Spurring “Talk” Between Hair’s Stem Cells May Offer Baldness Solution

May 12, 2011

How thousands of stem cells in the hair follicles of mice and rabbits “talk” to each other may be the key to solving human hair loss, according to study published in the journal *Science* and reported by ScienceDaily.

For the study, researchers from the Keck School of Medicine at the University of Southern California (USC) and England’s University of Oxford evaluated hair growth pattern changes on shaved mice and rabbits. Scientists found stem cells in the hair follicles of mice and rabbits cooperated to coordinate and encourage hair growth. (This is one of the first studies to look at a large pool of stem cells in thousands of hair follicles as opposed to one stem cell in a single follicle.)

“The results are totally surprising,” said author Cheng-Ming Chuong, MD, PhD, a professor of pathology at USC and the lead study author. “There is complex coordination not apparent to the naked eye.”

This “complex coordination” is how hair stem cells use repetitive signals that tell thousands of follicles to start growing.

Human hair follicles don’t help each other grow because, unlike a rabbit’s follicles, they don’t communicate, Chuong explained.

But if researchers can awaken this same communication mechanism in human stem cells, that process could possibly increase the number of strands a person produces when hair is in its growth phase.

As a result of these study findings, USC’s Stevens Institute for Innovation applied for a patent on the method they used to spur hair growth.

Click here to read more about the scientific progress being made to correct baldness.

© 2026 Smart + Strong All Rights Reserved.