

1. Institution:

Complutense University of Madrid. Department of Animal Physiology. Faculty of Veterinary. Madrid, 28040. Spain.

2. Principal investigator and contact person:

Pedro L. Lorenzo (plorenzo@vet.ucm.es) Phone. +34913944093

3. Key personnel

NAME	EMAIL	RESEARCH AREA DETAILS
Rosa M ^a Garcia-Garcia	rosa.garcia@vet.ucm.es	Ovarian physiology
Maria Arias Alvarez	m.arias@vet.ucm.es	Ovarian physiology
Pilar G. Rebollar	pilar.grebollar@upm.es	Nutrition and metabolic studies

4. Research profile

The group mainly investigates the relationship between the poor metabolic status of the females after parturition and the reproductive physiology using different techniques to identify how to improve reproduction in these animals. Studies include in vitro maturation, fertilization and early embryonic development.

5. Key technologies and tools

Body score analysis by bioimpedance, endocrine assays, oocyte in vitro maturation, embryo culture, confocal microscopy techniques, immunohistochemistry, RT-PCR analyses.

6. Selected publications (max. 5)

Rebollar P.G., Milanés A., Pereda N., Millán P., Cano P., Esquifino A. I., Villarroel M., Silván G., Lorenzo, P.L. (2006). Oestrus synchronisation of rabbit does at early post-partum by doe-litter separation or eCG injection: Reproductive parameters and endocrine profiles. *Animal Reproduction Science* 93: 218-230

Garcia-Garcia R.M., Arias-Alvarez, M., Rebollar, P.G., Revuelta, L., Lorenzo, P. (2009). Influence of different reproductive rhythms on endocrine profiles, features of follicular population and atresia rate, and oocyte maturation in controlled suckling rabbits. *Animal Reproduction Science* 114 :423-433.

Arias-Alvarez, M., Garcia-Garcia R.M., Rebollar, P.G., Revuelta, L., Millán, P.; Lorenzo, P. (2009). Influence of metabolic status on oocyte quality and follicular characteristics at different *postpartum* periods in primiparous rabbit does. *Theriogenology*; 72: 612-623.

Arias-Alvarez, M., Garcia-Garcia R.M., Rebollar, P.G., Torres-Rovira, L., González-Bulnes, A., Lorenzo, P. (2010) Influence of leptin on in vitro maturation through MAPK and STAT pathways and on steroidogenic secretion in rabbit oocyte model. *Reproduction* 139:523-32.

Castellini C, Dal Bosco A, Arias-Álvarez M, Lorenzo PL, Cardinali R, Rebollar PG. The main factors affecting the reproductive performance of rabbit does: a review. *Anim Reprod Sci.* 2010;122:174-82.