Alec Jeffreys’s Experiments to Identify Individuals by Their Beta-globin Genes (1977-1979) [1]

By: Harbison, Corey Keywords: Genetics [2]

In a series of experiments in the late 1970s, Alec J. Jeffreys in the UK and Richard A. Flavell in the Netherlands developed a technique to detect variations in the DNA of different individuals. They compared fragments of DNA from individuals’ beta-globin genes, which produce a protein in hemoglobin. Previously, to identify biological material, scientists focused on proteins rather than on genes. But evidence about proteins enabled scientists only to exclude, but not to identify, individuals as the sources of the biological samples. By 1979, Jeffrey’s experiments on beta-globin genes shifted the analytical approach of scientific identification from proteins to genes to identify an individual’s genetic identity. The ability to match a person to a biological sample developed in the 1980s and impacted many fields including paternity testing, forensics, immigration, and body identification.

Subject

Topic
Experiments [14]

Publisher
Arizona State University. School of Life Sciences. Center for Biology and Society. Embryo Project Encyclopedia.

Rights
Copyright Arizona Board of Regents Licensed as Creative Commons Attribution-NonCommercial-Share Alike 3.0 Unported (CC BY-NC-SA 3.0) http://creativecommons.org/licenses/by-nc-sa/3.0/

Format
Articles [15]

Last Modified
Saturday, May 18, 2019 - 03:29

DC Date
2017-07-20

DC Date Accessioned
Thursday, July 20, 2017 - 15:47

DC Date Available
Thursday, July 20, 2017 - 15:47

DC Date Created
2017-07-20

DC Date Created Standard
Thursday, July 20, 2017 - 07:00

Contact Us