

**Institution:**

A. Wrocław University of Environmental and Life Science (WUELS), Faculty of Veterinary Medicine, Department and Clinic of Obstetrics, Ruminant Diseases and Animal Health Care, assistant professor; B. Institute of Immunology and Experimental Therapy (IITD), Polish Academy of Sciences, Wrocław, Weigla Str.12 – head of the Laboratory of Reproductive Immunology

**Principal investigator and contact person** :Anna Chelmonska-Soyta [soyta@iitd.pan.wroc.pl](mailto:soyta@iitd.pan.wroc.pl)

**Key personel**

Name	Research Tasks	Email:
Kinga Switala-Jeleń, PhD, assistant prof.	estrogen receptors gene expression; promoters structure and activity	<a href="mailto:kinga_switala@poczta.onet.pl">kinga_switala@poczta.onet.pl</a> (WUELS)
Tomasz Maj, PhD student	estrogen receptor protein expression and modulation by cytokines (IFN) in immune cells	<a href="mailto:maj@iitd.pan.wroc.pl">maj@iitd.pan.wroc.pl</a> (IITD)
Anna Piesta, PhD student	immune cells activity (activation antigens expression and proliferation) during sperm and pregnancy recognition processes	<a href="mailto:anna_piesta@wp.pl">anna_piesta@wp.pl</a> (IITD)
Michał Gorczykowski, PhD student	IFN-tau modulation of bovine immune cells response	<a href="mailto:michgorcz@interia.pl">michgorcz@interia.pl</a> (WUELS)
Jan Twardoń, PhD, professor	in vivo experiments in cattle during early pregnancy	<a href="mailto:jantwardon@wp.pl">jantwardon@wp.pl</a> (WUELS)

**Research profile**

main research activity of the group is to investigate immuno-endocrine relationships in males and females, especially interaction between cytokine and estrogen induced signal transduction pathways in the context of early pregnancy (female) and some autoimmune diseases (male). Currently the hormone and cytokine modulation of ER alpha in immune cells during estrus cycle, early pregnancy and model autoimmune disease are under investigation. Experiments are conducted in mice and cattle.

**Key technologies and tools:** protein expression, gene expression, primary and cell line culture, embryo culture, flow cytometry

**Selected publications:**

1. Gmyrek GB, Sieradzka U, Goluda M, Gabrys M, Sozanski R, Jerzak M, Zbyryt I, Chrobak A, Chelmonska-Soyta A., Flow cytometric evaluation of intracellular cytokine synthesis in peripheral mononuclear cells of women with endometriosis. *Immunol Invest.* 2008;37:43-61.
2. Tomasz Maj, Anna Chelmońska-Soyta. Pleiotropy and redundancy of STAT proteins in early pregnancy. *Reprod Domest Anim.* 2007 42(4):343-53
3. Gierek D, Baczyńska D, Ugorski M, Bazer F, Kurpisz M, Bednarski T, Gorczykowski M, Chelmonska-Soyta A. Differential effect of IFN-tau on proliferation and distribution of lymphocyte subsets in one-way mixed lymphocyte reaction in cows and heifers. *J Reprod Immunol.* 2006 Oct;71(2):126-31
4. A. Chelmonska-Soyta, T. Maj, K. Switala, L. Kiczak, A. Miazek, A. Halbersztadt, Wrocław, Poland, Involvement of Estrogen Receptor Alfa in the Development of Immune Response to Syngenic Testicular Germ Cells (TGC) in C3H/He Male Mice. 5th ECRI Abstracts, AJRI, 2007, 58,3, 181-237