Heikens in 2010 at the college’s Hougham Woods Biological Field Station east of campus. Smith’s follow up research was the basis of the second-place award she earned at the conference.

“I beat out graduate students, and I am still in shock,” she said. “I am very grateful for my biology professor, Dr. Heikens, for giving me such an amazing opportunity and for all the field assistants who helped me.”

Smith’s research was supported by the Endowed Fund in Undergraduate Field Biology Research and the Franklin College Undergraduate Research Grant.

Smith is a biology major and chemistry minor, focusing on ecology and conservation biology.

“There’s so much I want to know about plant and animals,” she said. “I want to go to graduate school and continue doing research,” she said.

Lab work connects student to life sciences

By Natalie Owens ’14
Pulliam Fellow

J.D. Stephens ’13 has wanted to become a doctor for as long as he can remember. It’s why the biology major recently opted to sacrifice the potentially lazy days of summer for involvement in an intense undergraduate research program sponsored by the Howard Hughes Medical Institute at Purdue University.

The institute’s undergraduate research program included multiple projects emphasizing the use of quantitative and statistical tools in current life science-related research. Each project was hosted and mentored by Purdue faculty from biology, biochemistry, statistics and biomedical engineering. In addition to lab work, there were weekly quantitative training sessions and lunches to help foster a community of learning.

“I worked with a diverse team of graduate students and post-docs plus a mentor, all of whom were different ethnicities and from different cultures than me,” he said. “I loved getting to know them and learning about their cultures.”

Stephens and his team were involved in researching gene regulation on eye development and disease.

“The experience was very fast-paced and required a great deal of hours in the lab,” Stephens said. “I also had to digest vast amounts of information in short amounts of time.”

While his research and analyses focused on eye disease in zebra fish, the findings could help shed light on related fundamental processes of human eye disease. Stephens is proud that his findings will be included in a research paper published by his mentor this spring.

He credits Franklin College professors for motivating him to work hard in preparation of the undergraduate program and for giving him the confidence to adapt to a new and challenging environment.

Stephens said his academic adviser, chemistry professor Shannon Teeters-Kennedy, has played a significant role in helping him decide upon a future career. He indicated biology professors Steve Browder and Sam Rhodes also have been influential.

“Although their classes were not always easy for me, I always enjoyed attending them. I respect the professors’ dedication to making Franklin College a prestigious institution,” Stephens said. “Heading into the ‘real world’ next year, I feel very prepared because of their efforts. I am grateful for their interest in me and the positive influence they have had in shaping my character.”