

## CONCLUSIONS

We analysed eucaryotic initiation translation factors that are responsible for protein synthesis in mammalian oocytes. As well we examined the affinity of this factors to <sup>7</sup>mCap Sepharose during in vitro condition. In our laboratory was optimised the protocol for generation of porcine parthenotes that serve us as a model for analysis of cellular processes in zygotes with biochemical approaches.

Antibody microarray analysis was used to investigate the regulation of signalling pathways primarily during meiotic maturation of pig oocytes and subsequently in comparison to other species (bovine, frog and sea star).

On the base of proteome analysis of maturation of oocytes was chosen UCH-L1 molecule and is studied in detail in mammalian oocyte. Almost thoroughly was analysed function of UCH-L1 in porcine and bovine oocyte using specific inhibitors and overexpression. The mechanism that is involved UCH-L1 in antipolyspermy defence in mammalian oocyte was unveiled in our laboratory.