

## **IN VITRO FERTILIZATION (IVF): RESEARCH AND DEVELOPMENT IN BOVINE IN ARGENTINA**

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IVF is becoming prevalent in Argentina as one of the techniques of choice when it comes to the production of elite and large-scale embryos in bovine. There are myths and commercial realities that must be of public knowledge to interact in a market that needs the application of embryonic biotechnologies, which also include artificial insemination and superovulation and embryo transfer. The purpose of this talk is to provide an integrated overview of the application of animal biotechnology in different areas of the country, to encourage the formation of a greater number of specialized veterinarians and integral commercial programs that directly benefit bovine production in Argentina. In particular, from IHO - in vitro in cattle, we worked in European breeds (Holando, Angus, Hereford, Murray Gray) with fewer oocytes available per session of follicular aspiration and an average production of 3 to 4 embryos per cow, with the exception of More than 6 embryos when a selection of donors is made, fundamental feature to expand the service to commercial breeding. The percentages of pregnancy are greater than 50%, counting with the support of the clients who bet to offer us the best recipients to achieve the best results. In this sense, procedures can be repeated even weekly, improving oocyte quality and doubling the pregnancy in a short period of time, without the need to stimulate donors or to comply with expensive protocols. The calves are and always were normal and healthy, so it is possible to clear several concerns when you know what you work with. In the same way, promoting the application of technologies such as genomics and sexed semen brings more benefits and efficiency to the technique; while cryopreservation continues with its limitations. At this point, it is where the interaction with superovulation and embryo transfer is crucially important in order to avoid affecting the results at any point. For all of the above, the boom of IVF in Argentina is a fact and, therefore, professionals must be on guard, informed and updated to know how to adapt to the needs of customers and offer the most efficient answers, convinced that reproductive biotechnology is the basis of genetic improvement and the business of all is to achieve the pregnancy of all cows in the country with better embryos, based on comprehensive assessments of production, applying public developments that are the basis for strengthening and uncertainty added value that the world demands.