### The Newsletter of the Winthrop Eagle STEM Scholars Program



# Special Edition Newsletter

## Summer Bridge 2016

Volume 1, Issue 10-1 Summer 2016

## **Eagle STEM Summer Bridge Program Highlights**

by Rachel Law

# Special points of interest:

 Students comments about Summer Bridge

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welve scholars completed the second successful Eagle STEM Summer Bridge Program held from 6/22 - 7/29/2016. All were graduates of South Carolina high schools, three of whom attended the Governor's School for Science and Math. Students participated in a six week program of academic and team building activities. Ten are biology majors and two are chemistry majors. Peer Mentors for the program were Eagle STEM Scholars; Esseabasi Etim, a graduate who had a double major in chemistry and computer science and Adaeze Aninweze, the recipient of the prestigious Boren Scholarship who is now studying abroad in Brazil for a year. All students were housed in Phelps Residence Hall and were allowed home visits every other weekend. Besides program staff, the team planning for the summer bridge program included Dr. Pat Owens, Chemistry Department Chair, Dr. Takita Sumter, Professor of Chemistry, and Dr. Kathie Snyder, Assistant Professor, Chemistry. Admissions, Financial Aid, Residence Life and other Winthrop administrative services played key roles in making the program a success.

The comprehensive program included science classes (6 credit hours to be applied to the 14 hours of math and science credits required for the state scholarship enhancement), laboratory safety and techniques training, shadowing in SURE labs, workshops, speakers, and peer instruction. Student progress meetings to discuss grades, concerns, and issues were held with program staff at regular intervals. Team building and social activities were held weekly. Student feedback on the program was very

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### What did the Mentors Think About Summer Bridge?

daeze Aninweze - "I believe that summer bridge is a great addition to the Eagle STEM program. It offers incoming freshman students an opportunity for an extensive orientation of college. Students learn how to successfully transition from high school to college. Students spend the summer taking courses. For those in the honors

program, they will receive a majority of their required honors credits for the academic year. Throughout the summer, the students had peer mentors available to assist them.



Aninweze

## Faculty's Comments on the Summer Bridge Program

octor Cliff Harris - "I thoroughly enjoyed working with the students this summer. The CHEM 104H course is slightly different this year because the

Harris

students have been required to investigate topics and learn more concepts outside of the classroom. The response from the students has been positive, and they have been very engaged and enthusiastic all summer long. They have proven themselves more than capable of han-

dling all of the challenges that I have sent their way. Additionally, there has been a greater emphasis on collaboration, and it appears that the students are very adept at working together. I feel that the cohesion of this group is very strong. Overall, I am very happy with both the effort and performance of this group."

octor Ponn Maheswaranathan - "Overall, I had a pleasant experience as the physics instructor of Everyday Physics (PHYS 101H) for the Summer Bridge Program. The purpose of PHYS 101H was to

introduce the students to introductory physics topics and to help them master their mathematics skills necessary for the STEM fields. These prospective STEM majors came to us with a wide range of prior physics knowledge. Some students did not have the opportunity to take physics courses in their high schools.



Maheswaranathan

This made it a challenge to deliver the lecture at an appropriate level. Demonstrations and hands-on activities were used to introduce physics topics conceptually. All of them were eager to learn, actively engaged in the lecture, and participated well. They kept up with the assignments and did their homework well. I have the up most confidence in this dedicated group of twelve summer bridge students to excel in their majors and contribute positively to their profession and society upon graduation."■

### 2016 Eagle STEM Summer Bridge Participants



## What did the Students Think About Summer Bridge?

**Tiffany Dwyer** - "Summer Bridge was a great experience for me. I loved that I was able to become familiar



Dwver

with the campus, get six credit hours, and make friends. It also greatly helped transition me from high school to college. It definitely prepared me for college because I learned better study habits and time management. The most memorable part of summer bridge was when we

went to Carowinds. Summer Bridge was definitely worth giving up my summer because it gave me a big advantage coming into the Fall semester with six credit hours and knowing quite a few of the professors."



Jones

Morgan Jones - "Summer Bridge was, overall, a good experience. I think that it helped prepare me for college. The most memorable part was the group trip to the zoo. I think that it was worth giving up my summer."■

Sarah Reid - "My experience of the Summer Bridge program was very informative and enlightening. I was able to become my own person with the newfound freedom or independence. This independence allowed me to have a fresh and new start and be whoever I wanted to be. I was able to build a network or community of



Reid

friends, family, and faculty. The Summer Bridge Program gave me the opportunity to get a 'lay of the land' and feel more comfortable with my new surroundings for the next four years of my life. Being able to take chemistry and physics during the summer was very good. Doing so allowed us to focus solely on the

more challenging courses. Because of the Summer Bridge Program, I was able to get a head start before the beginning of the fall semester socially, environmentally, and academically. If I had the same choice to be a part of the Summer Bridge Program, I would definitely do it again. The whole six weeks were filled with laughter, friendship, fun activities, and the formation of amazing memories."

Caprice Garcia - "My summer was very enjoyable thanks to the Summer Bridge Program. Though it was

tough, it gave me a taste of what college is like and for that I am very grateful to have taken part in it. Taking two honors courses during the summer definitely seemed like an experience that would be rigorous yet fulfilling and it was. I came into the program not really understanding what being a college stu-



Garcia

dent meant, let alone being a STEM student. Through time, however, my experience was replaced with me being unprepared for college classes to me knowing exactly what my professors expect of me. One of the most important ways that this program prepared me for college was through the team building exercises we did at the rope climbing course. It showed what it means to rely on as well as be a helping hand to my classmates. During my first week of college, the things I learned that day definitely came in handy. That said, it was definitely worth giving up my summer to be in this program. I do believe that the skills that I learned being in the Summer Bridge Program will help me for years to come."

Marlin McKnight - "The Summer Bridge Program allowed me to get to know professors, other students who have similar motives as me, and to get an idea of how college classes and workloads are. It was a great experience and the upper hand that we all received

helped us to feel more prepared for college. The most memorable part of summer bridge for me was helping my lab professor with an experiment that he was both working on and planning to publish in the future. It made me feel as though I was capable enough to be an aid at something very important to him. Even feeling a bit prepared for col-



McKnight

lege classes myself, the Summer Bridge Program gave us a huge upper hand and experiences that can't be obtained easily in the school year."

#### STUDENTS continued from page 3

Addyson Griffin - "I enjoyed the Summer Bridge Program so much! I think that it was a wonderful opportunity to learn not only how college works, but also it allowed me to see that chemistry is what I want to



Griffin

pursue. This summer truly gave me a sense of what college is really like but in an environment that made the transition from high school to college very easy. For me the best part was getting to meet some of the professors and getting to work in their lab. I truly believe that it was worth giving up my sum-

mer to attend this program! I feel as if I now have a leg up going into my freshman year already having two classes under my belt. I honestly could not have asked for a better way to spend six weeks of my summer!"

Juliana Quay - "I am very grateful for the Eagle STEM Scholars program and the opportunities it has given me. While the Summer Bridge Program was difficult, I feel that it prepared me for college in many ways. It

felt good to start out my freshman year with two free honors classes, and the experience that came along with each. Now that my freshman year has actually started, I feel that giving up my summer was worth it. I enjoyed getting more familiar with the campus and meeting STEM professors. The SURE



Quay

labs were my favorite part of Summer Bridge, and they piqued my interest in undergraduate research here at Winthrop."

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#### **MENTORS** continued from front

The transition to college is not easy. In 6 weeks, students will learned about time management, improving study skills, networking, responsibility and independence. At the end of the program, the students felt highly prepared to undertake their freshman year."

esseabasi Etim - "I really enjoyed my time as one of the peer mentors with the Eagle STEM Scholars Summer Bridge Program. First, I really appreciate being chosen and trusted with the position. Adaeze Aninweze was an excellent choice and we complemented each other the whole summer. I assumed that having a lot of experience as a peer tutor would be the only experience I needed to do the job, but I was wrong. As a peer tutor, I just showed up for the tutor-



Etim

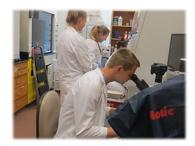
ing sessions and it lasted for about 75 minutes on average. Peer mentoring is drastically different. Albeit I did tutor almost every day, I had to care about what they were doing, how they were doing, if they're eating, happy, upset and etc. This was outside my comfort zone by miles but

I had to do it. Having Adaeze there to deal with the more personal/emotional issues left me with helping them with their academic issues. The experience was similar to babysitting a younger sibling, and I don't have a younger sibling. Nevertheless, I set up a struc-

ture to cope every day. I started a group chat on Group Me, the mobile app, for everyone. That's how I was able to communicate with everyone at once, with schedule reminders or schedule changes. But that also helped me learn their names easily because their pictures were attached to their account. Learning someone's name is key in forming a connection with someone, so the group chat was a good idea, I think. From there on, I could joke around with them and be assertive with them without being aggressive. Overall, I really enjoyed the experience. My overall comment would be to continue the summer bridge program because it was a wakeup call to every single one of them that college is different from high school. They started caring about their grades early, something I didn't do until second semester sophomore year. Also, if possible, tailor the classes to the students. I mean if there are biology and chemistry students, then there should be biology and chemistry classes. But if there are a lot of math students, have them take physics and math. I'm thinking they should take an introductory class of what they will be taking in the fall semester."

# Summer Bridge Lab Experiences





























## Community Service at Rock Hill Community Garden













## Community Service at Boys & Girls Club









## Team Building / Ropes Course

Led by Geoff Morrow, Director Winthrop Outdoor Education Center







#### **HIGHTLIGHTS** continued from front

favorable, with time spent in the laboratories a major highlight.

Thanks to all who contributed to the summer experience including the following:

- Classes: Chem 104 Honors Dr. Cliff Harris, Physics 101 Honors Dr. Ponn Maheswaranathan
- Laboratory Techniques Dr. Kathie Snyder
- SURE Lab Rotations Dr. Barak, Dr. Eric Birgbauer, Dr. Jay Hanna, Dr. Cliff Harris, Dr. Jason Hurlbert, Dr. Robin Lammi, Dr. Matthew Stern

#### Workshops and Speakers

- Academic Expectations & Integrity Ms. Carol Inglis
- Academic Success Ms. Ashley Burnside
- Personality Assessment Ms. Leah Kendall
- Global Issues: Dr. Cliff Harris Energy, Dr. Matt Heard – Water Quality, Mr. David Law, CEH, CISSP - Cybersecurity
- Career Opportunities Dr. Howard Ray, Industrial Test Systems, Inc.

 Faculty Introductions of Research: Dr.'s Grattan, Dimaculangan, Frost, Gelabert, Heard, Lammi, Hurlbert, Hanna, Birgbauer, Evans-Anderson

#### **Social Activities**

- Ropes Course / Team Building Mr. Geoff Morrow, Director, Winthrop Outdoor Education Center
- Cookout Remedy Church
- Harvey Gantt and Mint Museums Tours Dr. Adolphus Belk.



#### STUDENTS continued from page 4

Alexis Robinson - "I thought that it was amazing and truly a new experience! It helped me get used to the idea of living away from home and develop new study



Robinson

habits for classes I'm taking this semester. I think my favorite part of the whole program was getting to meet new people so when I finally got to college, I would not be so alone. Overall, I'm so glad that I got the chance to be a part of this program!"

Jessika Bonner - "The Summer Bridge Program was a great way for me to get a head start on my college

career, and allowed me to get used to the school and get a feel for the college courses I am going to be taking! We had many fun activities and I got to know many of the professors, which will be a big help once classes start in the fall."



Bonner

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The Eagle STEM Scholars Program was formed as a result of the INBRE II diversity initiative to effectively matriculate more students from diverse groups into biomedical science Ph.D. programs. Winthrop, because of its diverse population of students, is uniquely poised to increase the number of under-represented minority, low income and first generation undergraduates in South Carolina who matriculate into Ph.D. biomedical science, bioengineering, biochemistry, biology and chemistry programs. It is taking steps to move over the next two decades towards national leadership in this area.