Awards Ceremony Report

Division:	Elementa	ry ysics Laboratory Young	Category: From:	Princeton Plasma Physics Lab	
Engineer an	nd Science		From:	Finceton Flasma Fhysics Lab	
	633	Solar Oven			4
		Lawrence Intermediate Purba Karmaker			
	661	WHICH WHEEL WORKS BES BEARING	T? AN EXPLOR	ATION INTO SKATEBOARD	4
		Robinson Elementary Prem Patel			
	628	Flood Prevention Using The Ras	pberry Pi		5
		Stoney Brook Elementary Lucas Zapata-Sanin			
	2200	Networked Measurement of Ioni STONE STream Observation an Hopewell Valley Central High Sonja Michaluk			9
Division: Elemen 1st Place Princeton Award		ry Plasma Physics Laboratory	Category: From:	Princeton Plasma Physics Lab	
	604	How High Will it Fly			5
		St. Gregory the Great School Nicholas Reme			
Division: Earle S. Ro Plaque	Elementa	ry mmunications Award	Category: From:	Mercer Science and Engineering Club	
	677	The Effect of Stain Removers on	Stained Clothes		4
		Perry L. Drew Elementary Kristen B Rodrigues-Prabhu			
Division: Earle S. Ro Plaque	Junior mmel Cor	mmunications Award	Category: From:	Mercer Science and Engineering Club	
	100	The Roles of pH, Nitrates, Nitrog Growth Community Middle School Oliver Li	gen, and Enzymes	in Pitcher Plant Digestion and	6

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Division: Senior Earle S. Rommel Co	ommunications Award	Category: From:	Mercer Science and Engineering Club	
2500	Early Detection of Malaria Infect Lawrenceville School Nikhil Gopal	tion with Isothern	mal Loop Amplification (LAMP)	11
Division: Senior Abbott Marshlands		Category: From:	Abbott Marshlands	
2200	Networked Measurement of Ionic STONE STream Observation and Hopewell Valley Central High Sonja Michaluk			9
Division: Junior 3rd Certificate		Category: From:	Theobald Smith Society	
106	The Five Second Rule Chapin School Aria Sangha			8
Division: Junior 2nd Certificate		Category: From:	Theobald Smith Society	
107	Ring Ring! It's Bacteria calling Lawrence Intermediate Aditi Moturi			6
Division: Senior 1st Certificate		Category: From:	Theobald Smith Society	
2400	Bacteria Killer? A Novel Galvani Lawrenceville School Jacob Wu	ic Compound		10
Division: Element Best Use of Photogr Gift certificate at Le Certificate	aphy	Category: From:	Le Camera and Video	
611	Under What Conditions do Potat George E. Wilson Elementary Jalese Bailey	oes Sprout the Fa	astest	4

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Division: Certificate		ement eive a certificate, bag and assorted electr	Category: From: onics.	Air Force Research Laboratory	
	2500	Early Detection of Malaria Infection Lawrenceville School Nikhil Gopal	with Isother	rmal Loop Amplification (LAMP)	11
	1300	Carbaryl-induced cytotoxicity and in tissues implicate the pathogenesis of Lawrenceville School Bradford Lin		in both Mytilus edulis and human	11
	1304	MotivateMe: A Cost-Effective Wrist Time Physical Rehabilitation Exercis Other Diana Voronin			11
	1600	An Immunologic Basis for the Pathos Receptor Mechanisms and Downstre West Windsor-Plainsboro High North Kiruthika Devasenapathy			12
-	Junior Marine Co	orps Award	Category: From:	U.S. Navy/Marine Corps	
	100	The Roles of pH, Nitrates, Nitrogen, Growth Community Middle School Oliver Li	and Enzyme	s in Pitcher Plant Digestion and	6
	108	Are you having a Heart Attack? - Us Attacks Lawrence Intermediate Anushka Paulchoudhury	ing Biomark	eers to Detect and Prevent Heart	6
	323	-			8
•	Senior Marine Co e and medal	orps Award	Category: From:	U.S. Navy/Marine Corps	
	2500	Early Detection of Malaria Infection Lawrenceville School Nikhil Gopal	with Isother	rmal Loop Amplification (LAMP)	11
	1304	MotivateMe: A Cost-Effective Wrist Time Physical Rehabilitation Exercis Other Diana Voronin			11

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Division: Senior ASU Sustainabiliity		Category: From:	Arizona State University	
2202	A study on preparation of biochar river water The Peddie School Yiyu Wu	from shells and	l using it to remove pollutants from	10
1601	In silico Evaluation of a Hydrogen Cell-Free Protein Synthesis Princeton International School of Ma Jiaqi Huang	_		11
Division: Senior Stockholm Junior W	ater Prize	Category: From:	Water Environment Federation	
2200	Networked Measurement of Ionic S STONE STream Observation and I Hopewell Valley Central High Sonja Michaluk			9
2202	A study on preparation of biochar river water The Peddie School Yiyu Wu	from shells and	l using it to remove pollutants from	10
Division: Senior		Category:		
NJWEA Water Env	ironment Award	From:	New Jersey Water Environment Association	
State winners go to t school will receive a		vin a trip to Swe	den and a cash award, the U.S. Winner's	
2200	Networked Measurement of Ionic S STONE STream Observation and I Hopewell Valley Central High Sonja Michaluk			9
Division: Senior NASA Earth		Category: From:	National Aeronatics and Space Administration	
2600	Identifying Two Newly Discovered Princeton High Matthew Wang	Black Hole X-	ray Transients in the Galactic Center	11

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Division: Senior NOAA Award		Category: From:	National Oceanic and Atmospheric Administration	
1700	Is it Time for a Thunderstorm Ranki West Windsor-Plainsboro High North Alexander Li	ing System?		9
Division: Senior Superior Achievemen	nt	Category: From:	ASM International Foundation	
2400	Bacteria Killer? A Novel Galvanic C Lawrenceville School Jacob Wu	ompound		10
Division: Senior Superior Achievemen	nt	Category: From:	American Meteorological Society	
1700	Is it Time for a Thunderstorm Ranki West Windsor-Plainsboro High North Alexander Li	ing System?		9
Division: Senior Special Award		Category: From:	Association for Women Geoscientists	
2200	Networked Measurement of Ionic St STONE STream Observation and No Hopewell Valley Central High Sonja Michaluk	_		9
Division: Senior Superior Achievement 1 Certificate	nt	Category: From:	Society for In Vitro Biology	
1300	Carbaryl-induced cytotoxicity and in tissues implicate the pathogenesis of Lawrenceville School Bradford Lin		n both Mytilus edulis and human	11
Division: Senior Intel Excellence in C 1 Certificate and \$200	_	Category: From:	Intel Corp.	
1304	MotivateMe: A Cost-Effective Wrist Time Physical Rehabilitation Exercise Other Diana Voronin			11

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Division: Senior **Category:** Special Award From: Mu Alpha Theta 2300 **Application of ElGamal ECC algorithm** 10 The Pennington School Ye Teng **Division:** Senior Category: **Excellence in Engineering** From: Yale Science and Engineering Association Certificate Pewter medallion (sent in August) MotivateMe: A Cost-Effective Wristband Device to Aid Stroke Patients with Real-11 Time Physical Rehabilitation Exercise Performance Other Diana Voronin **Division:** Senior Category: The Regional Ricoh Sustainable Development From: Ricoh Corp. Award Certificate. Winner eligible for drawing for a Ricoh digital camera. In silico Evaluation of a Hydrogen Production System with Enzyme Produced from 11 **Cell-Free Protein Synthesis** Princeton International School of Mathematics and Science Jiaqi Huang **Division:** Senior **Category: Genius Olympiad** From: SUNY Oswego Students can compete in the Genius Olympiad science competition in SUNY Oswego in New York. Room and board costs covered but winners must provide transportation. The competition open to all other senior division students but they must register and be accepted to compete. Early Detection of Malaria Infection with Isothermal Loop Amplification (LAMP) 11 Lawrenceville School Nikhil Gopal MotivateMe: A Cost-Effective Wristband Device to Aid Stroke Patients with Real-11 **Time Physical Rehabilitation Exercise Performance** Other Diana Voronin

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Division: Elementa	ry Category: General Science
Honorable Mention	From: Mercer Science and Engineering Club
680	Chromatography Can Be Surprisingly Sweet 4
	Perry L. Drew Elementary
	Brett Anthony Carter
645	My Fish Tank is not a Swimming Pool 4
	Grace N. Rogers Elementary
	Gabriella DeMarco
615	Sour Power 4
	Ethel McKnight Elementary
	Caden Christopher Felton
684	Gummy Bear Lab 4
	Yardville Elementary
	Remy Feniello
623	Parachuting Prediction 4
	Kisthardt Elementary
	Skyler Linke
693	How Do Your Nails Grow?
	University Heights Elementary
	Elisa Salzano
609	Headmuffs 4
	Lawrence Intermediate
	Peyton Riley Valentino
717	Watery Soils 5
	Other
	Areebah A Bhatti
681	Thick or Thin Wires 5
	Kisthardt Elementary
050	Bryan D Martinez
653	Peanut Power 5
	Mercerville Elementary
	Mason Patrick Watson

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Division: Junior		Category:	Physical	
Honorable Mention		From:	Mercer Science and Engineering Club	
318	The Dart Cart			6
	Lawrence Intermediate Thomas Carpinelli			
316	The Phantom Of The House			6
	St. Gregory the Great School			
	Patrick John DeLuca			
308	Heart in the Game			7
	Lawrence Middle			
200	Arnav Aggarwal			
302	The Effects of Temperature on Pape	r Chromatogi	caphy of Ink	7
	Chapin School			
204	Kathy Cao			
301				7
	Lawrence Middle Paraj Goyal			
309	Cardboard Bridge is Falling Down			7
000	Home school			7
	Josiah Schemmann			
Division: Junior		Category:	Biological	
Honorable Mention		From:	Mercer Science and Engineering Club	
110	The effect of the time and location or	the amount	of bacteria on an object.	6
	St. Ann's School			
	James McDonald			
108	Are you having a Heart Attack? - Us Attacks	sing Biomarke	ers to Detect and Prevent Heart	6
	Lawrence Intermediate			
	Anushka Paulchoudhury			
113	Emerald Ash Borer			7
	Lawrence Middle			
	Akash Kura			
103	0.000.000.00000			8
	St. Gregory the Great School			
	Joseph Nicholas Ferrigno			

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Division: Elementar Meritorious Achiever		Category: From:	General Science Mercer Science and Engineering Club	
689	Lets Fly!			4
	Kisthardt Elementary Jackson Jonathan Krieg			
725	Operation Sandbox: What type of fal Middle East from breathing in sand? Yardville Heights Elementary Ava Marie Calp		r best protects soldiers serving in the	5
663	Predictable Prints			5
	Morgan Elementary Alyssa Hendricksen			
636	Does music help your concentration?			5
	St. Ann's School Olivia Jachura			
649	Can You Protect a Chicken Egg From	n Falling		5
	Yardville Elementary Ava Moser			
628	Flood Prevention Using The Raspber	ry Pi		5
	Stoney Brook Elementary			
	Lucas Zapata-Sanin			
Division: Junior		Category:	Physical	
Meritorious Achiever certificate	ment	From:	Mercer Science and Engineering Club	
325	Pumped Up!			6
	Albert E. Grice Middle Natalie Elizabeth Crossney			
310	Sink or Swim			6
	St. Gregory the Great School Nina Rodriguez			
300	Will it Conduct			7
	St. Gregory the Great School Ashley Reme			
323	Cell Phones: Just Like Cigarettes			8
	St. Gregory the Great School Devon Elizabeth Pasieka			

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Division: Junior Meritorious Achieve	ment	Category: From:	Biological Mercer Science and Engineering Club	
certificate	D. WILLIAM CO. 1			
104	ReThink Your Snack			7
	St. Gregory the Great School Cristina Madaio			
106	The Five Second Rule			8
	Chapin School			
	Aria Sangha			
Division: Senior		Category:	Behavioral and Social Science	
Third Place		From:	Mercer Science and Engineering Club	
1100	Republican vs Democrat Presidents	: The Stock M	arket Investigation	9
	The Peddie School			
	Ryan Yuandi Hu			
Division: Senior		Category:	Biomedical and Health Sciences	
Third Place		From:	Mercer Science and Engineering Club	
1301	Flavonoids As A Dietary Supplement Diabetics	nt In Controlli	ng Blood Sugar Levels in Type 2	9
	The Pennington School			
	Jordan Bostick			

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Division: Junior Category:

Broadcom Masters Award From: Society For Science & The Public

Award winners ARE NOT announced individually !!! Use the following description:

Winners of the Superior awards winners in the Junior Division will be allowed to compete in the Broadcom Master Competition. Winners of this competition will receive an all-expense paid trip to Washington, DC for the student and ONE parent or guardian to compete in the finals.

105	Nature's Thermometer	6
	St. Gregory the Great School	
	Thomas J. Black	
100	The Roles of pH, Nitrates, Nitrogen, and Enzymes in Pitcher Plant Digestion and Growth	6
	Community Middle School	
	Oliver Li	
315	Parachute Shape Show	7
	St. Gregory the Great School	
	Jimmy Burrows	
317	Ocean vs. River: How Gravity Currents Work	7
	Lawrence Middle	
	Charlotte Hunter	
312	Hair-Raising Truth	8
	St. Gregory the Great School	
	Estelle Rose Kulessa	

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Division: Elementa	ry		General Science	
Outstanding Achieve	ement	From:	Mercer Science and Engineering Club	
708	OMG! Distracted Driving			4
	Perry L. Drew Elementary			
	Rachna Acharya			
627	, - w r , ,	Chance?		4
	University Heights Elementary			
657	Aidan Lipman			
657	Memory: Visual Vs. Auditory			4
	Morgan Elementary Ethan S Zimmerman			
618	Air Ball			5
	St. Gregory the Great School			J
	Chase Burrows			
697	Water Quality Comparison			5
	Perry L. Drew Elementary			
	Megan Elizabeth Khazem			
601	What is the optimum ratio of baking bath fizzy?	g soda to crear	n of tartar to make the most fizz in a	5
	Lawrence Intermediate			
	Emma Charlotte Phelan			
Division: Junior		Cotogowy	Dhysical	
Division: Junior Outstanding Achieve	ement	Category: From:	Mercer Science and Engineering Club	
certificate	ment	riom.	Wereer Science and Engineering Club	
319	The Effect of the Type of Electrolyte	es on the Amo	unt of Electricity Being Produced	6
	St. Ann's School			
	Sean Geherty			
313	Breaking the Bridges			6
	St. Gregory the Great School			
	Ian Rivera Perez			
305	Deflategate: Who Was Right?			7
	St. Gregory the Great School Connor Michael Stachowski			
303	It's Too Loud!			7
300	Chapin School			7
	Lily Tsahalis			
	-			

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	Junior		Category:	•	
Outstanding certificate	g Acmeve	ement	From: Mercer Science and Engineering Clu		
	107	Ring Ring! It's Bacteria calling			6
		Lawrence Intermediate Aditi Moturi			
	111	The Effect of Ethylene from Ripe Fr	uits on the Ri	pening of Other Fruits	8
		St. Ann's School			
		Matthew Kuever			
Division:	Senior		Category:	Behavioral and Social Science	
Second Plac	ee		From:	Mercer Science and Engineering Club	
	1101	Expanded Medicaid Program and It	s Impact on S	elf-perceived Health Status	11
		The Pennington School			
		XinYi Zheng			
Division:	Senior		Category:	Biomedical and Health Sciences	
Second Plac	ce		From:	Mercer Science and Engineering Club	
	1300	Carbaryl-induced cytotoxicity and in tissues implicate the pathogenesis of		n both Mytilus edulis and human	11
		Lawrenceville School			
		Bradford Lin			
Division:	Senior		Category:		
C IDI			Т	Bioinformatics	
Second Plac	ee		From:	Mercer Science and Engineering Club	
	1601	In silico Evaluation of a Hydrogen P Cell-Free Protein Synthesis	roduction Sys	stem with Enzyme Produced from	11
		Princeton International School of Matl	hematics and S	Science	
		Jiaqi Huang			
Division:	Senior		Category:	Earth and Environmental Sciences	
Second Plac			From:	Mercer Science and Engineering Club	
	1700	Is it Time for a Thunderstorm Rank	ing System?		9
		West Windsor-Plainsboro High North			
		Alexander Li			

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Division: Senior Second Place		itegory: om:	Environmental Engineering Mercer Science and Engineering Club	
2202	A study on preparation of biochar from sriver water	shells and	using it to remove pollutants from	10
	The Peddie School			
	Yiyu Wu			
Division: Senior	Ca	tegory:	Mathematical Sciences	
Second Place	Fr	om:	Mercer Science and Engineering Club	
2300	Application of ElGamal ECC algorithm			10
	The Pennington School			
	Ye Teng			
Division: Senior	Ca	tegory:	Physics and Astronomy	
Second Place	Fr	om:	Mercer Science and Engineering Club	
2600	Identifying Two Newly Discovered Black Hole X-ray Transients in the Galactic Center			11
	Princeton High			
	Matthew Wang			
Division: Senior	Ca	tegory:	Robotics and Intelligent Machines	
Second Place		om:	Mercer Science and Engineering Club	
2800	Investigating Autonomous Car Strategies for Dealing with Unexpected Speed Changes Using Simulations			10
	Hopewell Valley Central High			
	Christian Zapata-Sanin			

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Division: Elementary		tegory:	General Science	
Superior Achievemen	nt Fro	m:	Mercer Science and Engineering Club	
613	Appealing Apples: to lunch and to tomorr	row.		4
	Alexander School			
	Sophia Jones			
647	Electric Play Dough			4
	Alexander School			
	Jace Maher			
672	Can You Ear Me Now?			4
	Yardville Elementary			
	Kiana Tamagno			
722	What is the relationship between oil and v	water?		5
	Robinson Elementary			
	Julia E Chen			
724	Just for Kicks!			5
	Sayen Elementary			
	Megan MacDonald			
705	What is the best gripper FOR MINDS	TORMS	ROBOTIC ARMS?	5
	Lawrence Intermediate			
	Piyush Nawade			
Division: Junior	Cat	tegory:	Physical	
Superior Achievemen	nt Fro	m:	Mercer Science and Engineering Club	
certificate and an invit	tation to compete in the Broadcom Master Cor	mpetition		
315	Parachute Shape Show			7
	St. Gregory the Great School			
	Jimmy Burrows			
317	Ocean vs. River: How Gravity Currents V	Work		7
	Lawrence Middle			
	Charlotte Hunter			
312	Hair-Raising Truth			8
	St. Gregory the Great School			
	Estelle Rose Kulessa			

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Division: Junior Superior Achievemer certificate and an invit		Category: From: Competition	Biological Mercer Science and Engineering Club	
105	Nature's Thermometer St. Gregory the Great School Thomas J. Black			6
100			s in Pitcher Plant Digestion and	
Division: Elementar Most Superior Plaque and certificate		Category: From:	Rider University	
705	What is the best gripper FOR MIN Lawrence Intermediate Piyush Nawade	DSTORMS	ROBOTIC ARMS?	5
Division: Junior Most Superior Plaque and certificate		Category: From:	Biological Rider University	
105	Nature's Thermometer St. Gregory the Great School Thomas J. Black			6
Division: Junior Most Superior Plaque and certificate		Category: From:	Physical Rider University	
312	Hair-Raising Truth St. Gregory the Great School Estelle Rose Kulessa			8
Division: Senior Most Superior Plaque and certificate		Category: From:	Rider University	
2500	Early Detection of Malaria Infection w Lawrenceville School Nikhil Gopal	vith Isothern	nal Loop Amplification (LAMP)	11

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Division:	Senior		Category:	Animal Sciences	
First Place			From:	Mercer Science and Engineering Club	
	1000	Remicade as a Remedy for Chemotherapeutic Fibrosis			12
		Lawrence High			
		James Gow			
Division:	Senior		Category:	Computational Biology and Bioinformatics	
First Place			From:	Mercer Science and Engineering Club	
	1600	An Immunologic Basis for the Pathon Receptor Mechanisms and Downstre West Windsor-Plainsboro High North Kiruthika Devasenapathy			12
Division:	Senior		Category:	Embedded Systems	
First Place			From:	Mercer Science and Engineering Club	
	1304	MotivateMe: A Cost-Effective Wrist Time Physical Rehabilitation Exercis Other Diana Voronin			11
Division:	Senior		Category:	Environmental Engineering	
First Place			From:	Mercer Science and Engineering Club	
	2200	Networked Measurement of Ionic Str STONE STream Observation and No Hopewell Valley Central High Sonja Michaluk	_		9
Division:	Senior		Category:	Materials Science	
First Place			From:	Mercer Science and Engineering Club	
	2400	2400 Bacteria Killer? A Novel Galvanic Compound			10
		Lawrenceville School Jacob Wu			10
Division:	Senior		Category:	Microbiology	
First Place			From:	Mercer Science and Engineering Club	
	2500	Early Detection of Malaria Infection	with Isother	mal Loop Amplification (LAMP)	11
		Lawrenceville School Nikhil Gopal		` ` '	

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Division: Senior **Category:** 2nd Runner Up From: Mercer Science and Engineering Club Remicade as a Remedy for Chemotherapeutic Fibrosis 12 Lawrence High James Gow **Division:** Senior **Category:** 1st Runner-up From: Mercer Science and Engineering Club Alternate for the ISEF trip if the Grand Prize winner cannot attend An Immunologic Basis for the Pathogenesis of Autism Spectrum Disorder: Toll-like 12 Receptor Mechanisms and Downstream Processes West Windsor-Plainsboro High North Kiruthika Devasenapathy **Division:** Senior **Category: Grand Prize** From: Mercer Science and Engineering Club All expense paid trip to the Intel International Science and Engineering Fair in May Early Detection of Malaria Infection with Isothermal Loop Amplification (LAMP) 11 Lawrenceville School Nikhil Gopal

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