

Dr. Nelson Ying Orange County Science Exposition

2023 SPECIAL AWARDS

The American Psychological Association offers a certificate and a student membership to the American Psychological Association to the student in Grades 9-12 whose project demonstrates excellence in the study of Behavioral Science.

From Orlando Science High School: Ananya Purimetla

The Association for Women Geoscientists awards a female student whose project exemplifies high standards of innovativeness and scientific excellence in the geosciences. In addition, the Dr. Nelson Ying Orange County Science Exposition adds a \$25.00 Visa gift card.

From Orlando Science Middle School: Mahie Mangesh Patil

The Florida Association of Science Teachers (FAST) awards a certificate and \$25.00 to two students, one in the Junior Division and one in the Senior Division, whose projects exemplified creative research in any area.

From Leaders Preparatory School: Amaya Lee Johnson

And from Edgewater High School: Elise Rina

The International Community School offers a \$25 gift card to a student whose project demonstrated application of the scientific method to an original idea in the Physical Sciences

From Maitland Montessori School: Hailey Marie Wilson

From Leaders Preparatory School: Yusup Khakimov

Kelly's Ice Cream awards a \$25 gift card to a student in any category that displays exemplary use of the scientific method.

From Maitland Middle School: Chloe Manak

And from Trinity Preparatory School: Abigail Lane Hernan

Leaders Preparatory School recognizes the following projects for their innovation and creativity and awards each student with a \$25.00 Visa gift card

From Orlando Science Middle School: Nisha Aghara

From Leaders Preparatory School: Dior Umar

From Maitland Montessori School: Caroline Ori

From South Creek Middle School: Kiley Luchy Rodriquez

The International Community School offers a \$25 gift card to a student whose project demonstrated application of the scientific method to an original idea in the Physical Sciences

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The National Aeronautics and Space Administration (NASA) offers a certificate and the Dr. Ying Orange County Science Exposition offers a \$25.00 Visa gift card to a student whose project demonstrated insight into Earth's interconnected systems (atmosphere, climate, water systems, geosciences, environment, etc.)

From Lake Eola Charter School: Reagan Hemenway

The National Geographic Society offers a *Cultivating Empathy for the Earth Award* certificate and a cash award in the amount of \$100 to the student in grades 9-12 whose project addressed one of Earth's most pressing challenges.

From: Orlando Science High School: Monish Saravana

National Oceanic and Atmospheric Administration (NOAA) awards a certificate to a student, and a congratulatory letter to the students' teacher. The project involved research that emphasizes climate, weather, oceans, coasts, and conservation of aquatic ecosystems. In addition, the Dr. Nelson Ying Orange County Science Exposition adds a \$25.00 Visa gift card to this award.

From The International Community School: Daniel Hughes

The Office of Naval Research awards a certificate and medallion to the following junior division students whose projects exhibited Naval applications:

From Orlando Science Middle School: Armaan Khokhar

From Lockhart Middle School: Adrian Jose Alvarez

And from The International Community School: The team of Reagan Harms and Erik Olson

The Office of Naval Research awards a certificate and medallion to the following senior division students whose projects exhibited Naval applications. These senior awards include an application for a gift card in the amount of \$50.00.

From Orlando Science High School: Tiffani Gay

From Orlando Science High School: Monish Saravana

And from West Orange High School: Noah Anderson Hall-King

Peritz Properties of Winter Park offers the following awards to students whose projects exemplified excellence related to Sports, Exercise, and/or the Health Sciences:

From Leaders Preparatory School: Zakaria Ansari

From Lake Highland Preparatory School: Neha Harish Patil

From South Creek Middle School: Kamall Dominic Davis

And from The International Community School: Edward Eggleston

Peterbrooke Chocolate of Winter Park awards the “Eat More Chocolate” award of a \$25.00 gift card to a high quality project in the From the International Community School: Ana Chaves

Regeneron and the Society for Science offers a \$375 cash award and a certificate to an exceptional student scientist who demonstrates an impressive command of biomedical science and research.

From Trinity Preparatory School: Lucas Zhenquan Qu

Ricoh Americas Corporation awards a certificate and publicity on the RICOH website and the Dr. Nelson Ying Orange County Science Exposition adds a \$25.00 Visa gift card to the project that displayed technological and scientific innovations that best reflect the principles of sustainability.

From Trinity Preparatory School: Tatiana Ella Picquet

The Society for In-Vitro Biology awards a certificate, congratulatory letter, a one-year membership and publicity in the society’s newsletter to the student whose project exhibited plant or animal in vitro biology or tissue culture.

From Lake Highland Preparatory School: Anay Rajesh Shah

The Stockholm Junior Water Prize competition awards a certificate to Junior division students who exhibited outstanding water-related projects.

From Lake Eola Charter School: Zane Benson

From Lake Eola Charter School: June Amelia Vinton

From Orlando Science Middle School: Makena Jane Venzon

From St. John Vianney Catholic School: Daniel Conti

From Maitland Middle School: Chloe Manak

From Orlando Science Middle School: Nirav Shah

From Leaders Preparatory School: Yousef Abuhamda

From Maitland Montessori: Hailey Marie Wilson

From Orlando Science Middle School: Daniela Dobrev

And from Orange County Preparatory School: Maya Felicity Girod

The Stockholm Junior Water Prize also awards a certificate and the opportunity to enter a STATE competition to the following Senior level projects:

From Orlando Science High School: Monish Saravana

From Trinity Preparatory School: Kate Elizabeth Martyny

And from Orlando Science High School: Shrey Trivedi

The U.S. Metric Association offers a certificate and a membership to the U.S. Metric Association to a student whose project demonstrated extensive use of metric measurements and used them properly.

From Lake Highland Preparatory School: Xiangnong Wu

The United States Air Force awards packages that include a sling pack, a power bank, a USB flash memory drive, a USB car charger, and official Air Force certificate to four students who exhibited outstanding projects with Air Force Applications.

From Lake Eola Charter School: Celeste Rebecca Prince

From Lake Eola Charter School: Ethyn Scott Wade

From the International Community School: Edward Eggleston

And also from the International Community School: Asher E. Porter

The Yale Science and Engineering Association awards a certificate and a pewter medallion to an outstanding Senior Division student in one of the following categories: Computer Science, Engineering, Physics, or Chemistry

From Lake Highland Preparatory School: Neha Harish Patil

Category Awards

4th place, honorable mention in:

Junior Animal Sciences to:

From Lake Eola Charter School, Ava Cmorey

And from Leaders Preparatory School, Sabrin Amiry

Junior Behavioral & Social Sciences to:

From Orlando Science Middle School, Ziyang Chen

Junior Biomedical & Health Sciences to:

From St. John Vianney Catholic School, Begona Morales

Junior Chemistry to:

From International Community School, Ana Chaves

From Lake Eola Charter School, June Vinton

From Lake Eola Charter School, Dorian Best

From Leaders Preparatory School, Hira Sharif

From Lake Eola Charter School, Rebecca Reis

From South Creek Middle School, Laurymar Bastides

And from Leaders Preparatory School, Yusup Khakimov

Junior Earth & Environmental Sciences to:

From Leaders Preparatory School, Abdullah Alnaizy

From Lake Eola Charter School, James David Hollingsworth

And from Lake Eola Charter School, Amelia Byrd

Junior Engineering to

From Orlando Science Middle School, Anishka Sharma

From Saint John Vianney Catholic School, Luke Fleischman

From Lake Eola Charter School, Emerson Lerner

From Lake Eola Charter School, Celeste Prince

From Leaders Preparatory School, Eshan Rahman

And from Lake Eola Charter School, Angie Garcia

Junior Environmental Engineering to:

From Leaders Preparatory School, Nuh Musri

And from Orlando Science Middle School, Shahrizoda Yusupova

Junior Microbiology to:

From Lake Eola Charter School, Dominic Mirande

Junior Physics and Astronomy to:

From Saint John Vianney Catholic School, Gabriella Guerrier

From Lake Eola Charter School, George Shade

From Lake Eola Charter School, Amir Meitis

From Lake Eola Charter School, Jenassie Toledo

From South Creek Middle School, Matthew Eugene

And from Saint John Vianney Catholic School, Marco Alonso

Junior Plant Sciences to:

From Leaders Preparatory School, Yaseen Elgazar

From International Community School, Evan McNally

From Lake Eola Charter School, Samah Williams

And from Leaders Preparatory School, Dior Umar

Senior Behavioral & Social Sciences to:

From Trinity Preparatory School, Koray Tekin

Senior Mathematics & Computational Sciences to:

From Lake Highland Preparatory School, Stephi Lyou

And from Trinity Preparatory School, Fenghai Li

Senior Plant Sciences to:

From Lake Highland Preparatory School, Anya Shah

Third place in:

Junior Animal Sciences to:

From Maitland Montessori School, Victoria Viallaneix

And from Lake Eola Charter School, Molly Pennisi

Junior Behavioral and Social Science to:

From Orlando Science Middle School, Soha Chhabra

And from Lake Eola Charter School, Kayleigh Reed

Junior Biomedical and Health Sciences to:

From Orlando Science Middle School, Niyata Devnani

And from Orlando Science Middle School, Aniska Jindal

Junior Cellular/Molecular Biology & Biochemistry to:

From International Community School, Olivia Blackwell

Junior Chemistry to:

From Saint John Vianney Catholic School, Valentina Justiniano

From Orlando Science Middle School, Makena Venzon

From International Community School, Elizabeth Olson

And from Orlando Science Middle School, Nirav Shah

Junior Earth & Environmental Sciences to:

From Orlando Science Middle School, Melanie Maldonado

From Maitland Middle School, Chloe Manak

And from Lake Eola Charter School, Reagan Hemenway

Junior Engineering to:

From Lake Eola Charter School, Oliver Van Voorhis

From Leaders Preparatory School, Cynthia Faith Romero

And from Lake Eola Charter School, Hazel Goodsell

Junior Environmental Engineering to:

From Orlando Science Middle School, Armaan Khokhar

Junior Intelligent Machines, Robotics and Systems Software to:

From International Community School, the team of Reagan Harms & Erik Olson

Junior Mathematics and Computational Sciences to:

From Leaders Preparatory School, Adam Gareeboo

Junior Microbiology to:

From Lake Eola Charter School, Zane Benson

Junior Physics and Astronomy to:

From Leaders Preparatory School, Eyman Fathalla

From International Community School, Edward Eggleston

From International Community School, Joshua Keene

And from Leaders Preparatory School, Suhail Al-Gumary

Junior Plant Sciences to:

From Saint John Vianney Catholic School, Sahana Alwani

And from Lake Eola Charter School, Olivia Gulsoy

Senior Behavioral and Social Science goes to:

From Trinity Preparatory School, Anna Miliotes

And from Orlando Science High School, Hamsika Anala

Senior Biomedical and Health Sciences to:
From Lake Highland Preparatory School, Prateek Seela
And from Orlando Science High School, Snehal Sahu

Senior Chemistry to:
From Lake Highland Preparatory School, Suchi Vennam

Senior Engineering to:
From Trinity Preparatory School, Giselle Pfeifer

Senior Environmental Engineering to:
From Orlando Science High School, Monish Saravana

Senior Intelligent Machines, Robotics and Systems Software to:
From Orlando Science High School, Arav Sonawane
And from Edgewater High School, Elise Rina

Senior Mathematics and Computational Sciences to:
From Trinity Preparatory School, Jeffrey Wang

Senior Plant Sciences to:
From Trinity Preparatory School, Grace Elizabeth Brady

2nd Place in:

Junior Animal Sciences to:
From Orlando Science Middle School, Anwasha Byadagi

Junior Behavioral and Social Sciences to:
From Orlando Science Middle School, Anusha Gupta

Junior Biomedical & Health Sciences to:
From Leaders Preparatory School Zakaria Ansari

Junior Cellular/Molecular Biology & Biochemistry to:
From Lake Eola Charter School, Ryker Samuel Benson

Junior Chemistry to:
From St. John Vianney Catholic School, Leiya de la Rosa
And also from St. John Vianney Catholic School, Nicholas Briceno

Junior Earth & Environmental Sciences to:

From Orlando Science Middle School, Mahie Patil

Also from Orlando Science Middle School, Daniela Dobrev

And from International Community School, Daniel E. Hughes

Junior Engineering to:

From Maitland Montessori School, Dominic Costa

Also from Maitland Montessori School, Caroline Ori

And from Orlando Science Middle School, Nishka Aghara

Junior Environmental Engineering to:

From Lake Eola Charter School, Timothy Paul Barton

Junior Intelligent Machines, Robotics & Systems Software to:

From Orlando Science Middle School, Smera Rathee

Junior Mathematics & Computational Sciences to:

From Orlando Science Middle School, Guari Borkar

Junior Microbiology to:

From International Community School, Kaden Fandino

Junior Physics to:

From Lake Eola Charter School, Harrison Young

And also from Lake Eola Charter School, Ethyn Scott Wade

Junior Plant Sciences to:

From St. John Vianney Catholic School, Vivienne Tarnowski

And from Lake Eola Charter School, Mason Batista

Senior Animal Sciences to:

From Trinity Preparatory School, Megan Vu

Senior Behavioral and Social Science to:

From Orlando Science High School, Ananya Purimetla

Senior Biomedical and Health Sciences to:

From Trinity Preparatory School, Lucas Qu

Senior Cellular/Molecular Biology & Biochemistry to:

From Winter park High School, Neel Chhabra

Senior Chemistry to:

From Trinity Preparatory School, Eric Nguyen

Senior Earth & Environmental Sciences to:

From Orlando Science High School, Shrey Trivedi

Senior Engineering to:

From Lake Highland Preparatory School, Neha Patil

Senior Environmental Engineering to:

From Orlando Science High School, Mehak Singh

Senior Intelligent Machines, Robotics & Systems Software to:

From Lake Highland Preparatory School, Isabella Delbakhsh

And also from Lake Highland Preparatory High School, Siddarth Kasi

Senior Mathematics & Computational Sciences to:

From Lake Highland Preparatory School, Xiagnong Wu

Senior Microbiology to:

From Trinity Preparatory School, Lauren Giana Thelwell

Senior Plants to:

From Trinity Preparatory School, Rhea Choksey

1st Place in:

Junior Animal Sciences

From Lake Eola Highland Preparatory School, Aakash Manaswi

Junior Behavioral & Social Sciences

From International Community School, Isabella Moratin

Junior Biomedical & Health Sciences

From Orlando Science Middle School, Aanvi Mathur

Junior Cellular/Molecular Biology & Biochemistry

From Leaders Preparatory School, Malak Salem

Junior Chemistry

From Orlando Science Middle School, Shishir Sajja

Junior Earth & Environmental Science
From Orlando Science Middle School, Yuthika Panigrahi

Junior Engineering
From Lockhart Middle School, Adrian Jose Alvarez

Junior Environmental Engineering
From Orlando Science Middle Charter School, Aditi Swain

Junior Intelligent Machines, Robotics and Systems Software
From Orlando Science Middle School, Abigail Merchant

Junior Mathematics and Computational Sciences
From International Community School, Paxton Boaz

Junior Microbiology
From Orlando Science Middle School, Ragini Nayak

Junior Physics & Astronomy
From Maitland Montessori School, Micah Webb

Junior Plant Sciences
From Orlando Science Middle School, Keerthi Karri

Senior Animal Sciences
From Orlando Science High School, Atreya Manaswi

Senior Behavioral & Social Sciences
From Lake Highland Preparatory School, Ece Sarioglu

Senior Biomedical & Health Sciences
From Lake Highland Preparatory School, Krithik Seela

Senior Cellular/Molecular Biology & Biochemistry
From Lake Highland Preparatory School, Anay Rajesh Shah

Senior Chemistry
From Trinity Preparatory School, Kate Elizabeth Martyny

Senior Earth & Environmental Sciences
From Lake Highland Preparatory School, Aayna Bhatheja

Senior Engineering
From Lake Highland Preparatory School, Ashna Mathur

Senior Environmental Engineering
From Trinity Preparatory School, Genesis Cely

Senior Intelligent Machines, Robotics & Systems Software
From Orlando Science High School, Tiffani Gay

Senior Mathematics and Computational Sciences
From West Orange High School, Noah Anderson Hall-King

Senior Microbiology
From Lake Highland Preparatory School, Naina Aggarwal

Senior Physics and Astronomy
From Lake Highland Preparatory School, Aryan Pathak

Senior Plant Sciences
From Trinity Preparatory School, Anthony James Micelli

Congratulations to these outstanding students!!

Major Awards

GENIUS Olympiad

For her project titled, “What is the Protection Capacity of the Components of Reef-Safe Sunscreens?” from Trinity Preparatory School, Kate Elizabeth Martyny.

For his project titled, “Year III: Developing OCTOPAS (Oil Spill Clean-up Through an Optimized Pragmatic Automated System” from Orlando Science High School, Monish Saravana

And for her project titled, “Hybrid Clay Films with Antimicrobial Efficacy for Treating Burns and Wounds, Year II” from Lake Highland Preparatory School, Aayna Bhatheja

The D.O.D. STEM Leadership Prize

This award is to be given to one project of a middle school student(s) in the 6th, 7th or 8th grade that meets the following award criteria. The criteria are that the student or students:

- **Excel in STEM knowledge and technical skills by placing 1st – 4th in category judging**
- **Demonstrate problem solving skills and determination to overcome challenges throughout their research project**
- **Exemplify leadership qualities through excellent communication skills and creative thinking**

This year's award went to: From Orlando Science Middle School, Mahie Mangesh Patil.

The Lemelson Early Inventor Prize

This award is given to one project of a middle school student that meets the invention award criteria of:

- **Demonstrates problem-finding skills by identifying a critical problem that impacts their life and others;**
- **Develops a tangible, inventive solution that is novel and that positively impacts others;**
- **Identifies and explains how STEM principles relate to their solution;**
- **Have a well-developed design process that demonstrates critical thinking skills by identifying, testing and documenting various design choices;**
- **Create a functional prototype or have a clearly developed design or process.**

The Lemelson Early Inventor Prize, sponsored by the Lemelson Foundation and the Society for Science & the Public, celebrates young inventors whose projects exemplify the ideals of inventive thinking.

This year's award went to, from Orlando Science School, Anishka Sharma.

Ying Scholar Grand Prize Awards

Among the first place award winners in the junior division the following students stood out to the judges as the best in the fair! Junior Ying Scholar Grand Prize Award Winners will receive two tickets to the Orlando Science Center, a special plaque and a \$500.00 cash award.

In the division of Junior Biological Sciences there are two Junior Ying Scholar Grand Prize Award winners:

For her project titled, “The Efficiency of Different Amounts of Ayurvedic Medicine for Nourishment of Young Lettuce Plants”, from Orlando Science Middle School, Keerthi Kari

For his project titled, “A Novel Investigation of Various Beer Brands for Small Hive Beetles Treatment in Honey Bee Colonies”, from Lake Highland Preparatory School, Aakash Manaswi.

In the division of Junior Physical Sciences there are two Junior Ying Scholar Grand Prize Award winners:

For his project titled, “Which Artificial Sweetener Does Yeast Grow Best In?” from Orlando Science Middle School, Shishir Sajja

For his project titled, “Single-axis and Dual-axis Tracking Systems”, from Lockhart Middle School, Adrian Jose Alvarez

Among the first place award winners in the senior division the following students stood out to the judges as the best in the fair!

Senior Alternates: Should for any reason the Senior Ying Scholar Grand Prize Award Winners be unable to attend the International Science and Engineering Fair or should they qualify for International Science and Engineering Fair by winning the Florida State Science and Engineering Fair (which has happened many times in the past!), the alternate will take their place. The Dr. Nelson Ying Orange County Science Exposition awards each of these students with \$500.00 cash!!

In the division of Senior Physical Sciences, the alternate is:
With her project titled, “Biodegradable Magnesium Implants for Bone Repair”, from Lake Highland Preparatory School, Ashna Mathur

In the division of Senior Biological Sciences, the alternate is:
For his project titled, “Examining Endothelial Cell Migration in the Presence of Magnetic Field for Wound Healing Purposes”, from Lake Highland Preparatory School, Anay Rajesh Shah

The following students received an automatic bid to the Regeneron International Science and Engineering Fair, May 14-11, 2023 in Dallas, Texas where they will compete and represent the Dr. Nelson Ying Orange County Science Exposition and the State of Florida. Senior Ying Scholar Grand Prize Award Winners will receive a special plaque and a \$1000.00 cash award.

In the division of Senior Biological Sciences there are two Senior Ying Scholar Grand Prize Award winners:

With his project titled, “Using Artificial Intelligence Graph Neural Networks to Repurpose Pre-existing Drugs and Analyze Drug Relationships: Year 3”, from Lake Highland Preparatory School, Krithik Seela

With his project titled, Year 4: Evaluating the Efficacy of Novel Volatile Beer Blend and Coumaphos Acaricide for Small Hive Beetle Treatment Within Honey Bee Hives”, from Orlando Science High School, Atreya Manaswi

In the division of Senior Physical Sciences there are two Senior Ying Scholar Grand Prize Award winners:

With her project titled, “The Novel Development of a Bio-Based Smart Material for Pharmaceutical Packaging and Temperature Monitoring”, from Trinity Preparatory School, Genesis Cely

With her project titled, “Year II: Designing a Novel LIDAR Navigation System with Haptic Feedback, Bluetooth and App Integration for the Visually Impaired”, from Orlando Science High School, Tiffani Gay.

Congratulations to all of these students who created these fine projects!