МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РФ ТОМСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ БИОЛОГИЧЕСКИЙ ИНСТИТУТ

СТАРТ В НАУКУ

МАТЕРИАЛЫ

LXX научной студенческой конференции Биологического института

Томск, 26-30 апреля 2021 г.

Томск 2021

IS IT POSSIBLE TO BRING DINOSAURS BACK TO THE WORLD?

V.A. Koneva konewa.val@yandex.ru

Currently, science is close to recreating the species of animals that have disappeared from our planet. There are already a number of projects to resurrect extinct animals, such as the Woolly Mammoth or the Tasmanian Wolf. Therefore, it is obvious that when scientists found a mechanism for recreating animals, they began to think about more complex projects like the return of dinosaurs to the world. The purpose of my work is to analyze the methods of «resurrection» of animals and to consider ways that can be applied to dinosaurs in order to understand the possibility of their return.

Originally, there are two methods for «resurrect» an extinct animal. The first method has existed since the twentieth century. It is possible to restore the appearance of an extinct ancestor by selective breeding of representatives of the most primitive breeds of its descendants. So, German biologists recreated the extinct ancestor of modern horses - the tarpan (*Equus ferus ferus*). It means they crossed the representatives of several breeds, in whose cells there were tarpan genes, and were able to create a creature that looks like an ancestor. These animals contain most of the genes of the wild ancestor of the horse most likely, but it is impossible to verify this, because the genetic data bank of the tarpans themselves has not been preserved. However, this method is not applicable to dinosaurs, because there are no suitable descendants.

Another method is based on the creation of a hybrid embryo. If the DNA of an extinct animal is preserved in full, then it can be transplanted into the nucleus of the germ cell of a representative of the closest species, and grow the desired organism.

In conclusion, scientists cannot «resurrect» dinosaurs right now. But science believes that they can be created anew. However, these will be completely different dinosaurs that will have nothing to do with real ancient giants.

Academic advisor – senior lecturer E.V. Vychuzhanina