

Science Education Collection

Perspectives on Sensation and Perception

URL: <https://www.jove.com/science-education/10321>

Overview

Source: Laboratory of Jonathan Flombaum—Johns Hopkins University

The study of sensation—how signals are transduced from sensory organs, like the eyes—and perception—how the brain interprets these messages—has a rich history dating back to the 19th century, when great strides were made in understanding the properties of light and how they relate to the visual system. Importantly, such sensory and perceptual processes determine what we see, feel, taste, and hear in our surroundings. However, many teaching methods don't expose students to the very sensory events they're trying to learn about.

JoVE's collection in Sensation and Perception fills this gap by showcasing visual and auditory illusions that viewers can actually experience for themselves, and delves into the their anatomical bases. For example, by watching the video "Color Afterimages," an observer will encounter the phenomenon of perceiving a blank star as occupied by a color, and learn how specific neurons are responsible for this effect. By emphasizing such perceptual tricks, this collection explores the assumptions that the brain uses to interpret information and create our perception of a complex world.

The JoVE videos in Sensation and Perception provide an engaging introduction to this field in psychology. By letting viewers sit in the seat of a participant and take part in actual experiments, this collection emphasizes to students that their own brains can be deceived into perceiving something that isn't there, as well as even removing objects from perception.