**KHEIRON CLONING Buenos Aires, November 30th, 2017**

 **PRESS RELEASE**

***An Argentinean lab is the first in the world to accelerate genetic evolution in sports animals.***

Argentine scientists from KHEIRON,working together with FLENI Foundation, are able to produce genetically engineered embryos for the first time using the CRISPR-Cas9 technique. This powerful tool of "biological scissors" allowed these researchers to generate equine clones with improved genomes.

According to Daniel Sammartino,former CEO of multinational Techint, andmain shareholder and founder of Kheiron**,** "This technology brings an additional progress in horse breeding. It could be possible to achieve better horses in less time”.

The **"Precision Genetic Progress"** is a revolutionary concept in reproduction which consists of identifying sequences of genes existing naturally in horses that represent certain characteristics, but instead of acquiring them in their offspring through conventional crossbreeding**,**  these sequences are incorporated by genetic editing.

This particular achievement focuses on the edition of the myostatin gene sequence, which is related to muscle development, endurance and animal speed. Scientists plan to continue editing other genes related to other characteristics. This type of editions could also be used to cure defective sequences by eliminating genetic pathologies.

**‘Designer clones, the next generation of sports elite horses’**

Cloned horses shine in the Argentine Polo Open, they are being incorporated in the Olympic games in disciplines such as Show Jump and have proved their effectiveness in other sports such as Endurance and in Quarter Horse competitions.

However, science does not stop advancing and the future is already glimpsed with the next generation of sport's elite horses. This new technology will not only replicate and preserve the genetics but also should help improve it further.

This development was carried out in the KHEIRON laboratory, world leader company in Reproductive Biotechnologies and the most advanced in the world in Equine Cloning and part of a group of 100% Argentine and greenfield start ups. In 2013 KHEIRON generated the first clone of a polo mare in Latin America (Silvina Luna) and has optimized its technology so much that today it achieves the same effectiveness of viable and healthy births as in conventional breeding. These results will be published soon in the prestigious scientific journal "Cloning And Stem Cells”.

The research was directed by Dr. Gabriel Vichera and Ramiro Olivera, cloning experts and directors of KHEIRON and by Dr. Lucia Moro and Dr. Santiago Miriuka, experts in molecular biology of the LIAN laboratory of the FLENI Foundation.

Regarding this world finding, Daniel Sammartino defines:
"Our real next challenge is not only to export our technology, but fundamentally develop these scientific advances in other animal species for multiple purposes."