

IN THE NEWS

Star cells

Neuroscientist Jerry Lettvin's 1960s proposal that particular neurons — termed 'grandmother cells' — might respond to a specific concept, such as their grandmother, was dismissed as overly simplistic. However, research by Rodrigo Quiroga and colleagues at the University of Leicester, UK, indicates that certain neurons might fire specifically in response to people or concepts that are well known to us.

One of Quiroga's co-workers, Christof Koch, who is based at the California Institute of Technology, USA, said, "For things that you see over and over again, your family, your boyfriend, or celebrities, your brain wires up and fires very specifically to them" (*New Scientist*, 22 June 2005).

The researchers showed various pictures to eight patients with epilepsy who had had electrodes implanted in their brains, and found that some neurons do respond exclusively to pictures of certain individuals. One woman, for example, had a neuron that fired in response to pictures of Jennifer Aniston, whereas another had one that responded to pictures of Halle Berry — even if they were only outline drawings. All that seemed to be required was that the image was recognizable as the film star.

"In this case it almost seems to be a cell that responds to the concept of Halle Berry as it were," said Martin Tovee, at the University of Newcastle upon Tyne, UK, "But nobody's saying it's a grandmother cell" (*News@Nature.com*, 22 June 2005).

Charles Connor, at the Johns Hopkins University, Baltimore, USA, added, "You are looking at the far end of the transformation from metric, visual shapes to conceptual, memory-related information. It is that transformation that underlies our ability to understand the world" (*New Scientist*).

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