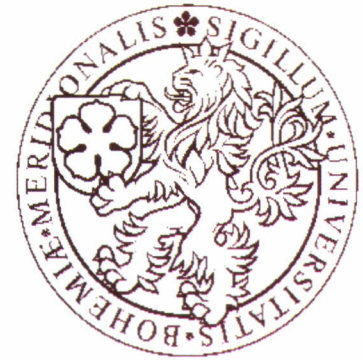




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Assessment of thesis by Marie Jakešová: **The role of Csf1 ^{During} Preimplantation Mouse Development**

Formal aspects of Bachelor thesis of Marie Jakešová: Thesis is written in classical format starting with introduction, followed by material and methods, results and discussion. The thesis is very well written, particularly in very good English, with clear and logic structure. The introduction is deep enough for Bsc. thesis, methods are sufficiently characterized and text is supported by explanatory figures. Minor comments:

1. list of abbreviations used in the thesis would be helpful,
2. some uncommon terms such as “osteopetrotic” phenotype deserve explanation for non-specialist and ignorant (such as this reviewer)
3. Fig. 3 is rather poorly printed, Fig 7. is not recognizable;

Practical aspects of the thesis: The work was done during one year, which is relatively small amount of time. Yet, Marie was able to learn and use several methods including Mouse embryo *in vitro* culture, embryo immune-staining, double strand RNA preparation, microinjection techniques and confocal microscopy.

Marie Jakešová experimentally addressed possible role of Csf1 in early development. First, she used chemical inhibitor of Csf1 receptor kinase, then attempted to deplete Csf1 by RNA interference. Unfortunately, these experiments did not provide clear new finding. On the other hand that is perfectly acceptable for Bsc. research, where the methodology and learning of experimental work and scientific writing is the priority.

Questions:

Is there an alternative approach to chemical inhibition of Csf1 receptor? (Genetic?) Has Csf1 only one receptor or is there possibility that there are several redundant receptors?

Taken together, my impression from the thesis is that Marie Jakešová spent reasonable time during laboratory experiments and then wrote solid bachelor thesis which is well above the average and deserves to be marked as excellent. The actual mark, however, depends on presentation. Good luck in future studies and scientific experiments.

České Budějovice
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