Researchers Find a Gene Responsible for Gray Hair

June 14, 2016

Suppose instead of having to dye your silvery strands, you could pop a pill to restore hair color? Well, science may have come one step closer to this possibility with new understanding about a gene called IRF4, known for playing a role in the color of hair, and now also linked to turning tresses gray, according to findings published in the journal Nature Communications, reports a press release from the University College London.

For the study, researchers checked DNA samples from more than 6,000 men and women of mixed European, Native American and African ancestry from Brazil, Columbia, Chile, Mexico and Peru to learn what genes caused graying and also determined hair's density and shape. Scientists found that IRF4 helps regulate the production and storage of melanin, the pigment responsible for the color of our hair, skin and eyes.

"We have found the first genetic association to hair graying, which could provide a good model to understand aspects of the biology of human aging," said Andres Ruiz-Linares, MD, PhD, a professor at the University College London Biosciences, and the lead researcher on the study. "Understanding the mechanism of the IRF4 graying association could also be relevant for developing ways to delay hair graying."

Hair turns gray when melanin isn't present, so scientists want to find out exactly what role IRF4 plays in this process. If they're able to understand how this gene affects the silvering of tresses, this could help researchers develop new ways, and possibly products, to slow or block hair going gray.

Click here to read about another substance produced by the body that makes hair go gray.