

Award: American Chemical Society

First Place: Kambryn Vera Division: S& Category: All Categories 65074

Project: C the Difference

School: LIBERTY CHRISTIAN HIGH SCHOOL Advisor: Jamie Michalek

First Place: Mary Harshfield Division: S& Category: All Categories 65074

Project: C the Difference

School: LIBERTY CHRISTIAN HIGH SCHOOL Advisor: Jamie Michalek

First Place: Lindsay Tito Division: S& Category: All Categories 65074

Project: C the Difference

School: LIBERTY CHRISTIAN HIGH SCHOOL Advisor: Jamie Michalek



Award: American Industrial Hygiene Association North Texas Section

First Place: David Kearns Division: J Category: All Categories 55237

Project: The Effects of WiFi vs. LTE on Plant Growth

School: E.A. YOUNG ACADEMY MS Advisor: Carol Raymond



Award: American Industrial Hygiene Association North Texas Section

First Place: Natasha Chugh Division: S Category: All Categories 55410

Project: A Novel, Telemedicine Monitoring and Prevention Tool for Behavior-Induced Chronic Dehydration: The

Use of Cognitive Motivation Methodologies with LDA-Supervised Image Processing

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

First Place: Benjamin Li Division: S Category: All Categories 55410

Project: A Novel, Telemedicine Monitoring and Prevention Tool for Behavior-Induced Chronic Dehydration: The

Use of Cognitive Motivation Methodologies with LDA-Supervised Image Processing



Award: American Meteorolgical Society & National Weather Association

First Place: Emma Norstebon Division: J Category: All Categories 42467

Project: Wave Wonder

School: ST, ELIZABETH ANN SETON CATHOLIC MID Advisor: Katherine Arnold

Second Place: Anthony Guerrero Division: J Category: All Categories 69813

Project: Wind vs Solar Power

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Deborah Epps



Award: American Meteorological Society - ISEF

First Place: Ashley McKillop Division: S& Category: All Categories 40966

Project: Can We Change the Way We Develop Cities to Prevent Flooding?

School: Colleyville Heritage High School Advisor: Sonya Loughran

Second Place: Hunter Meroney Division: S& Category: All Categories 66086

Project: Do wind farms cause harm to plants?

School: GRANBURY HIGH SCHOOL Advisor: Priscilla Lumbreras



Award: American Meteorological Society & NWS - N Texas Chapter

First Place: Ashley McKillop Division: S Category: All Categories 40966

Project: Can We Change the Way We Develop Cities to Prevent Flooding?

School: Colleyville Heritage High School Advisor: Sonya Loughran

Second Place: Hunter Meroney Division: S Category: All Categories 66086

Project: **Do wind farms cause harm to plants?** 

School: GRANBURY HIGH SCHOOL Advisor: Priscilla Lumbreras



Award: American Psychological Association

First Place: Brooke Wilson Division: S& Category: All Categories 41470

Project: The Effects of Various Distractors on Working Memory in Adolescents

School: Colleyville Heritage High School Advisor: Sonya Loughran



Award: American Society for Quality, Greater Ft. Worth Section 1416

First Place: Lindy Lyda Division: J Category: All Categories 64694

Project: The Effect of CILTEP and Pirecetam on D. Dorotocephala and the Potential Relation to Human Memory

School: E.A. YOUNG ACADEMY MS Advisor: Carol Raymond

Second Place: Ashar Khazi-Syed Division: J Category: All Categories 70022

Project: Microbes The Giants of the Future: Water Desalination Using MDC's

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse

Third Place: Julia Shanks Division: J Category: All Categories 58618

Project: Water Spins Me Right Round Baby Right Round

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo



Award: American Society for Quality, Greater Ft. Worth Section 1416

First Place: Ruhani Ahluwalia Division: S Category: All Categories 66423

Project: Lipoprotein-based Therapeutic Approach to Combat Breast Cancer

School: HARMONY SCHOOL OF INNOVATION HIGH Advisor: Omer Dogan

Second Place: David Yue Division: S Category: All Categories 65709

Project: Innovative High-Performance Polymer-Blended Mixed-Matrix Membranes (PB-MMMs) with

Heterogenous Triadic Compatibilizers ΓÇö Small Organic Molecules, Metal Organic Frameworks, and

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

Third Place: Jonathan Lu Division: S Category: All Categories 57762

Project: Laser-Enhanced Biodegradable Bone Implants: In Vitro-Assessed Biomineralization and Degradation of Mg-

Alloy Biomaterials with Optimized Microstructure Modifications

### Fort Worth Regional Science Fair Winners Directory



Award: ASM International - DFW Chapter

First Place: Justin Chapman Division: S& Category: All Categories 66955

Project: **Head Shots** 

School: GRANBURY HIGH SCHOOL Advisor: Priscilla Lumbreras

First Place: Christian Fawley Division: S& Category: All Categories 66955

Project: Head Shots

School: GRANBURY HIGH SCHOOL Advisor: Priscilla Lumbreras

Second Place: Major Hermann Division: S& Category: All Categories 49959

Project: Handyman

School: LIBERTY CHRISTIAN SCHOOL Advisor: Kate Daggett



Award: ASM International Materials Education Foundation - ISEF

First Place: Rajveer Sagoo Division: S& Category: All Categories 70574

Project: Nitinol-60 Rockets

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse



Award: Association for Women Geoscientist - ISEF

First Place: Ashley McKillop Division: S& Category: All Categories 40966

Project: Can We Change the Way We Develop Cities to Prevent Flooding?

School: Colleyville Heritage High School Advisor: Sonya Loughran

Special Awards 2018

#### Page 13

# Fort Worth Regional Science Fair Winners Directory



Award: ASU Walton Sustainability Solutions Initiatives - ISEF

First Place: Julia Cavalcanti Division: S& Category: All Categories 40956

Project: The Power of Compost

School: Colleyville Heritage High School Advisor: Sonya Loughran

Second Place: Victoria Fasakin Division: S& Category: All Categories 70445

Project: Almost Free Energy

School: Harmony School of Nature (Dallas) MS

Advisor: Fatih Ilhan



Award: Charlie Mary Noble Award in Astronomy

First Place: Alicia Hurtado Division: S& Category: Environmental Management 40808

Project: Self-Cleaning Solar Panel: The Construction and Application of a Dark-Detecting Photoresistor Circuit to

**Maximize Solar Panel Efficiency** 

School: Colleyville Heritage High School Advisor: Sonya Loughran

First Place: Jamil Okada Division: S& Category: Environmental Management 40808

Project: Self-Cleaning Solar Panel: The Construction and Application of a Dark-Detecting Photoresistor Circuit to

**Maximize Solar Panel Efficiency** 

School: Colleyville Heritage High School Advisor: Sonya Loughran



Award: Delbert E. Lawry Award

First Place: Carter Peabody Division: J Category: All Categories 70323

Project: How does temperature affect the performance of a metal alloy bat?

School: Sue Crouch Intermediate Advisor: Bryan Michler



Award: Delbert E. Lawry Award

First Place: Arnold Xu Project: Fly Me to the Sun	Division: <b>S</b>	Category: All Categories	62371
School: LIBERTY CHRISTIAN HIGH SCHOOL		Advisor: Jamie Michalek	
First Place: Austin Graves Project: Fly Me to the Sun	Division: <b>S</b>	Category: All Categories	62371
School: LIBERTY CHRISTIAN HIGH SCHOOL		Advisor: Jamie Michalek	
First Place: Jake Watson Project: Fly Me to the Sun	Division: <b>S</b>	Category: All Categories	62371
School: LIBERTY CHRISTIAN HIGH SCHOOL		Advisor: <b>Jamie Michalek</b>	

#### Fort Worth Regional Science Fair Winners Directory



Award: Fort Worth Area Psychological Association

First Place: Natasha Chugh Division: S Category: All Categories 55410

Project: A Novel, Telemedicine Monitoring and Prevention Tool for Behavior-Induced Chronic Dehydration: The

Use of Cognitive Motivation Methodologies with LDA-Supervised Image Processing

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

First Place: Benjamin Li Division: S Category: All Categories 55410

Project: A Novel, Telemedicine Monitoring and Prevention Tool for Behavior-Induced Chronic Dehydration: The

Use of Cognitive Motivation Methodologies with LDA-Supervised Image Processing

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

Second Place: Ainsley McDonald-Boyer Division: S Category: All Categories 40875

Project: Diagnostic Test for Dyslexia: Year 3

School: AZLE HIGH SCHOOL Advisor: Kimberly Wrick



Award: Fort Worth Audubon Society Conservation Award

First Place: John Matthews Division: J Category: All Categories 69085

Project: The Dissolve Effect

School: Harmony School of Nature (Dallas) MS

Advisor: Fatih Ilhan



Award: Fort Worth Audubon Society Conservation Award

First Place: Blake Pope Division: S Category: All Categories 41711

Project: Mitochondrial Genetic Variation Within and Among Holbrookia lacerata lacerata and Holbrookia lacerata

subcaudalis, the Spot-tailed Earless Lizards of Texas

School: SUMMIT INTERNATIONAL HIGH SCHOOL Advisor: Gary Nicholson

# Fort Worth Regional Science Fair Winners Directory



Award: Institute of Electrical and Electronics Engineers, Fort Worth Sec

First Place: Eliyah El Division: J Category: All Categories 69986

Project: Pick Me Up

School: Harmony School of Nature (Dallas) MS

Advisor: Fatih Ilhan

Second Place: Raphael Cacho Division: J Category: All Categories 70427

Project: V.e.l.o.c.i.t.y. Vessel Emitting Light of computing technological yield

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse

#### Fort Worth Regional Science Fair Winners Directory



Award: Institute of Electrical and Electronics Engineers, Fort Worth Sec

First Place: Sarah Manjee Division: S Category: All Categories 40976

Project: Smart Glove

School: Colleyville Heritage High School Advisor: Sonya Loughran

First Place: Shreya Roy Division: S Category: All Categories 40976

Project: Smart Glove

School: Colleyville Heritage High School Advisor: Sonya Loughran

Second Place: Jamil Okada Division: S Category: All Categories 40808

Project: Self-Cleaning Solar Panel: The Construction and Application of a Dark-Detecting Photoresistor Circuit to

**Maximize Solar Panel Efficiency** 

School: Colleyville Heritage High School Advisor: Sonya Loughran

Second Place: Alicia Hurtado Division: S Category: All Categories 40808

Project: Self-Cleaning Solar Panel: The Construction and Application of a Dark-Detecting Photoresistor Circuit to

**Maximize Solar Panel Efficiency** 

School: Colleyville Heritage High School Advisor: Sonya Loughran

Special Awards 2018

Page 22

# Fort Worth Regional Science Fair Winners Directory



Award: Intel Excellence in Computer Science - ISEF

First Place: Ritik Patnaik Division: S Category: All Categories 51796

Project: Piometrics FingoID: Multimodal Biometric Authentication through Peripheral Vein Patterns and

**Fingerprints** 

## Fort Worth Regional Science Fair Winners Directory



Award: Lockheed Martin Aeronautics Company

First Place: Michael Ramirez Division: J Category: All Categories 51742

Project: Light but Mighty: Carbon Fiber Composite

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

Second Place: Jenny Kim Division: J Category: All Categories 50869

Project: Bright Laser, Refract through Water

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

Third Place: Rajveer Sagoo Division: J Category: All Categories 70574

Project: Nitinol-60 Rockets

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse

Special Awards 2018

#### Fort Worth Regional Science Fair Winners Directory

Page 24



Award: Lockheed Martin Aeronautics Company

First Place: Justin Yu Division: S Category: All Categories 40957

Project: Winging it: Performance of Co-Flow Jets on Common Airfoils at Low Reynolds Numbers

School: Colleyville Heritage High School Advisor: Sonya Loughran

Second Place: Sangita Vasikaran Division: S Category: All Categories 51858

Project: Effective Evasion of Chemotherapeutic Resistance by Functionalized Viral Capsid

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

Third Place: Jonathan Lu Division: S Category: All Categories 57762

Project: Laser-Enhanced Biodegradable Bone Implants: In Vitro-Assessed Biomineralization and Degradation of Mg-

Alloy Biomaterials with Optimized Microstructure Modifications

### Fort Worth Regional Science Fair Winners Directory



Award: Lockheed Martin Leadership Association

First Place: Raphael Cacho Division: J Category: All Categories 70427

Project: V.e.l.o.c.i.t.y. Vessel Emitting Light of computing technological yield

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse

Second Place: Alyssa Trasporto Division: J Category: All Categories 51013

Project: Bacteria Banished: An Investigation on the Effect of Varying pH Levels on Promoting Bactericidal Processes

School: TAMS Middle School Aspire Fair Advisor: Russ Stukel

Third Place: Enzo Sagun Division: J Category: All Categories 69213

Project: Hydro Gen

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Deborah Epps



Award: Lockheed Martin Leadership Association

First Place: Rhea Kapoor Division: S Category: All Categories 57821

Project: Application of Fractal Geometry for Early Detection and Histopathological Analysis of Lung Cancer

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

Second Place: Alice Hou Division: S Category: All Categories 57653

Project: Single Cell Analysis Nanochip Platform with Multi-dimentional Therapeutical Impact

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

Third Place: Ritik Patnaik Division: S Category: All Categories 51796

Project: Piometrics FingoID: Multimodal Biometric Authentication through Peripheral Vein Patterns and

**Fingerprints** 

### Fort Worth Regional Science Fair Winners Directory



Award: Miles Foundation

First Place: Julia Shanks Division: J Category: All Categories 58618

Project: Water Spins Me Right Round Baby Right Round

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

Second Place: Dylan Mizell Division: J Category: All Categories 66730

Project: Ship Shape Hulls

School: Harmony Science Academy Carrollton-Middle Sch Advisor: Sukran Cakiroglu

Third Place: Joaquin Van Trease Division: J Category: All Categories 66524

Project: Bad to the bow

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

Special Awards 2018

# Fort Worth Regional Science Fair Winners Directory

Page 28



Award: Miles Foundation

First Place: Jesse Marasigan Division: S Category: All Categories 70967

Project: Stealthy Shapes

School: HARMONY SCHOOL OF INNOVATION HIGH Advisor: Nicole Turner

Second Place: Cameron Taylor Division: S Category: All Categories 59306

Project: Exit Velocity

School: EVERMAN HIGH SCHOOL Advisor: Angela Collinsworth

Third Place: Jacob Gutierrez Division: S Category: All Categories 40942

Project: Hydrogen A better fuel

School: AZLE HIGH SCHOOL Advisor: Kimberly Wrick



Award: Mu Alpha Theta - ISEF

First Place: Rhea Kapoor Division: S Category: All Categories 57821

Project: Application of Fractal Geometry for Early Detection and Histopathological Analysis of Lung Cancer



Award: NASA Earth System Science Award - ISEF

First Place: Alexandra Popke Division: S Category: All Categories 43367

Project: **Bio-Tarp** 

School: Colleyville Heritage High School Advisor: Sonya Loughran



Award: National Oceanic & Atmospheric Administration US Dept of Commerce

First Place: David Yue Division: S& Category: All Categories 65709

Project: Innovative High-Performance Polymer-Blended Mixed-Matrix Membranes (PB-MMMs) with

Heterogenous Triadic Compatibilizers ΓÇö Small Organic Molecules, Metal Organic Frameworks, and

#### Fort Worth Regional Science Fair Winners Directory



Award: RadioShack Corporation Award

First Place: Kevin Mathew Division: S& Category: All Categories 70039

Project: VR and Haptics: The After Effects

School: HARMONY SCHOOL OF INNOVATION HIGH Advisor: Bilal Yildirim

First Place: Ethan Bolling Division: S& Category: All Categories 70039

Project: VR and Haptics: The After Effects

School: HARMONY SCHOOL OF INNOVATION HIGH Advisor: Bilal Yildirim

First Place: Lucio Petrilli Division: S& Category: All Categories 70039

Project: VR and Haptics: The After Effects

School: HARMONY SCHOOL OF INNOVATION HIGH Advisor: Bilal Yildirim

Second Place: Livia Kasjanowicz Division: S& Category: All Categories 70046

Project: Control LEDs With Your Voice

School: Harmony Science Academy Carrollton-Middle Sch Advisor: Nuray Elbasi

Third Place: Sarah Zou Division: S& Category: All Categories 51246

Project: High-Performance Lithium-Ion Battery Electrode Derived from Sustainable Biomass



Award: Ricoh Sustainable Development Award - ISEF

First Place: David Yue Division: S& Category: All Categories 65709

Project: Innovative High-Performance Polymer-Blended Mixed-Matrix Membranes (PB-MMMs) with

Heterogenous Triadic Compatibilizers ΓÇö Small Organic Molecules, Metal Organic Frameworks, and



Award: Sigma Kappa - Marge Barnes Award in Medicine

First Place: Gary Tejeda Division: S Category: All Categories 65958

Project: BioLight

School: Harmony Science Academy Carrollton\_High Schoo Advisor: Manisha Singh

# Fort Worth Regional Science Fair Winners Directory



Award: Society of Allied Weight Engineers

First Place: Rajveer Sagoo Division: J Category: All Categories 70574

Project: Nitinol-60 Rockets

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse

Second Place: Michael Ramirez Division: J Category: All Categories 51742

Project: Light but Mighty: Carbon Fiber Composite

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

#### Fort Worth Regional Science Fair Winners Directory



Award: Society of Allied Weight Engineers

First Place: Ziqian Wang Division: S Category: All Categories 40994

Project: A Helping Hand: Analyzing the Viability of Reaction-Driven Soft Robotic Actuators

School: Colleyville Heritage High School Advisor: Sonya Loughran

First Place: Zafir Patel Division: S Category: All Categories 40994

Project: A Helping Hand: Analyzing the Viability of Reaction-Driven Soft Robotic Actuators

School: Colleyville Heritage High School Advisor: Sonya Loughran

Second Place: Rebecca Fripp Division: S Category: All Categories 66416

Project: High Frequency Force Sensors to Quantify Balance

School: Harmony Science Academy Carrollton\_High Schoo Advisor: Mehmet Biter

Special Awards 2018 Page 37

## Fort Worth Regional Science Fair Winners Directory



Award: Society of Flight Test Engineers

First Place: Rajveer Sagoo Division: J Category: All Categories 70574

Project: Nitinol-60 Rockets

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse

Second Place: Molly Monschke Division: J Category: All Categories 52492

Project: Wind Breaker

School: LIBERTY CHRISTIAN SCHOOL Advisor: Kate Daggett

School: LIBERTY CHRISTIAN HIGH SCHOOL

#### Page 38

# Fort Worth Regional Science Fair Winners Directory



Advisor: Jamie Michalek

Award: Society of Flight Test Engineers - Aerospace Achievement Award

First Place: Justin Yu Project: Winging it: Performance of Co-Flow Jets on	Division: S n Common Airf	Category: All Categories foils at Low Reynolds Numbers	40957
School: Colleyville Heritage High School		Advisor: Sonya Loughran	
Second Place: Jake Watson Project: Fly Me to the Sun	Division: S	Category: All Categories	62371
School: LIBERTY CHRISTIAN HIGH SCHOOL  Second Place: Arnold Xu  Project: Fly Me to the Sun	Division: <b>S</b>	Advisor: Jamie Michalek Category: All Categories	62371
School: LIBERTY CHRISTIAN HIGH SCHOOL  Second Place: Austin Graves  Project: Fly Me to the Sun	Division: <b>S</b>	Advisor: Jamie Michalek Category: All Categories	62371

#### Page 39

## Fort Worth Regional Science Fair Winners Directory



Award: Tarrant County Veterinary Medical Association

First Place: Mackenzie Hamilton Division: J Category: All Categories 51254

Project: **Best Blanket Bond** 

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

Second Place: Reeves Baller Division: J Category: All Categories 52603

Project: Mealworm Magic!

School: LIBERTY CHRISTIAN SCHOOL Advisor: Kate Daggett



Award: Tarrant County Veterinary Medical Association

First Place: Neha Kalakuntla Division: S Category: All Categories 54434

Project: Biomineralization of Laser-Assisted Hydroxyapatite Coatings on AZ31B Magnesium Alloy

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

Second Place: Savanna Hutcherson Division: S Category: All Categories 44152

Project: Antibiotic Resistance

School: Colleyville Heritage High School Advisor: Sonya Loughran



Award: US Air Force

First Place: Jake Watson Division: S& Category: All Categories 62371

Project: Fly Me to the Sun

School: LIBERTY CHRISTIAN HIGH SCHOOL Advisor: Jamie Michalek

First Place: Arnold Xu Division: S& Category: All Categories 62371

Project: Fly Me to the Sun

School: LIBERTY CHRISTIAN HIGH SCHOOL Advisor: Jamie Michalek

First Place: Austin Graves Division: S& Category: All Categories 62371

Project: Fly Me to the Sun

School: LIBERTY CHRISTIAN HIGH SCHOOL Advisor: Jamie Michalek

First Place: Chenglong Huang Division: S& Category: All Categories 70820

Project: Deep Learning for Survival Prediction from Imaging Genetics Data

School: CHHS-ch Advisor: Junzhou Huang

First Place: Rishi Shridharan Division: S& Category: All Categories 55307

Project: Effects of Primary Cilia Loss on Population of Oligodendrocyte Lineage in Mouse Brain

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

First Place: Abigail Bates Division: S& Category: All Categories 40941

Project: Catnip Repellant

School: AZLE HIGH SCHOOL Advisor: Kimberly Wrick

## Fort Worth Regional Science Fair Winners Directory

Page 42



Award: US Metric Association - ISEF

First Place: Michael Ramirez Division: S& Category: All Categories 51742

Project: Light but Mighty: Carbon Fiber Composite

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

#### Fort Worth Regional Science Fair Winners Directory

Page 43



Award: US Navy / US Marine Corps Office of Naval Research

First Place: Jenny Kim Division: J Category: All Categories 50869

Project: Bright Laser, Refract through Water

School: LIBERTY CHRISTIAN SCHOOL Advisor: Loren Gallo

First Place: Ashar Khazi-Syed Division: J Category: All Categories 70022

Project: Microbes The Giants of the Future: Water Desalination Using MDC's

School: HARMONY SCHOOL OF INNOVATION MIDD Advisor: Darryl Narcisse

First Place: Yusuf Aslan Division: J Category: All Categories 70690

Project: Nanotechnology for Water Purification

School: Harmony School of Nature (Dallas) MS

Advisor: Fatih Ilhan



Award: US Navy / US Marine Corps Office of Naval Research

First Place: Shreya Roy Division: S Category: All Categories 40976

Project: Smart Glove

School: Colleyville Heritage High School Advisor: Sonya Loughran

First Place: Sarah Manjee Division: S Category: All Categories 40976

Project: Smart Glove

School: Colleyville Heritage High School Advisor: Sonya Loughran

First Place: Justin Yu Division: S Category: All Categories 40957

Project: Winging it: Performance of Co-Flow Jets on Common Airfoils at Low Reynolds Numbers

School: Colleyville Heritage High School Advisor: Sonya Loughran

First Place: Ritik Patnaik Division: S Category: All Categories 51796

Project: Piometrics FingoID: Multimodal Biometric Authentication through Peripheral Vein Patterns and

**Fingerprints** 

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

First Place: Jonathan Lu Division: S Category: All Categories 57762

Project: Laser-Enhanced Biodegradable Bone Implants: In Vitro-Assessed Biomineralization and Degradation of Mg-

Alloy Biomaterials with Optimized Microstructure Modifications

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls

Special Awards 2018 Page 45

## Fort Worth Regional Science Fair Winners Directory



Award: Water Environment Association of Texas

First Place: Jaila Dobie Division: J Category: All Categories 69105

Project: Algae Alive

School: NORTHSTAR MIDDLE SCHOOL Advisor: Erin Jezek

Second Place: Isabella Caban Division: J Category: All Categories 70435

Project: Water filter V.S. pre filtered water

School: Harmony School of Nature (Dallas) MS

Advisor: Fatih Ilhan

Third Place: Sara Savage Division: J Category: All Categories 70268

Project: What Metal Is Most Affected By Salted Water

School: ST. JOHN APOSTLE CATHOLIC MIDDLE SCH Advisor: Kevin Hathaway



Award: Water Environment Association of Texas

First Place: Kesavan Srivilliputhur Division: S Category: All Categories 70256

Project: Mechanisms of Rare Gas Diffusion Through Graphene Using First Principles Simulations

School: Denton High School Advisor: Heather Lentz

Second Place: Jayaker Kolli Division: S Category: All Categories 44155

Project: Clear as Mud: The Efficiency of Flocculation on Water Extraction and Microbial Fuel Cell Creation

School: Colleyville Heritage High School Advisor: Sonya Loughran

Third Place: Ryan Nguyen Division: S Category: All Categories 40951

Project: Staying clean, the creation of drinking water

School: Collevville Heritage High School Advisor: Sonya Loughran

Special Awards 2018 Page 47

## Fort Worth Regional Science Fair Winners Directory



Award: Water Environment Association Stockholm Junior Water Prize - ISEF

First Place: Kesavan Srivilliputhur Division: S& Category: All Categories 70256

Project: Mechanisms of Rare Gas Diffusion Through Graphene Using First Principles Simulations

School: Denton High School Advisor: Heather Lentz

Second Place: Jayaker Kolli Division: S& Category: All Categories 44155

Project: Clear as Mud: The Efficiency of Flocculation on Water Extraction and Microbial Fuel Cell Creation

School: Colleyville Heritage High School Advisor: Sonya Loughran

Third Place: Ryan Nguyen Division: S& Category: All Categories 40951

Project: Staying clean, the creation of drinking water

School: Collevville Heritage High School Advisor: Sonya Loughran



Award: Yale Science and Engineering Association - ISEF

First Place: Jonathan Lu Division: S& Category: All Categories 57762

Project: Laser-Enhanced Biodegradable Bone Implants: In Vitro-Assessed Biomineralization and Degradation of Mg-

Alloy Biomaterials with Optimized Microstructure Modifications

School: TEXAS ACADEMY OF MATHEMATICS AND S Advisor: Samuel Earls