

Students live, learn together

BY SUSAN RAY



Julia Bourg, center, and Kristen Collar, right, have been working with Stan Tozer, left, at the Magnet Lab since their freshman year. *Photo by Ken Ford*

Having the opportunity to work in a national research lab can be a life changing – if not *major* changing – experience for a young woman. Making such opportunities possible is one of the goals of the

Women in Math, Science & Engineering (WIMSE) program at The Florida State University. The Mag Lab's Center for Integrating Research and Learning works closely with the program to facilitate the placement of WIMSE students.

FSU's WIMSE students are part of a living-learning community housed at Cawthon Hall. The community brings together first-year students who share an interest in science and take one or more classes together. WIMSE students

also participate in colloquiums and other educational and social activities related to their interest in science.

Two of those students started working at the lab their freshmen year. Scholar scientist Stan Tozer of the lab's Extreme Conditions group supports Kristen Collar and Julia Bourg through a grant from the U.S. Department of Energy/National Nuclear Security Administration.

Both young women, who will be juniors in the fall, say their experience at the Magnet Lab has influenced their career paths.

What brought you to the lab?

Kristen: I came to the lab in search of a job. I e-mailed a bunch of scientists from a list that I got from (WIMSE Director Susan Blessing) and then went to visit the lab. I chose the Mag Lab because I loved the atmosphere and enthusiasm of the group.

Julia: Kristen actually brought me to the lab! Kristen and I met our freshman year through WIMSE and she lived down the hall from me in the dorm. She would come back and talk about all the interesting things she was learning, which grabbed my attention initially. I asked Kristen if she thought Dr. Tozer had any space for me in the spring semester (2008) and I've been involved ever since.

Do you think your experience at the Mag Lab will influence your future career path? If yes, how?

Kristen: I know that the Mag Lab has influenced my career path. It led me to participate in the Research Experiences for Undergraduates program at the Mag Lab last summer and the Center for Compact and Efficient Fluid Power REU program at the University of Illinois this summer.

Julia: Definitely. When I started at FSU I was dead set on being a chemical engineer, but working at the lab changed all of that. I just recently changed my major to Biophysics.

What have you learned about what it means to be a scientist?

Kristen: I learned that the challenge of experimental science is patience to keep trying. It seems that things never go right the first time but when it finally works you realize it was all worth it. The daily work at the lab makes me realize how much I have to learn.

Julia: The biggest thing I've learned is how to approach problems when plan A, B, C, etc., have all failed. Especially because there are so many days when it seems that everything goes wrong.

For more information about the WIMSE program, including how to apply, visit <http://wimse.fsu.edu>.

Has working at the lab influenced your choice of a major or your consideration of graduate school and beyond?

Kristen: I was an Exploratory Sciences, Technology and Engineering major, and after a year of working at the lab, I changed my major to Physics. I have found that I love the challenge of the job and the material I am studying. I am now considering going to graduate school, but still have a lot of thinking to do.

Julia: I changed my major from Chemical Engineering to Biophysics, but I'm not 100 percent sure I want to do that still. I'm really interested in biology, but it's safe to say that I'm going to do something in physics. I also do want to go to graduate school.

Describe your mentor. How has he contributed to your educational and/or personal growth?

Kristen: Stan is full of energy and determination. He is a positive leader and has an endless work list of things for me to do and learn. He has helped me learn everything from fixing ovens, to glove boxes and a flat tire.

Julia: Dr. Tozer has been really incredible. Getting any lab experience as a freshman is really incredible and being able to continue that through my undergraduate education is even better. He's shown me how to be patient and be creative when tackling new problems. ■