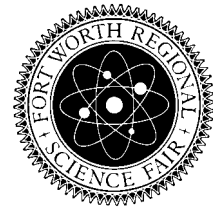


# Fort Worth Regional Science Fair

## Winners Directory

### Award: ANIMAL SCIENCES

<b>First Place: Reeves Baller</b> Project: <b>Nature's Plowman</b>	Division: <b>J</b>	<b>85778</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Loren Gallo</b>	
<b>Second Place: Sarah Becker</b> Project: <b>How Garden Snails Find Your Garden</b>	Division: <b>J</b>	<b>103886</b>
School: <b>Ican Homeschool (Ms)</b>	Advisor: <b>Ruth Moore</b>	
<b>Third Place: Noah Stephenson</b> Project: <b>Moth To a Flame</b>	Division: <b>J</b>	<b>82868</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Amy Funderburk</b>	

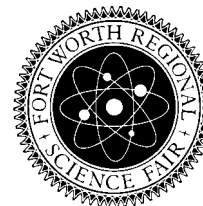


# Fort Worth Regional Science Fair

## Winners Directory

Award: **BEHAVIORAL & SOCIAL SCIENCES**

<b>First Place:</b> Ella Bennett	Division: J	95457
Project: Eye Tracking Differences in People With Without Dyslexia When Reading		
School: Trivium Academy	Advisor: Layne Miles	
<b>Second Place:</b> Savanna Morris	Division: J	72475
Project: C the Difference		
School: Liberty Christian School M S	Advisor: Loren Gallo	
<b>Third Place:</b> EmmaGrace Freeman	Division: J	85392
Project: Visual or Auditory~ Which one are you?		
School: Liberty Christian School M S	Advisor: Kate Daggett	



# Fort Worth Regional Science Fair

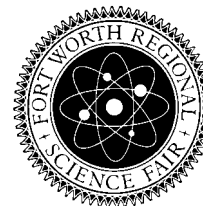
## Winners Directory

### Award: **BIOCHEMISTRY**

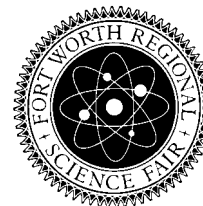
<b>First Place: Cyrus Carlson</b>	Division: <b>J</b>	<b>104121</b>
Project: <b>Fueling the Future: Algal Bio Fuels</b>		
School: <b>Tams Middle School Aspire Fair</b>	Advisor: <b>Russ Stukel</b>	
<b>First Place: Daniel Puma</b>	Division: <b>J</b>	<b>104121</b>
Project: <b>Fueling the Future: Algal Bio Fuels</b>		
School: <b>Tams Middle School Aspire Fair</b>	Advisor: <b>Russ Stukel</b>	
<b>Second Place: Sumodha Pokhrel</b>	Division: <b>J</b>	<b>102253</b>
Project: <b>Fermentation of Saccharides by Yeast</b>		
School: <b>Harmony School Of Innovation Middle School (For</b>	Advisor: <b>Karen Moore</b>	
<b>Third Place: Lanie O'Neill</b>	Division: <b>J</b>	<b>102643</b>
Project: <b>Ecstatic planters (Testing Biomass Production by Measuring of Heat Production of Various Herbs)</b>		
School: <b>Tams Middle School Aspire Fair</b>	Advisor: <b>Russ Stukel</b>	

# Fort Worth Regional Science Fair

## Winners Directory

Award: **CHEMISTRY**

<b>First Place: Quinnly Heinsen</b> Project: <b>The Truth About Toothpaste</b>	Division: <b>J</b>	<b>82877</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Amy Funderburk</b>	
<b>Second Place: Sean McCall</b> Project: <b>Reliable plastic made of milk.</b>	Division: <b>J</b>	<b>97578</b>
School: <b>Graham Junior High School</b>	Advisor: <b>Jeanne Richardson</b>	
<b>Second Place: Ty Carter</b> Project: <b>Reliable plastic made of milk.</b>	Division: <b>J</b>	<b>97578</b>
School: <b>Graham Junior High School</b>	Advisor: <b>Jeanne Richardson</b>	
<b>Third Place: Jackson Purvis</b> Project: <b>The Vitamin C-hallenge</b>	Division: <b>J</b>	<b>86074</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Loren Gallo</b>	



# Fort Worth Regional Science Fair

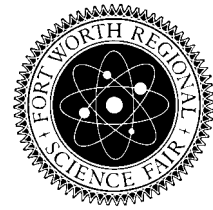
## Winners Directory

### Award: **COMPUTER SCIENCE**

<b>First Place: Nimit Satwah</b>	Division: <b>J</b>	103705
Project: <b>Which Voice Controlled Personal Assistant Is The Most Helpful?</b>		
School: <b>Sue Crouch Intermediate</b>	Advisor: <b>Chelsea Ruffin-Hawthorn</b>	

<b>Second Place: Molly Monschke</b>	Division: <b>J</b>	86019
Project: <b>Monopoly mastermind</b>		
School: <b>Liberty Christian School M S</b>	Advisor: <b>Loren Gallo</b>	

<b>Third Place: Gebryan Arciniega</b>	Division: <b>J</b>	82037
Project: <b>Manipulation of Artificial Intelligence in Human Applications</b>		
School: <b>Irma Marsh Middle School</b>	Advisor: <b>Rachel Truax</b>	
<b>Third Place: Luis Arciniega</b>	Division: <b>J</b>	82037
Project: <b>Manipulation of Artificial Intelligence in Human Applications</b>		
School: <b>Irma Marsh Middle School</b>	Advisor: <b>Rachel Truax</b>	
<b>Third Place: Edgar Cruz Morales</b>	Division: <b>J</b>	82037
Project: <b>Manipulation of Artificial Intelligence in Human Applications</b>		
School: <b>Irma Marsh Middle School</b>	Advisor: <b>Rachel Truax</b>	

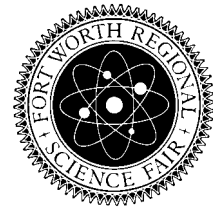


# Fort Worth Regional Science Fair

## Winners Directory

Award: **EARTH & PLANET SCIENCE**

<b>First Place: Levi Johanon</b> Project: <b>Bio Battle</b>	Division: <b>J</b>	<b>102438</b>
School: <b>Harmony School Of Innovation Middle School (For</b>		
Advisor: <b>Karen Moore</b>		
<b>First Place: Trenton Norris</b> Project: <b>Bio Battle</b>	Division: <b>J</b>	<b>102438</b>
School: <b>Harmony School Of Innovation Middle School (For</b>		
Advisor: <b>Karen Moore</b>		
<b>Second Place: Enzo Sagun</b> Project: <b>Ctrl+Z Plastic</b>	Division: <b>J</b>	<b>102382</b>
School: <b>Harmony School Of Innovation Middle School (For</b>		
Advisor: <b>Karen Moore</b>		
<b>Third Place: Margaret Cordero</b> Project: <b>To Eat or Not To Eat</b>	Division: <b>J</b>	<b>102902</b>
School: <b>Harmony School Of Innovation Middle School (For</b>		
Advisor: <b>Rhonda Reinicke</b>		

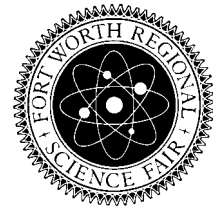


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **ENERGY & TRANSPORTATION**

<b>First Place: Beverly Schluckwerder</b> Project: <b>Can you hear me?</b>	Division: <b>J</b>	<b>102067</b>
School: <b>Harmony School Of Innovation Middle School (For</b>	Advisor: <b>Deborah Epps</b>	
<b>Second Place: Evan McKellar</b> Project: <b>Hydrogen, The Future Powered On!</b>	Division: <b>J</b>	<b>102940</b>
School: <b>Harmony School Of Innovation Middle School (For</b>	Advisor: <b>Rhonda Reinicke</b>	
<b>Third Place: Stewart Cox</b> Project: <b>Methyl Alcohol Biodiesel Production</b>	Division: <b>J</b>	<b>102434</b>
School: <b>Harmony School Of Innovation Middle School (For</b>	Advisor: <b>Karen Moore</b>	



# Fort Worth Regional Science Fair

## Winners Directory

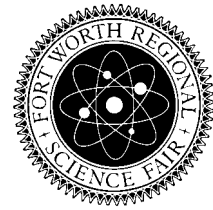
Award: **ENGINEERING: ELEC & MECH**

<b>First Place: Austin Guzzardo</b> Project: <b>Channel Wing</b>	Division: <b>J</b>	<b>102525</b>
School: <b>Harmony School Of Innovation Middle School (For</b>	Advisor: <b>Karen Moore</b>	
<b>Second Place: Robb Grimes</b> Project: <b>Does the air pressure of a soccer ball affect the distance traveled when kicked?</b>	Division: <b>J</b>	<b>97583</b>
School: <b>Graham Junior High School</b>	Advisor: <b>James Wyatt</b>	
<b>Second Place: Owen Gage</b> Project: <b>Does the air pressure of a soccer ball affect the distance traveled when kicked?</b>	Division: <b>J</b>	<b>97583</b>
School: <b>Graham Junior High School</b>	Advisor: <b>James Wyatt</b>	
<b>Third Place: Silas Shortes</b> Project: <b>Over Troubled Waters</b>	Division: <b>J</b>	<b>102716</b>
School: <b>Harmony School Of Innovation Middle School (For</b>	Advisor: <b>Karen Moore</b>	



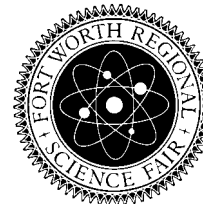
# Fort Worth Regional Science Fair

## Winners Directory



Award: **ENGINEERING: MATL & BIOENG**

<b>First Place: Kate Ramirez</b> Project: <b>Max Toughness</b>	Division: <b>J</b>	<b>85876</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Kate Daggett</b>	
<b>Second Place: Madison Gee</b> Project: <b>Detergent wars</b>	Division: <b>J</b>	<b>84852</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Kate Daggett</b>	
<b>Third Place: Antonio Simone</b> Project: <b>What's The Right Mix?</b>	Division: <b>J</b>	<b>84893</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Kate Daggett</b>	



# Fort Worth Regional Science Fair

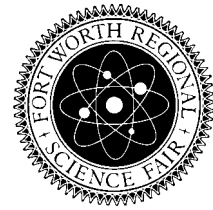
## Winners Directory

Award: **ENVIRONMENTAL SCIENCES**

<b>First Place: Peighton Allred</b> Project: <b>IS GREY WATER GREEN?</b> School: <b>Children'S University</b>	Division: <b>J</b> Advisor: <b>Tabatha Knickerbocker</b>	<b>100071</b>
<b>Second Place: Unnathi Prakash</b> Project: <b>A Study of the Effects of Ferrofluid on Simulated Oil Spills</b> School: <b>Harmony Academy - Euless Middle School</b>	Division: <b>J</b> Advisor: <b>Mary Dunn</b>	<b>103999</b>
<b>Third Place: Cristina Garcia</b> Project: <b>Can Recycled Plastics Create Bullet Resistant Glass</b> School: <b>Graham Junior High School</b>	Division: <b>J</b> Advisor: <b>Jeanne Richardson</b>	<b>97947</b>

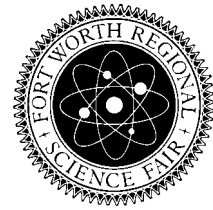
# Fort Worth Regional Science Fair

## Winners Directory



Award: **MATHEMATICAL SCIENCES**

<b>First Place: Zackary Michler</b>	<b>Division: J</b>	<b>102354</b>
<b>Project: Let's Make a Paradox</b>		
<b>School: Sue Crouch Intermediate</b>	<b>Advisor: Chelsea Ruffin-Hawthorn</b>	



# Fort Worth Regional Science Fair

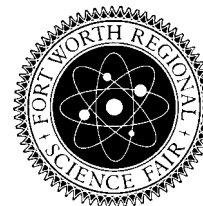
## Winners Directory

Award: **MEDICINE AND HEALTH SCIENCES**

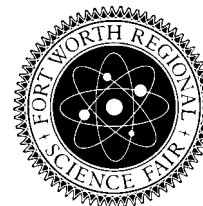
<b>First Place: Jenna Blanton</b> Project: <b>Don't smoke kids!</b>	Division: <b>J</b>	<b>86066</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Loren Gallo</b>	
<b>Second Place: Thandi Gwelo</b> Project: <b>Spick and Span but Cough and Hack?</b>	Division: <b>J</b>	<b>82961</b>
School: <b>Liberty Christian School M S</b>	Advisor: <b>Amy Funderburk</b>	
<b>Third Place: Janice Lee</b> Project: <b>Sunscreen's Protective Effect on Bean Germination against UV</b>	Division: <b>J</b>	<b>102324</b>
School: <b>Heritage Middle School</b>	Advisor: <b>Sonya Loughran</b>	

# Fort Worth Regional Science Fair

## Winners Directory

**Award: MICROBIOLOGY**

<b>First Place: Wilson Borry</b> Project: <b>How Does Bacteria React to Certain Chemicals?</b> School: <b>Trivium Academy</b>	Division: <b>J</b> Advisor: <b>Beth Frank</b>	<b>96811</b>
<b>Second Place: Kate Fryda</b> Project: <b>What's In Your Water?</b> School: <b>St. John Apostle Catholic Middle School</b>	Division: <b>J</b> Advisor: <b>Kevin Hathaway</b>	<b>102759</b>
<b>Third Place: Sydney Reardon</b> Project: <b>0? 2? 5? 10? How Much Thieves Should You Put In?</b> School: <b>Liberty Christian School M S</b>	Division: <b>J</b> Advisor: <b>Loren Gallo</b>	<b>86068</b>

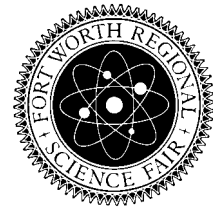


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **PHYSICS AND ASTRONOMY**

<b>First Place: Nathaniel Foy</b> Project: <b>Air: the Electron Highway</b>  School: <b>St. John Apostle Catholic Middle School</b>	Division: <b>J</b>  Advisor: <b>Kevin Hathaway</b>	<b>102937</b>
<b>Second Place: Ellie Meredith</b> Project: <b>Bounce Back</b>  School: <b>Liberty Christian School M S</b>	Division: <b>J</b>  Advisor: <b>Loren Gallo</b>	<b>87591</b>
<b>Third Place: Sebastian Harasimiuk</b> Project: <b>Magnifying Sunlight</b>  School: <b>St. Elizabeth Ann Seton Catholic Middle School</b>	Division: <b>J</b>  Advisor: <b>Katherine Arnold</b>	<b>76602</b>
<b>Third Place: James Watts</b> Project: <b>Magnifying Sunlight</b>  School: <b>St. Elizabeth Ann Seton Catholic Middle School</b>	Division: <b>J</b>  Advisor: <b>Katherine Arnold</b>	<b>76602</b>

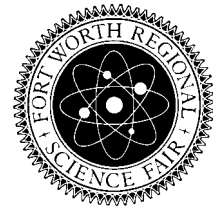


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **PLANT SCIENCES**

<b>First Place: Sandra Mathew</b> Project: <b>Vitamin C in Veggies</b>	Division: <b>J</b>	<b>102057</b>
School: <b>Harmony School Of Innovation Middle School (For</b>	Advisor: <b>Deborah Epps</b>	
<b>Second Place: Mary Bonenberger</b> Project: <b>Homemade Plant Fertilizers Compete With Store Bought Fertilizer</b>	Division: <b>J</b>	<b>94744</b>
School: <b>Trivium Academy</b>	Advisor: <b>Layne Miles</b>	
<b>Third Place: Eden Resendez</b> Project: <b>Are used K-Cup coffee grounds better than dirt and fertilizer for bean growth?</b>	Division: <b>J</b>	<b>103344</b>
School: <b>Sue Crouch Intermediate</b>	Advisor: <b>Justin Thompson</b>	



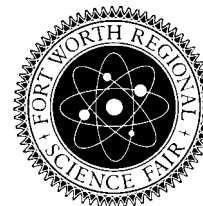
# Fort Worth Regional Science Fair

## Winners Directory

### Award: ANIMAL SCIENCES

<b>First Place: Jean Nie</b>	Division: S	79281
Project: <b>Wake-Up Call: Utilizing Coffee As an Organic Solution To Control the Aedes Aegypti Population</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	
<b>Second Place: Shriya Veluri</b>	Division: S	91506
Project: <b>Using the Wick Drug Delivery System to Study Vascular Malformations in Gallus domesticus</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	
<b>Third Place: Madison Hidalgo</b>	Division: S	102872
Project: <b>The effect of food additives on the hyperactivity of Drosophila melanogaster.</b>		
School: <b>Granbury High School</b>	Advisor: <b>Priscilla Lumbreras</b>	
<b>Third Place: Isabella Sanchez</b>	Division: S	102872
Project: <b>The effect of food additives on the hyperactivity of Drosophila melanogaster.</b>		
School: <b>Granbury High School</b>	Advisor: <b>Priscilla Lumbreras</b>	





# Fort Worth Regional Science Fair

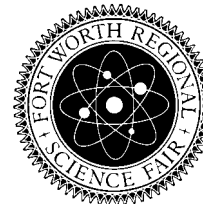
## Winners Directory

Award: **BEHAVIORAL & SOCIAL SCIENCES**

<b>First Place: Rhythm Garg</b>	Division: S	<b>92482</b>
Project: <b>Diagnosing Autism with Machine Learning: Binary Classification for Eye Movement in Virtual Reality Environment</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	

<b>Second Place: Ishika Bindal</b>	Division: S	<b>79411</b>
Project: <b>Snap Out Of It: Using Blue Light to Lessen the Effects of Mind Wandering</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	

<b>Third Place: Ellie Mattoon</b>	Division: S	<b>89425</b>
Project: <b>Caffeine and Health Outcomes in Boarding-School Adolescents</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

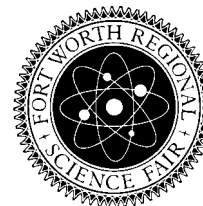
## Winners Directory

Award: **BIOCHEMISTRY**

<b>First Place: Zhuoran Wang</b>	Division: S	<b>72590</b>
Project: <b>Regulation of SREBP-1 by Polyunsaturated Fatty Acids</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	

<b>Second Place: Krithika Ravishankar</b>	Division: S	<b>92436</b>
Project: <b>Structural Analysis of Mutation in Poly [ADP-ribose] Polymerase 1 (PARP1) correlated with Lung Cancer and Follicular Lymphoma</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	

<b>Third Place: Zihan Zhao</b>	Division: S	<b>92964</b>
Project: <b>Role of cisd-3 in C. elegans Fertility</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

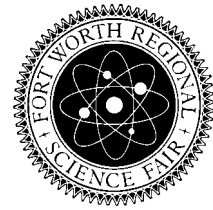
## Winners Directory

Award: **CHEMISTRY**

<b>First Place: Eunyoung Kim</b>	Division: S	<b>91183</b>
Project: <b>Photothermal efficiency of silver nanoparticles in tissue stratification models: An investigation on the effect of nanoparticle size and polymeric substrate models on nanoparticle light to heat conversion efficiency</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	

<b>Second Place: Jehil Mehta</b>	Division: S	<b>92428</b>
Project: <b>Development of Novel Metal-Inorganic Frameworks toward Greening the Environment</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	

<b>Third Place: Rohan Maheshwari</b>	Division: S	<b>73268</b>
Project: <b>Morphology-Dependent Optoelectronic Properties of Hydrothermally Grown Nano- and Microscale ZnO</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	

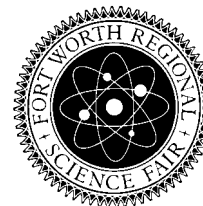


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **COMPUTER SCIENCE**

<b>First Place: Julia Camacho</b>	Division: S	<b>91166</b>
Project: <b>Predicting the Development of Secondary Central Nervous System Cancer Through Ensemble Learning Methods</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	
<b>Second Place: Julia Shanks</b>	Division: S	<b>84422</b>
Project: <b>Eyes of the Future</b>		
School: <b>Liberty Christian High School</b>	Advisor: <b>Theresa Green</b>	
<b>Third Place: Sarthak Sirotiya</b>	Division: S	<b>77874</b>
Project: <b>Detecting Diabetic Retinopathy using Machine Learning Algorithms</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	

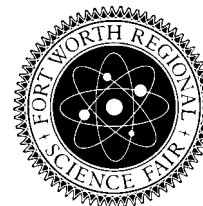


# Fort Worth Regional Science Fair

## Winners Directory

Award: **EARTH & PLANET SCIENCE**

<b>First Place: Daniela Covarrubias</b> Project: <b>Purification of Contaminated Water by Mycoremediation</b>  School: <b>Summit International High School</b>	Division: <b>S</b>  Advisor: <b>Omeshia Moffett</b>	<b>75328</b>
<b>First Place: Lily Huynh</b> Project: <b>Purification of Contaminated Water by Mycoremediation</b>  School: <b>Summit International High School</b>	Division: <b>S</b>  Advisor: <b>Omeshia Moffett</b>	<b>75328</b>
<b>Second Place: Ryan Dharmadi</b> Project: $\frac{h}{m} [c, K_T]$ The Light  School: <b>Harmony School Of Innovation High School (Fort</b>	Division: <b>S</b>  Advisor: <b>Bilal Yildirim</b>	<b>102338</b>
<b>Third Place: Ashar Khazi-Syed</b> Project: <b>Micro Meets Nano: Applying Carbon Nanotubes in Microbial Desalination Cells</b>  School: <b>Harmony School Of Innovation High School (Fort</b>	Division: <b>S</b>  Advisor: <b>Deena Ibrahim</b>	<b>102391</b>

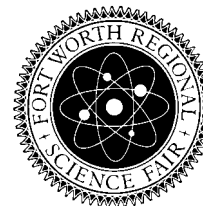


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **ENERGY & TRANSPORTATION**

<b>First Place: Noah Francis</b>	Division: S	<b>79280</b>
Project: <b>A Brighter Future: Improving the Efficiency of Chlorophyll-Sensitized Solar Cells to Create Effective Solar Energy Systems.</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	
<b>First Place: Colin Wei</b>	Division: S	<b>79280</b>
Project: <b>A Brighter Future: Improving the Efficiency of Chlorophyll-Sensitized Solar Cells to Create Effective Solar Energy Systems.</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	
<b>Second Place: Angela Owe</b>	Division: S	<b>78108</b>
Project: <b>Don't Be Waste-Fuel: The Synthesis of Cellulosic Biofuel from Organic Waste</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	
<b>Third Place: Gabe Graves</b>	Division: S	<b>103090</b>
Project: <b>Improvement of Silicon Based Solar Cell Efficiency through Photon Down-conversion of Graphene Quantum Dots Synthesized from Citric Acid</b>		
School: <b>Liberty Christian High School</b>	Advisor: <b>Theresa Green</b>	

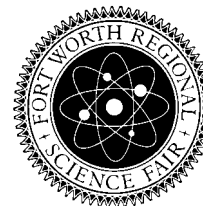


# Fort Worth Regional Science Fair

## Winners Directory

Award: **ENGINEERING: ELEC & MECH**

<b>First Place: Taaseen Safyy</b>	Division: S	<b>98726</b>
Project: <b>Investigation into Improving Microwave Power Transmission Systems through Novel Beamformer Designs</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	
<b>First Place: Anna Su</b>	Division: S	<b>98726</b>
Project: <b>Investigation into Improving Microwave Power Transmission Systems through Novel Beamformer Designs</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	
<b>Second Place: Zachary Massey</b>	Division: S	<b>99957</b>
Project: <b>Speech to Text Arduino Project to Help the Deaf.</b>		
School: <b>Granbury High School</b>	Advisor: <b>Priscilla Lumbreras</b>	
<b>Third Place: Rajveer Sagoo</b>	Division: S	<b>101927</b>
Project: <b>The Nitinol Effect</b>		
School: <b>Harmony School Of Innovation High School (Fort</b>	Advisor: <b>Deena Ibrahim</b>	



# Fort Worth Regional Science Fair

## Winners Directory

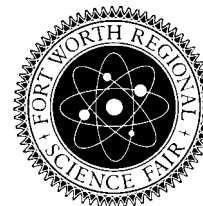
Award: **ENGINEERING: MATL & BIOENG**

<b>First Place:</b> Sucharita Banerjee	Division: S	<b>102000</b>
Project: <b>Laser Interaction with Hard Tissues</b>		
School: <b>Denton High School</b>	Advisor: <b>Heather Lentz</b>	

<b>Second Place:</b> Kevin Yao	Division: S	<b>92848</b>
Project: <b>Redefining the Mechanism for Etching of Exfoliated Graphene on Substrates by Low-Energy Electron Irradiation</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	

<b>Third Place:</b> Aamilah Chowdhury	Division: S	<b>74338</b>
Project: <b>Biomechanical Characterization of the Adult Porcine Cardiac Septum: A New Animal Model for Hypertrophic Cardiomyopathy</b>		
School: <b>Summit International High School</b>	Advisor: <b>Gabriel Diaz-Gregorich</b>	



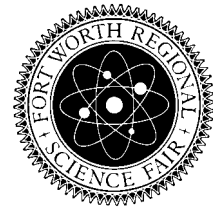


# Fort Worth Regional Science Fair

## Winners Directory

Award: **ENVIRONMENTAL SCIENCES**

<b>First Place: Haneul Hyun</b> Project: <b>H2Go: A Construction and Analysis of a Novel Purification Device</b> School: <b>Colleyville Heritage High School</b>	Division: <b>S</b>  Advisor: <b>Sonya Loughran</b>	<b>77767</b>
<b>Second Place: Michael Clark</b> Project: <b>Carbon Sequestration: New methods for Carbon Dioxide Extraction</b> School: <b>Harmony School Of Innovation High School (Fort</b>	Division: <b>S</b>  Advisor: <b>Bilal Yildirim</b>	<b>101445</b>
<b>Second Place: Guangshun Chen</b> Project: <b>Carbon Sequestration: New methods for Carbon Dioxide Extraction</b> School: <b>Harmony School Of Innovation High School (Fort</b>	Division: <b>S</b>  Advisor: <b>Bilal Yildirim</b>	<b>101445</b>
<b>Third Place: Douglas Dyer</b> Project: <b>Ant Killers: Chemical or Organic</b> School: <b>Northstar High School</b>	Division: <b>S</b>  Advisor: <b>Erin Jezek</b>	<b>101389</b>

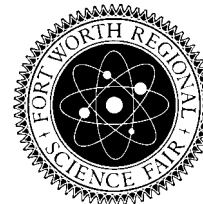


# Fort Worth Regional Science Fair

## Winners Directory

Award: **MATHEMATICAL SCIENCES**

<b>First Place: Sean Elliott</b>	Division: S	97758
Project: <b>A Scalable Network Model for Fisher-Eigen Evolutionary Processes</b>		
School: <b>North Texas Academy Of Higher Learning - High</b>	Advisor: <b>Linda Chisholm</b>	
<b>Second Place: Enes Ozturk</b>	Division: S	102756
Project: <b>Maximum Product</b>		
School: <b>Harmony School Of Innovation High School (Fort</b>	Advisor: <b>Bilal Yildirim</b>	
<b>Third Place: Brenna Casey</b>	Division: S	78883
Project: <b>A Statistical Analysis of the Best Predictors of College Success</b>		
School: <b>Colleyville Heritage High School</b>	Advisor: <b>Sonya Loughran</b>	

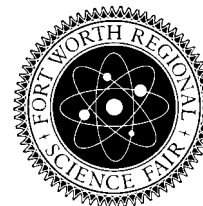


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **MEDICINE AND HEALTH SCIENCES**

<b>First Place: Ruhani Ahluwalia</b>	Division: S	<b>99807</b>
Project: <b>Reconstituted High-Density Lipoproteins for the Treatment of Pediatric Cancer</b>		
School: <b>Harmony School Of Innovation High School (Fort</b>	Advisor: <b>Bilal Yildirim</b>	
<b>Second Place: Tanvi Bobba</b>	Division: S	<b>92301</b>
Project: <b>Primary Cilia in Alzheimer's Disease</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	
<b>Third Place: Diego Fergus</b>	Division: S	<b>72959</b>
Project: <b>Frequency Threshold that Humans can Maintain within their Heads</b>		
School: <b>Grapevine High School</b>	Advisor: <b>Erin Smith</b>	



# Fort Worth Regional Science Fair

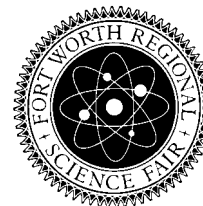
## Winners Directory

Award: **MICROBIOLOGY**

<b>First Place:</b> Sangita Vasikaran	Division: S	92431
Project: <b>First Isolation and Characterization of Bacteriophages from S. antibioticus</b>		
School: Texas Academy Of Mathematics And Sciences H S	Advisor: Samuel Earls	

<b>Second Place:</b> Manasa Sripati	Division: S	80542
Project: <b>Biosensor: A Heavy Metal Toxin Detector for Human Blood Through the Application of Bioluminescent Bacteria</b>		
School: Colleyville Heritage High School	Advisor: Sonya Loughran	

<b>Third Place:</b> Dianne Zhao	Division: S	79208
Project: <b>Break It Down: Energy Production from Organic Material in a Microbial Fuel Cell</b>		
School: Colleyville Heritage High School	Advisor: Sonya Loughran	

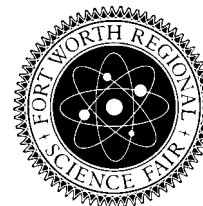


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **PHYSICS AND ASTRONOMY**

<b>First Place: David Yue</b>	Division: S	<b>101272</b>
Project: <b>Stereoscopic X-Ray Reconstruction Algorithms for Preventing Radiation-Induced Cancer</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	
<b>Second Place: Jonathan Lu</b>	Division: S	<b>74348</b>
Project: <b>Dynamic Structural Rearrangements of Active Spinner Particles in Self-Assembling Materials</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	
<b>Third Place: Nikhil Vicas</b>	Division: S	<b>89536</b>
Project: <b>Plasmon-Induced Circular Dichroism in Triskelion-Based Gold(I) Metastructures with Deep Learning for Novel Advances of Biochemistry Methods</b>		
School: <b>Texas Academy Of Mathematics And Sciences H S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

## Winners Directory

### Award: **PLANT SCIENCES**

<b>First Place:</b> Athulya Nagarajan	Division: S	92835
Project: A Novel Application of Host-Induced Gene Silencing To Limit Severity of Fusarium Head Blight in Common Wheat And the Model Plant Arabidopsis thaliana		
School: Texas Academy Of Mathematics And Sciences H S	Advisor: Samuel Earls	

<b>Second Place:</b> Apsara Mitra	Division: S	92965
Project: Analysis of Stress-Associated Transcription Factor GeneFCOs Effects On Resistance of Arabidopsis thaliana to Myzus Persicae and Environmental Stresses		
School: Texas Academy Of Mathematics And Sciences H S	Advisor: Samuel Earls	
<b>Second Place:</b> Aishwarya Mitra	Division: S	92965
Project: Analysis of Stress-Associated Transcription Factor GeneFCOs Effects On Resistance of Arabidopsis thaliana to Myzus Persicae and Environmental Stresses		
School: Texas Academy Of Mathematics And Sciences H S	Advisor: Samuel Earls	

<b>Third Place:</b> Saskia Hamilton	Division: S	82973
Project: Thyme To Die: Evaluating the Efficacy of Plant-Derived Essential Oils On Inhibiting Growth of E. Coli and B. Cereus		
School: Colleyville Heritage High School	Advisor: Sonya Loughran	
<b>Third Place:</b> Justin Yu	Division: S	82973
Project: Thyme To Die: Evaluating the Efficacy of Plant-Derived Essential Oils On Inhibiting Growth of E. Coli and B. Cereus		
School: Colleyville Heritage High School	Advisor: Sonya Loughran	