

通过利用藻类中首次发现的感光蛋白，一名完全失明男子的部分视力得到了恢复。

The man from Brittany in France was **diagnosed** with retinitis pigmentosa 40 years ago. Doctors used a **pioneering** technique called **optogenetics** to try to restore his vision.

40年前，这名来自法国布列塔尼的男子被诊断患有视网膜色素变性。医生们用了一种名为光遗传学的开创性技术来试图恢复他的视力。

It's based on the **proteins** that microscopic **algae** use to swim towards the light and requires a special pair of **goggles** to convert natural light into the right wavelength for the proteins.

该技术基于利用帮助微藻游向光的蛋白质，病人需要戴上一副特殊的护目镜以将自然光转换成适合这种蛋白质的波长。

The patient knew the method was working when he could see the stripes of a **pedestrian crossing**. He does not have perfect sight, but the difference between none and limited vision is still **life-changing**.

当这位病人可以看到人行横道上的斑马线时，就知道这个方法是有用的。虽然他的视力并没有恢复到正常水平，但从完全失明变成有部分视力仍然能够改变人生。

## 1. 词汇表

diagnosed	被诊断
pioneering	开创性的
optogenetics	光遗传学
proteins	蛋白质
algae	水藻, 藻类
goggles	护目镜
pedestrian crossing	人行横道
life-changing	能改变人生的

## 2. 阅读理解: 请在读完上文后, 回答下列问题。(答案见下页)

1. What was the name of the technique used to try to restore the man's vision?
2. What needs to be worn to convert natural light into the right wavelength for the proteins?
3. True or false? *The patient knew the technique hadn't worked when he saw the stripes on a pedestrian crossing.*
4. How good is the man's sight now?

### 3. 答案

1. What was the name of the technique used to try to restore the man's vision?

**Doctors used a pioneering technique called optogenetics to try to restore his vision.**

2. What needs to be worn to convert natural light into the right wavelength for the proteins?

**The technique requires wearing a special pair of goggles to convert natural light into the right wavelength for the proteins.**

3. True or false? *The patient knew the technique hadn't worked when he saw the stripes on a pedestrian crossing.*

**False. The patient knew the method was working when he could see the stripes of a pedestrian crossing.**

4. How good is the man's sight now?

**He does not have perfect sight, but the difference between none and limited vision is still life-changing.**