



Meet three families who wouldn't let ADHD win. Click here ▶ for your free DVD information kit

For Attention Deficit Hyperactivity Disorder (ADHD)  
ONCE-DAILY  
**CONCERTA**<sup>®</sup>  
(methylphenidate HCl) Extended-release tablets 18 mg, 27 mg, 36 mg, 54 mg

News

Articles

Videos

Images

Books

Search

Health & Medicine

Mind & Brain

Plants & Animals

Earth & Climate

Space & Time

Matter & Energy

Computers & Math

Fossils & Ruins

## Science News

Share Blog Cite

Print Email Bookmark

### Magician's Hand: How Humor And Misdirection Can Manipulate Levels Of Attention

ScienceDaily (Aug. 20, 2008) — 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.

See also:

#### Mind & Brain

- Memory
- Psychology
- Neuroscience
- Perception
- Child Development
- Language Acquisition

#### Reference

- Cognitive neuroscience
- Dementia with Lewy bodies
- Attention
- Neuroscience

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."

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.

Drs. Macknik and Martinez-Conde have been featured on the cover of Scientific American and in the Wall Street Journal for their research on fixational eye movements.

Adapted from materials provided by St. Joseph's Hospital and Medical Center, via EurekAlert!, a service of AAAS.

Ads by Google

Advertise here

#### 1 Rule of a Flat Stomach:

Cut down 37 lbs of stomach fat in 3 months by keeping this 1 big rule  
Wu-YiSource.com

#### Steve Cohen Chamber Magic

Sophisticated fun in a Victorian parlor, every Friday in NYC  
www.ChamberMagic.com

#### Prepare to be Shocked

Millions have already taken this amazing test. What's your RealAge?  
RealAge.com

#### Magic of Speed & Thro

High Energy Magic and Comedy. Exciting Stage Illusions.  
www.speedthro.com

#### Illusion magician

Illusions That Will Captivate You. Book a Great Illusion Show Now.  
www.PhilipAndHenry.com/Magicians

#### Related Stories

**Age-old Magic Tricks Can Provide Clues For Modern Science** (July 23, 2008) — Revealing the science behind age-old magic tricks will help us better understand how humans see, think, and ...  
> read more

**Social Cues And Illusion: There's More To Magic Than Meets The Eye** (Nov. 21, 2006) — The mechanisms that govern visual perception are only partly understood by scientists, and in fact much of what we know about how the human visual system works stems from investigations into our ...  
> read more

**Now You See It, Now You Don't: 'Change Blindness' Isn't Magic** (Aug. 24, 2005) — A team of scientists at UCL (University College London) has discovered why we often miss major changes in our surroundings - such as a traffic light turning green when we're listening to the radio. ... > read more

**Laughter Is The Best Medicine** (Jan. 26, 2008) — Laughter is the best medicine. We've heard the expression time and again. For decades, researchers have explored how humor helps patients relieve stress and heal. Now, researchers have taken it one ... > read more

**Just In:**  
Why Symmetry Predicts Bodily Attractiveness

#### Science Video News

**Tracking Your Team**  
People can focus on more than three items at a time if those items share a common color. Psychologists at Johns Hopkins University have demonstrated. ... > full story

- ▶ Human Factors Researchers Measure Attention Given To Walking
- ▶ Doppler Sonography Helps Psychologists Measure Attention Levels
- ▶ Psychologist Uses Driving Simulator To Test The Dangers Of Distraction
- ▶ more science videos

Meet three families who wouldn't let ADHD win. Click here ▶ for your free DVD information kit

For Attention Deficit Hyperactivity Disorder (ADHD)  
ONCE-DAILY  
**CONCERTA**<sup>®</sup>  
(methylphenidate HCl) Extended-release tablets 18 mg, 27 mg, 36 mg, 54 mg

#### Breaking News

... from NewsDaily.com

- ▶ "Bigfoot" was rubber gorilla costume
- ▶ Stem cell test to help treat bowel cancer
- ▶ Resilient storm Fay could hit Florida a third time
- ▶ Stem cells could allow "blood farms," company says
- ▶ Bacteria a big killer in 1918 flu pandemic: study
- ▶ more science news

REUTERS



Meet three

In Other News ...