

# Newsletter

## Director's Corner

Wesley Fondal, Jr., Executive Director



The second half of the year has been very busy for STARBASE ROBINS. In May we were selected for and went through the DoD Level III certification process. We look forward to an announcement real soon. Stay tuned!

We were excited in June to bring back the STARBASE ROBINS LEGACY Academy, in partnership with Wright Patterson Air Force Base. LEGACY is an Air Force program designed to attract, inspire and develop the next generation of our nation's scientific and technical workforce.

We had 32 students participate in two weeks of programming that was fun, exciting and educational. Students not only learned about different STEM skills, but also was introduced to several STEM careers. The students were grouped by ages for a majority of the academy, but came together for different aspects of the programming. Students also got the opportunity to tour Robins Air Force Base and learn how STEM applies to different career and technical fields on base. The second week of the academy was centered around coding, computer programming, and video game production. The students really had a great time and learned some valuable skills.

The last two weeks of June was devoted to our STARBASE ROBINS STEM-powered Girls Summer Academy. This year we focused on Science, Technology, Engineering, Agriculture and Math (STEAM), entrepreneurship, and intellectual property. We partnered with the U.S. Patent and Trademark Office (USPTO) to bring a three-day workshop with in the two weeks. The young ladies learned about patents and trademarks and what it takes to start a business. They also explored the laboratory of Dr. Lonnie Johnson in Atlanta, who holds over 100 patents, but most notable for the invention of the Super Soaker. They were also visited by Kaneisha Miller, owner of EM Farms, to discuss how to turn their passions into a business. This academy has been a very popular academy for the last 5 years.

In July, one of our instructors, Demetria Smith, applied for, and was accepted to the USPTO Summer Teacher Institute, which was held in Charlotte, NC. Several instructors and staff members attended workshops and conferences, such as the Sun Power for School Workshop (Audra Hubbard and Louis McCrary) and the NSTA Building STEM Leadership Alliance Conference (Wesley Fondal).

In August we kicked off our 23<sup>rd</sup> year of serving the Middle Georgia Area. The start of the year has been hectic. As many may know, Dawn Pannell retired in January of this year and in September we said good-bye to Janae Holbeck, Program Instructor, Marques Floyd, STEM Programs Project Manager and Ariana Reese, Program Instructor. We would like to welcome to the STARBASE ROBINS Family, Program Instructors Laura Money and Zeineb Yousif and also STEM Programs Project Manager, Tammie White. Zeineb is a former student of STARBASE.

We look forward to the New Year. We will be starting off the new year with our FLL Super Regional Tournament on Saturday January 25. We are always in need of volunteers to serve as career guides, mentors or FLL volunteers.

*"The function of education is to teach one to think intensely and critically. Intelligence plus character-that is the goal of true education." -Dr. Martin Luther King, Jr.*

### Fall/Winter 2020 Issue

#### About STARBASE ROBINS

STARBASE ROBINS offers a hands-on Science, Technology, Engineering, and Mathematics (S.T.E.M.) curriculum to students from local school systems as well as several area private schools. STARBASE ROBINS is a Department of Defense (DoD) educational program sponsored through a partnership with the Air Force Reserve Command (AFRC), the Museum of Aviation, and the Museum of Aviation Foundation, Inc. STARBASE ROBINS emphasizes the importance of goal-setting, teamwork, and communication in everyday life.

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Warner Robins, GA 31099*

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## STARBASE Participating Schools



The STARBASE ROBINS 5th Grade program is a five-week program housed at the Museum of Aviation. This program presently serves 23 elementary schools within the following four Middle Georgia counties: Bibb, Dooly, Houston, and Twiggs.

### ***Bibb County***

Alexander II Elementary School, Bernd Elementary School, Brookdale Elementary School, Bruce Elementary School, Hartley Elementary School, Heard Elementary School, Lane Elementary School, Springdale Elementary School, Union Elementary School, Veterans Elementary School, L H Williams Elementary and Vineville Elementary School

### ***Dooly County***

Dooly County Elementary School

### ***Houston County***

Centerville Elementary School, Eagle Springs Elementary School, Langston Elementary School, Lindsey Elementary School, Miller Elementary School, Northside Elementary School, Shirley Hills Elementary School, Qual Run Elementary School, Russell Elementary School, Sacred Heart Catholic School, Westfield Elementary School, and Westfield Elementary School

### ***Twiggs County***

Jeffersonville Elementary School



The STARBASE 2.0 After-School program is held one day a week for 12-13 weeks each academic semester. The STARBASE 2.0 program is currently held at 12 middle schools in the following four Middle Georgia counties: Bibb, Houston, Peach, and Twiggs.

### ***Bibb County***

Appling Middle School, Ballard Hudson Middle School and Weaver Middle School

### ***Houston County***

Feagin Mill Middle School, Huntington Middle School, Northside Middle School, Perry Middle School, Thomson Middle School, Warner Robins Middle School, and Sacred Heart Catholic School

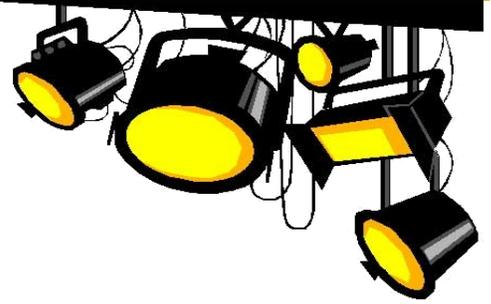
### ***Peach County***

Byron Middle School and Fort Valley Middle School

### ***Twiggs County***

Twiggs County Middle School

## Spotlight on NEW TEAM MEMBERS



### 5th Grade Instructor

Zeineb Yousif has been a resident of Warner Robins, GA since 1997. She was born in Saudi Arabia and lived in Ethiopia until the age of five. Her family consists of her parents, an older and younger brother, and a younger sister. Zeineb attended Middle Georgia State University for her bachelor's degree in Early Childhood and Special education. She later received her master's degree from Georgia Southwestern University.

Over the course of five years, Zeineb taught kindergarten, first, and second grade at Shirley Hills Elementary. Some of her hobbies include spending quality time with family and friends, staying up to date with new movies and books, and trying new restaurants and foods.



### STEM Programs Project Manager

Tammie White was born in Warner Robins, Georgia and raised in Gosnell, Arkansas. She has two daughters and a granddaughter. She holds a Bachelor's degree in Communication Studies and a Master's degree in Education and Public Administration. She has worked in a collegiate environment for the last 11 years and she values education. She played basketball in college and overseas and now enjoys coaching her daughter on a travel basketball team she helped to start 7 years ago.

Tammie loves to travel and has lived in places like Iceland, England, and Korea. In her spare time, she enjoys sports, reading and movies. She is excited to be a part of the STARBASE ROBINS team.



### 5th Grade Instructor

Laura Money grew up in Maryland, graduated high school at age sixteen and started her educational training as a Biology major while attending Frederick Community College. While planning to transfer to a four-year school, she met and married a sailor named Cliff Money who was stationed in Norfolk, Virginia. Shortly following their wedding, the couple moved to a new duty station at the Kings Bay Submarine Base in St. Mary's, Georgia where they remained for the next fifteen years while parenting their three children, Sarah, Rachel, and Caleb Money. Laura homeschooled their three children for three years until she was hired as a classroom paraprofessional for the Camden County School System.

Laura attended college classes in the evenings and over the summer to earn her Bachelor of Science in Early Childhood Education from Armstrong Atlantic State University in Savannah, Georgia.

A few years later, Laura was hired as a classroom teacher for the Bibb County School District where she worked for the next fifteen years and earned her Master's in Education from Lesley University in Massachusetts until joining STARBASE ROBINS as a STARBASE Instructor.

*welcome*

# 15th Annual Central Georgia First Lego League (FLL) Super Regional Qualifier

STARBASE ROBINS will host our 15<sup>th</sup> *Annual Central Georgia FIRST Lego League (FLL) Super Regional Qualifier*. This tournament is considered a second tier of the FLL competition, just before the state qualifier. This year's robotics tournament will be held on Saturday, January 25, 2020. The theme for this year's challenge is City Shaper. We are expecting approximately, 30-40 competition teams to participate in the event. This robotics event is more than just a competition, it's an experience for elementary and middle school students to challenge themselves. This is where creativity, innovation and problem solving come together.



**Mark your calendars for the**  
**15<sup>th</sup> Annual Central Georgia FIRST Lego League (FLL) Super Regional Qualifier**

**Date: Saturday, January 25, 2020**

**Time: 8:00 AM-5:00 PM**

**Location: Century of Flight Hangar (#2) of the Museum of Aviation**

**Address: 1942 Heritage Boulevard, Warner Robins, Georgia 31098**

## VOLUNTEER

Volunteers are still needed for the 15<sup>th</sup> *Annual Central Georgia FIRST Lego League (FLL) Super Regional Qualifier*. As we get closer to the date of the tournament, STARBASE ROBINS will conduct several training sessions for various positions that need to be filled.

Positions Needed:

- ✓ Judges (Robot Design, Project and Core Value)
- ✓ Referees
- ✓ Keepers of the Course (reset the competition tables)
- ✓ Keepers of the Room (help in the volunteer and judge break areas)
- ✓ On-Time Coordinators
- ✓ Information Table
- ✓ Raffle Area
- ✓ Practice Tables



If you are interested in volunteering and/or

have any questions email: [info@starbaserobins.org](mailto:info@starbaserobins.org)

## The STARBASE “STEM Shapers”

Tim Pendleton

On October 8-9, 2019, STARBASE 2.0 students chose to spend part of their Fall Break finetuning their skills in Robotics, as STARBASE ROBINS hosted the 1<sup>st</sup> annual STARBASE 2.0 FLL Robotics Boot Camp. At this camp, 15 students from various STARBASE 2.0 sites from around the Middle GA area had the opportunity to gain first hand knowledge and experience in Robotics, by receiving in-depth training from STARBASE staff on the building and programming of EV3 MindStorm robots and attachments, using this information to complete “City Shapers” Robotics Missions in an FLL-style mock tournament. The students were pushed to step outside of their comfort zones of pace and perfection, as they had to work together to learn the table, its missions, and the best strategies to complete them in two days. The students not only stepped up to the plate but also exceeded the expectations of the STARBASE staff. Needless to say, these students learned a lot from this experience, as according to their respective teachers and site facilitators, they have taken this experience as an opportunity to pass their knowledge off to the rest of their teammates at their respective sites and serve as site ambassadors. Congratulations to the following students for their participation in the STARBASE 2.0 FLL Robotics Boot Camp!

Brycen Brown – Feagin Mill Middle

A'Tev Coger – Northside Middle

Sophia Comportie – Sacred Heart

Sebastian Dawson – Sacred Heart

Jillian Gowen – Fort Valley Middle

Gabriel Guthrie – Huntington Middle

Margaret James – Sacred Heart

Jakeem Lester – Fort Valley Middle

Jacob Mayes – Northside Middle

Frederick McLaughlin – Perry Middle

Ahmad Miller – Northside Middle

Adam Ogburn – Fort Valley Middle

Abdullah Orr – Weaver Middle

Nathan Sullivan – Perry Middle

Ashlinn Williamson – Huntington Middle



# STARBASE ROBINS

## Appreciation for a Job Well Done!

Audra Hubbard



**Dawn Pannell**

Every business has a time when an employee leaves for new opportunities, but not often do employees retire. STARBASE ROBINS experienced the retirement of Lead 5<sup>th</sup> Grade Instructor Dawn Pannell on December 31, 2018. Dawn worked diligently with the 5<sup>th</sup> grade program at STARBASE ROBINS for 15 years. Dawn used her passion for learning to excite students, both young and old when it

came to STEM. She taught the staff that, “We wake kids up to STEM like they’ve never seen before!” Dawn’s ability to pick up on how STEM applies to everyday life allowed her the opportunity to talk about STARBASE ROBINS with everyone she came in contact with whether it was at work or the grocery store. As a result, she developed many friendships that lead to faithful Career Guides and Volunteers for our program. She also helped to nurture the partnership with Fort Valley State University and STARBASE ROBINS. Teacher candidates from Fort Valley State University come into our 5<sup>th</sup> grade program to observe and teach while learning about non-traditional teaching environments. Dawn’s love of learning and outgoing personality with all involved in STARBASE ROBINS is definitely being missed. The STARBASE ROBINS family would like to thank Dawn for all of her devotion, dedication, and service over the years. Congratulations, we wish you well!



## Full “CODE” Ahead

**Demetria C. Smith**

We are living in a technologically driven world that is dictating how we approach many things in our daily lives. Due to the abundance of advancements in technology, our STARBASE ROBINS fifth grade instructional team decided to follow suite and change some of the lessons we teach. Because STEM is our focus, it only made sense for us to teach more advanced technology lessons to help build on tomorrow’s future. Our lesson in coding is definitely a step in the right direction. The definition of coding is giving a machine (which is often a computer) a set of instructions that it must follow to complete a task.

Our lesson in coding allows each student to understand the basics of programming and what it takes to make objects move and animation perform many tasks. We begin with helping the students understand that their instructions have to be very specific because each set of instructions will make the objects do exactly what you code them to do. The next step in the process is placing figures in the correct position on the grids to complete specific tasks given by the user. At the very end of the coding lesson, the students are allowed to spend approximately 20-30 minutes on an iPad playing “Lightbot Hour”. This game allows each student to move at their own pace while increasing in difficulty on each level. Each STARBASE ROBINS instructor is continuously facilitating the class during this time and there to assist as needed. This emerging technology has taken us Full Code Ahead into the exciting world of technology and STARBASE ROBINS boarding the train has insured that we will not be left behind.



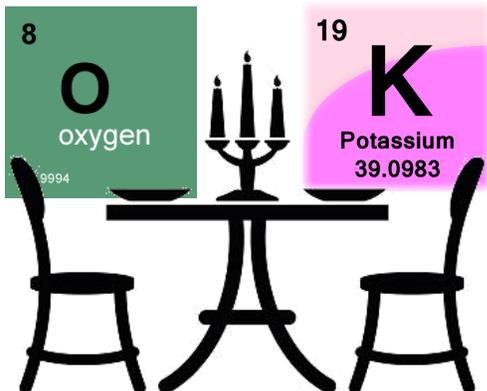
# STEM FUN FACT

**The moon has no atmosphere so there is no water or wind. This means the footprints of the astronauts who landed there are likely to stay for 100 million years!**



Did you hear that oxygen and potassium went on a date?

I heard it went OK



## Holiday STEM Ideas

### Germinating pumpkins

STEM isn't just about design and building. Growing things is a form of scientific engineering also. Germinating pumpkins inside of miniature pumpkins can teach students about seeds, soil, and caring for plants. A new pumpkin grows out of the decay of the old one within a couple of weeks! Then, depending on what climate you live in, you can plant the pumpkins outside and potentially see new growth from them in the spring.



### Spider webs

Spiders are master engineers the way they create designs with their silk. The webs can be geometrical and students can make spider webs out of yarn or paper as a fun activity.

## Christmas Tree



The gum drop Christmas tree focuses on engineering and math. This is a perfect time to engage your student and sneak in a little holiday fun.

Materials:

- Gumdrops (about 40 per group)
- Toothpicks
- Rulers or other measuring tools

## “Rocket Launch”

Tammie White

5, 4, 3, 2, 1 is what you hear from a sea of smiling faces, following a band of laughter and a loud “whoa” in amazement as the rockets takes off. The students look in the sky to find their rocket and wait for the signal to take off and go see where their rocket landed. It is day 5 “Rocket Launch” day and it is the day the students eagerly anticipate. Each class gets to launch their rockets in the amphitheater in front of the Century of Flight Hangar. STARBASE ROBINS has 5<sup>th</sup> graders from all over Middle Georgia participate in and learn STEM activities for five weeks.



## Off to a Great Start

Louis McCrary

2019 has been such an amazing year for me here at STARBASE ROBINS. We kicked off the summer with two extraordinary camps. The teamwork and dedication the students showed was remarkable during the Legacy camp, but I must say that the STEM girls camp was not only a new experience for them, but it was also new for us here at STARBASE ROBINS. United States Patent and Trademark Office (USPTO) gave us an opportunity to help the students tap into their creative juices and come up with several inventions and present them to parents and peers. Also for the past few months, I have had the opportunity to teach a few 5<sup>th</sup> grade classes and it has been great for me , I enjoy coming to work and seeing the excitement and joy on the students faces. They are all so eager to learn and have fun and I must say it has been a honor to be able to bring that to the table for them this year. I look forward to what 2020 has in store for not only me, but for STARBASE ROBINS and the students we impact every day.  
 #ILOvestarbaserobins

**STEM**



## Improving STARBASE Through Professional Development

Audra Hubbard



In order to offer the best, we have to the students, teachers, and schools that we serve, STARBASE ROBINS encourages employees to attend conferences and professional development. In October I was able to attend the Georgia STEM/ STEAM Forum.

Not only is this Forum an opportunity to learn, but it also allows networking with teachers and other informal educators around the state. As educators we shouldn't be competing against each other, we should be helping each other do everything we can to reach our students. In that effort, I was not only a participant but also a presenter this year. In presenting I was able to share the impact we have on students in our 5<sup>th</sup> grade program and our 2.0 program with the 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders. I was also able to

share about the existing partnerships we have with local universities, school systems, and mentors.

Professional Development offered by Sun Powered Schools taught me strategies for integrating solar energy into STEM Education and partnerships around the state to assist in that real-world connection. Growing in my own knowledge also led me to obtain my STEM Endorsement this past year. As many of the schools we work with are now on the track to STEM Certification we want to make our partnership with them a resource to finish the requirements. By increasing my knowledge, I am better able to serve those I teach.



**Continuous personal and professional development is your key to the future.**

- - - *Brian Tracy*

STARBASE ROBINS Photographs



**STARBASE ROBINS**



## The STARBASE ROBINS Team



**Wesley Fondal, Jr.**  
*Executive Director*



**Martha Lockhart**  
*Administrative Program Assistant*



**Katie Lockhart**  
*Program Assistant*

Email:



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*Instructor*



**Audra Hubbard**  
*Lead Instructor*



**Demetria Smith**  
*Instructor*



**Laura Money**  
*Instructor*



**Tim Pendleton**  
*STARBASE 2.0*  
*Coordinator*



**Yakira West**  
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**Louis McCrary**  
*STARBASE 2.0*  
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**Tammie White.**  
*S.T.E.M.*  
*Programs Project Manager*



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