

How does the body control stem cells? ‘It’s like a game of roulette’

Stem cells are unspecialized cells that can develop into any type of cell in the human body. So far, however, scientists only partially understand how the body controls the fate of these [cells].

...

In order to learn more about [how organisms can create a diversity of cells from the same genetic template], Dr. Alexander Skupin and his team [at the University of Luxembourg] treated blood stem cells from mice with growth hormones and then watched closely how these progenitor cells behaved during their differentiation into white or red blood cells.

The researchers observed that the cells’ transformation does not occur in linear, targeted fashion, but rather more opportunistically. Each progenitor cell adapts to the needs of its environment and integrates itself into the body where new cells are needed...The researcher likens this step to a game of roulette, where the different types of cells can be thought of as the differently numbered slots in the roulette wheel that catch the ball.

...

“This finding can help us to improve stem cell therapy in future,” says Skupin.

[The study can be found [here](#).]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Researchers decipher how the body controls stem cells](#)

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