

# MY HISTORY HERO

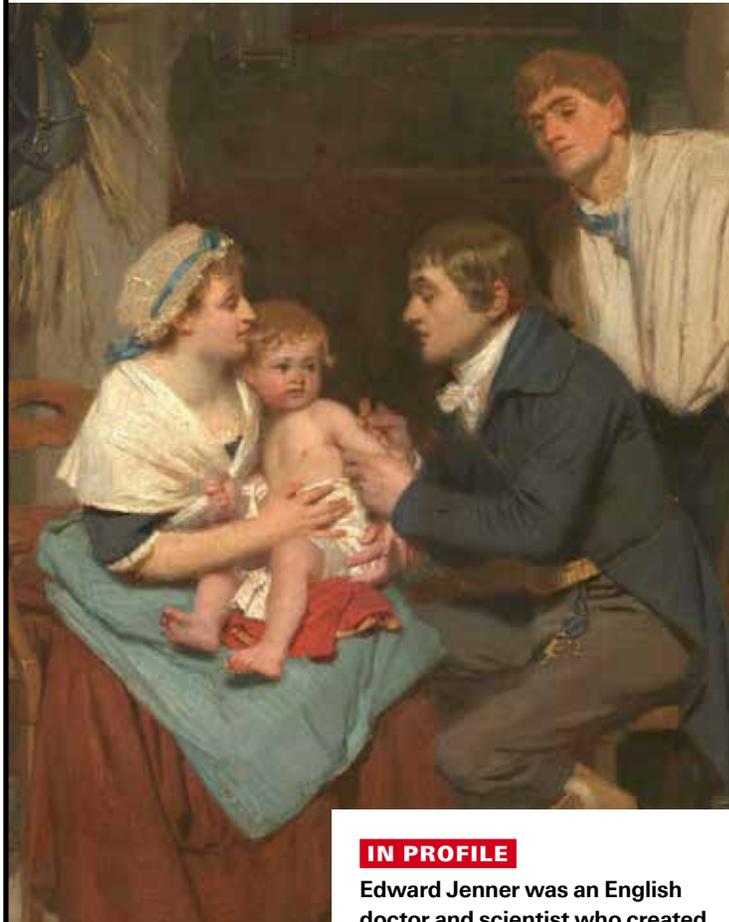
Vaccinologist Professor Dame Sarah Gilbert chooses

## Edward Jenner

1749–1823



**Dame Sarah Gilbert** is a professor of vaccinology at Oxford University. She co-developed the AstraZeneca Covid-19 vaccine with the Oxford Vaccine Group.



Edward Jenner vaccinates a baby in a painting from 1884. “What he did that was so important was to test his vaccine and communicate his findings,” says Sarah Gilbert

### IN PROFILE

**Edward Jenner was an English doctor and scientist who created the world’s first vaccine, the smallpox vaccine. The eighth son of a Gloucestershire churchman, the father of vaccinology saved the lives of millions of people around the world. He died of an apparent stroke, aged 73, and was survived by two of his three children.**

**// I wonder what Jenner would make of the challenges of developing a vaccine today. I’m sure he would have been cheering us on //**

### When did you first hear about Edward Jenner?

In my school days. But it was not until after 2005, when I became more involved in vaccine development, that I learned more about his story and all that he achieved.

### What kind of man was he?

He was a country doctor, but also a naturalist, and in his first paper, he observed how the cuckoo threw other eggs out of nests – so he was obviously a naturally curious person. He liked to understand how things worked and was also keen on communicating his findings. At heart, I think he was a scientist despite working as a doctor.

### What made Jenner a hero?

He’s known as the “Father of Vaccinology”, and for good reason. Everyone knows how he vaccinated his gardener’s eight-year-old son, James Phipps, with cowpox taken from a milkmaid. He did it because he wanted to stop another practice: deliberately infecting children with a small amount of the smallpox virus to protect them against smallpox. This was an unpleasant procedure – it had been done to him as a child – and he wanted to find a better, safer way of protecting people against smallpox. And that’s why he used cowpox.

### What was his finest hour?

Persisting with publishing his findings on the smallpox vaccine until everybody knew about them, which had huge benefits for public health. In his day, the disease killed around one in 10 of the population, and as many as one in five in towns.

What he did that was so important was to test his vaccine – by trying to infect James with smallpox after inoculating him – and test it again, and then write up his findings on a number of cases and present them to the Royal Society. He went on to vaccinate as many local people as possible: both the gentry and those too poor to pay, in a building in his garden known as the Temple of Vaccinia. Smallpox is the only human disease that has been eradicated and that all goes back to his work.

### Can you see any parallels between Jenner’s life and your own?

I have also initiated development of a vaccine, which went into clinical testing and was then proven to be effective. The regulatory and ethical requirements to do this are very different now, and I wonder what Jenner would have made of them. But I am sure he would have been cheering us on.

### What would you ask Jenner if you could meet him?

I’d like to know whether he thought vaccination is all about protecting the individual or the whole population. 

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