## China's twins might have had their brains inadvertently enhanced

New research suggests that a controversial gene-editing experiment to make children resistant to HIV may also have enhanced their ability to learn and form memories.

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The twins, called Lulu and Nana, reportedly had their genes modified before birth by a Chinese scientific team. The goal was to make the girls immune to infection by HIV, the virus that causes AIDS (1).

Now, new research shows that the same alteration introduced into the girls' DNA, **deletion (2)** of a gene, not only makes **mice (3)** smarter but also improves human brain recovery after **stroke (4)**, and could be linked to greater success in school.

"The simplest interpretation is that those mutations will probably have an impact on cognitive function in the **twins (5)**," says Alcino J. Silva, a neurobiologist at the University of California, Los Angeles. He says the exact effect on the girls' cognition is impossible to predict, and "that is why it should not be done."

The experiment has been widely condemned as irresponsible, and He Jiankui of the Southern University of Science and Technology in Shenzhen [who led the experiment] is under investigation in China. News of the first gene-edited babies also inflamed speculation : could technology one day be used to create super-intelligent humans, perhaps as part of a biotechnology race between the US and China.

(1) : SIDA

- (2) : suppression
- **(3)** : souris
- (4) : crise
- (5) : jumelles