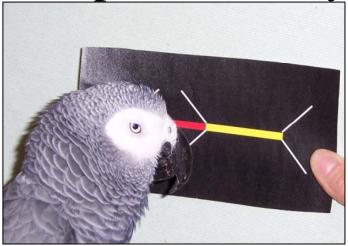
## Brooklyn College Department of Psychology Graduate Colloquium Series Presents:

## Visual Perception in Grey Parrots



**Irene Pepperberg** 

Harvard University

ABSTRACT: Studies of optical illusions in birds-small, flighted prey animals with likely a greater need than humans for visual accuracy-provide insights into avian processing. Using Grey parrots (Psittacus erithacus) that were previously taught English labels for various colors and shapes with respect to three-dimensional stimuli, and that could label the color of the bigger or smaller of two items, we tested one bird's abilities on the Müller-Lyer illusion, under varying conditions of angle and size contrast between the central line and the arrows, and under control conditions when arrows are replaced by vertical bars. We also tested whether another parrot could transfer to two-dimensional images using modal and amodal completion



stimuli. For modal completion (aka subjective contours), Kanizsa figures were constructed using black 'pac-men' to form regular polygons on colored paper. For amodal completion, portions of variously colored regular 2D polygons were occluded by black circles or other black figures. We draw several conclusions from the parrots' successful responses. First, it appears that a human visual system is not a requirement for success; second, parrots with vocal abilities like Griffin's can be rigorously tested for visual competencies, an option not readily available with other experimental animals.

TIME: Tuesday September 30<sup>th</sup>, 12:30-1:30 PM, LOCATION: 5117 James Hall, Brooklyn College Campus.

For more information about this or any talks in the Psychology Department series contact FGrasso@brooklyn.cuny.edu.