

R.I.T.

College of Science

Chester F. Carlson

Center for **IMAGING** SCIENCE

Seminar Series

Functional Imaging of the Human Subcortex

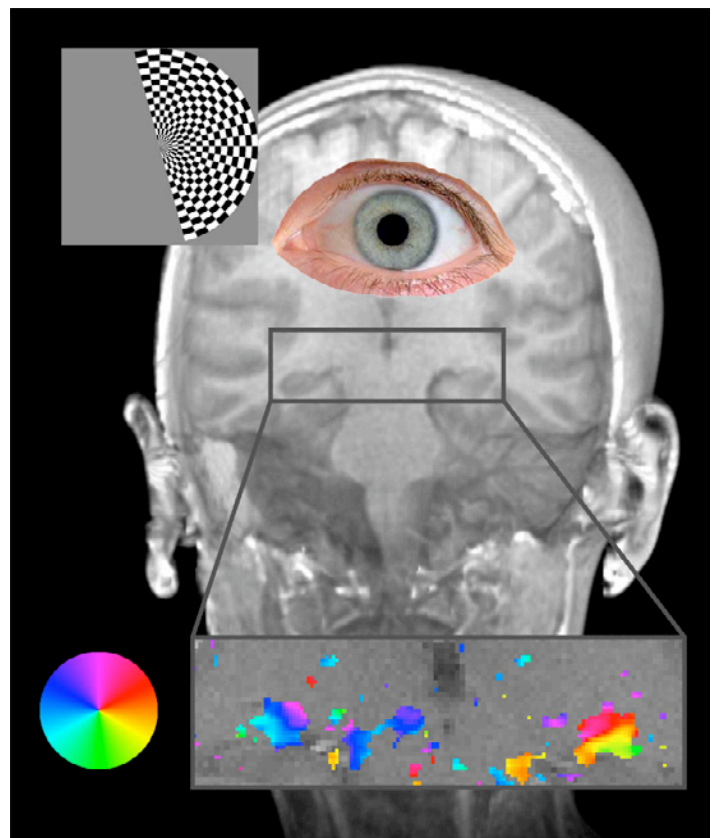
Keith Schneider

*Assistant Professor,
Rochester Center for Brain Imaging*

**4pm, Wednesday,
April 12, 2006**

**Auditorium of the Center for
Imaging Science**

Functional magnetic resonance imaging (fMRI) is used to investigate the structure and functional properties of the human lateral geniculate nucleus (LGN) and superior colliculus (SC), two small subcortical structures that may play key roles in visual attention and consciousness. These structures are part of an orderly topographic layout of the visual field inside the brain. Recent results showing that conscious perceptions are reflected in the activity of the LGN will be presented. Efforts to increase the spatial resolution of fMRI including a new super-resolution technique will be described.



www.cis.rit.edu/seminar

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Speaker Bio

I graduated from the California Institute of Technology in 1994 with a BS in physics. From there I went to Boston University for an MA in astronomy. I came to the University of Rochester in 1996 as a graduate student in the Brain and Cognitive Sciences Department where I studied visual attention using fMRI and psychophysics. In my dissertation, I studied the phenomenon of prior entry, the hypothesized speeding up of visual processing caused by attention. I was a postdoctoral fellow at Princeton University from 2002–2005, where I began studying the structure and function of human subcortical nuclei using fMRI. I returned to the University of Rochester in the summer of 2005, and I am now an assistant professor in the Rochester Center for Brain Imaging.