

Study: Color plays role in perception

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U.S. scientists have discovered a neural circuit they say is likely to play an important role in the visual perception of moving objects.

The finding, say researchers at the Salk Institute for Biological Studies in La Jolla, Calif., forces neurobiologists to rethink the neural pathways our brain relies on to detect motion.

It has long been assumed sensory information about color and fine detail is relatively unimportant for perceiving moving objects -- mainly because the neural pathways in the brain carrying color and fine detail information seemed to be completely separate from areas of the brain previously associated with motion processing.

But now, Salk researchers show a neural pathway carrying color and fine detail most likely helps the brain detect moving objects.

"There are many different kinds of cues in the visual environment that can be used to detect motion -- basically anything that is moving," says Neurobiology Professor Edward Callaway, senior author of the study. "We asked the question, 'Is motion processing taking advantage of the full range of possible cues?'"

He said the study demonstrates for the first time that it is.

The research appears in the journal *Nature*.

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