

“Longevity gene” may boost lifespan

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Courtesy Christian-Albrechts University in Kiel and [World Science](#) staff

A variation in a gene called FOXO3A seems to increase human life expectancy in populations worldwide, scientists report.

Researchers at the Christian-Albrechts-University in Kiel, Germany, compared DNA from 388 German centenarians with those from 731 younger people. The findings appeared last week in the research journal *Proceedings of the National Academy of Sciences*.

Last September, an American research team led by Bradley J. Willcox had published in the journal a study that indicated a higher frequency of this genetic variation in long-lived Americans of Japanese origin. Almut Nebel, the scientific leader of the Christian-Albrechts research group, said the newer work has confirmed Willcox's findings using independent populations.

“We have now eliminated that uncertainty about the connection between FOXO3A and longevity, both by our results from the German sample study and by the support from our French partners in Paris, whose research on French centenarians showed the same trend... We can now conclude that this gene is probably important as a factor in longevity throughout the world.”

FOXO3A is of interest for genetic research on ageing, since it was reported in the 1990s that the gene was connected with ageing processes in worms and flies.

“The most difficult problem is to get enough old people, especially those aged 100 or more, to take part in such a study,” said Friederike Flachsbart of the university.

“Interestingly, the genetic effects are much more evident in 100-year-olds than in 95-year-olds.”