

„The role of the methylation of the progesterone receptor isoforms A and B promoters in the regulation of bovine corpus luteum function”.

Supervisor: **dr hab. Robert Rękawiecki**

The scientific goal of the project is to determine the role of methylation of the PGRA and PGRB isoform promoters in the regulation of the corpus luteum (CL) function. The implementation of the presented aim will be carried out by examining: (1) whether there are changes in the expression level of enzymes responsible for methylation and demethylation processes in CL (2) whether these changes affect the level of DNA promoters methylation of progesterone receptor isoforms A and B (3) whether the factors regulating CL functions can modulate the processes of methylation and demethylation within the promoters of isoforms A and B of the progesterone receptor, and thus the effect of this hormone on target cells.

Requirements for the candidate:

- Higher education (second-cycle studies) in the field of biological sciences (biology, biotechnology), agricultural (zootechnics), or related sciences;
- Basic knowledge of animal physiology and cell biology;
- Knowledge of basic techniques of molecular biology (eg Real-time PCR, Western blot, agarose electrophoresis), microscopic (IHC, imaging), cell culture, and statistical analysis of the obtained results;
- Preparation of presentations and scientific abstracts as well as presentation of the obtained results at scientific conferences;
- Good command of spoken and written English;
- Availability and readiness to work in the field of collecting material for research and in vitro cell cultures;
- Motivation to work in science, good work organization, analytical thinking, ability to work individually and in a team;

Required documents:

- Curriculum Vitae (CV)
- Motivation letter
- Master Thesis Certificate
- Recommendation letter
- Other documents that, in the Candidate's opinion, may significantly contribute to the recruitment proces

For more information about the project: r.rekawiecki@pan.olsztyn.pl