

UK scientists edit DNA of human embryos 英国研究团队编辑人类胚胎中的 **DNA**

- 請注意：中文文字内容只提供簡體版

DNA 是生命的蓝图。英国的一组研究者已在试验中修改了人体胚胎的构造，这是英国首例。这个来自弗朗西斯·克里克研究所（**The Francis Crick Institute**）的团队即将解开有关人类生命起始的谜题之一。了解卵子受精后的情况可以帮助研究者寻找改进试管受精技术的方式，同时也可以解释一部分女性流产的原因。请听报道。

This research is **unlocking the mysteries** of life. We all **started off** as a single **fertilised egg** that grows into a body made of billions of cells, yet the first few steps are as critical as they're poorly understood.

The team at the Francis Crick Institute is investigating **instructions** in our DNA known as genes that are **highly active** in the week after fertilisation. By editing DNA to turn genes off, they can work out what they do.

Their first experiments published in the journal Nature show how instructions called **OCT4** are essential for helping the **embryo** grow from a single cell to a hollow sphere called a **blastocyst**.

Researcher Dr Kathy Niakan says getting a complete understanding of early development could help **infertile** couples. These experiments have been legal since 2008 and have been recently made possible by rapid advances in the field of **gene editing**.

The work of the Crick in London is a **feat** of pure scientific discovery and the embryos will never be **implanted** in the womb. But other groups are working on **modifying** embryos to eliminate **inherited diseases**.

Dr Sarah Chan, a **bioethicist** at the University of Edinburgh says the field is posing big questions for society. Gene editing is a technology with a potential to **transform** our understanding of human biology and medicine.

词汇表

unlocking the mysteries	即将解开…的奥秘
started off	以…的形式开始
fertilised egg	受精卵
instructions	遗传指令
highly active	高度活跃
embryo	胚胎
blastocyst	(生物学) 胚泡
infertile	不能生育的
gene editing	基因编辑 (技术)
feat	成就, 功绩
implanted	(经手术) 植入
modifying	改造、改变
inherited diseases	遗传疾病
bioethicist	生物伦理学家
transform	彻底改变

测验

请听报道并回答下列问题。

1. What is the team at Francis Crick Institute investigating?
2. What has recently made these experiments possible?
3. True or false? *According to bioethicist Dr Sarah Chan, no one needs to worry about the field.*
4. Which word in the text means ‘improvements or developments’?

答案

1. What is the team at Francis Crick Institute investigating?
The team at the Francis Crick Institute is investigating instructions in our DNA known as genes that are highly active in the week after fertilisation.
2. What has recently made these experiments possible?
These experiments have been recently made possible by rapid advances in the field of gene editing.
3. True or false? *According to bioethicist Dr Sarah Chan, no one needs to worry about the field.*
False. Dr Sarah Chan says the field is posing big questions for society.
4. Which word in the text means ‘improvements or developments’?
Advances.