



# Machines Like Us

[Home](#) > [View content](#)

## Scientists use magic to study the brain

Tue, 08/19/2008 - 14:48 — NLN

### [Phoenix Magic Shows](#)

Children's Birthday Parties Comedy-Fun-Balloons-Live Rabbit  
[www.ChristopherTheMagician.com](http://www.ChristopherTheMagician.com)

### [Corporate-FX "Team"](#)

Tradeshaw Magic & Magicians Toll-Free  
1.800.Magic.13  
[www.CorporateFX.com](http://www.CorporateFX.com)

### [The Magic of Drew Thomas](#)

Corporate, special events, trade shows, product launch!  
[www.drewthomas.net](http://www.drewthomas.net)



Two neuroscientists at Barrow Neurological Institute at St. Joseph's Hospital and Medical Center are turning magic tricks into science. Stephen Macknik, Ph.D., director of the Laboratory of Behavioral Neurophysiology -- and Susana Martinez-Conde, Ph.D., director of the Laboratory of Visual Neuroscience -- are working with world-famous magicians to discover the brain's mechanisms underlying attention and awareness.

The collaboration between the magicians and scientists in a recent study have led to new insights and may benefit the fields of education and medical rehabilitation by using magical techniques to help treat ADHD, Alzheimer's disease and brain trauma.

"Magicians have developed powerful cognitive principles and intuitions about attention and awareness that are not understood scientifically," says Dr. Martinez-Conde. "We've been able to learn more about cognition from magicians who have developed illusions that trick audiences."



Ads by Google

The scientists have studied how magicians mix humor into their

performances because a laughing audience is unable to pay attention to the magician's hand. The study also determined that there are various levels of misdirection that magicians use to trick an audience. These insights, which were previously unknown to scientists, suggest that humor and misdirection can help manipulate levels of attention.

The magicians working with Drs. Macknik and Martinez-Conde include James Randi (The Amazing Randi), Teller (of Penn & Teller), Apollo Robbins, Mac King and John Thomson (The Great Tomsoni).

"The collaboration on this project has led to many exciting insights to help us understand the brain's underlying cognition," says Dr. Martinez-Conde.

[St. Joseph's Hospital and Medical Center](#)

### [1 rule of a flat stomach:](#)

Cut down 9 lbs of stomach fat every 11 days by obeying this 1 rule.

### [Hugh Downs Reports](#)

Little known heart attack symptom many people tragically ignore.



Ads by Google

Average:



Your rating: None Average: 3.7 (3 votes)

[Login or register](#) to post comments [Printer-friendly version](#)

[Brain & Cognition](#)

## Related stories

- [What can magic tricks tell us about human cognition?](#)
- [Sizing up the coming robotics revolution](#)
- [How Ritalin works to boost cognition in the brain](#)
- [Your brain on Krispy Kremes](#)
- [Religion and gullibility](#)
- [Subliminal advertising leaves its mark on the brain](#)
- [Human visual system equipped with "future seeing powers"](#)
- [A new target for Alzheimer's disease discovered](#)
- [What's the brain got to do with education?](#)
- [Natural chemical in brain enhances visual processing](#)