Researchers analyze DNA from 'supercentenarians' aged 110+ to discover secret to longevity

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James Clement, a self-described "citizen-scientist," has collected blood, skin and saliva samples from individuals aged 110-plus in 14 states and seven countries during the past six years, *The New York Times* reports.

Mr. Clement — with the help of George Church, PhD, a prominent geneticist at Cambridge, Mass.-based Harvard University, who advises the project — collects and analyzes full genetic sequences from "supercentenarians," or those in their 12th decade. Mr. Clement plans to release DNA sequences from the project, called the New England Centenarian Study, this month.

The goal of the project is to determine what genetic variations affect human longevity. The average lifespan for individuals in developed countries is almost 80. Two dozen of the roughly 70,000 Americans who live to be 100 years old typically live past 110.

Recent research estimates supercentenarians comprise roughly one in 5 million people in the U.S., according to *The New York Times*.

Mr. Clement has detected 2,500-plus differences between supercentenarian DNA and the general population. However, with a sample size of only some three dozen genomes, his team is still working to determine which genes are significant. One analysis suggested supercentenarians tended to inherit fewer genetic variations related to conditions like heart disease and Alzheimer's disease.

However, since supercentenarians also tend to be more healthy than the general population, some researchers hypothesize there are other genetic benefits at play. For example, supercentenarians may boast genes that protect them from aspects of aging.

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