

Sir Jeffreys awarded the world's oldest science prize

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The inventor of genetic fingerprinting has been awarded the world's oldest science prize, the Royal Society's Copley Medal. In 1984, Prof. Sir Alec Jeffreys stumbled upon a method of distinguishing individuals based on their DNA. It involved showing the variation between individuals' DNA, a technique which he developed, and which became known as genetic fingerprinting. This discovery transformed forensic science and resolved questions of identity and kinship.

He received the medal "for his pioneering work on variation and mutation in the human genome."

The Copley medal was first awarded by the Royal Society in 1731, 170 years before the first Nobel Prize. It is awarded for outstanding achievements in scientific research. Previous recipients include eminent scientists such as Charles Darwin, Michael Faraday, Albert Einstein, and Stephen Hawking.

He made the discovery in his lab at the University of Leicester after looking at an X-ray image of the DNA of different members of his lab technician's family.

Sir Alec Jeffreys said "I am absolutely thrilled to receive the Copley Medal. I am particularly delighted that the award recognizes our work, extending over three decades, in exploring human DNA diversity and the processes that generate this variation, and not just our accidental foray into forensic DNA." He added, "My life changed on Monday morning at 9.05 am, 10 September 1984. What emerged was the world's first genetic fingerprint. In science it is unusual to have such a eureka moment. We were getting extraordinarily variable patterns of DNA, including from our technician and her mother and father, as well as from non-human samples. My first reaction to the results was this is too complicated, and then the penny dropped and I realized we had genetic fingerprinting."

He continued, "It opened up a new area of science. The research team immediately grasped its applications, including crime, paternity and identical twins, as well as work on conservation and diversity among non-human species. Later that day my wife added another to the list - immigration. That was when I realized that this had a political dimension and that it could change the face of immigration disputes, especially where no documentary evidence existed."