

W.E.S.S. News

From the desk of Rachel Law, Director

Winthrop University Eagle STEM Scholars Program Spring 2012 Highlights

Special points of interest:

- Eagle STEM Scholars participated in a Team-building activity.
- Meet the Eagle STEM Staff!

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Three new scholars nominated by professors were welcomed into the Eagle STEM Scholars Program Spring 2012. The new scholars were quickly assimilated into the program. Seminars, community service and social and team building activities helped to integrate the new scholars into the Eagle STEM learning community. One seminar was the result of a GLI grant which was a collaborative effort between the Eagle STEM Scholars Program and the Chemistry Department. Some activities were conducted by the Winthrop Outdoor Education Center. Scholars have been full participants in the Winthrop community. They continued regular meetings with



Rachel Law

program staff to discuss academic progress and scholar concerns. Parents of scholars received updates at mid-term and semester's end. Scholars received packages containing snacks and games to sustain them through finals week. The packages were provided by a program supporter. Many of the students were selected to participate in summer research activities.

Some were selected for the three week WISE internships and others are participating in undergraduate research as summer interns. The program has been well supported by professors who chose to have these students learn in their labs at this early time in their academic experience. A few scholars chose to attend summer school. The program has had a positive impact on the academic success of the scholars.

Invitations for application to the program for the Fall 2012 cohort were extended during the spring. A web site for the Eagle STEM Scholars Program was developed in time for completion of online scholarship applications. A

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Eagle STEM Scholars participated in a Team-building activity?

The Eagle STEM Scholars participated in the ropes course, which is a group team-building exercise, given by Winthrop's Outdoor Education Center. They had a great time. Here are a few of their comments.

Sarah Wicks said, "I enjoyed the Ropes Course team building activity because it made each of us challenge ourselves. We were given a goal to complete the course and everyone successfully achieved this goal. No one could've done it alone though. This activity required each of us to motivate one another and encourage



Sarah Wicks

them to keep moving forward. The Ropes Course can be related to our first year in college. We think that college is going to be a scary place where "falling off" is a possibility, but with the motivation of friends and the use of hard work, we find that we can overcome any obstacle." ■

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Meet the Eagle STEM Staff

Meet Carol Inglis

Carol Inglis graduated from Winthrop cum laude with an honors Chemistry degree in May 2011 and was appointed as the graduate assistant for the Eagle STEM Scholars Program. She is now pursuing a Masters of Arts in Teaching with a concentration in chemistry.



Carol Inglis

Currently her role in the Eagle STEM Scholars Program is monitoring the students' progress, being a mentor to the students and coordinating student mentors

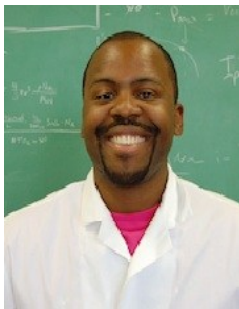
and tutors. Carol loves working with the Eagle STEM Scholars and seeing them succeed. She also keeps up with the Eagle STEM facebook page.

In her spare time, Carol enjoys going to church, hanging out with her husband, working with her flowers and plants in the yard and couponing! She is really looking forward to the new scholars coming in August! ■



Meet Clifton Harris

Clifton Harris is a second-year assistant professor in the department of chemistry at Winthrop University, and the associate director of the Eagle STEM Scholars program. He completed his Ph.D. at the University of Notre Dame with a focus in Physical chemistry, and his Bachelor's degree at the University of Maryland-Baltimore County where he was a member of the prestigious Meyerhoff Scholarship Program. He currently teaches chemistry 105, the department's accelerated general chemistry course. Dr. Harris loves teaching, and enjoys interacting personally with his students. His teaching approach is very student-oriented with strong emphasis on cooperative learning and critical thinking. He is also actively involved in energy and fuel research, and currently oversees a three-student undergraduate research group. His work aims to address the impending energy shortage that faces our world, and the overabundance of greenhouse gases in our atmosphere by using solar energy to facilitate the generation of hydrogen and oxygen gases from water, a process commonly referred to as "water-splitting". Hydrogen gas is an excellent choice fuel source for transportation and heating. The benefit of burning hydrogen is that the only product is water, creating a truly renewable energy cycle.



Clifton Harris

Dr. Harris is originally from the Washington D.C. area, and is the oldest of four children. His hobbies include travelling, watching sports, and eating red velvet cupcakes. He is looking forward to an excellent year with the new class of scholars. ■

Meet Mary Abell

Mary Abell. A native of Pineville, NC, is number 7 of 8 children. She is a graduate of Central Piedmont Community College and More Than Conquerors College, both of Charlotte, NC, and York Technical College, Rock Hill, SC. During a long career of 28 years at a Fortune 500 company, Mary held several positions which included the plant manager's administrative assistant, human resources support, network specialist and computer operator. After the closure of the plant, she attended York Technical College and received an Associate Degree in Computer Technology followed by an internship at Abitibi-Bowater. In the summer of 2011, Mary joined Winthrop as the administrative assistant for the Eagle STEM Scholars program. She serves in a supportive role to the program director and staff.



Mary Abell

Mary and her husband are the proud parents of one daughter. She is very active in her church as the praise team leader, choir director and the adult Sunday school teacher. She enjoys spending time with her family and baking. ■

From the desk of Clifton Harris, Associate Director

This year marks a milestone here at Winthrop University. As of May 2012, fourteen students from across the region have been selected to become part of the inaugural cohort of the Eagle STEM (Science, Technology, Engineering and Math) Scholars Program. These students were selected because they exhibit extraordinary proficiency for science and mathematics, as well as strong leadership qualities and a high level of maturity. The mission of the Eagle STEM Scholars Program is to foster the best and brightest minds and guide these students towards advanced degrees in the STEM fields. We specifically target those individuals who are categorized as first-generation students or underrepresented minorities, as well as individuals that exhibit financial need. As educators and advisors, our primary functions as the staff of the Eagle STEM Scholars program is to: (1) facilitate the transition of our scholars into collegiate life; (2) cultivate our students' intellectual gifts; (3) provide them with sound and detailed advising; (4) develop our students academically, socially, and culturally; and (5) adequately prepare them for graduate school and beyond.



Cliff Harris

During their time here at Winthrop, our students will learn a great deal with respect to their academics, and even more about life. However, as Eagle STEM Scholars, the most important lesson they will learn is the importance of networking and team work. Our program is modeled after the Meyerhoff Scholarship Program at UMBC, a program considered by many to be the gold-standard of scholarship programs. Over the past 20+ years, the Meyerhoff program has produced over 300 Ph.D. students from all backgrounds, and even more M.D.'s, M.Eng.'s, and J.D.'s. Many have inquired as to how a scholarship program could demonstrate such consistent success year after year. As a former Meyerhoff Scholar, I can assure you that the answer is quite straightforward. The program is built on the ideals of team-building and co-operative learning. While simple in principle, instilling this philosophy in our students does take some time and effort.

When it comes to intellectually gifted students like ours, the honest truth is that they have never truly been challenged academically. Because of this, several common situations arise. First, they tend to assume that the work habits they established in high school will also work in college. This is **VERY** wrong, as many students quickly learn. Secondly, because they've never actually failed, they simply assume that they never will. As a result, they tend not to take classes as seriously as they should early on, and are forced to dig themselves out of a deep hole. Thirdly, students in specialized programs tend to develop a sense of competitiveness, and may not work together as they should. This situation is the most detrimental, because students that actually need help may choose not to seek it due to their own pride, or to the (very

common) belief that needing help somehow makes you "stupid". In my short time as a professor, I am astonished at how many students are literally afraid to ask for help for fear that they will be perceived as unintelligent.

Now, in order to address our program mission of grooming the next generation of STEM scholars, we must first and foremost address the issues previously mentioned. We understand the importance of community, and devote a great deal of time and effort to creating a truly unified cohort. In fall of 2011, prior to the recruitment of our first official Eagle STEM group, we made 10 slots available to a voluntary pilot group of students. We developed a special course for Eagle STEM students (SCIE 101X), that served as a student-oriented seminar series. This course strongly encourages student discussion and interaction. We would invite speakers of various backgrounds, ranging from senior students to professors to industrial scientists, to speak to our students about a vast range of topics. We would also have team-building exercises. For example, during one module, a representative from the Winthrop Outdoor Education Center (WOEC) came and led a series of brain-teasers and team-based obstacles that engaged and connected our group. We also organized several social events for our group outside of school, including a Carowinds® trip, and a high-rope course challenge through the WOEC. Additionally, we sponsored a "Study Hall" two nights a week with paid tutors available for the students. I would regularly attend these group study sessions to speak with the students, provide additional assistance, and observe the students' work habits and interactions with one another. The students truly bought in to our objective. By mid semester, students had

established consistent study groups. By the semester's end, the group was inseparable. The average GPA of our pilot group following the 2011 fall semester was 3.3, which is nearly one and a half points above the average for incoming freshman. All of the members of our pilot group have paired together in the dorms, and commonly spend time together outside of school. The relationships that these students have built will help them through college, and will likely continue beyond, as has been my personal experience. This group has a mutual goal of academic success, and they will succeed as one.



We are very excited for the upcoming year. I have no doubts that our newest group will set the tone for our program for years to come. We will do our very best to set our scholars on a path for success by providing them with the guidance and resources they need. With hard work, dedication, and a passion for learning, there is no limit to what our Eagle STEM Scholars can do. ■

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Michelle Humphrey said, "Because of my fear of heights, the ropes course was very mentally challenging for me. As I climbed higher and higher at the beginning of the ropes course, I began to second guess my decision to try it. A combination of my personal drive and the encouragement from the other Eagle STEM Scholars gave me the determination to finish the rest of the course. To me, it symbolized my freshman year of college. Even though I was afraid, I had



Michelle Humphrey

the support to push me through. I felt that the ropes course was a great teambuilding experience. Even though we weren't physically helping each other through, we cheered each other on, and as a result, everyone who started it was able to finish it." ■



"I think the Ropes Course makes people realize how far they can push themselves. And it also represents college life because in college, you push through the hard part and get the reward at the end and even though it was hard, it was worth it," according to **Arlene Haskins**. ■



Arlene Haskins



Briana

Briana Murray said "The High Ropes Course was a great experience for the Eagle STEM Scholars. It was an amazing bonding activity as we helped some scholars in the group conquer their fear of heights. We were able to cheer each other on and make sure everyone made it to the finish line. I enjoyed my time in the Winthrop Woods with the Winthrop Outdoor Education Center (WOEC) and would love to do it again!" ■

I loved the ropes course. I have done high obstacle activities before, but this was on a whole different level. This should become an annual or semester thing. It is a great team building activity that showed us that we are all here for each other. Ian is terrified of heights, but through our encouragement he was able to get through it, according to **Jabari Robinson**. ■



Jabari Robinson



TEAM BUILDING .. continued from page 4

Ian Deas said, "I really enjoyed the ropes course because it forced me to get outside of my comfort zone, and conquer one of my fears. It was also helpful because it taught me that I should continue to try, regardless of whether I want to give up or not. And this concept could most definitely be applied to every situation in my college career. With that being said, I honestly would not do it again. It was horrifying!" ■

**DIRECTOR ... continued from front**

group of stellar students were recruited and selected to receive various departmental scholarships. Many of the applicants were students who would have attended other universities. Fourteen scholars will become the Fall 2012 cohort. Ten of these students accepted Eagle STEM scholarships and the other four have other types of Winthrop scholarships. The caliber of these students and a year of program learning contribute to high expectations for the upcoming academic year. ■



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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 PhD 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.

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