



請注意：中文文字内容只提供簡體版

美国总统奥巴马最近斥资一亿美元发起了一项旨在研究人类大脑所蕴藏的“巨大奥妙”的科研计划。奥巴马总统希望这一“大脑计划”能够帮助世人了解和学习到人类大脑的运转方式以及一些如老年痴呆等不同的脑部疾病。

BBC记者 Paul Adams 从美国华盛顿报道：

The president's advisors call the BRAIN project ambitious, even **audacious**. It aims to produce dynamic pictures of the brain that show, in the words of a White House statement, how individual cells and complex **neural circuits** interact at the speed of thought. Announcing the programme, Barack Obama said humans could identify distant galaxies and study **subatomic particles**, but still had a limited understanding of the brain.

Barack Obama:

"There's this enormous mystery waiting to be unlocked. The BRAIN **Initiative** will change that by giving scientists the tools they need to get a dynamic picture of the brain in action and better understand how we think and how we learn and how we remember."

That knowledge, he said, would be **transformative**: families no longer helpless at the **onset** of Parkinson's, and **war veterans** able to reverse the effects of **traumatic** brain injury. The administration reckons it costs around \$500bn a year to treat the various conditions this project hopes to **address**. It believes that technological advances, in data processing and revolutionary new techniques like **optogenetics** mean that, for the first time, this hugely ambitious research is actually possible.

Questions

1. What does Obama hope the pictures of the brain will show?
2. Which word does Obama use to describe the problem of our lack of understanding of the human brain?
3. Does Obama think the project will have any real effect on people's lives?
4. True or false: the Obama administration believes this research could have been done long ago, but they didn't have enough money.

Vocabulary and definitions

audacious	大胆的
neural circuits	神经回路
subatomic particles	亚原子粒子
initiative	倡议
transformative	转变性的
onset	发作
war veterans	战役老兵
traumatic	创伤的
address	处理（问题等）
optogenetics	光遗传学

Answers to the questions

1. What does Obama hope the pictures of the brain will show?

Answer: He hopes they will show how individual cells and complex neural circuits interact at the speed of thought

2. Which word does Obama use to describe the problem of our lack of understanding of the human brain?

Answer: He calls it a "mystery".

3. Does Obama think the project will have any real effect on people's lives?

Answer: Yes. He thinks the knowledge gained will transform the lives of people with diseases like Parkinson's, and their families.

4. True or false: the Obama administration believes this research could have been done long ago, but they didn't have enough money.

Answer: False. The Obama administration believes that research is only now possible for the first time thanks to new technological advances.