



# UPWARD BOUND MATH & SCIENCE



Preparing students for the future

July - December

Upward Bound Math and Science Newsletter

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## UPCOMING SPRING EVENTS:

FASFA Workshop

MLK luncheon

Senior Banquet (May 7th)

## Students Acquire Research Skills

### NCERC WORKSHOP ON BIOMASS STORAGE

Over the summer Upward Bound Math & Science students paired up with representatives from the National Corn-to-Ethanol Research Center (NCERC) at SIUE and have been working on different ways of acquiring research skills. The students investigated the importance of proper storage conditions in order to preserve the quality of biomass. The students began their research by asking the question : "Which container type would store biomass best ?" The two container types were an air tight sealed container compared to a net/mesh type container. On October 25<sup>th</sup> UB M&S met again with the NCERC Team to find out the results of their experiment started in the summer. Together the students analyzed and compared the abiotic conditions of the biomass samples from before storage and after storage. Upon first observation of their samples many students noticed mold. The students learned how moisture and exposure to air can affect the storage stability of different

biomasses. The research also helped students observe and learn first-hand the properties of storage materials and the importance of proper storage. The results of this experiment are important because proper storage of different biomasses such as corn grain, corn stover, switchgrass, and wheat-straw benefits the cost-effectiveness when manufacturing different fuels and chemicals.



Pictured Left to Right: Stephanie Anderson, Latisha Cole, Mikiyah Bell & Zemondre McKinzie



## Hands Up for Justice

In the wake of the August 9th shooting of Ferguson, MO resident Mike Brown, the St. Louis Community has experienced unrest and injury. However, out of these events that have transpired, dialogs and an awakening has swept the country and world at large. Individuals and nations from around the world stood in solidarity with St. Louis as it sheds light on racial inequalities that still exist in 2015.

In St. Louis we have seen history being made! Movements, "die-in's", legal protests and visitors from around the world standing together against racial inequality and systematic oppression.

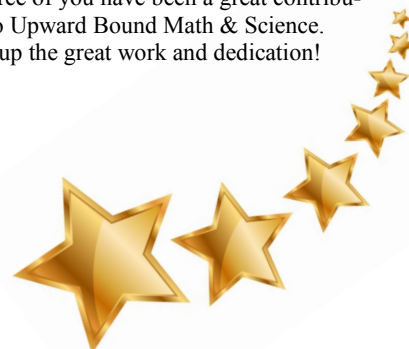
As St. Louis works on healing we hope to remind our students that each day they are living history. Our Upward Bound Math and Science Students are young, capable and powerful and can make differences in their communities.

## Students Worth Mentioning

This Fall has been one of our busiest yet! As our Students began their final year of high school and start the often times overwhelming process of preparing for college. Here are 3 of our seniors who stood out this Fall for their top attendance:

1. Mikiyah Bell
2. Xavier Bonner
3. Janel Handy

All three of you have been a great contribution to Upward Bound Math & Science. Keep up the great work and dedication!



# Our Seniors Go to Washington D.C.



Upward Bound M&S Students set off for our nation's capital and arrived in Washington DC on July 27<sup>th</sup>. Over the course of the next 4 days students visited several sites and universities navigated by Gerber Tours out of Washington DC.

The students first day was packed with several activities. Their first stop was the Ronald Reagan Building and a tour of the Bureau of Engraving and Printing. Students got to see and learn about international trade and our U.S. currency. Howard University was the first university tour the students visited. Later on in the evening students visited historical sites which included, the Lincoln, Veteran's and Korean Memorials.

The second day kept the students busy with visits to two famous institutions: Georgetown University and the George Washington University. In between these college tours students also spent time visiting the Arlington National Cemetery and the Jefferson and Iwo Jima Marine Memorials.

The remainder of the trip was spent sightseeing and visiting other iconic sites which included the White House, U.S. Holocaust Memorial Museum, Smithsonian Institute, National Museum of Natural History, African American Civil War Memori-

al Freedom Foundation and Museum, the Martin Luther King Jr. National Memorial, 9/11 Memorial and the WWII Memorial. The students concluded their trip with a campus tour of the University of Maryland.



## What We've Been Up To: Preparing for College

We could not be more proud of our seniors as they embark on the last year of their high school career! Upward Bound Math & Science has been busy with preparing students for their next step towards college.

Our Saturday Sessions have been used for various enrichment and tutorials which includes learning Computer skills, Math, Science, and English. Students have access to Tutors to help them in any subject area that they may need. We have also used our Saturday's to start looking ahead and getting ready for college.

Many of our students are busy filling out school applications and writing personal statements/Admission letters. Our students are also staying active in various extra curricular activities. Here are three of our students active in Government and Leadership, Brandy Brown (Senior Class President ESTL Senior High) Chanda Wallace (Senior Class President, Cahokia High) and Darwin Harris (Senior Class Vice President, Cahokia High). Way to GO!

## SPOTLIGHT ON ALUMNI

*Shontrice Garrett*

**High School Attended:** East St. Louis Senior High School

**College Attended:** Jackson State University

**Date of Graduation/Expected Graduation:** If the Lord be willing, MAY 02, 2015!!!!



**Career Goals:** I have many career goals which involve me being a Mogul in the field of education. Once I am finished with my undergraduate degree I plan to start teaching in the Jackson Public School system while pursuing my Master's Degree in Teaching. My ultimate career goal is to start an after-school program for underprivileged youth as well as become a State Superintendent.

**How UBMS Influenced My Life:** UBMS influenced my life by providing me with an authentic college experience. Attending UBMS during the summer is what molded the skills I currently have which have provided me with success in college. I did not enjoy study hour during the summer, but I am thankful for it. As a result of having study hour during the summer I am able to make a study hour (or a couple of study hours) for myself today. Not only did the summers mold me, but the Saturday sessions helped me as well. I made the Saturday Sessions work for me. I was able to get assistant with my homework I currently had or get introduced to new things I hadn't went over in class. By being introduced to things I hadn't seen before, I was able to be ahead in my classes at school.





# Trio Fall Program

## Uncover the Mystery: UBMS Takes on Forensic Science

During the Fall academic year a Forensic Science enrichment course was offered to students. By coincidence The International Exhibition of Sherlock Holmes was visiting the St. Louis Science Center. Sherlock Holmes is often revered as the father of Forensic Science. On December 13<sup>th</sup> the UB Math & Science Students were able to take advantage of this opportunity and visit the Exhibit.

Before the visit students spent some time learning about Sherlock Holmes and his contributions to Forensic Science. At the exhibit the

students and staff enjoyed learning about how forensic science works through hands on activities such as, crime scene investigation, finger print examinations, blood splatters and other visual clues to help solve “mysteries” and “crimes”.

The exhibit was set up as a crime scene and students went to different stations analyzing different aspects of the crime. During the field trip students worked on applying the knowledge they have gained from their forensics class as well as using new techniques learned at the exhibit to solve the crime.



Many students enjoyed testing their hypothesis on what events occurred during the crime. Some students were pleasantly surprised that they were able to reveal the events of the crime. Alternatively, some students were disappointed because their assumptions and hypothesis did not turn out the way they thought. Overall it was a successful fieldtrip and a unique experience for them to apply their newly acquired forensic skills!

## Trashcan Ethanol



and we all shine on...

This winter, 3 of our students have paired up with the National Corn-to-Ethanol Research Center (NCERC) to compete in SIUE's regional Science and Engineering Research Challenge. In this challenge Mikiyah Bell, Martell Cotton and Paris Patterson will work together to test if compost material from our everyday trash can produce ethanol and be used as a biofuel source. The group will be ready to compete and present their findings on March 28, 2015. Good Luck to all three participants as you go on to compete and advance biofuel research!



*Pictured Left to Right: Paris Patterson, Mikiyah Bell & Martell Cotton*



*Pictured Above: Compost collected*



*Martell, Paris & Mikiyah reacting to opening the compost container for the first time.*

## Meet Fall Staff: Graduate Assistants



**Sai Panyam**— Sai has been with UBMS since Fall Semester 2013. Sai is a SIUE Graduate Student in the School of Engineering and instructor for Science and Computers during the Academic Year. He assisted students with college searches. Sai will graduate this Spring 2015.



**Ololade Mustafa**— Ololade joined UBMS this Fall and is a SIUE Graduate Student studying English with specialty in Teaching English as a Second Language. During the Academic Year Ololade taught English and assisted students with college applications. Ololade will graduate in Spring 2016



**Pooja Punukollu**— Pooja started with UBMS this fall and is a SIUE Graduate Student in the School of Engineering. Pooja works as an instructor teaching Science and Computers. Pooja will graduate this summer 2015.



**Ravi Velukonda**— Ravi began working in the Fall with UBMS and is a SIUE Graduate Student in the School of Engineering. Ravi has worked as our Math instructor during the Academic Year and will graduate this Spring 2015

## A New Face With UBMS!



On December 1st Ms. Lara Jennings joined the Upward Bound Math & Science Team as our Program Counselor. Ms. Jennings started working for UBMS in October 2013 through the Summer 2014 as a Graduate Assistant while getting her Master's in Social Work.

### A Message From The New Counselor:

I am very excited to be apart of the UBMS Team and be involved in such a

great program. I have also really enjoyed getting to know this group of Students and having an opportunity to watch them grow the past year and seeing them graduate! I am very proud of our Students!

Additionally, if there is anything I can do for any of our students or parents please do not hesitate to ask! I know as the students move towards making a college decision that at times, it can all be overwhelming! My door is always open!

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### A special THANKS

We would like to say thanks to Courtney Breckenridge and Sabrina Trupia and everyone else from NCERC who has contributed their time and energy to make our research experiences possible!



### Contact us

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