

Scientists Find Way to Turn Back the Aging Clock

VOCABULARY WORDS

1. reverse /rɪ'vɜ:s/ (verb) to stop things happening, or to stop happening, in a particular way
Example: The struggling retailer has slashed prices in an attempt to reverse the decline in sales.
2. specialized /'speʃəlaɪzd/ (adjective) relating to one particular area or designed for a particular purpose
Example: The company makes highly specialized products for the health-care industry.
3. breakthrough /'breɪk.θru:/ (noun) an important discovery or event that helps to improve a situation or provide an answer to a problem
Example: Scientists are hoping for a breakthrough in the search for a cure for cancer.
4. induced (adjective) brought about, produced, or caused, especially artificially
Example: Medical intervention in childbirth has become the norm, with hospitals relying on epidurals, C-sections, and induced labor.
5. regain /rɪ'geɪn/ (verb) to take or get possession of something again:
Example: The government has regained control of the capital from rebel forces.



Researchers in the UK have developed a method that will **reverse** the skin cells aging process without losing their **specialized** function. The research program has been able to partly restore the function of older cells, as well as restoring a youthful appearance. While in the early stages of study, this **breakthrough** from the Babraham Institute could change regenerative medicine.

What is regenerative medicine? As we age, our cells' ability to function declines and our skin shows marks of aging. Regenerative biology aims to repair or replace cells including old ones. One of the most important tools in regenerative biology is our ability to create '**induced**'

stem cells. Induced stem cells are created by scientists in the laboratory. Stem cells are important because they replace lost or damaged cells that our bodies can't replace naturally.

The new method which is based on the Nobel Prize winning technique scientists use to make stem cells, is the solution to the problem of entirely erasing cell identity by stopping reprogramming part of the way through the process. This allowed researchers to find the exact balance by making them biologically younger while still being able to **regain** their specialized cell function.

DISCUSSION

1. Who is the oldest person you know? What do you know about their life?
2. What does a person's age tell us? What do we know about a sixty-year-old that's different from a thirty-year-old?
3. Our tastes in many areas change as we get older. What did you like before that you don't like now? What did you dislike before but now enjoy?
4. Some people try to hold on to their youth with exercise, surgery, or medication. How do you feel about getting older? Will you age gracefully?
5. What happens to senior citizens in your culture? Are retirement homes common? Or do older generations continue to live with their children? Which is better?
6. How do you imagine yourself when you turn 60?