



3 Bucknell finalists in international illusions contest

LEWISBURG, Pa. – Three visual illusions developed at Bucknell are finalists for the Best Visual Illusion of the Year Contest, an international competition hosted by the Neural Correlate Society.

Art Shapiro, associate professor of psychology, and junior Emily Knight collaborated on two of the [finalist illusions](#). Shapiro, who won first place in 2005, collaborated with Kai Hamburger from the University of Giessen, Germany, on a third finalist illusion.

"Having one finalist is an accomplishment. Having three is a surprise," Shapiro said.

The top 10 will be presented on May 12 at an event that coincides with the 2007 Vision Sciences Society Annual Meeting in Sarasota, Fla. Attending visual scientists will vote on the best illusion based on five criteria including, most importantly, the significance of the illusion for our understanding of the visual system.

Knight first of neuroscience majors

Knight, who is a presidential fellow and part of the first class of neuroscience majors at Bucknell, will present one of the entries to a large audience, who will vote for the winner.

"These particular illusions are both scientifically interesting and spectacular in appearance. They're entertaining and at the same time help us to understand visual perception," Knight said.

The entries

"Swimmers, Eels and Other Gradient-Gradient Illusions" is a striking demonstration of how shapes with gradients can appear to move – even "swim" – when interacting with background grating.

"Where Has All the Motion Gone?" is also extremely intriguing from a scientific standpoint. It shows how a blur can add motion to an illusion.

"The effect is important because blur does not physically add information to the image. The brain should be reporting motion for both blurred and non-blurred versions of the illusion. Why it reports motion only for the blurred version of the image is a mystery," Shapiro said.

International interest

Hamburger made the trip from Germany to work with Shapiro at Bucknell, where they collaborated on "'Weaves' and the Hermann Grid." Involving a series of intertwined bars that create illusory dots at various locations, it was partially the result of extensive discussions that took place over coffee at Zelda's Cafe in Lewisburg.

"Last year, I got the opportunity from my graduate program to go to a foreign lab for a couple of weeks," said Hamburger. "I wanted to go to Professor Shapiro's lab, since I was fascinated by his work and still am."

The contest's international panel of judges, which selected the 10 finalists, includes representatives from Italy, Japan, Switzerland, the United Kingdom, and the United States.

Pretty, but also pretty important

According to Shapiro, visual illusions are more than just "pretty things on the web." They help researchers to understand how the brain allows humans to see motion and color, among other uses.

A sampling of illusions, both fun and functional, can be seen at Shapiro's [website](#).

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