



## Special Edition Newsletter

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Summer 2017

# Summer Bridge 2017

### Eagle STEM Summer Bridge Program Highlights

by Rachel Law

#### Special points of interest:

- Students comments about Summer Bridge

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Sixteen scholars completed the third successful Eagle STEM Summer Bridge Program held from 6/21 – 7/28/2017. Fourteen are residents of South Carolina and two were out-of-state residents from Delaware and New Hampshire. Students participated in a six week program of academic and team building activities. Eight are biology majors; five are chemistry majors; three are computer science majors. Peer Mentors for the program were Eagle STEM Scholars; Emily Watson, with a major in chemistry and Jordan Lewis, a graduate with a double major in biology and environmental science. 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, Chemistry Professor, Faculty

Provost Fellow, and Dr. Kathie Snyder, Associate 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 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. Student feedback on the program was very favora-

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

Emily Watson - "While some students may be uneasy about spending 6 weeks of their last summer before college on campus, the summer bridge program is an amazing way to become connected with the professors, faculty, and the Winthrop experience in general. If I had the opportunity to do the summer bridge program when I was

a freshman, knowing what I know, I would do it in a heartbeat. The bridge program is a great way for the incoming Eagle STEM freshmen to have a smooth transition from



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## Faculty's Comments on the Summer Bridge Program



Harris

**D**octor Cliff Harris - "The 2017 summer bridge program was an overwhelming success. This new cohort will certainly prove to be an excellent representation of the values of the Eagle STEM Scholars program. Throughout the summer, this unique and diverse group of students displayed remarkable chemistry and cohesion, and an admirable work ethic. The CHEM 104H course was particularly fun for me to teach. The students were actively engaged, inquisitive, and excited about the challenge. There also seems to be a genuine interest in undergraduate research within this group. The students enjoyed speaking with the faculty members from different departments about their areas of research and asked great questions. Furthermore, the response from the students regarding their summer research rotations was overwhelmingly positive.

The students also had a wonderful time with their extracurricular activities, and I was able to take part in a few. The museum day was very fun and informative, and "bowling night" was an absolute blast (I think it should be noted that my team won in pretty dramatic fashion). I would also like to acknowledge the tireless contributions of our peer mentors, Jordan and Emily. Because of their efforts, events like these, as well as the day-to-day happenings, proceeded smoothly and without issue. They were absolutely perfect selections and will truly be missed. We wish them both great success as they pursue their graduate degrees.

In summary, I am so glad that we are able to host such an amazing program and truly get the chance to know our students. I look very forward to the upcoming semesters, and to seeing them bloom into future scientists, doctors, educators, innovators, and leaders of tomorrow." ■

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**D**octor Betty Roberts Cardinale—This summer, I really enjoyed working with the sixteen hard working Eagle STEM scholars, in MATH 101H, Algebra and Trigonometry for Calculus. The course work was designed to review advanced algebra and trigonometry skills necessary for the STEM Fields and Calculus at Winthrop. Students engaged with course topics and practiced those topics with Pearson's My Math Lab. All Student participated well. I believe that this group of summer bridge students will excel at Winthrop and contribute to their chosen professions." ■



Cardinale

## What did the Students Think About Summer Bridge?

**Alyssa Petty** - "The summer bridge program was very beneficial for me. I was able to learn my way around campus while making new friends. I was also able to get an early start with a math and chemistry class. I also enjoyed being able to get connected with professors in my major as well as school organizations. The summer bridge program was fun and an early and strong start to my college experience. I'm so glad I was selected to be a part of such a beneficial program." ■



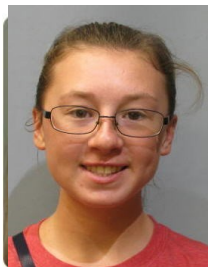
Petty

**Arryana Daniels** - "I thought the Eagle STEM summer program is very helpful and a great way to get ahead for the end goal of graduating with a stem degree. I enjoyed having peer mentors to ask questions about all aspects of Winthrop as well as making new friends over the 6 weeks." ■



Daniels

**Sigrid Dorman** - "I believe the summer bridge program provided a very good experience and a good transition between high school and college. I liked how it allowed me to get some classes out of the way and earn some honors credits. More than anything, I learned to time manage around activities and other events that I couldn't avoid. I enjoyed the classes and the time in the research labs. It allowed me to get to know some of the professors I will be having and allowed me to make some friends within and outside of my major." ■



Dorman

**Hannah Richards** - "I thought the summer bridge program was very helpful! The classes were rigorous but they were definitely manageable. We got tons of cultural credits and really became close with the rest of the students and staff! I really thought it was going to be a terrible experience and everyone was going to be weird but it was completely the opposite." ■



Richards

**Kiera Alexander** - "The summer bridge program was very fulfilling as an incoming freshman. As a group we were given opportunities to get acquainted with the campus, professors, and even other students. Although we had to take rigorous courses they gave us an insight to what college classes would be like which really prepared us. Along with group activities, cultural events, speakers, classes, peer instruction, and everything else on our schedule I really enjoyed having lab rotations. Getting to work in two different labs gave me a chance to see actual research and it also gave me an understanding of what I could possibly do in the future. Overall the program helped me get ready for the upcoming fall semester and I'm grateful." ■



Alexander

**Shelby Riley** - "Summer Bridge was an excellent experience for me, and I genuinely believe it helped me have a flawless transition from high school to Winthrop University. I had the opportunity to meet professors, make new friends, and get to know the campus better, which made the program a success for me. I learned new ways to study, how to make connections, and how to overall be a successful college student. I am so thankful for the STEM Program, as it has allowed me to have a head-start on college academically and socially." ■



Riley

**Timber Talley** - "The Summer Bridge Program was a great experience. I really enjoyed learning from the peer mentors as they offered invaluable advice on how to navigate college, not only academically, but socially as well. While the classes were challenging at times, I now have a better idea as to how a college classroom environment works. My favorite part of this program has definitely been meeting new people and knowing that when classes begin for the fall, I'll already have friends who've shared the same experiences I have." ■



Talley



## 2017 Eagle STEM Summer Bridge Participants



### MENTORS continued from front

high school to college. The students are able to take 2 classes for college credit, in order to prepare themselves for the academic challenges of Winthrop STEM majors. Extracurricular activities that the freshmen were involved in (such as game nights, Camp Canaan, bowling, the Riverbanks Zoo, etc.) helped develop a deeper cohort relationship that is needed for the success in STEM fields. Having fellow cohort members in the classes they take means having friends, study partners, and accountability partners. I never would have liked my science classes as much without my cohort members by my side. I really enjoyed being a peer mentor for the incoming freshmen because I was able to pass on helpful and realistic advice on how to stay sane as a STEM major. I loved getting to know the students and being able to prepare them the best I could for their academic and social lives at Winthrop. I am confident that they will excel in the future and do great things at Winthrop because they are bright Eagle STEM scholars.” ■

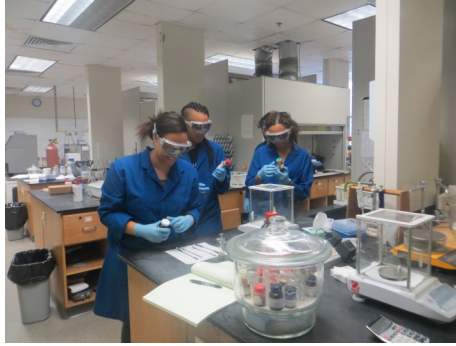
Jordan Lewis - “I think that all of the students benefited in some way from the Eagle STEM Summer Bridge Program, whether academically or socially. All of the students



have different backgrounds and I think that one of the biggest assets the bridge brings is early identification of personal shortcomings. Some students realize they need to develop better study habits, or take

better notes, while some are able to work on social skills or develop time management due to the rigorous schedule. Allowing them to “get their feet wet” before being thrown into college head first allows them to learn these lessons in a more forgiving environment.” ■

## Summer Bridge Lab Experiences





## Team Building / Ropes Course





## Trip to The Mint Museum



## Trip to the Riverbanks Zoo and Garden



**HIGHLIGHTS** continued from front

ble, 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,
- Math 101 Honors –Dr. Betty Cardinale
- Laboratory Techniques – Dr. Kathie Snyder
- SURE Lab Rotations – Dr. Eric Birgbauer, Dr. Nick Grossoehme, Dr. Jay Hanna, Dr. Aaron Hartel, Dr. Jason Hurlbert, Dr. Robin Lammi, Dr. Matthew Stern, Dr. Cynthia Tant, and Dr. Scott Werts

**Workshops and Speakers**

- Academic and College Success– Ms. Ashley Burnside, Mr. Angelo Geter, Ms. Patricia Riley, Mr. Anthony Davis
- Diversity and Multiculturalism – Ms. Kinyata Adams-Brown
- STEM Issues: Dr. Andrew Besmer - Cybersecurity, Dr. Kristen Abernathy - Modeling the Cancer Cell Hypothesis, Dr. Takita Sumter - Chemistry as a Tool for Understanding Cancer Initiation and Progression, Dr. Barak Meir– Cancellous Bone Structure–Function Relation, A Case of Crying Wolff
- Career Opportunities—Dr Howard Ray, Industrial Test Systems, Inc.
- Faculty Introductions of Research: Dr. Diana Boyer

**Social Activities**

- Wall Climbing / Team Building - Mr. Geoff Morrow, Director, Winthrop Outdoor Education Center
- Cookout—Remedy Church
- Camp Canaan - Team Building
- Uptown and Randolph Road Mint Museums Tours
- Riverbanks Zoo
- Bowling
- Movies
- Meals off Campus

**Eagle STEM Scholars Program**

101 Sims Science Building  
Rock Hill, SC 29733

Phone: 803/323-4932  
Fax: 803/323-2246  
E-mail: eaglestem@winthrop.edu

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.

We're on the Web  
[eaglestem.winthrop.edu](http://eaglestem.winthrop.edu)