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

Volume 1, Issue 12-1 Summer 2018

# Special Edition Newsletter

Summer Bridge 2018

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

by Rachel Law

Special points of interest:

• Students comments about Summer Bridge

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he fourth Winthrop Eagle STEM Scholars Summer Bridge Program to transition high school students to college began 6/22/2018 and ended 7/27/2018. Fifteen students participated in the approximate six week long program of academic and team building activities. These high achieving applicants were selected from underrepresented minority, first generation college, or financial needs groups. All graduated from high schools or home schools in South Carolina except for one who graduated from high school in Washington. Seven are biology majors; three are chemistry majors; three are computer science majors; and two are math majors. Seven are in the Honors Program and two are Palmetto Fellows.

Peer Mentors for the program were Mona Herndon, a spring 2018 Math graduate pursuing her Masters degree, Sydney McCall, a senior math major, and Zachary Revert, a junior biology major. All students resided in Thomson Hall and were allowed home visits twice during the six week period.

The comprehensive program included chemistry and math 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. Two community service activities were also completed at the Museum

See HIGHLIGHTS page 8

## What did the Mentors Think About Summer Bridge?

Chimon Herndon - "I think the bridge program was an eye opener for lots of the incoming scholars because of their past experiences. It felt good to be able to help guide them and give them advice on what to do and what not to do in order to be successful going into their freshman year. I think the most beneficial lesson the scholars learned this summer is the importance of teamwork and everyone playing their part. Through all of the team building activities and always being together, the scholars and mentors



## Faculty's Comments on the Summer Bridge Program



Harris

D octor Cliff Harris - "This past summer, we welcomed our second largest and most diverse Eagle STEM cohort ever to campus as part of the bridge program. The students were engaged in intense coursework, professional development workshops, research, and a wide variety of social enrichment activities. Despite the rigor of the summer, the students exhibited outstanding work ethic and grit. As a cohort, they have meshed together quite well. I am intrigued by the extensive array of scientific and technical interests of the students, and I am excited to see what the future holds for them. This was a very engaging and personable group as well. I look forward to making meaningful and long-lasting connections with them."

D octor Jane Wilkes - "The 2018 summer bridge program was a great opportunity for incoming freshmen to gain experiences in college classes and to become familiar with the Winthrop campus be-

fore the beginning of the fall semester. I had the privilege of teaching Math 101H to the program participants. Our class reviewed skills in advanced algebra and in trigonometry. The goal of this class was to better prepare students for calculus and other STEM courses. The daily practice included engaging students in cooperative learning and using technology, such as the Desmos web app, graphing calculators, and My Math Lab. All of the students in this excellent cohort successfully completed the class and showed potential to become Winthrop scholars. I foresee great accomplishments from this group of young people and look forward to more opportunities to work with this wonderful program."



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## 2018 Eagle STEM Summer Bridge Participants



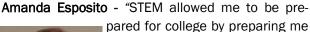
## What did the Students Think About Summer Bridge?

Carlos Escoto - Diaz - "Many would rather hold off from pursuing any summer courses, especially right before a full 4 year college career. But I have no regrets from



entering this program, even though there were challenges present that are part of every alumni's experience. With each member of our 2018 cohort by our side and our great peer mentors to guide us, any challenge that any of us encountered has served to better adapt us for campus-

life and prepare us for classes in the future."





Esposito

for college-level courses. It allowed me to see the difference between college and high school before I was in college. I loved this summer. I made tons of friends that I still talk to and hang out with. It was great going into col-

lege with friends. My summer roommate and me were a perfect pair. We are best friends now. I enjoyed bonding with all of my classmates."■

#### Sarah Fleetwood - "The summer bridge program



provided a wonderful head start for my upcoming years at Winthrop. Not only did I get to know my way around campus and made new friends, but I also met wonderful faculty who I will continue to work with throughout the years and I learned about a multitude of oppor-

Fleetwood

tunities I can take advantage of in the future. My experience in the classroom was invalua-

ble because it definitely helped prepare me for my first full semester of classes, an overall wonderful start to my Winthrop experience."■

Tynasia Foster - "The summer bridge program was a very

exciting, but also an eye opening opportunity. It allowed us to get a first hand feel of the high school to college transition with things from living on campus to actual college work to depending on your peers for several different reasons. to learning how to use outside resources to help you succeed. What made me most happy with the program



is the fact that there were different activities set aside for us so we wouldn't merely focus on the schoolwork and so we can build bonds with each other. On top of all of this, we were given an opportunity of working in two labs of our choices, which is something that most students never get to experience. I am so thankful that I was offered an opportunity and will use everything I learned to help me get through college and life in general."■

#### Ryan Lumbert - "The Eagle STEM program was a

wonderful gateway into college, providing an excellent foundation to begin my Freshman year at Winthrop. The opportunity to shadow a researcher in their laboratory, made connections with the other students in the program, and learn about the area surrounding Winthrop has given



me valuable experience with which to traverse college in the future. Eagle STEM has been an amazing stepping-stone into the future."

Crystal Moore - "The summer program helped me

establish relationships with students who have a similar goal as I do. The program also introduced me to the work expected of me in college and helped introduced me to some professors in my field. Being in the bridge program prepared me for my first year in college and gave me resources to lean

on through my entire college ca-

reer."∎



Moore

See Student page4

#### Students continued from page 3

Natalie Combs - " This summer was many things to me. Coming into it, I was anxious and wasn't



sure how well I would adjust to college life. After meeting my roommate as well as the rest of my cohort, I quickly knew that it would be so much more than I anticipated. It didn't take long for me to develop friendships with my peers. Another worry coming into the summer was that I would be way behind the

Combs

rest of my cohort intelligence-wise. It comforted me to know that we all had worries and were nervous about what to expect, but also the fact that we all had our individual strengths and weaknesses. Though they were stressful, I enjoyed my classes and was fond of the professors chosen to teach this summer as well. Overall, the Eagle STEM summer program for 2018 was a success. I believe that it prepared me for freshman year even better than I had predicted."

Savannah Scott - "Being a part of the STEM pro-

gram was a great opportunity to learn and gain skills transitioning from high school to college as well as getting to know about the campus and opportunities given at Winthrop. I believe it gave me an advantage as opposed to other freshmen coming in due to already having relationships with some of the professors at the school and understand-



Scott

ing some of the research each professor is doing for the school year and summer. The program also allowed me to gain skills that I can use for all aspects of life including communication and working with others. I believe doing the STEM program is a great opportunity and if others have the chance to apply should take this opportunity and use it to their advantage."∎



Josiah Bauer- "I would say that overall I enjoyed the Eagle STEM summer bridge program. I feel like it gave me an appropriate taste of what college life was going to be like without overwhelming me in the process. It helped me to understand what professors expect from me as well as understand how to manage my time for the upcoming fall semester. That being said I do believe there is room for improvement to the summer bridge program."

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

got to learn how diverse our personalities, strengths, and weaknesses were. From a mentor standpoint, we encouraged the scholars to take advantage of individual's strengths so that they could try to build on their weaknesses. I think taking advantage of the Summer Bridge program as an incoming freshman will be very beneficial to them throughout their college career. This summer was the beginning of new friendships and a learning experience for us all. I plan to take what we experienced and use it in the future as an educator and friend."

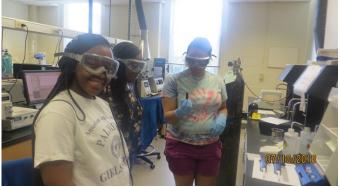


ydney McCall - "As a member of the first cohort to go through the Eagle STEM Summer Bridge program. I was honored to be asked to serve as a Peer Mentor this summer. Being a Peer Mentor encompasses many jobs including campus guide, tutor, and full time support system. One of the things that I tried to stress to the students this summer was that their peers are their greatest assets. I would not have made it through my summer, or the last three years, without other members of the Eagle Scholars program. The Summer Bridge program is a great chance for students to experience the pressures of college. The accelerated classes show students the difference in the work load of high school and college which is something that benefited me

during my Summer Bridge experience. Students have also made connections with members of the research staff and are looking forward to working with them in the future. "

# Summer Bridge Lab Experiences

















# Team Building / Ropes Course



Trip to the Riverbanks Zoo and Garden

#### HIGHTLIGHTS continued from front

of York County and Rock Hill Thrift Store. Students commented that they felt much more prepared to begin college because of their participation in the program.

The team selecting program participants and planning for the summer bridge program included Dr. Pat Owens, Dr. Takita Sumter, Dr. Kathie Snyder, Dr. Kristi Westover, Dr. Cliff Harris, Dr. Michael Whitney, Dr. David Meeler, Autumn Leggins, and Rachel Law. Admissions, Financial Aid, Finance, Residence Life and other Winthrop administrative services played key roles in making the program a success. Thanks to all who contributed to the summer experience including the following:

- Chem 104 Honors-Dr. Cliff Harris
- Math 101 Honors \_ Prof. Jane Wilkes
- Laboratory Techniques Dr. Kathie Snyder, Ms. Willie Ruth Aiken
- SURE Lab Rotations Dr. Jay Hanna, Dr. Eric Birgbauer, Dr. Nick Grossoehme, Dr. Cliff Harris, Dr. Jason Hurlbert, Dr. Julian Smith, Dr. Matthew Stern, Dr. Takita Sumter, Dr. Robin Lammi, Dr. Maria Gelabert, Dr. Fatima Amir, Dr. Michael Whitney, and Dr. Aaron Hamm

#### Workshops and Speakers

- Summer Program Advice—Jordan Lewis
- Study Skills and Time Management—Jasmine Howze
- Note Taking and Internalizing Information—Alecz Yeager
- Center for Career and Civic engagement Services—Thomas Injaychock
- DSU Angelo Geter
- Multiculturalism and Diversity-Dean Kinyata Adams-Brown
- Health and Counseling Services–Dr. Kwabena Sankofa
- Writing Skills—Alecz Yeager
- Study Abroad Program-Chelsi Colleton
- STEM Issues: Dr. Christian Grattan—The Design, Synthesis and Evaluation of Novel Sphingosine Kinase 1 Inhibitors, Dr. Kristen Abernathy The Mathematics Behind Disease Dynamics, Dr. Scott Werts Fire Effects on Soil Mineralogy and Encomycorrhizal Fungal Spores: Applications to Geoarchaeology, Dr. Barak Meir Understanding the Structure-Function Relation of Trabecular Bone, Dr. Cliff Harris and Autumn Leggins Four Year Plans and Pre-Professional Requirements, Dr. William Thacker-Mathematical Software Research or Why Computers Don't Do Math

#### **Social Activities**

- Team Building—Escape Room
- Mint Museum
- Carowinds
- Riverbanks Zoo
- Bowling
- Ropes Course/Team Building Mr. Geoff Morrow, Director, Winthrop Outdoor Education Center

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We're on the Web www.winthrop.edu/eaglestem 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.