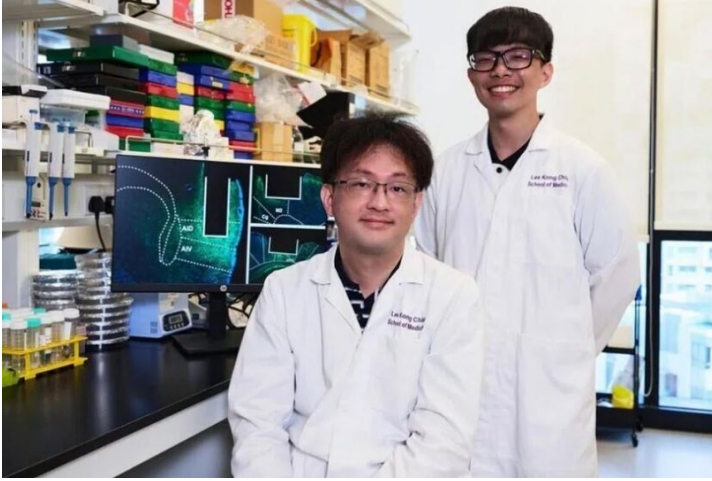


Translated from Tamil

6 April 2026

The brain's role in controlling behaviour: Singapore researchers' discovery



Singaporean researchers have discovered how different parts of the brain work together to create self-control during times of sudden emotions.

The research was conducted by researchers from the Lee Kong Chian Institute of Medicine at Nanyang Technological University.

Researchers say the findings from this study improve understanding of conditions such as attention deficit hyperactivity disorder (ADHD) and drug addiction.

The researchers examined three areas of the brain.

These areas are responsible for thinking skills and complex cognitive functions. They are also important for controlling emotions.

Researchers say that each of these three areas functions in a different way.

In this study, researchers examined the self-control of rats.

The experiment used a technology called optogenetics to inhibit the activity of various parts of the brains of mice.

Activities involving different parts of the brain have already been identified. In this case, self-control is not a single, integrated process, but rather a coordinated computational process involving at least three different brain regions, said Assistant Professor Kamigaki, one of the researchers.

He added that this shows that by precisely targeting each brain region, we can, in principle, modulate impulsive behaviour in a controlled way.

He also said that this will have a profound impact on our thinking about those who struggle to behave with restraint.

The results of this study were published in October 2025 in the peer-reviewed journal *Science Advances*.

<https://www.tamilmurasu.com.sg/singapore/brains-role-controlling-sudden-emotions-singapore-research>