

Dr. Nelson Ying Orange County Science Exposition

February 23, 2021

Special Awards

The American Meteorological Society offers a certificate and the Dr. Nelson Ying Orange County Science Exposition adds a \$25.00 gift card to two students whose projects earned recognition for the study of atmospheric conditions or related oceanic and hydrologic sciences.

**From Lake Highland Preparatory School – Jeffrey Zhou
and from St. John Vianney Catholic School – Isabella Glove**

The American Psychological Association offers a certificate and the Dr. Nelson Ying Orange County Science Exposition offers a \$25.00 gift card to a Junior student and a Senior student who best met their criteria in the area of Behavioral Science.

**From International Community School – Hailey Kelsey
and from Lake Nona High School – Shreya Shreekanth**

Ardaman and Associates awards a plaque and a \$100 Amazon.com gift card to one student for outstanding research in Environmental Science

**From Orlando Science Middle School, Mehak Singh
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 Gift Card.**

From Trinity Preparatory School – Lena Mortimer

ASM Materials Education Foundation – A preliminary certificate and a ribbon are awarded to a project demonstrating the materials paradigm and clarity in presentation. The ribbon is awarded after receipt of the results by the foundation.

**From Trinity Preparatory School – Natahja Graddy
and from International Community School – Keith Dixon**

CDM Smith – Awards a \$25 gift card and a CDM Smith Logo “Swing Bag” containing sports accessories to the student who displayed a creative application in *Environmental Science*

From Orlando Science Middle School, Monish Sundari

CDM Smith – Awards another \$25 gift card and a CDM Smith Logo “Swing Bag” containing sports accessories to the student who displayed a creative application in the area of Environmental Engineering.

From Maitland Middle School, Hazel Wolff

Exolith awards a merchandise basket including a certificate, promo items, and Exolith regolith simulant bags for use in future experimentation to the best project (junior or senior) in any category regarding innovation in space exploration

From Lake Highland Preparatory School, Aliza Hasan

The Florida Association of Science Teachers (F.A.S.T.) 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, Suad Alhawandeh
also from Leaders Preparatory School, Fatima Khogali**

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, Lucas Fuller

Lukas Nursery offers a \$25 gift certificate to a student whose project exemplified outstanding research in the Plant Sciences

From Lake Eola Charter School – Lydia Vallier

Mu Alpha Theta Math Honor Society – Awards a certificate and congratulatory letter to a student whose project displayed a challenging, original, thorough, and creative investigation of a problem involving mathematics. In addition, the Dr. Nelson Ying Orange County Science Exposition adds a \$20.00 gift card to this award.

**From Winter Park High School – Jessica Zhou
and from Lake Highland Preparatory School – Stephi Lyou**

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

**From Lake Eola Charter School, Reagan Hemenway
And from Trinity Preparatory School, Lena Mortimer**

National Oceanic and Atmospheric Administration (NOAA): awards a certificate to two students, and a congratulatory letter to the students' teachers. The projects 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 gift card to these awards.

**From Lake Highland Preparatory School – Jeffrey Zhou
And from leaders Preparatory School – Ismail Mohammed**

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

From Lake Eola Charter School, Kate Lynch, Bella Santurri and Ryland Pierotti

And from Leaders Preparatory School, Maria Felo

The Office of Naval Research also awards a certificate, medallion, and a gift card to the following senior division students:

From Leaders Preparatory School, Ahmed Elimairi

From Trinity Preparatory School, Lillian Nguyen

And from Leaders Preparatory School, Rodayna Elgazar

Peterbrooke Chocolate of Winter Park offers a \$25.00 gift card to a project in the Junior Division that best met their criteria of outstanding research in the area of Biomedical & Health Sciences

From International Community School, Charlotte Linville and Scarlett Key

Ricoh Americas Corporation awards a certificate and publicity on the RICOH website and the Dr. Nelson Ying Orange County Science Exposition adds a \$20.00 gift card to the project that displayed technological and scientific innovations that best reflect the principles of sustainability.

From Orlando Science Schools - Atreya Manaswi

The Society for In-Vitro Biology awards a certificate, congratulatory letter, and the Dr. Nelson Ying Orange County Science Exposition adds a \$25 gift card, to the student whose project exhibited plant or animal in vitro biology or tissue culture.

From Lake Highland Preparatory School – Varun Madan

The Stockholm Junior Water Prize competition awards a certificate, and the Dr. Nelson Ying Orange County Science Exposition adds a \$25.00 gift card to a *senior* division student who exhibited an outstanding water-related project.

From Trinity Preparatory School – Arden Dean

The Stockholm Junior Water Prize competition also awards certificates to junior division students who exhibited an outstanding water-related project.

**From Orlando Science Schools – Havish Uppada
From Leaders Preparatory School – Ismail Mohammed
From Orlando Science Schools – Monish Sundari
From Orlando Science Schools – Aditi Swain
From Orlando Science Schools – Snigdha Beesabathuni
And from Leaders Preparatory School – Yusup Khakimov**

The St. John’s Water Management District offers a certificate to students for their work related to water resource protection:

**From Leaders Preparatory School – Yusup Khakimov
From Orlando Science Schools – Havish Uppada
From Leaders Preparatory School – Ismail Mohammed
From Maitland Montessori School – Lucas Fuller
From Lake Eola Charter School – the team of Kate Lynch, Bella Santurri, and Ryland Pierotti
From Orlando Science Schools – Aditi Swain
From Lake Eola Charter School – Sean Cole
From Orlando Science Schools – Snigdha Beesabathuni
From Trinity Preparatory School – Arden Dean
From Lake Highland Preparatory School – Taneesh Makkena
From Lake Eola Charter School – Esthermaya Tilus
From Lake Eola Charter School – Reagan Hemenway**

U. S. Air Force – The U. S. Air Force encourages studies in mathematics, physics, and engineering and endorses projects that offer Air Force applicability. The following students or teams will receive a certificate, and the Dr. Nelson Ying Orange County Science Exposition adds a \$25.00 gift card to the following students:

**From Lake Highland Preparatory School – Anne Fang
and from Lake Highland Preparatory School – Asha Reddy**

The U. S. Metric Association awards a certificate and the Dr. Nelson Ying Orange County Science Exposition adds a \$25.00 gift card to a student who used the greatest variety of metric measurements and symbols, and uses them properly.

From Trinity Preparatory School – Aaron Rubinow

Way Chocolate and Coffee of Winter Garden offers a \$25.00 gift card to a project in the Junior Division that best met their criteria of outstanding research in the area of Behavioral Science

From Lake Eola Charter School, Angelinne Oliveira

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 Trinity Preparatory School – Alex Wang

Category Awards

4th place, honorable mention in Junior Animal Sciences goes to:

From Lake Eola Charter School, Reagan Hemenway

4th place, honorable mention in Junior Behavioral and Social Science goes to:

From Orlando Science School, Anum Ali

4th place, honorable mention in Junior Biomedical & Health Sciences goes to:

From St. John Vianney Catholic School, Megan Winemiller

4th place, honorable mention in Junior Chemistry goes to:

From Leaders Preparatory School, Maryem Alkattan

And from Lake Eola Charter School, Allory Boston

4th place, honorable mention in Junior Earth & Environmental Sciences to:

From Maitland Montessori School, Lucas Miller

And from Orlando Science School, Sanjana Thomas

4th place, honorable mention in Junior Engineering goes to:

From Orlando Science School, Rhea Desetty

4th place, honorable mention in Junior Environmental Engineering goes to:

From Orlando Science School, Kriti Kodipelli

And from Lake Eola Charter School, Samantha Dimulescu

4th place, honorable mention in Junior Physics and Astronomy goes to:

From Saint John Vianney Catholic School, Matthew Ison

And from Leaders Preparatory School, Hajar Dohset

4th place, honorable mention in Junior Plant Sciences goes to:

From Leaders Preparatory School, Alveena Iqbal

There were no honorable Mention Awards in the Senior Division.

3rd place in Junior Animal Sciences goes to:

From St. John Vianney Catholic School, Aileen de la Rosa

3rd place in Junior Behavioral and Social Science goes to:

From International Community School, Olivia Martin

3rd place in Junior Biomedical and Health Sciences goes to:

From Orlando Science School, Collette Pugh

And also from Orlando Science School, Shailey Karri

3rd place in Junior Cellular/Molecular Biology & Biochemistry goes to:

From Lake Eola Charter School, Dominic Mirande

3rd place in Junior Chemistry goes to:

From St. John Vianney Catholic School, Kellen Gonzalez

And from Lake Eola Charter School, Kaya Braggs

3rd place in Junior Earth & Environmental Sciences goes to:

From Leaders Preparatory School, Ismail Mohammed

3rd place in Junior Engineering goes to:

From Orlando Science School, Arav Sonawane

And from Maitland Middle School, Hazel Wolff

3rd place in Junior Environmental Engineering goes to:

From Orlando Science School, Snigdha Beesabathuni

3rd place in Junior Intelligent Machines, Robotics and Systems Software to:

From Leaders Preparatory School, Gharham Alkhaldi

3rd place in Junior Physics and Astronomy goes to:

From Orlando Science School, Snehal Sahu

And also from Orlando Science School, Shrika Velagapudi

3rd place in Junior Plant Sciences goes to:

From Leaders Preparatory School, Adam Boudre

In the Senior Division...

3rd place in Senior Behavioral & Social Sciences goes to:

From Lake Highland Preparatory School, Shivi Jain

And also from Leaders Preparatory School, Suad AlGumary

3rd place in Senior Biomedical and Health Sciences goes to:

From Trinity Preparatory School, Carolina Jorro

3rd place in Senior Earth & Environmental Sciences goes to:

From Trinity Preparatory School, Arden Dean

3rd place in Senior Engineering goes to:

From Trinity Preparatory School, Natahja Graddy

Congratulations to all of the third place winners of the 2020-2021 Ying Expo!

2nd place in Junior Animal Sciences goes to:

From Leaders Preparatory School, Suad Alhawandeh

2nd place in Junior Behavioral and Social Sciences goes to:

From International Community School, Hailey Kelsey

2nd place in Junior Biomedical & Health Sciences goes to:

From Lake Eola Charter School, Aniston Wilson

2nd place in Junior Cellular/Molecular Biology & Biochemistry goes to:

From Lake Eola Charter School, Molly Pennisi

2nd place in Junior Chemistry goes to:

From Orlando Science School, Mahie Patil

And from Leaders Preparatory School, Sana Abu Shabaan

2nd place in Junior Earth & Environmental Sciences goes to:

From Orlando Science School, Havish Uppada

2nd place in Junior Engineering goes to:

From Orlando Science School, Yikang Zhu

2nd place in Junior Environmental Engineering goes to:

From International Community School, Keith Dixon

2nd place in Junior Intelligent Machines, Robotics & Systems Software to:

From Lake Eola Charter School, Ella Meitis

2nd place in Junior Mathematics & Computational Sciences goes to:

From Lake Eola Charter School, Jazlynn Hammond

2nd place in Junior Microbiology goes to:

From Lake Eola Charter School, Olivia Huff

2nd place in Junior Physics goes to:

From International Community School, Cole Spencer

2nd place in Junior Plant Sciences goes to:

From Lake Eola Charter School, Lydia Vallier

In the Senior Division...

2nd place in Senior Animal Sciences goes to:

From Lake Highland Preparatory School, Ahad Ansari

2nd place in Senior Behavioral and Social Science goes to:

From Leaders Preparatory School, Fatima Khogali

2nd place in Senior Biomedical and Health Sciences goes to:

From Lake Highland Preparatory School, Kheli Phillips

2nd place in Senior Earth & Environmental Sciences goes to:

From Lake Highland Preparatory School, Jeffrey Zhou

2nd place in Senior Engineering goes to:

From Lake Highland Preparatory School, Arjun Verma

And 2nd place in Senior Mathematics & Computational Sciences goes to:

From Lake Highland Preparatory School, Stephi Lyou

Congratulations to our Junior and Senior 2nd place category winners!

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, we were proud to award this prize to, from Orlando Science School, Tiffani Gay.

The D.O.D. STEM Leadership Prize 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 International Community School, Cole Spencer.

All first place winners in the Junior Division received a personalized plaque, \$50.00 cash, a nomination to apply to Broadcom MASTERS and moved on to the Virtual Florida State Science and Engineering Fair.

1st Place Junior Projects

Animal Sciences

From Orlando Science Middle School, Atreya Manaswi

Biomedical & Health Sciences

We have a tie...From Orlando Science Middle School, Aanvi Mathur

And also from Orlando Science Middle School, Ananya Purimetla

Cellular/Molecular Biology & Biochemistry

From Lake Eola Charter School, Julia Pack

Chemistry

From Leaders Preparatory School, Taufeeq Chowdhury

Earth & Environmental Science

From Orlando Science Middle School, Monish Saravana Kumar Divya Sundari

Engineering

From Orlando Science Middle School, Tiffani Gay

Environmental Engineering

We have another tie...From Orlando Science Middle School, Aditi Swain

And also from Orlando Science Middle School, Mehak Singh

Intelligent Machines, Robotics and Systems Software

From Orlando Science Middle School, Zara Serrano-Diaz

Mathematics and Computational Sciences

From Orlando Science Middle School, Shrey Trivedi

Microbiology

From International Community School, Carter DeLoach

Physics & Astronomy

From Trinity Preparatory School, Cara Mortimer

Plant Sciences

From Trinity Preparatory School, Elliot McDermed

All first place winners in the Senior Division received a personalized plaque, \$100 cash and moved on to the Virtual Florida State Science and Engineering Fair.

1st Place Senior Projects

Animal Sciences

From Lake Highland Preparatory School, Varun Madan

Behavioral & Social Sciences

From Lake Nona High School, Shreya Sreekanth

Biomedical & Health Sciences

From Lake Highland Preparatory School, Krithik Seela

Cellular/Molecular Biology & Biochemistry

From Lake Highland Preparatory School, Anne Fang

Chemistry

From Trinity Preparatory School, Aaron Rubinow

Earth & Environmental Sciences

From Lake Highland Preparatory School, Naina Aggarwal

Engineering

From Lake Highland Preparatory School, Ananya Bhatheja

Environmental Engineering

From Trinity Preparatory School, Lene Mortimer

Intelligent Machines, Robotics & Systems Software

From Trinity Preparatory School, Alex Wang

Mathematics and Computational Sciences

From Lake Highland Preparatory School, Asha Reddy

Microbiology

From Lake Nona High School, Bhargav Vyas

Physics and Astronomy

From Lake Highland Preparatory School, Aliza Hasan

Plant Sciences

From Lake Highland Preparatory School, Anay Shah

GENIUS Olympiad

This year we nominated two projects from the Dr. Nelson Ying Orange County Science Exposition to participate in the GENIUS Olympiad. The Dr. Nelson Ying Orange County Exposition pays your registration fees if you enter.

For her project titled, “Precycling – Novel Strategies for Dealing with Household Plastic Recycling, Year 2” from Trinity Preparatory School, Lene Mortimer.

And for his project titled, “The Effect of Air Pollution on the Biodeiversity of Lichens” from Lake Highland Preparatory School, Naina Aggarwal

Ying Expo Grand 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 received a special plaque and a \$500.00 cash award.**

In the division of Junior Physical Sciences there were two Junior Ying Scholar Grand Prize Award winners.

Our first winner was:

For her project titled, “Which Method of Biomedical Waste Disposal is Most Efficient in Protecting Front Line Workers from Needle Injuries”, from Orlando Science Middle School, Tiffani Gay

And our second winner was:

For her project titled, “Eco-friendly Water Purifier”, from Orlando Science Middle School, Aditi Swain

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

Our first winner was:

For her project titled, “Which form of calcium supplementation is most effective for osteoporosis?”, from Orlando Science Middle School, Aanvi Mathur

And our second winner was:

For her project titled, “UV: The Increased Probability of Deceased Yeast”, from Lake Eola Charter School, Julia Pack

And in the Senior Division...

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 Ying Scholar Grand Prize Award Alternate winners:
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 several times!), the alternate will take their place.

And just for added flavor, Dr. Nelson Ying Sr. has decided to award each of these students with \$500.00 cash!!

In the division of Senior Physical Sciences the alternate was:

With her project titled, “Precycling - Novel Strategies for Dealing with Household Plastic Recycling, Year 2”, from Trinity Preparatory School, Lene Mortimer

And in the division of Senior Biological Sciences the alternate was:

For her project titled, “Developing a Molecular Scale DNA Nanochip for Educational Purposes, Phase II”, from Lake Highland Preparatory School, Anne Fang.

And finally... The Senior Ying Scholar Grand Prize Award Winners... The students received an automatic bid to the Virtual Regeneron International Science and Engineering Fair, May 16-21, 2021 where they competed and represented 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 were two Senior Ying Scholar Grand Prize Award winners.

Our first winner was:

For his project titled, “Year 4: Developing a Multiple Linear Regression Model to Predict the Specific Effects of Various Lactic Acid Bacteria Dosages on the Overall Honey Bee Gut Microbiota and *Nosema ceranae* Reduction”, from Lake Highland Preparatory School, Varun Madan.

Also in the Biological Sciences, our second winner was:

With his project titled, “A Novel Computational Approach To Drug Discovery Through Drug Repositioning”, from Lake Highland Preparatory School, Krithik Seela

In the division of Senior Physical Sciences there were two Senior Ying Scholar Grand Prize Award winners.

Our first winner was:

With her project titled, “Implementation of Time Frequency Analysis for Seizure Localization: Phase II”, from Lake Highland Preparatory School, Asha Reddy.

And our final winner was:

With his project titled, “Using A Novel Semi-Supervised Machine Learning Method to Improve Image-based Lung Cancer Diagnostic Algorithms”, from Trinity Preparatory School, Alex Wang