st Place	Shyam	Cherry Hill High School East	Intricate Connections Between Math and Music
D	1st Place	Nicholas	Delran HS	What Factors Decrease the Stroop Effect
E	1st Place	Aashna	William Allen Middle School	Internet-based Focused Intervention for Recycling
E	Department of the Navy Junior Award	Aashna	William Allen Middle School	Internet-based Focused Intervention for Recycling
E	2nd Place	Pankhuri	William Allen Middle School	Homework Help at Home and Student Grades
E	3rd Place	Abi	East Camden Middle School	Making Faces: Drawing Skills Based on Preference

Biochemistry

Division	Award Name	Student Name	School	Project Title
A	1st Place	Nashay	Brimm Medical Arts HS	The Effect of Shampoos on the Tensile Strength of Hair
A	2nd Place	Jonathan	Cherry Hill HS East	Investigation of Aggregated Androgen Receptor Structure Using Antibodies and Fluorescence Microscopy
A	South Jersey Chapter of the American Chemical Society Award	Jonathan	Cherry Hill High School East	Investigation of Aggregated Androgen Receptor Structure Using Antibodies and Fluorescence Microscopy
C	1st Place	Anisha	Cherry Hill HS East	Cholesterol Concentration in Liposome Affecting the Efficacy of Liposomal Adriamycin in Killing MCF7 Cells
E	1st Place	Christina	Harrington Middle School	An Apple a Day

Botany

Division	Award Name	Student Name	School	Project Title
A	1st Place	Susana	Brimm Medical Arts HS	Do Stomata Matta?
A	Milton V. Brown Botany Prize	Susana	Brimm Medical Arts High School	Do Stomata Matta ?
A	2nd Place	Aquera	Brimm Medical Arts HS	How Calendula officinalis and Phaseolus vulgaris are Affected by TMV
A	3rd Place	Kristine	Brimm Medical Arts HS	What Factors Affect the Rate at Which Pollen Tubes Grow?
B	1st Place	Vivian	Cherokee HS North	Slime Molds Supersede Human Expectations
C	1st Place	Rebecca	Woodill Homeschool	Washing Each Day Keeps the Bacteria Away: A study of the effect of Bacteria in Carinet Reeds
C	2nd Place	Rachel	Collins Place Home School	The Carbonation of Beans
D	1st Place	Chalice	Brimm Medical Arts HS	Plant That Hair!
E	1st Place	Grace	Delran Middle School	Which Type of water Makes Plants Grow the Fastest?
E	Milton V. Brown Botany Prize	Grace	Delran Middle School	Which Type of water Makes Plants Grow the Fastest?
E	2nd Place	Elizabeth	Harrington Middle School	Carbon Dioxide and Plant Growth
E	3rd Place	Elizabeth	Gateway Regional HS	Cut Flowers, Additives, and Longevity

Chemistry

Division	Award Name	Student Name	School	Project Title
A	1st Place	Yue (Joyce)	Cherry Hill High School East	Coordination Drug Polymerization: A Novel Way to Enhance the Efficacy of the Active Pharmaceutical Ingredient, Ibuprofen
A	2nd Place	Joseph	Brimm Medical Arts HS	Vegetable b Oil
B	1st Place	Mark Anthony	Cherokee High School North	The Effects of Heat and Orbitals on Paramagnetism
E	1st Place	Nathan	Moorestown Upper Elem.	Dish Soaps: Which One Dissolves the Most Oil?
E	Lewis Coriell Best of Fair 6-8 Grade	Nathan	Moorestown Upper Elementary	Dish Soaps: Which One Dissolves the Most Oil ?
E	Philadelphia Chapter of the American Chemical Society Award	Nathan	Moorestown Upper Elementary	Dish Soaps: Which One Dissolves the Most Oil?
E	2nd Place	Katherine	Gateway Regional HS	How Sweet is Your Apple?
E	3rd Place	Kyle	Haddonfield Friends School	A lasting touch
E	Honorable Mention	Jessica	Aura Elementary School	How to Desalinate Sea Water

Computer Science

Division	Award Name	Student Name	School	Project Title
A	1st Place	Nicholas	Taylor Homeschool	An Evaluation Algorithm to Examine Math Test Results
B	1st Place	Mary	Gateway Regional HS	Is there a Distinguishable Difference among Picture Formats?
C	1st Place	Naveen	Cherry Hill High School East	Applying Home Health Care Devices in Order to Improve Preventative Health Care
D	1st Place	Deepak	Eastern Regional HS	Decision Making Made Simple: Artificial Intelligence in Everyday Life
E	1st Place	Zachary	Delran Middle School	Is Your Wireless Home Network Protected?
E	Department of the Navy Junior Award	Zachary	Delran Middle School	Is Your Wireless Home Network Protected ?
E	2nd Place	Vaishnavi	Voorhees Middle School	How Much Money?

Consumer Science

Division	Award Name	Student Name	School	Project Title
E	1st Place	Natalie	Delran Middle School	Which Hand Cream or Body Lotion Retains the Most Moisture?
E	2nd Place	Roxanne	Harrington Middle School	The Ultimate Taste Test: Can You Tell the Difference?
E	3rd Place	James	Magnolia School District	Not a Square to Spare
E	Coriell CAC	James	Magnolia School District	Not a Square to Spare
E	Honorable Mention	Jessica	East Camden Middle School	Slime Time: Comparing Slime Elasticity
E	South Jersey Chapter of the American Chemical Society Award	Jessica	East Camden Middle School	Slime Time: Comparing Slime Elasticity

Earth and Space Sciences

Division	Award Name	Student Name	School	Project Title
A	1st Place	Walter	Camden Academy Charter HS	It's Getting Rocky in Here: An Examination of Trace Elements
E	1st Place	Blair	Delran Middle School	What Type of Soil Drains Water Fastest ?

Engineering

Division	Award Name	Student Name	School	Project Title
A	1st Place	Melissa	Cherry Hill High School	One Turbine Fits All
A	Best Physical Sciences 9-12 Grade	Melissa	Cherry Hill High School East	One Turbine Fits All
A	2nd Place	Elijah	Camden Academy Charter HS	Alternative Fuels
B	1st Place	Kelsey	Moorestown High School	Evaluation of Horizontal Versus Vertical-Axis Wind Vehicle Turbines for Power and Recovery in an Electric
B	Burlington County	Kelsey	Moorestown High School	Evaluation of Horizontal Versus Vertical-Axis Wind Vehicle

B	College Scholarship 2nd Place	Arvind	Moorestown High School	Turbines for Power and Recovery in an Electric The Benefits of Using a Super-capacitor in an Electric
C	1st Place	Brett	Reich Homeschool	Drag Race
C	Lewis Coriell Best of Fair 9-12 Grade	Brett	Reich Homeschool	Drag Race
C	2nd Place	Christopher	Lenape High School	Wind Engineering: A Gust of Alternative Energy
D	1st Place	Dennis	Delran High School	Floating Arm Trebuchet Energy Efficiency
D	2nd Place	Alexei	Taylor Homeschool	Determining Best Paper Airplane Design
E	1st Place	Joseph	Haddonfield Friends School	Bendable Beams
E	2nd Place	Mackenzie	Haddonfield Friends School	Smooth Ride
E	3rd Place	Alex	McBride Homeschool	Effects of a Light Amplification by Stimulated Emission of Radiation Device Concentrated in a Hydrogen Generator on a PEM Fuel Cell Hybrid
E	Department of the Navy Junior Award	Alex	McBride Homeschool	Effects of a Light Amplification by Stimulated Emission of Radiation Device Concentrated in a Hydrogen Generator on a PEM Fuel Cell Hybrid
E	Honorable Mention	Marlee	Moorestown Upper Elem.	Windbelt: An Efficient Inexpensive Energy Source?

Environmental Science

Division	Award Name	Student Name	School	Project Title
A	1st Place	Jibril	Camden Academy Charter HS	Running Low on Silk: Effect of Pesticides on Silkworms and Their Silk Production
A	Department of the Navy Award	Jibril	Camden Academy Charter High	Running Low on Silk: Effect of Pesticides on Silkworms and Their Silk Production
A	2nd Place	Latiesha	Brimm Medical Arts HS	Soil Remediation
A	3rd Place	Ashley	Brimm Medical Arts HS	The Urban Effects on Inshore Plankton
B	2nd Place	Meyri	Brimm Medical Arts HS	Will Pollution Strike Again?
B	3rd Place	Andrew	Cherry Hill HS West	Potential Cost-Savings by Using Solar Panels at School
C	1st Place	Aubrey	Delran HS	Earth in Crisis: Understanding Soil Erosion Caused by Heavy Rainfall
C	2nd Place	Rebecca	Finter Homeschool	Coliform Colors
C	3rd Place	Samantha	Lenape HS	Chlorine Dioxide: A Safe and Environmentally Friendly Biological Safety Cabinet Decontamination
D	1st Place	Akshay	Cherry Hill HS East	Conversion of Lignocellulosic Acid to Fuels
E	1st Place	Meredith	McBride Homeschool	Decomposing Expanded Polystyrene Foam (EPF) with D-Limonene
E	2nd Place	Jessica	Burlington City Junior & Senior	Motivational Colors

E	3rd Place	Rebecca	Delran Middle School	How Much Energy Does the Average Household Lose to Vampire Consumption?
E	Honorable Mention	Tyler	Reich Homeschool	Waste Not
E	Honorable Mention	Julie	Moorestown Upper Elem.	UES, Clean Air or Carbon Air?

Mathematics

Division	Award Name	Student Name	School	Project Title
A	1st Place	Rodolfo	Camden Academy Charter HS	Mathematic Analysis of Caloric Intake in Teenagers
B	1st Place	Gerald	Kids For Chemistry	A Statistical 2 Cubed 3 Factorial Design Study on the Effect of 3 Variables on Cement Strength
D	1st Place	Justin	Kids For Chemistry	A Statistical 2 Cubed Factorial Design Study on the Effect of 3 Variables on a Magnetic Field
E	1st Place	Joanna	Costa Homeschool	Are You Shrinking or an I Getting Larger?

Medicine and Health

Division	Award Name	Student Name	School	Project Title
A	1st Place	Nipun	Cherry Hill High School East	Distribution of Carboxypeptidase E (CPE) Variants in Mouse Brain
A	2nd Place	Gowtham	Cherry Hill High School East	Immune Stimulatory Interleukin HMGB1 Induces Dendritic Cell (DC) Maturation and Immune Enhancement In Vivo
C	1st Place	Matthew	McBride Homeschool	An Investigation into the Chemotherapeutic Properties of D-Limonene Using T47D Breast Cancer Cells
C	Best Life Sciences 9-12 Grade	Matthew	McBride Homeschool	An Investigation into the Chemotherapeutic Properties of D-Limonene Using T47D Breast Cancer Cells
E	1st Place	Amanda	William Allen Middle School	Hurry up! What Foods Affect the Absorption of Aspirin?
E	Best Drug Research 6-8 Grade	Amanda	William Allen Middle School	Hurry up! What Foods Affect the Absorption of Aspirin?
E	2nd Place	Megan	Haddonfield Friends School	Hard Hats Help: A Study of Helmet Safety
E	3rd Place	Megan	Harrington Middle School	You Are What You Eat
E	Best Life Sciences 6-8 Grade	Dhalil	Haddonfield Friends School	I Spy a Little Eye
E	Honorable Mention	Emily	Moorestown Upper Elementary	Third Child Tooth Tragedy
E	Honorable Mention	Brittany	Haddonfield Friends School	Saliva-Alive-A

Microbiology

Division	Award Name	Student Name	School	Project Title
A	1st Place	Jorge	Camden Academy Charter HS	Fecal Coliform: How Much Contamination is in Your River?

B	1st Place	Ian	West Deptford HS	What are the Effects of Removal of Adenosine or Caffeine on Physarum After Prolonged Exposure?
B	Best Drug Research 9-12 Grade	Ian	West Deptford High School	What are the Effects of Removal of Adenosine or Caffeine on Physarum After Prolonged Exposure?
B	2nd Place	Shikha	Eastern Regional HS	Identification of Novel Grb-2 Binding Proteins from Osteoblasts
B	3rd Place	Nicholas	Cherry Hill HS West	Population Dynamics of Rotifers and Vorticella in Man-Made Habitats
D	1st Place	Kevin	Brimm Medical Arts HS	Clean if Green
E	1st Place	Aviana	Haddonfield Friends School	May the Saliva be with You
E	2nd Place	Melissa	East Camden Middle School	Killing Zone: Comparing the Effect of Anti-Bacterial Wipes on E. Coli K12
E	3rd Place	Sophia	Delran Middle School	5 Second Food Rule: To Eat or Not to Eat?
E	Honorable Mention	Catherine	Harrington Middle School	Water: As Pure as You Think?

Physics

Division	Award Name	Student Name	School	Project Title
C	1st Place	Elliot	Taylor Homeschool	Heat Sink Study: Material hardness vs. Heat Capacity
D	1st Place	Luisa	Haddonfield Memorial HS	The Effects of Multi-Pane and Coated Windows on the Fading of Fabric
E	1st Place	Stephen	Costa Homeschool	Impact of Color Filters on Solar Energy
E	Best Physical Sciences 6-8 Grade	Stephen	Costa Homeschool	Impact of Color Filters on Solar Energy
E	2nd Place	Morgan	Magnolia School District	Superbility of a Superball
E	3rd Place	Kevin	Delran Middle School	How Far Away was the Shooter from the Target ?
E	Honorable Mention	Vivek	Voorhees Middle School	The Power of the Gauss Rifle
E	Honorable Mention	Jaimie	William Allen Middle School	Will a Gloved Hand Decrease the Force of a Strike?

Zoology

Division	Award Name	Student Name	School	Project Title
A	1st Place	Samantha	Brimm Medical Arts HS	An Alternative HS Protocol for D. Melanogaster
A	2nd Place	Breanna	Brimm Medical Arts HS	The Effects of a Weight Gaining Supplement on the Regeneration of Black Worms
A	3rd Place	Lucas	Camden Academy Charter HS	Fly Effect: Additives Effect on Housefly Development
B	1st Place	Janaki	Cherokee HS North	Earthworms Back from the Dead: Or So It Seems
D	1st Place	Marion	Moorestown High School	What Repels Mosquitoes Best?
D	2nd Place	Amanda	Bonsignore Homeschool	Waste for Worms
E	2nd Place	Matt	Gateway Regional HS	Birds Eat Out of What Color Feeder?

E	3rd Place	Delvin	Morgan Village Middle School	Silver Worms: Blackworms, Silver Biotics, and Recovery
E	Honorable Mention	Alyson	William Allen Middle School	A-maze-ing Fish

Team/Life Sciences

Division	Award Name	Student Name	School	Project Title
AD	1st Place	Christopher	West Deptford High School	How Will Nicotine and Ginseng Affect the Growth of Rosemarinus officinalis?
AD	Best Drug Research 9-12 Grade	Christopher	West Deptford High School	How Will Nicotine and Ginseng Affect the Growth of Rosemarinus officinalis?
AD	1st Place	SungHyun	West Deptford High School	How Will Nicotine and Ginseng Affect the Growth of Rosemarinus officinalis?
AD	Best Drug Research 9-12 Grade	SungHyun	West Deptford High School	How Will Nicotine and Ginseng Affect the Growth of Rosemarinus officinalis?
E	1st Place	Matthew	Moorestown Upper Elementary	§ Vitamin C in Orange Juice
E	1st Place	Brian	Moorestown Upper Elementary	§ Vitamin C in Orange Juice
E	2nd Place	Sarita	Harrington Middle School	Nuts: The Future of Energy ?
E	Best Teams	Sarita	Harrington Middle School	Nuts: The Future of Energy ?
E	2nd Place	Andrew	Harrington Middle School	Nuts: The Future of Energy ?
E	Best Teams	Andrew	Harrington Middle School	Nuts: The Future of Energy ?
E	2nd Place	Mackinley	Harrington Middle School	Nuts: The Future of Energy ?
E	Best Teams	Mackinley	Harrington Middle School	Nuts: The Future of Energy ?
E	Honorable Mention	Saylor	Moorestown Upper Elem.	Does Multitasking Affect Your Performance?
E	Department of the Navy Junior Award	Saylor	Moorestown Upper Elementary	§ Does Multitasking Affect Your Performance ?
E	Honorable Mention	Alison	Moorestown Upper Elementary	§ Does Multitasking Affect Your Performance ?
E	Department of the Navy Junior Award	Alison	Moorestown Upper Elementary	§ Does Multitasking Affect Your Performance ?
E	Honorable Mention	Claribel	St. Joseph Pro-Cathedral School	Survival of Brine Shrimp
E	Honorable Mention	Thuy	St. Joseph Pro-Cathedral	Pump Up the Physarum
E	Best Drug Research 6-8 Grade	Thuy	St. Joseph Pro-Cathedral School	Pump Up the Physarum

Team/Physical Sciences

Division	Award Name	Student Name	School	Project Title
A	1st Place	Kyle	Cherokee High School North	Breaking the Barrier: Concrete Composition Above and Beyond
A	1st Place	Tyler	Cherokee High School North	Breaking the Barrier: Concrete Composition Above and Beyond
A	1st Place	Mike	Cherokee High School North	Breaking the Barrier: Concrete Composition Above and Beyond
E	1st Place	Rachel	Gateway Regional HS	Sticky Solutions: How to Get Gum Out of Your Hair
E	1st Place	Christina	Gateway Regional HS	Sticky Solutions: How to Get Gum Out of Your Hair

E	2nd Place	Sam	Aura Elementary School	Fast Physics
E	2nd Place	Michael	Aura Elementary School	Fast Physics
E	3rd Place	Katrina	Aura Elementary School	It's Not Easy Being Green
E	3rd Place	Sophia	Aura Elementary School	It's Not Easy Being Green
E	Honorable Mention	Natasha	Harrington Middle School	Picture Perfect Cookies
E	Honorable Mention	Jennifer	Harrington Middle School	Picture Perfect Cookies
E	Honorable Mention	Peter	Harrington Middle School	The Sky is the Limit
E	Honorable Mention	Jonathan	Harrington Middle School	The Sky is the Limit