

"Functional analysis of fibrinogen-related proteins (FREPs, Ixoderins) of the tick *Ixodes ricinus* and their function in pathogen transmission"

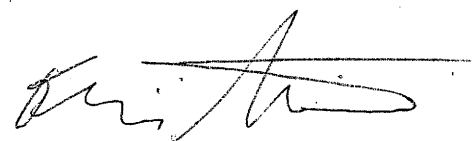
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&
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Helena came to our laboratory at the beginning of year 2013 and immediately became a valuable member, mainly because of her knowledge, experience and, fresh and critical way of thinking. Her topic touched a specific group of lectins, FREPs, tick proteins with not yet fully known function. She confirmed presence of three groups of FREPs in the *Ixodes ricinus* genome and performed qRT-PCR profiles for the selected members of each group. Further, she evaluated their involvement in the phagocytosis (by tick hemocytes) of model pathogens and *Borrelia afzelii* using RNA interference technique. Finally, she performed transmission experiments on mice after Ixoderin's knockdowns.

I must say, that Helena worked mostly independently, but with a detailed knowledge about the method and a reason, why she is using the certain technique. She was able to analyze obtained results and present it to us on regular meetings. Here data will be used in the preparing manuscript about the function of tick Ixoderins. Last but not least, I must highlight her advanced level of written and spoken English. I would fully recommend that Helena stays in science and continues for a PhD program.

I am fully convinced that the submitted thesis can be accepted as a Master's thesis and evaluated by the mark "1".

In České Budějovice 18th January 2016



RNDr. Ondřej Hajdušek, Ph.D.
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