

Answer on Question#50044 – Biology – Other

Could humans be converted into apes again or could any other specie be converted to ancestral species? Why and how?

Answer:

No. This process is absolutely impossible. That's a good old idea from horror movies but in real life things are a little bit more sophisticated. At first «specie» is a complex term based on different definitions from molecular biology, genetics, morphology, ecology etc. Every specie has own features that differ it from other species. Combination of this features is unique and statistical unrepeatable. This theory called Dollo's principle.

Dollos's principle (Dollos's law of irreversibility) postulates that evolution is irreversible. «An organism is unable to return, even partially, to a previous stage already realized in the rank of its ancestors» (1893). (The molecular mechanism of this process perfectly described in the article «An epistatic ratchet constrains the direction of glucocorticoid receptor evolution» Thornton J. W.).

Reverse of evolutionary direction even one protein structure is statistically extremely unlikely. There are molecular mechanisms that prevent the repeat of old structures. And reverse from offspring to ancestor is absolutely impossible.

P. S. In terms of genetic engineering this process is also impossible. It's easy to create new specie but impossible to convert one specie to its ancestral form. There is an opportunity to create similar species but not the same. The variety of genes is statistical unrepeatable.