Supervisor comments on of the bachelor thesis of Katharina Perfahl entitled "**Isoenzymes of cathepsin L-type peptidases in the tick *Ixodes ricinus***"

Kathy came to our lab as a participant of the "Linz-Budweis" joint international educational program of Biological Chemistry in late 2016. Since our lab headed by Dr. Kopáček and myself, although located at the Institute of Parasitology, is by the range of used methods as well as by orientation of scientific journals used to publish our results truly Biology-Chemical, I happily agreed on the fact to supervise another bachelor student of this wonderful program. This decision was made also based on the wonderful experience with previous students of the "Linz-Budweis" program either as supervisors or reviewers of previous diploma works.

Kathy will present the topic of the Bc. diploma work herself, so I would only like to add that presented topic is only a smaller mosaic stone within a bigger image of a long-term project on late tick digestive peptidases of cathepsin L and D types, that play a potential role in producing antimicrobial fragments of hemoglobin helping to preserve enormous amounts of imbibed blood in a fertilized tick female in post feeding period and during oviposition. The results will soon be published by my PhD student David Hartmann as the first author and Kathy, due her input to this work, will certainly appear on the Author list of this publication.

Besides the scientific quality of the thesis, I have one major point that should be taken in mind and possibly further discussed among involved supervisors and organizers of the study program: I would like to point out my bad surprise with how little time could Kathy dedicate to the actual lab work, when the substantial part of her contribution was made during a three week continuous working in the lab in the summer of 2017. Otherwise her visits to the lab were limited to several hours a week, with huge (weeks to months) gaps etc. I have not investigated whether this was caused by substantial health problems, that Kathy unfortunately had to go through during her studies, or whether this becomes a major handicap of the otherwise successful bachelor program, when students are pressed to do two different diploma works and while staying in Budweis, they have constant block practical lesson instead collecting experience in a real scientific environment and working on their theses. Thus, the presented work, regardless mistakes, is a small miracle to me. However, to give it some full meaning, we had to let Kathy mix her real contribution with the work and results of other people working on the broader range of this project although I am fully convinced that with Kathy's skills and enthusiasm, she could perform most of the work herself if she would have the time to do so.

Taking this in mind I have to evaluate her work as good or very good with the final mark demanding on the opinions of reviewers and comity upon the oral presentation during her Bc. defense on 28. January 2018, and I wish her very best for her future carrier

In Č. Budějovice, January 28, 2019

RNDr. Daniel Sojka, Ph.D.