

1. Institution

Department of Animal Medicine and Surgery. Faculty of Veterinary Medicine, Universitat Autònoma de Barcelona. Bellaterra, 08193. Barcelona, Spain.

2. Principal investigator and contact person

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3. Key personnel

NAME	RESEARCH AREA DETAILS	EMAIL
Teresa Mogas	Bovine in vitro embryo production/ Oocyte and embryo cryopreservation	Teresa.Mogas@uab.es
Jordi Miró	Equine reproduction (AI, sperm freezing, ultrasonography, embryo transfer)	Jordi.Miro@uab.es
Roser Morató	Bovine in vitro embryo production/ Oocyte and embryo cryopreservation/ Immunocytochemistry	Roser.Morato@uab.es
Ester Taberner	Equine Reproduction (AI, sperm freezing, ultrasonography)	Ester.Taberner@uab.es
Bladimir Cordova	Bovine in vitro embryo production	Bladimir.Cordova@uab.es

4. Research profile

Biotechnology of reproduction in farm animals, basic and applied research in molecular embryology with particular emphasis on in vitro oocyte maturation for the identification of the more appropriate media for the competent maturation of bovine and horse oocytes. Optimization of embryo and oocyte vitrification protocols. Homologous and heterologous in vitro fertilization.

5. Key technologies and tools

In vitro embryo production - embryo, oocyte and sperm cryopreservation - computer assisted sperm analysis – artificial insemination - embryo transfer - follicular dynamics – immunohistochemistry and immunofluorescence - transmission and scanning electron microscopy.

6. Selected publications (max. 5)

Morató R., Izquierdo D., Paramio M.T., Mogas T. (2008). Embryo development and structural analysis of in vitro matured bovine oocytes vitrified in flexipet denuding pipettes. *Theriogenology* 70(9):1536-43.

Morató R., Izquierdo D., Paramio M.T., Mogas T. (2008). Cryotops versus open-pulled straws (OPS) as carriers for the cryopreservation of bovine oocytes: effects on spindle and chromosome configuration and embryo development. *Cryobiology*; 57(2):137-41.

Morató R., Mogas T., Maddox-Hyttel P. (2008). Ultrastructure of bovine oocytes exposed to Taxol prior to OPS vitrification. *Mol Reprod Dev.* 75(8):1318-26.

Morató R., Izquierdo D., Albarracín J.L., Anguita B., Palomo M.J., Jiménez-Macedo A.R., Paramio M.T, Mogas T. (2008). Effects of pre-treating in vitro-matured bovine oocytes with the cytoskeleton stabilizing agent taxol prior to vitrification. *Mol Reprod Dev.* 75(1):191-201.

Taberner E., Medrano A., Peña A., Rigau T., Miró J. (2008) Oestrus cycle characteristics and prediction of ovulation in Catalanian jennies. *Theriogenology* 70(9):1489-97.