

INSPIRING STUDENTS IN STEM

## K-12 STEM ENQUIRER

March 2024

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### Read Across America

On Friday, March 22<sup>nd</sup> the National Museum of the United States Air Force and WPAFB Educational Outreach Office welcomed elementary school students across the Dayton region to participate in Read Across America for the first in-person event since the pandemic. Volunteers from WPAFB, published authors and staff from the Ohio Education Association read a variety of books to student groups, *Celebrating a Nation of Diverse Readers*. Thank you to all the educators and students who participated and for the volunteers who read and escorted classes around the NMUSAF!

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#### Join us next month...

- Spring Job Shadow Day
- FIRST® World Festival



# FLL Explore Festivals

The Dayton and the Loveland Robotics FLL Explore Festivals were held in March. For this season's challenge, MASTERPIECE, children learned about how people's passion for the arts are shared through STEM. A total of 44 teams participated in exploring a challenge, learning about core values, creating a team model with coding, and designing a team poster. We are so thankful for the coaches, volunteers, family and friends who attended and supported these amazing teams through their journey of collaboration and communication to build, learn, and play!



## Dayton Festival



FLL Explore Festivals cont'd.



# FLL Explore Festivals *cont'd.*



## Loveland Festival



FLL Explore Festivals *cont'd.*

# MASTERPIECE



FLL Explore Festivals *cont'd.*



## FLL Challenge Ohio Championship

The weekend of March 9<sup>th</sup> & 10<sup>th</sup> was a frenzy of activity as the top 42 *FIRST® LEGO®* League Challenge teams from across Ohio gathered in Troy for the Ohio FLL MASTERPIECE Championship! This season challenged teams to design, build, and program robots to autonomously complete STEAM themed LEGO obstacles on a game table, aiming to score as many points as possible in 2.5 minute matches. Teams also explored ways to use art and technology to share their passions with others - a great many apps, infomercials, adaptations and improvements to games, and even new games were created by these young Ohio innovators. All of this innovation and creation is completed under the umbrella of the FIRST Core Values, using Gracious Professionalism and Coopertition (cooperating with one's competition) making the FIRST LEGO League competition fierce, yet friendly and collaborative.

At the end of the weekend, the accomplishments of all 42 teams was celebrated for being Championship level teams. Awards were given and 5 teams were selected to move on to international events, representing Ohio at an even higher level of competition. We will be cheering for them and will share news of their success in the coming months.

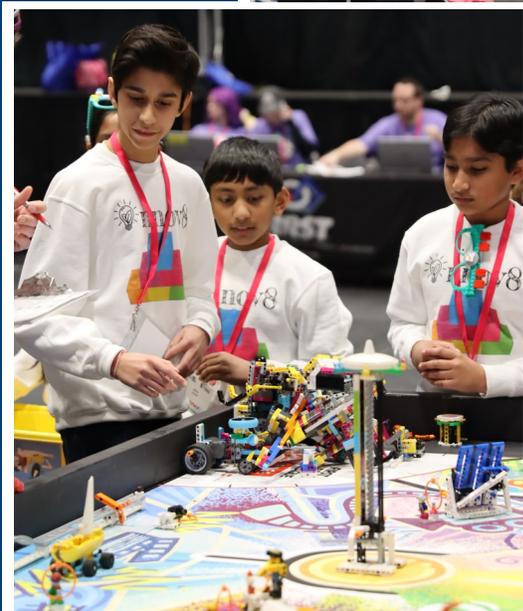
Results can be found here, at the [Scoreboard](#) and [Awards](#) links.



FLL Challenge Ohio Championship *cont'd.*



FLL Challenge Ohio Championship *cont'd.*



# FLL Challenge Ohio Championship *cont'd.*



## 2023-2024 FIRST LEGO League Challenge



### OHIO CHAMPIONSHIP

#### AWARD WINNERS

**CHAMPION'S AWARD:**

2751 Lego Legion (Winner)  
37575 Howl Bout It (Finalist)  
37348 Charged Up (Finalist)

**CORE VALUES AWARD:**

61318 Hyperdrive  
50927 Positive Protons  
37732 Power Pandas

**INNOVATION PROJECT AWARD:**

481 Wendas  
2494 Hungry, Hungry Hornets  
61271 Tech Warriors

**ROBOT DESIGN AWARD:**

47339 Aquabots  
353 LEGO Maskers  
38134 Jumping Jellybeans

**ADVANCING TEAMS:**

2751 Lego Legion  
37575 Howl Bout It  
34348 Charged Up  
353 LEGO Maskers  
37732 Power Pandas

**ROBOT PERFORMANCE AWARD:**

1<sup>st</sup> Place: 37732 Power Pandas  
2<sup>nd</sup> Place: 63673 Smart Bots  
3<sup>rd</sup> Place: 2751 Lego Legion

**ROBOT GAME SCOREBOARD:**

<http://flltournament.com/Scoreboard.aspx?TID=26203>

**ENGINEERING EXCELLENCE AWARD:**

56750 Tony Hawks

**RISING ALL-STAR AWARD:**

61212 Tech Tigers

**BREAKTHROUGH AWARD:**

40039 No Signal

**MOTIVATE AWARD:**

54930 Painted Penguins

**COOPERTITION AWARD:**

57229 Titanium Tacos

**COACH/MENTOR AWARD:**

Kerry Marsh (2751)

Mike Berendt (50927)

**FIRST FAMILY AWARD:**

The Rasmussens

The Hicks

**OUTSTANDING VOLUNTEER:**

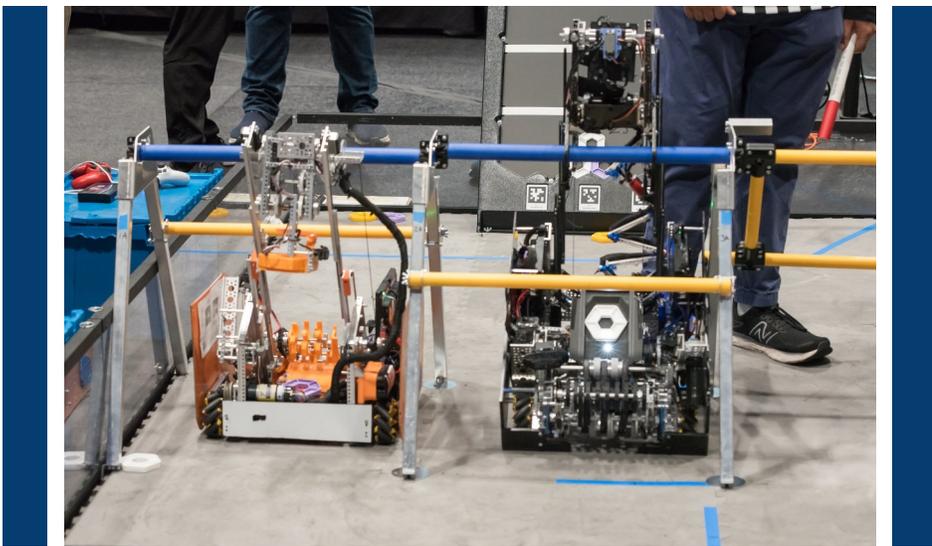
Alex Collins

Ryan Brant

## FIRST®Tech Challenge Ohio Championship

The WPAFB Educational Outreach Office hosted the *FIRST*®Tech Challenge Ohio Championship. 36 teams from across the state qualified to compete at the championship held at Hobart Arena in Troy, Ohio on March 9<sup>th</sup>, 2024. Teams qualified by competing and finishing as a top team at tournaments around the state. To start the day, Major General Scott Cain, the Commander of the Air Force Research Laboratory at WPAFB gave an inspiring talk about the importance of STEM and encouraged the students to continue their work. Teams competed in qualifier matches to start the day, then ended with exciting elimination matches between the top robot-performing teams. The crowd and teams were on the edge of their seats! At the end of the competition 3 teams advanced to the FIRST Championship in Houston, Texas where they will compete against teams from all over the world. Three students were also selected to be Dean's List Finalists. Deans list is a globally recognized award that celebrates FIRST's most outstanding students.

Congratulations to all of the award winners and thank you to everyone who contributed to making this fantastic event happen.



# FIRST®Tech Challenge Ohio Championship *cont'd.*



# FIRST® Tech Challenge Ohio Championship *cont'd.*



## 2023-2024 FIRST Tech Challenge

### OHIO CHAMPIONSHIP AWARD WINNERS



#### ADVANCING TEAMS

8719 Quantum Leap  
16449 Juniper Robotics  
21865 Fe2O3

#### INSPIRE AWARD

1<sup>st</sup> place: 8719 Quantum Leap  
2<sup>nd</sup> place: 21865 Fe2O3  
3<sup>rd</sup> place: 20744 24 Karat

#### WINNING ALLIANCE

Captain: 16449 Juniper Robotics  
1<sup>st</sup> pick: 23435 Gyrobotic Droids  
2<sup>nd</sup> pick: 20744 24 Karat

#### FINALIST ALLIANCE

Captain: 8581 Ædificatores  
1<sup>st</sup> pick: 8719 Quantum Leap  
2<sup>nd</sup> pick: 6133 The "NUTS!"

#### THINK AWARD

1<sup>st</sup> place: 10464 The Bionic Tigers  
2<sup>nd</sup> place: 6133 The "NUTS!"  
3<sup>rd</sup> place: 3311 Innovators Robotics

#### CONNECT AWARD

1<sup>st</sup> place: 21865 Fe2O3  
2<sup>nd</sup> place: 14279 FLRC Circuit Breakers  
3<sup>rd</sup> place: 12802 We Will Bot You

#### INNOVATE AWARD sponsored by RTX

1<sup>st</sup> place: 6418 NDCL Robotics  
2<sup>nd</sup> place: 10084 Team Calamari  
3<sup>rd</sup> place: 14174 Cougar Robotics

#### CONTROL AWARD

1<sup>st</sup> place: 16449 Juniper Robotics  
2<sup>nd</sup> place: 23435 Gyrobotic Droids  
3<sup>rd</sup> place: 8581 Ædificatores

#### MOTIVATE AWARD

1<sup>st</sup> place: 5040 Nuts & Bolts  
2<sup>nd</sup> place: 4537 DRSS Enterprise  
3<sup>rd</sup> place: 4969 Robot-X

#### DESIGN AWARD

1<sup>st</sup> place: 20744 24 Karat  
2<sup>nd</sup> place: 17978 Robo Kai (Fenwick)  
3<sup>rd</sup> place: 7136 Higgs Bosons

#### PROMOTE AWARD

1<sup>st</sup> place: 19778 Wire Monkeys  
2<sup>nd</sup> place: 7136 Higgs Bosons  
3<sup>rd</sup> place: 17978 Robo Kai (Fenwick)

#### COMPASS AWARD

1<sup>st</sup> place: Mike Rudder – 8120 Electric Hornets  
2<sup>nd</sup> place: Cherie Estill – 12768 INNOV-8  
3<sup>rd</sup> place: Richard Alden – 10464 The Bionic Tigers

#### JUDGES CHOICE AWARD

19778 Wire Monkeys

#### DEAN'S LIST FINALISTS

Sophia Lander – 4537 DRSS Enterprise  
Kateri Sherman – 14279 FLRC Circuit Breakers  
Jamie Brown – 10464 The Bionic Tigers

#### VOLUNTEER OF THE YEAR

Alex Lambert

## The Big Hoopla - STEM Challenge

STARBASE Wright-Patt and LEGACY represented the WPAFB Educational Outreach Office on St. Partick's Day at the Big Hoopla STEM Challenge held at the Dayton Convention Center. Hundreds of students and their families attended for hoops and hands-on STEM activities!

The Big Hoopla helps Dayton rev up for the first four games of the Men's NCAA March Madness tournament with a Hot Shot tournament and many fun activities from local organizations. The Big Hoopla is always a fun time, and this year it was fun to see all of the green for St. Partick's Day!



The Big Hoopla - STEM Challenge *cont'd.*



## WOW! Workshops

The WOW! program partnered with SOITA and CET to offer two Spring Workshops this month, focusing on Finch Robots, Sphero Indis and Bolts, Ozobots and Bee-Bots. These in-person days with local teachers were enjoyed by all!



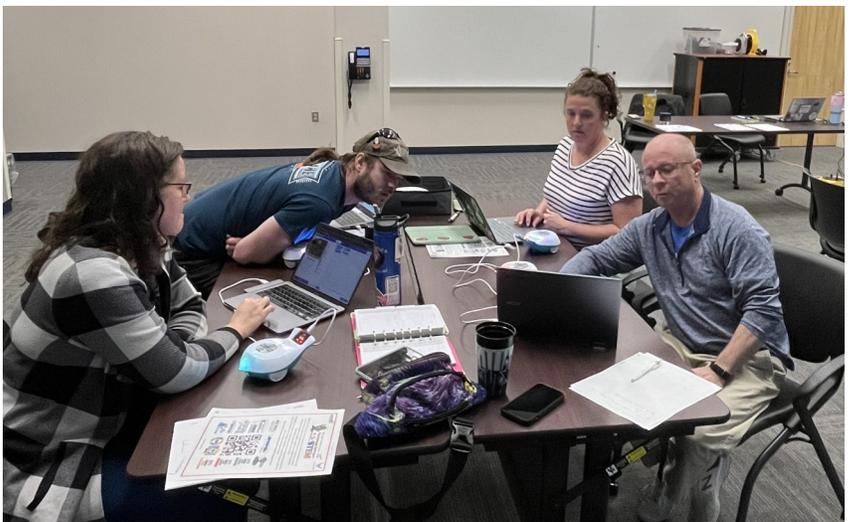
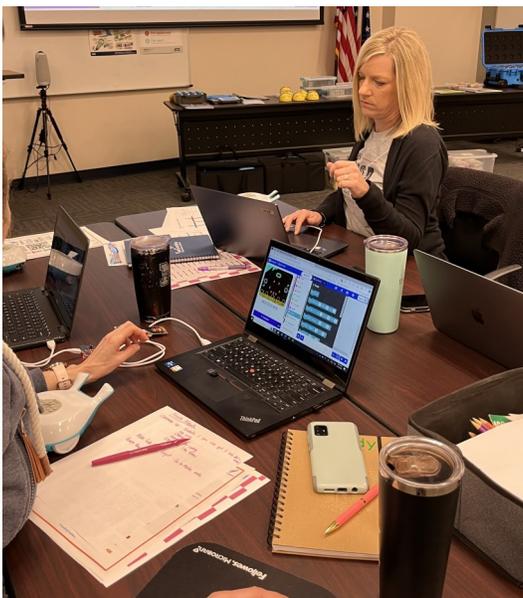
**Registration for summer workshops opens on April 3<sup>rd</sup>.** All workshops are 9:00-3:00 with a free hour for lunch (*not provided*). Certificates for contact hours are issued at the end of the day. [Click here](#) to register!

**5<sup>th</sup> -8<sup>th</sup> grade teachers** - *come to one or both sessions and experience different ideas to use in the classroom!*

- Monday, June 17<sup>th</sup>
- Tuesday, July 16<sup>th</sup>

**K-4<sup>th</sup> grade teachers** - *come to one or both sessions and experience different ideas to use in the classroom!*

- Tuesday, June 18<sup>th</sup>
- Wednesday, July 17<sup>th</sup>



## Junior Science and Humanities Symposium

On Friday, March 1<sup>st</sup> representatives from WPAFB travelled to Capital University in Columbus, Ohio to participate in the 61<sup>st</sup> annual Junior Science and Humanities Symposium (JSHS). 67 high school students from all over the state of Ohio arrived to present their research projects. Students in grades 9-12 competed in both oral and poster presentations in the fields of environmental science, biomedical sciences, life & behavior sciences, medicine & health, engineering & technology, mathematics & computer science, physical sciences, and chemistry. Congratulations to all the student competition winners! ([Click here](#) to learn more.)



## Employee Spotlight

**Name:** *Melissa Diskete (contractor)*

**Title:** *Instructor*

**Program:** *STARBASE*

**Years with the STARBASE office:** *1 year*

**What do you enjoy most about your role in STARBASE?** *I enjoy working with the students and seeing their excitement as they learn about STEM.*

**What is your favorite aspect of working with students in STEM?** *I love that everything is hands on. I also love that the students get to do a variety of activities like program robots, learn about CAD, launch rockets, and so much more!*

**What accomplishment are you most proud of at STARBASE?** *I am most proud of my interaction with the students, being upbeat and welcoming, and helping them to have a positive experience when they come to STARBASE.*

**If you had one superpower, what would it be and why?** *If I had a superpower, I would want to be able to take all the hurt and pain away from everyone.*

