

# The Sydney Morning Herald

CELEBRATING  
175  
YEARS

Friday May 5, 2006

First published 1831 No. 52,614 \$1.20 (inc GST)

## Hold a magnet to your head and become Rain Man

**Richard Macey**

A SYDNEY scientist hopes to build a "creativity machine" that could inspire jaded workers by letting them view the world in extraordinary detail.

Allan Snyder, director of the Centre for the Mind, a joint project between the University of Sydney and the Australian National University in Canberra, said he had found a way to give ordinary people the amazing mental skills displayed by Dustin Hoffman's character in the film *Rain Man*.

If the technique could be built

into a machine it should be possible for almost everyone to boost their creativity.

Hoffman's movie character, an autistic savant, saw a waitress spill toothpicks on the floor. In a moment he counted the toothpicks and announced: "246."

"People do these extraordinary things... brain impaired people," said Professor Snyder. He explained that the brains of autistic savants provided them with detailed information that was, in normal people, filtered out by the anterior temporal lobe.

In his experiment, the brains

of 12 normal university students were exposed to a pulsating magnetic field for 15 minutes, turning off their information-filtering lobes.

They were then shown a monitor that flashed up, at half-second intervals, 20 to 30 images depicting up to 150 "virtual toothpicks".

The students had to count the toothpicks as fast as the pictures appeared. Usually, Professor Snyder said, the task would be hopeless. But the test subjects improved their counting skills by at least two or three times.

The experiment's results have been published online in the British journal *Perception*.

"Ten of the 12 did remarkably well after stimulation with the magnetic pulses. Eight did dramatically better." The ability faded when the pulses stopped.

Professor Snyder said the brain's information filter allowed normal people to sift out unwanted complex details about their environment so they could quickly grasp the world around them "as a whole". This meant they could respond rapidly to events, and not be bogged down

by irrelevant facts that autistic savants cannot ignore.

"This [experiment] is a breakthrough," Professor Snyder. He hoped to eventually create "a creativity machine," allowing people to turn off their in-built information filter. They could then discard their conventional "big picture" view, "and see all the dots that make up the world".

"You could let your mind wander," he said. It could inspire new ways to work, paint and even sing. Possibly, he added, "prejudice can be mitigated".