

1. Institution

Clinic of Reproduction and Obstetrics, Veterinary Faculty, University of Thessaly, Karditsa, Greece

2. Principal investigator and contact person

Georgios S Amiridis, Assistant prof (gsamir@vet.uth.gr)

3. Personnel

Name	Research Tasks	e-mail
Senior scientists		
G.S. Amiridis	Team leader, superovulation, in vivo - in vitro embryo production in ruminants	gsamir@vet.uth.gr
Th. Tsiligianni, Adjunct Assist. Prof	Role of glucosidases in bovine IVP	tsiligianni@nagref.gr
Irene Valasi. Post doc	Oocyte pick-up from juvenile lambs and IVP	ivalasi@vet.uth.gr
T. Papanikolaou, Post doc	Effects of Plasminogen activators/plasmin system in bovine IVP	tpapanik@vet.uth.gr
PhD-student		
Eleni Ntovolou PhD student	Role of antioxidants in the bovine IVP	dovoloul@gmail.gr

4. Research profile

The Faculty was founded in 1993, and the first member of staff in our clinic was appointed in 1998. The group was initially focused on estrus synchronization and multiple ovulation in sheep and cows. Then we started working in in vivo embryo production from high yielding dairy cows and ewes. We currently work on the composition of oocyte and embryo culture media. We modify the media with addition of plasminogen activators /plasmin members or antioxidants in predetermined concentrations according to those found in the follicular and/or the oviductal fluid. Another research interest is the in vitro embryo production from in vivo collected oocytes from ewe-lambs, and the evaluation of the future reproductive performance of the donor.

5. Key technologies and tools

The clinic has the basic infrastructure for in vitro embryo production. We have standardized the ultrasound guided OPU in cows, and the laparoscopic OPU and embryo collection from small ruminants.

The clinic is in close cooperation with the Agricultural University of Athens, and the National Agricultural Research Foundation having access to embryo micromanipulators, and where endocrine studies can be performed.

6. Selected publications

1. Th Papanikolaou, GS Amiridis, I Dimitriadis, E Vainas CA Rekkas (2008) Effect of plasmin, urokinase, tissue-type plasminogen activator or ϵ -ACA on bovine in vitro embryo production. *Reprod Fert Dev* 20,320-327
2. Valasi I, L.Leontides, I Menegatos and GS Amiridis (2007) Oestradiol concentration as a predictor of ovarian response in FSH stimulated ewe-lambs. *Anim.Reprod. Sci* 102,1-2,145-151
3. I Valasi , L. Leontides, Th. Papanikolaou and G.S. Amiridis (2006) Age, FSH dose, and follicular aspiration frequency affect oocyte yield from juvenile donor lambs *Reprod in Dom Anim* 41, 1-8
4. GS Amiridis, T Tsiligianni, E Vainas (2006) Follicle ablation improves the ovarian response and the number of collected embryos in superovulated cows during the early stages of lactation. *Reprod. Dom. Animals* 41,402-407
5. GS Amiridis, I Valasi, I Menegatos, C Rekkas, P Goulas, Th. Papanikolaou C Deligiannis (2005) Luteal stage dependence of pituitary response to GnRH in cyclic dairy ewes subjected to synchronization of ovulation. *Reproduction Fertility & Development* 17,769-774