

Student invited to Capitol Hill

February 20, 2009

Carly Eargle '09 has been invited to Capitol Hill, where she will present research as part of the Council on Undergraduate Research's "Posters on the Hill" event on May 5. Approximately 60 undergraduates from across the country were invited to participate.

"It is such an honor," Eargle said, "and I am humbled that my research would even be considered. I am really very proud and surprised."

Eargle will present her research at the Rayburn Office Building, a congressional office building for the U.S. House of Representatives. While in Washington, DC, she will also tour the city and will have a chance to meet with her Congressional Representative and Senator.

Eargle worked on most of the research, which is her Biology Honors project, as a junior, a year earlier than most students begin their projects. Heather Hawkins '08, who also worked on the project will not present in Washington because she now attends graduate school.

For her research, "Pollen Profiles in Pond Deposition Basins and Associated Plant Community Structure in Young's Pond, Clinton, SC," Eargle took sediment samples to see if the pond's pollen samples in the sediments were a true reflection of the plant communities.

According to Eargle's research mentor, biology professor Dr. Michael Rischbieter, scientists sometimes assume that ancient pollen samples taken from the bottom of lakes and ponds can help determine how global warming, glacial episodes, and other climatic fluctuations have affected the earth.

"What we came up with," said Rischbieter, "was the idea of testing this assumption with a fairly small environment to see if this assumption was valid."

After taking the samples, Eargle made slides of the pollen that was extracted from various sediment levels, determined what kinds of plants the pollen was from, and then compared this with the plants from the surrounding area to determine if there was a statistical match.

"We found that the pollen distribution did not match the true distribution," Eargle said, "thus raising questions about previous assumptions that paleoenvironments could be reconstructed on the basis of pollen analysis."

The biology major and English and chemistry minor first presented her findings as part of PC's Honors Research program last semester. She is continuing with the research, updating information as she receives it. The project should be complete by the end of this semester.

In addition to presenting on Capitol Hill, Eargle will present at the Big South Undergraduate Research Symposium on March 27-28.

posted by [Stacy Dyer '96](#)

