Development of porcine embryos reconstituted with somatic cells and enucleated metaphase I and II oocytes matured in a protein-free medium

## **ABSTRACT**

After nuclear transfer, somatic cells from porcine M I oocytes may develop into blastocysts.

## INTRODUCTION

In the world of animal research, the term 'developmental reseach' refers to the study of the development of animals from embryonic stem cells. Such studies are usually done on animals with normal or normal-to-severe genetic abnormalities and are used to better understand the genetic basis of disease.

The term 'developmental reseach' is also sometimes used to refer to the following studies:

The development of human embryos from pluripotent stem cells (HSPCs) is another area in which the term 'developmental reseach' is used to refer to studies in which a pluripotent stem cell (PSC) is used.

What is a pluripotent stem cell?

A pluripotent M II oocytes have been used as the recipient cytoplasm for many animals cloned with human donors, including sheep, cattle, and goat.

## CONCLUSION

Remarkable conclusions Our research has revealed that porcine M I oocytes have the potential to become blastocysts after nuclear transfer of somatic cells. However, the process of nuclear reprogramming may vary between M II and M III based on the developmental abilities of retrieved embryos, which differ from the maturation stages of recipient ovations. Comparing these occurrences would provide valuable information about the mechanisms of nucleosynthesis in cloned embryols. We recommend using defined IVM medium to conduct experiments.