

## 1. Institution

Department of Animal Reproduction, Institute of Animal Science of Lithuanian Veterinary Academy, R. Zebenkos 12, LT- 82317 Baisogala, Radviliskis dist., Lithuania

## 2. Principal investigator and contact person

Rasa Nainiene, PhD, rasa@lgi.lt

## 3. Key personnel

NAME	EMAIL	RESEARCH AREA DETAILS
Rasa Nainiene, PhD, senior researcher	rasa@lgi.lt	Bovine oocyte and embryo quality, IVP
Arturas Siukscius, PhD, senior researcher	arturas@lgi.lt	Equine, pig reproduction, ultrasonography
Vidmantas Pileckas, Habil. dr.	vidmantas@lgi.lt	Bull fertility, semen quality, semen cryopreservation
Aldirdas Urbsys, PhD, senior researcher	augmena@lgi.lt	Semen and embryo cryopreservation
Jonas Kutra, PhD, senior researcher	reprodukcija@lgi.lt	Reproductive endocrinology, embryo transfer

## 4. Research profile

Department of Animal Reproduction studies effects of different environments factors on embryos generated *in vivo* and *in vitro*, investigates the impact of ovarian function on oocyte developmental competence and embryo quality. Other studies are conducted to determine the reproductive traits of stallions, boars, rams, dogs, dolphins by defining the dependence of semen quality parameters on the breed, season, individual and other factors. Research is conducted to find most suitable technological cryopreservation parameters for gametes of different animal species including wild ones. We take part in creating cryobank of indigenous endangered animal breeds.

## 5. Key technologies and tools

Embryo production *in vivo* and *in vitro*, superovulation, embryo flushing, sperm and embryo cryopreservation.

Light and fluorescence microscopy, computer assisted sperm analysis, facilities for the IVP.

## 6. Selected publications (max. 5)

1. Kutra J., Pileckas V., Urbšys A., Šiukščius A., Nainienė R. Determination of optimum stallion semen freezing regimes // Journal Medycyna Weterynaryjna. 2008. Vol.64(2). P.161-163. PL ISSN 0025-8628.

2. Pileckas V., Kutra J., Urbšys A. The influence of the genotype on the quantitative traits of bovine semen // Veterinarija ir Zootechnika. 2007. T. 40(62), P. 73-77. ISSN 1392-2130.

3. Kutra J., Šiukščius A., Urbšys A., Pileckas V., Nainienė R., Mankevičienė A. The effect of zearalenone and product Toxy-Nyl Plus Dry on physiological responses of boar semen // Journal Medycyna Weterynaryjna. 2006. Vol.62(1). P.43-46. PL ISSN 0025-8628.

4. Nainienė R., Kutra J., Urbšys A., Pileckas V., Šiukščius A. PCR-sexing, genotyping and viability of bovine preimplantation embryos after freezing-thawing and biopsy // Proceedings of the 13th Baltic Animal Breeding Conference. Parnu, Estonia, 24-27-May. ISBN-978-9949-426-26-3. 2007. P. 49-53.

5. Nainienė R., Kutra J., Urbšys A., Pileckas V., Šiukščius A. Bovine embryo genotyping and freezability after biopsy // Proceedings of the 12th Baltic Animal Breeding Conference, Sigulda. 2006. P.197-203.