

How does space change your genetics? Astronaut twins Scott and Mark Kelly explain

*[Editor's note: Astronauts Mark and Scott Kelly — the only twins who have traveled in space — offer observations on the genetic experiment they took part in.]*

**Loren Grush:** Now that some of the preliminary results are coming in, were you guys surprised at some of the genetic changes that they've been finding, for instance?

**Scott Kelly:** Yeah, I was really surprised.

**Mark Kelly:** The one big surprising thing was his telomeres got longer while in space, and that's kind of the opposite of what they thought would happen. The presumption was that in the radiation...and the stress of being on the space station, they thought that those things would result in the shortening of his telomeres...And there were some people out there in the media that were speculating that maybe NASA discovered the fountain of youth, which is going into space, which is not true and that's wild speculation.

...

**LG:** Didn't Scott get a little bit younger because of time dilation?

**SK:** Yeah, by like three milliseconds.

**MK:** No, no, Scott, I think if you actually add up your 520 days...I think where I used to be six minutes older, I think I am now — if you did the math correctly — it's six minutes and 13 milliseconds.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Astronauts Scott and Mark Kelly on NASA's twin experiment and the future of space travel](#)

For more background on the Genetic Literacy Project, read [GLP](#) on Wikipedia.