

# The Daily Cardinal

## NEWS

# Human brain's 'creative neurons' focus of talk

**By Dinesh Ramde**  
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Mozart's creativity led him to compose magnificent symphonies. Shakespeare's creativity inspired him to write timeless plays. Einstein's creativity helped him formulate a revolutionary vision of the universe.

Though each man produced unique ideas, their creativity took them down markedly different paths. The difference, Andy Plioplys might argue, depended on the part of the brain in which each man's 'creative neurons' lay.

Plioplys, a child neurologist and conceptual artist who did his medical internship at UW-Madison, addressed students Friday on the topic of "Neurobiological Origins of Creativity." Plioplys showed slides of the brain scans of 12 subjects engaged in thinking exercises.

Though certain areas of the brain were active in all subjects, each brain also showed "tremendous variation of activity" in other areas, variation that could account for different forms of creativity.

People's creativity is hard-wired in their neurons and is difficult to change, he said, though one's growth and maturation, as well as external influences, can affect one's creativity at the brain-cell level.

He said we have 100 billion to 200 billion nerve cells in the central nervous system, and

he paused to marvel at the number.

"There are about 100 billion stars in the Milky Way, and about 100 billion galaxies. There's something about that number—when you're looking at the human brain, you really are looking at the whole universe," he said.

Apparently, not all of us see the universe in the same color, he added. In a phenomenon called synesthesia, occurring in roughly one of every 200 people, certain words or numbers seem to be a certain color.

To demonstrate, Plioplys showed a black-and-white slide covered with a random scattering of the digits 2 and 5 that made the numbers difficult to distinguish from one another. Then he showed the same slide as a synesthetic person might see it, with the 5's all red and the 2's green. Even if the numbers are black, he said, the synesthetic observer will always see them in a different color.

UW-Madison junior Nate Chin found Plioplys' synesthesia examples interesting.

"It's weird that we all use synesthesia in our language everyday, but we still think it's odd when other people see 2's differently," he mused.

Johnny Wu, a UW-Madison graduate student, appreciated Plioplys's advice for improving creativity.

"To be creative, link the senses—sight, taste, sound," he said. "I can do that."

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