

# Fort Worth Regional Science Fair

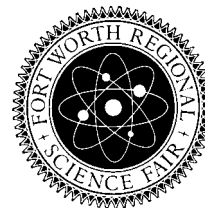
## Winners Directory

### Award: **ANIMAL SCIENCES**

<b>Third Place: Samuel Reinhardt</b>	Division: <b>J</b>	<b>01307</b>
Project: <b>Chicken Science</b>		
School: <b>ACTON MIDDLE SCHOOL</b>	Advisor: <b>Scott Carpenter</b>	

<b>Second Place: Grace Tallmadge</b>	Division: <b>J</b>	<b>09352</b>
Project: <b>Hyperactive Fleas</b>		
School: <b>E.A. YOUNG ACADEMY MS</b>	Advisor: <b>Evan Fuchs</b>	

<b>First Place: Colby Sessums</b>	Division: <b>J</b>	<b>03570</b>
Project: <b>Horses Effect on Heartrates</b>		
School: <b>LIBERTY CHRISTIAN SCHOOL</b>	Advisor: <b>Cameron Mouser</b>	



# Fort Worth Regional Science Fair

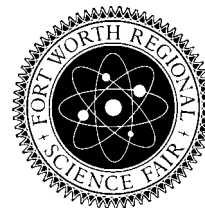
## Winners Directory

### Award: **BEHAVIORAL & SOCIAL SCIENCES**

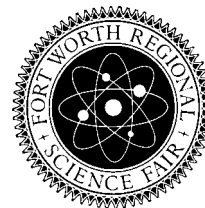
<b>Third Place: Emily Ekeroth</b> Project: <b>Left or Right</b>	Division: <b>J</b>	<b>12569</b>
School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Advisor: <b>Johnny Ha</b>	
<b>Second Place: Dixon DiBartolomeo</b> Project: <b>Musical Rat Maze</b>	Division: <b>J</b>	<b>06316</b>
School: <b>PLUM CREEK ELEMENTARY</b>	Advisor: <b>Therese Ashworth</b>	
<b>First Place: Audrey Davis</b> Project: <b>Sensory Solutions: Learning with Intensities</b>	Division: <b>J</b>	<b>08957</b>
School: <b>E.A. YOUNG ACADEMY MS</b>	Advisor: <b>Carol Raymond</b>	

# Fort Worth Regional Science Fair

## Winners Directory

**Award: Biochemistry**

<b>Third Place: Ruhani Ahluwalia</b> Project: <b>Trojan Horse Carries Magic Bullets to Kill Cancer Cells</b> School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Division: <b>J</b> Advisor: <b>Johnny Ha</b>	<b>11615</b>
<b>Second Place: Kritisha Sharma</b> Project: <b>Crying Onions</b> School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Division: <b>J</b> Advisor: <b>Johnny Ha</b>	<b>12208</b>
<b>First Place: Adam Stone</b> Project: <b>Copying DNA for a Cure</b> School: <b>ACTON MIDDLE SCHOOL</b>	Division: <b>J</b> Advisor: <b>Scott Carpenter</b>	<b>03785</b>

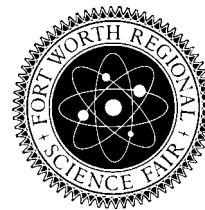


# Fort Worth Regional Science Fair

## Winners Directory

Award: **CHEMISTRY**

<b>Third Place: Ryne Bishop</b> Project: <b>What is the Flammability of Different Fabrics?</b> School: <b>LIBERTY CHRISTIAN SCHOOL</b>	Division: <b>J</b> Advisor: <b>Aaron Mouser</b>	<b>02137</b>
<b>Second Place: Omoleegho Idumah</b> Project: <b>Oh my it's sweet</b> School: <b>SUMMIT INTERNATIONAL MIDDLE SCHOOL</b>	Division: <b>J</b> Advisor: <b>Brandon Pope</b>	<b>10991</b>
<b>First Place: Hannah Keck</b> Project: <b>Buyer Beware: A Chemical Analysis For C15H16O2</b> School: <b>North Texas Academy of Higher Learning</b>	Division: <b>J</b> Advisor: <b>Linda Chisholm</b>	<b>12891</b>



# Fort Worth Regional Science Fair

## Winners Directory

### Award: **COMPUTER SCIENCE**

**Third Place: Christian Cobos**

Division: **J**

**03746**

Project: **Got Wi-fi**

School: **LIBERTY CHRISTIAN SCHOOL**

Advisor: **Cameron Mouser**

**Second Place: Ranishia Pickett**

Division: **J**

**09914**

Project: **Sight It!**

School: **GRANBURY MIDDLE SCHOOL**

Advisor: **Elizabeth Parks**

**First Place: Nikhil Thomas**

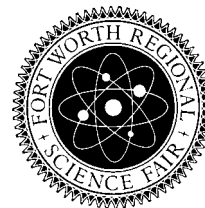
Division: **J**

**11181**

Project: **Remote Weather Monitoring Station - An Internet of Things (IoT) project using Raspberry Pi**

School: **Harmony Science Academy Carrollton-Middle Sch**

Advisor: **Sukran Cakiroglu**

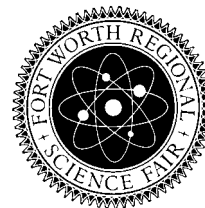


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **EARTH & PLANETARY SCIENCE**

<b>Third Place: Kaitlyn Atwood</b> Project: <b>Richter Scale Accuracy Part 2</b> School: <b>ACTON MIDDLE SCHOOL</b>	Division: <b>J</b> Advisor: <b>Scott Carpenter</b>	<b>02518</b>
<b>Second Place: Austin Graves</b> Project: <b>Neodymium vs. Ferrite, Which Magnet is Stronger?</b> School: <b>LIBERTY CHRISTIAN SCHOOL</b>	Division: <b>J</b> Advisor: <b>Cameron Mouser</b>	<b>03174</b>
<b>First Place: Elizabeth Proctor</b> Project: <b>Can fish waste provide enough nutrients to sustain plant growth, and how does it compare to traditional soil based techniques?</b> School: <b>Saint Maria Goretti Catholic School</b>	Division: <b>J</b> Advisor: <b>Gary Spaulding</b>	<b>13716</b>

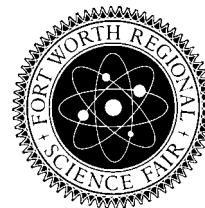


# Fort Worth Regional Science Fair

## Winners Directory

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

<b>Third Place: Max Espinoza</b> Project: <b>Hot Work Makes For Cool Sodas: Thermal Energy at Work</b> School: <b>St Peter the Apostle Catholic School</b>	Division: <b>J</b> Advisor: <b>Lisa Giardino</b>	<b>10898</b>
<b>Second Place: Thomas Holt</b> Project: <b>Gravity - In a Whole New Light</b> School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Division: <b>J</b> Advisor: <b>Johnny Ha</b>	<b>11951</b>
<b>First Place: Kelly Becker</b> Project: <b>Density, Does It Really Matter?</b> School: <b>LIBERTY CHRISTIAN SCHOOL</b>	Division: <b>J</b> Advisor: <b>Aaron Mouser</b>	<b>02680</b>



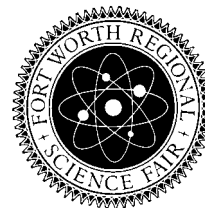
# Fort Worth Regional Science Fair

## Winners Directory

### Award: **ENGINEERING: ELECTRICAL & MECHANICAL**

<b>Third Place: Lindy Lyda</b> Project: <b>Safety Scalpels</b>  School: <b>E.A. YOUNG ACADEMY MS</b>	Division: <b>J</b>  Advisor: <b>Evan Fuchs</b>	<b>08969</b>
<b>Second Place: Addison Hudelson</b> Project: <b>The Strongest Shape</b>  School: <b>LIBERTY CHRISTIAN SCHOOL</b>	Division: <b>J</b>  Advisor: <b>Aaron Mouser</b>	<b>02640</b>
<b>First Place: Rajveer Sagoo</b> Project: <b>Fuse Rockets</b>  School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Division: <b>J</b>  Advisor: <b>Norma Ponce</b>	<b>12735</b>



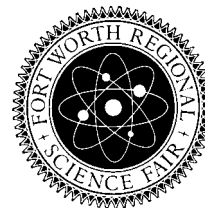


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **ENGINEERING: MATERIALS & BIOENGINEERING**

<b>Third Place: Robert Kremer</b>	Division: <b>J</b>	<b>12448</b>
Project: <b>Huff, Puff, Burn the House Down! Do engineered wood beams burn faster than solid wood beams in residential construction?</b>		
School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Advisor: <b>Johnny Ha</b>	
<b>Second Place: Quan Le</b>	Division: <b>J</b>	<b>12002</b>
Project: <b>Finding the Optimal Solar Cell</b>		
School: <b>Harmony Science Academy Carrollton-Middle Sch</b>	Advisor: <b>Rajkumar Tiwari</b>	
<b>First Place: Tausiful Hoque</b>	Division: <b>J</b>	<b>12498</b>
Project: <b>Using Bioinformatics to Determine the Best Transcription Factor for Direct Reprogramming</b>		
School: <b>HARMONY ACADEMY - EULESS MIDDLE SC</b>	Advisor: <b>Fatih Ilhan</b>	

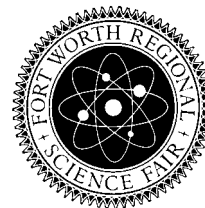


# Fort Worth Regional Science Fair

## Winners Directory

### Award: ENVIRONMENTAL SCIENCES

<b>Third Place: Guangshun Chen</b> Project: <b>Dry Ice Electricity</b>	Division: <b>J</b>	<b>12570</b>
School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Advisor: <b>Johnny Ha</b>	
<b>Second Place: Rebecca Fripp</b> Project: <b>Separating Oil and Water with a Spoon</b>	Division: <b>J</b>	<b>12137</b>
School: <b>Harmony Science Academy Carrollton-Middle Sch</b>	Advisor: <b>Rajkumar Tiwari</b>	
<b>First Place: Ashar Khazi-Syed</b> Project: <b>NANO IS HOT : Water Desalination Using Nanoparticles</b>	Division: <b>J</b>	<b>12186</b>
School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Advisor: <b>Norma Ponce</b>	

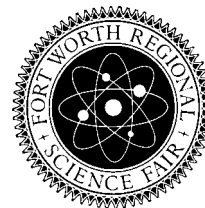


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **MATHEMATICS**

<b>Third Place: Hayden Hall</b> Project: <b>Does Gaming Help Your Math Skills</b> School: <b>PLUM CREEK ELEMENTARY</b>	Division: <b>J</b> Advisor: <b>Therese Ashworth</b>	<b>10801</b>
<b>Second Place: Taaseen Safy</b> Project: <b>Radiation Emission Of Different Colors</b> School: <b>HARMONY ACADEMY - EULESS MIDDLE SC</b>	Division: <b>J</b> Advisor: <b>Fatih Ilhan</b>	<b>12652</b>
<b>First Place: Michael Clark</b> Project: <b>On-Site Power: Sustaining the American Lifestyle</b> School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Division: <b>J</b> Advisor: <b>Johnny Ha</b>	<b>11868</b>

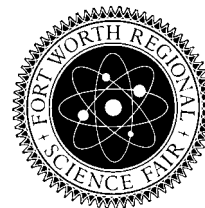


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **MEDICINE & HEALTH**

<b>Third Place: Luis Hernandez</b> Project: <b>Is hearing hightend by your dominant side</b> School: <b>GRANBURY MIDDLE SCHOOL</b>	Division: <b>J</b> Advisor: <b>Elizabeth Parks</b>	<b>09365</b>
<b>Third Place: Daniel Dsouza</b> Project: <b>Is hearing hightend by your dominant side</b> School: <b>GRANBURY MIDDLE SCHOOL</b>	Division: <b>J</b> Advisor: <b>Elizabeth Parks</b>	<b>09365</b>
<b>Second Place: Jordan Hanes</b> Project: <b>Plunge Into Darkness</b> School: <b>E.A. YOUNG ACADEMY MS</b>	Division: <b>J</b> Advisor: <b>Evan Fuchs</b>	<b>09351</b>
<b>First Place: Michael Perriello</b> Project: <b>Do You See What I See</b> School: <b>ACTON MIDDLE SCHOOL</b>	Division: <b>J</b> Advisor: <b>Scott Carpenter</b>	<b>03553</b>



# Fort Worth Regional Science Fair

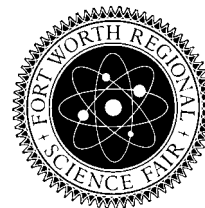
## Winners Directory

### Award: **MICROBIOLOGY**

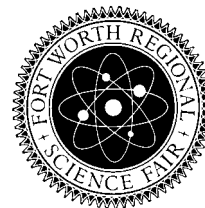
<b>Third Place: Lindsey Gorman</b> Project: <b>The Denim Debacle</b>  School: <b>E.A. YOUNG ACADEMY MS</b>	Division: <b>J</b>  Advisor: <b>Carol Raymond</b>	<b>07347</b>
<b>Second Place: Mary Harshfield</b> Project: <b>Dating: Is it Right or Udderly Wrong?</b>  School: <b>LIBERTY CHRISTIAN SCHOOL</b>	Division: <b>J</b>  Advisor: <b>Aaron Mouser</b>	<b>02637</b>
<b>First Place: Harry Black</b> Project: <b>The Defrosting Dilemma</b>  School: <b>ST. JOSEPH CATHOLIC SCHOOL IN ARLING</b>	Division: <b>J</b>  Advisor: <b>Valerie Fell</b>	<b>10108</b>

# Fort Worth Regional Science Fair

## Winners Directory

**Award: PHYSICS & ASTRONOMY**

<b>Third Place: Irene Strzhemechny</b> Project: <b>Does Temperature Affect the Strength of a Magnet</b> School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Division: <b>J</b> Advisor: <b>Johnny Ha</b>	<b>11832</b>
<b>Second Place: Aleena Teresa</b> Project: <b>3..2..1 Blast Off!</b> School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Division: <b>J</b> Advisor: <b>Johnny Ha</b>	<b>11859</b>
<b>First Place: Scout Skaggs</b> Project: <b>An "Ernest" idea</b> School: <b>ACTON MIDDLE SCHOOL</b>	Division: <b>J</b> Advisor: <b>Scott Carpenter</b>	<b>02116</b>

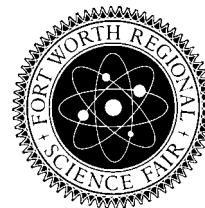


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **PLANT SCIENCES**

<b>Third Place: Blaine McCoy</b>	Division: <b>J</b>	<b>13038</b>
Project: <b>Which Is More Effective on the Germination of Cilantro Seeds; Miracle Grow Potting Soil with Tap Water or Miracle Grow Potting Soil with Epsom Salt Solution?</b>		
School: <b>CHRISTIAN COTTAGE PREP MIDDLE SCHOO</b>	Advisor: <b>Teri Willis</b>	
<b>Second Place: Amar Sharma</b>	Division: <b>J</b>	<b>11991</b>
Project: <b>Multiplying Madness: Nature is in Control</b>		
School: <b>HARMONY SCHOOL OF INNOVATION MIDD</b>	Advisor: <b>Johnny Ha</b>	
<b>First Place: Quincy Harper</b>	Division: <b>J</b>	<b>08841</b>
Project: <b>GMN0</b>		
School: <b>E.A. YOUNG ACADEMY MS</b>	Advisor: <b>Gayle Brown</b>	



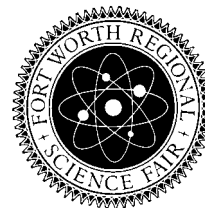
# Fort Worth Regional Science Fair

## Winners Directory

### Award: ANIMAL SCIENCES

<b>Third Place: Kasey Jones</b> Project: <b>Hamster GPS</b> School: <b>EVERMAN HIGH SCHOOL</b>	Division: <b>S</b> Advisor: <b>Larry Ritchie</b>	<b>12466</b>
<b>Second Place: Rayni Skaggs</b> Project: <b>Consequence of Nonpoint Source Pollution on Freshwater Mussels</b> School: <b>GRANBURY HIGH SCHOOL</b>	Division: <b>S</b> Advisor: <b>Janel Morris</b>	<b>07272</b>
<b>First Place: Blake Pope</b> Project: <b>Resource Partitioning in Sceloporus olivaceus</b> School: <b>SUMMIT INTERNATIONAL HIGH SCHOOL</b>	Division: <b>S</b> Advisor: <b>Kiara Hervey</b>	<b>04781</b>



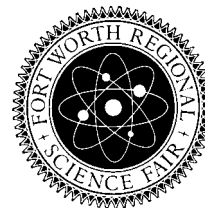


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **BEHAVIORAL & SOCIAL SCIENCES**

<b>Third Place: Elyssa Pfluger</b> Project: <b>Stress: It's Ruff</b>	Division: <b>S</b>	<b>08483</b>
School: <b>E.A. YOUNG ACADEMY HS</b>	Advisor: <b>Jeremy Edins</b>	
<b>Third Place: Zarine Parakh</b> Project: <b>Stress: It's Ruff</b>	Division: <b>S</b>	<b>08483</b>
School: <b>E.A. YOUNG ACADEMY HS</b>	Advisor: <b>Jeremy Edins</b>	
<b>Third Place: Shannon Fischer</b> Project: <b>Stress: It's Ruff</b>	Division: <b>S</b>	<b>08483</b>
School: <b>E.A. YOUNG ACADEMY HS</b>	Advisor: <b>Carol Raymond</b>	
<b>Second Place: Raquel Garcia</b> Project: <b>Methods of Loci</b>	Division: <b>S</b>	<b>08511</b>
School: <b>E.A. YOUNG ACADEMY HS</b>	Advisor: <b>Jeremy Edins</b>	
<b>First Place: Ainsley McDonald-Boyer</b> Project: <b>Diagnostic Test for Dyslexia</b>	Division: <b>S</b>	<b>08531</b>
School: <b>AZLE HIGH SCHOOL</b>	Advisor: <b>Monica Amyett</b>	



# Fort Worth Regional Science Fair

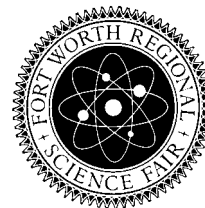
## Winners Directory

### Award: **BIOCHEMISTRY**

<b>Third Place: Vincent Liu</b>	Division: <b>S</b>	<b>06456</b>
Project: <b>"Eye" See What You Did There: Using an Empirical Method to Determine Neurocircuitry</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>Second Place: Michael Yuan</b>	Division: <b>S</b>	<b>06753</b>
Project: <b>Identification and characterization of ciliary receptors as novel anti-epileptic drug targets</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	
<b>Second Place: Sachit Menon</b>	Division: <b>S</b>	<b>06753</b>
Project: <b>Identification and characterization of ciliary receptors as novel anti-epileptic drug targets</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>First Place: Carolyn Huynh</b>	Division: <b>S</b>	<b>07887</b>
Project: <b>Characterizing the Role of Cilia in the Oligodendrocyte Lineage During Myelination</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	
<b>First Place: Jagath Vytheeswaran</b>	Division: <b>S</b>	<b>07887</b>
Project: <b>Characterizing the Role of Cilia in the Oligodendrocyte Lineage During Myelination</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

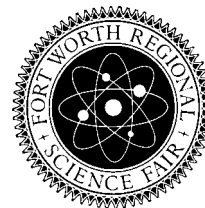
## Winners Directory

Award: **CHEMISTRY**

<b>Third Place: Celeste Soto</b>	Division: <b>S</b>	<b>12477</b>
Project: <b>How much does your cell phone burst?</b>		
School: <b>EVERMAN HIGH SCHOOL</b>	Advisor: <b>Larry Ritchie</b>	

<b>Second Place: Emily Hu</b>	Division: <b>S</b>	<b>06531</b>
Project: <b>Computational Study of Nickel Silicide Electronic Structure and Bonding Properties</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>First Place: Joshua Yue</b>	Division: <b>S</b>	<b>06788</b>
Project: <b>Molecular Dynamics Simulations of the NF-kB Inducing Kinase in Disease Prevention</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

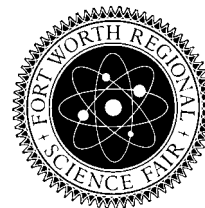
## Winners Directory

### Award: **COMPUTER SCIENCE**

<b>Third Place: Aditya Vaidya</b>	Division: <b>S</b>	<b>05431</b>
Project: <b>Modeling the Spread and Control of a Contagion on Multiplex Social Networks</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>Second Place: David Hashe</b>	Division: <b>S</b>	<b>06624</b>
Project: <b>Method for the Translation of Control-Flow Instructions into Data-Flow Graphs</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>First Place: David Yuan</b>	Division: <b>S</b>	<b>06396</b>
Project: <b>Network Security Through Random Path Algorithm</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

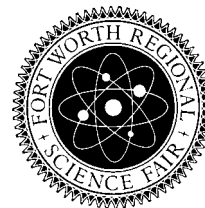


# Fort Worth Regional Science Fair

## Winners Directory

### Award: **EARTH & PLANETARY SCIENCE**

<b>Third Place: Dumdubabari Gimah</b> Project: <b>Tornadoes In Action</b> School: <b>EVERMAN HIGH SCHOOL</b>	Division: <b>S</b> Advisor: <b>Larry Ritchie</b>	<b>12527</b>
<b>Second Place: Jose Alcala</b> Project: <b>Creating A Facilitating System To Increase Energy Output</b> School: <b>SUMMIT INTERNATIONAL HIGH SCHOOL</b>	Division: <b>S</b> Advisor: <b>Kiara Hervey</b>	<b>04966</b>
<b>First Place: Daniela Gonzalez</b> Project: <b>Muddy Power</b> School: <b>EVERMAN HIGH SCHOOL</b>	Division: <b>S</b> Advisor: <b>Larry Ritchie</b>	<b>12469</b>



# Fort Worth Regional Science Fair

## Winners Directory

**Award: ENERGY & TRANSPORTATION**

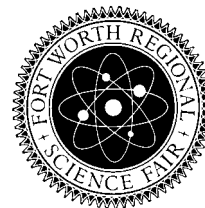
<b>Third Place: Edgar Hernandez</b> Project: <b>Human Power Source</b>	Division: <b>S</b>	<b>12618</b>
School: <b>EVERMAN HIGH SCHOOL</b>	Advisor: <b>Larry Ritchie</b>	

<b>Second Place: Colin Monaco</b> Project: <b>Power Up</b>	Division: <b>S</b>	<b>06998</b>
School: <b>LIBERTY CHRISTIAN HIGH SCHOOL</b>	Advisor: <b>Jamie Michalek</b>	

<b>Second Place: David Alvarez</b> Project: <b>Power Up</b>	Division: <b>S</b>	<b>06998</b>
School: <b>LIBERTY CHRISTIAN HIGH SCHOOL</b>	Advisor: <b>Jamie Michalek</b>	

<b>Second Place: Cameron Baller</b> Project: <b>Power Up</b>	Division: <b>S</b>	<b>06998</b>
School: <b>LIBERTY CHRISTIAN HIGH SCHOOL</b>	Advisor: <b>Jamie Michalek</b>	

<b>First Place: Carson Vogel</b> Project: <b>3, 2, 1 Splash Off!</b>	Division: <b>S</b>	<b>12520</b>
School: <b>NORTHSTAR HIGH SCHOOL</b>	Advisor: <b>Kimberly Desrosiers</b>	



# Fort Worth Regional Science Fair

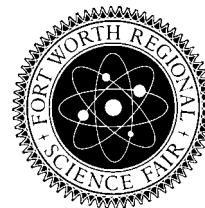
## Winners Directory

**Award: ENGINEERING: ELECTRICAL & MECHANICAL**

<b>Third Place: Noah Ferguson</b>	Division: S	<b>08485</b>
Project: <b>Motion Tracking to Aid in Percussion Instruction</b>		
School: <b>E.A. YOUNG ACADEMY HS</b>	Advisor: <b>Jeremy Edins</b>	

<b>Second Place: Alex Wu</b>	Division: S	<b>06735</b>
Project: <b>The Effect of 2-D Coating Materials on the Stabilization of the Electron Emission of Molybdenum Tips</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>First Place: Kaylee Brawner</b>	Division: S	<b>06530</b>
Project: <b>Solar Tracker Design and Analysis</b>		
School: <b>GRANBURY HIGH SCHOOL</b>	Advisor: <b>Janel Morris</b>	
<b>First Place: Kinsey Brawner</b>	Division: S	<b>06530</b>
Project: <b>Solar Tracker Design and Analysis</b>		
School: <b>GRANBURY HIGH SCHOOL</b>	Advisor: <b>Janel Morris</b>	



# Fort Worth Regional Science Fair

## Winners Directory

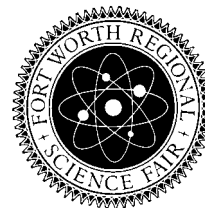
**Award: ENGINEERING: MATERIALS & BIOENGINEERING**

<b>Third Place: Diana Dyer</b>	Division: S	<b>09994</b>
Project: <b>Reduce Evaporation, Save Water</b>		
School: <b>NORTHSTAR HIGH SCHOOL</b>		
		Advisor: <b>Stacy Vasquez</b>

<b>Second Place: Victoria Chen</b>	Division: S	<b>06438</b>
Project: <b>Mathematical Analysis to Discover Relationships Between Human Neural Micro-Circuitries and Intentional Movement</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>		
		Advisor: <b>Samuel Earls</b>

<b>First Place: Daniel Zhong</b>	Division: S	<b>05992</b>
Project: <b>Determination of Efficacies of Somatic Muscle Cell Transcription Factors for Direct Reprogramming into Induced Muscle Stem Cells</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>		
		Advisor: <b>Samuel Earls</b>





# Fort Worth Regional Science Fair

## Winners Directory

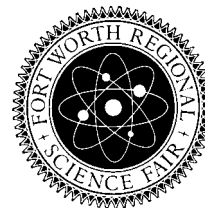
### Award: ENVIRONMENTAL SCIENCES

<b>Third Place: Raashi Thakkar</b>	Division: S	<b>05441</b>
Project: <b>Go With the Flow: Development of a Novel Water Filter Utilizing Nanotechnology and Porous Materials For Third World Country, Military, and Freshwater Ecosystem Applications</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>Second Place: Rohit Reddy</b>	Division: S	<b>06874</b>
Project: <b>A Novel Method Enhancing the Service Life of Thermoelectric Devices with High Temperature Polymer Coatings for Waste Heat Recovery</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>Second Place: Michelle Liu</b>	Division: S	<b>06874</b>
Project: <b>A Novel Method Enhancing the Service Life of Thermoelectric Devices with High Temperature Polymer Coatings for Waste Heat Recovery</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>First Place: Matthew Law</b>	Division: S	<b>04714</b>
Project: <b>A Magnetite-Incorporated Hydroxyapatite-Based Electrochemical Sensor for Rapid Detection of Phenolic Content in Water</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

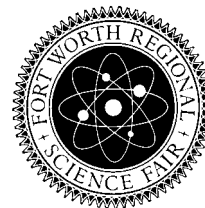
## Winners Directory

### Award: **MATHEMATICS**

<b>Third Place: Lauren Pham</b>	Division: <b>S</b>	<b>06862</b>
Project: <b>Trauma Reactions</b>		
School: <b>SUMMIT INTERNATIONAL HIGH SCHOOL</b>	Advisor: <b>Kiara Hervey</b>	
<b>Third Place: Tayler Pham</b>	Division: <b>S</b>	<b>06862</b>
Project: <b>Trauma Reactions</b>		
School: <b>SUMMIT INTERNATIONAL HIGH SCHOOL</b>	Advisor: <b>Kiara Hervey</b>	

<b>Second Place: Mark Hartgraves</b>	Division: <b>S</b>	<b>08855</b>
Project: <b>Project Apollo</b>		
School: <b>GRANBURY HIGH SCHOOL</b>	Advisor: <b>Janel Morris</b>	

<b>First Place: Sarah Cheeran</b>	Division: <b>S</b>	<b>06527</b>
Project: <b>Development of a Fragment Method for Estimating Solubilities in Environmentally Friendly Ionic Liquid Solvents</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	
<b>First Place: Amber Lu</b>	Division: <b>S</b>	<b>06527</b>
Project: <b>Development of a Fragment Method for Estimating Solubilities in Environmentally Friendly Ionic Liquid Solvents</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	
<b>First Place: Bihan Jiang</b>	Division: <b>S</b>	<b>06527</b>
Project: <b>Development of a Fragment Method for Estimating Solubilities in Environmentally Friendly Ionic Liquid Solvents</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

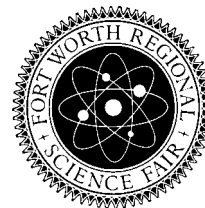
## Winners Directory

### Award: **MEDICINE & HEALTH**

<b>Third Place: Liesl Krone</b>	Division: <b>S</b>	<b>09682</b>
Project: <b>Digging Deeper into a Gut Focused Nutraceutical - Is it Just Hot Air?</b>		
School: <b>GRANBURY HIGH SCHOOL</b>	Advisor: <b>Janel Morris</b>	

<b>Second Place: Jewon Sohn</b>	Division: <b>S</b>	<b>06421</b>
Project: <b>Laser Surface Engineering of Stent for Improved Blood Flow Kinetics</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>First Place: Kalkidan Alemu</b>	Division: <b>S</b>	<b>12546</b>
Project: <b>What's For Breakfast?</b>		
School: <b>EVERMAN HIGH SCHOOL</b>	Advisor: <b>Larry Ritchie</b>	



# Fort Worth Regional Science Fair

## Winners Directory

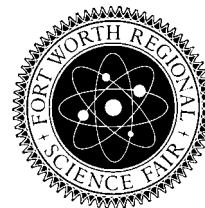
Award: **MICROBIOLOGY**

<b>Second Place: Austin Klein</b>	Division: <b>S</b>	<b>08277</b>
Project: <b>Tabletop Terrors</b>		
School: <b>E.A. YOUNG ACADEMY HS</b>	Advisor: <b>Gayle Brown</b>	

<b>First Place: Afeefah Khazi-Syed</b>	Division: <b>S</b>	<b>11369</b>
Project: <b>Nano is Novel: Improving Antibiotic Efficacy for S. epidermidis with Structurally Modified Silver Nanoparticles</b>		
School: <b>HARMONY SCHOOL OF INNOVATION HIGH</b>	Advisor: <b>Bilal Yildirim</b>	

# Fort Worth Regional Science Fair

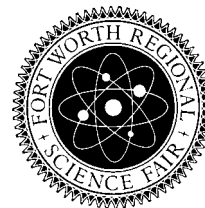
## Winners Directory

**Award: PHYSICS & ASTRONOMY**

<b>Third Place:</b> Michelle Mao	Division: S	<b>06842</b>
Project: <b>Surface Plasmon Resonance with AZO Film with Tunable Nanoantennas</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>Second Place:</b> Shinyoung Kang	Division: S	<b>06474</b>
Project: <b>Asteroid's Ring Formation Mechanism Simulation</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	

<b>First Place:</b> Anagha Krishnan	Division: S	<b>06528</b>
Project: <b>Novel Earth's Field Magnetic Resonance Imaging of Copper Chloride for Inexpensive Disease Detection</b>		
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	



# Fort Worth Regional Science Fair

## Winners Directory

### Award: **PLANT SCIENCES**

<b>Third Place:</b> Ashley Sanchez Project: <b>Light's Up!</b>	Division: <b>S</b>	<b>11259</b>
School: <b>SUMMIT INTERNATIONAL HIGH SCHOOL</b>	Advisor: <b>Kiara Hervey</b>	
<b>Second Place:</b> Hunter Meroney Project: <b>pH, Phoshates, &amp; Nitrates, ... OH MY!!!</b>	Division: <b>S</b>	<b>03771</b>
School: <b>GRANBURY HIGH SCHOOL</b>	Advisor: <b>Janel Morris</b>	
<b>First Place:</b> (name withheld) Project: <b>Dehydroabietinal Signaling in Plant Defenses with Novel Applications to Drought Resistance</b>	Division: <b>S</b>	<b>04823</b>
School: <b>TEXAS ACADEMY OF MATHEMATICS AND S</b>	Advisor: <b>Samuel Earls</b>	