

Introduction of the defendant RNDr. Jidřich Chmelař by the PhD. thesis supervisor Jan Kopecký

I have known Jindřich since 2003, when he started to work on his MSc. diploma work under my supervision. The subject of the diploma work was "Identification of immunomodulatory proteins from the saliva of the tick *Ixodes ricinus*". Jindřich constructed cDNA libraries from the tick salivary glands and prepared several recombinant proteins with serin proteases inhibitory activity (serpins). At that time already he got acquainted with the methods of molecular biology like PCR, real-time PCR, molecular cloning, DNA sequencing, and preparation of recombinant proteins in various expression systems, construction and screening of cDNA libraries, protein purification methods.

After finishing his undergraduate studies, he started the PhD. study programme. He continued in the field of his undergraduate studies. The subject of his PhD. thesis is the characterization of *I. ricinus* salivary serpins, especially with respect to their immunomodulatory activities. Out of eight different serpin clones Jindřich Chmelař isolated four full length serpin sequences and published them in the GenBank. One of these serpins he prepared recombinant, characterized it biochemically and analysed its effect on blood clotting and inflammation. Construction of four cDNA libraries from different feeding stages of *Ixodes ricinus* and their bioinformatic analysis preceded the serpin story.

All these results were summarised in two very comprehensive papers published in the top journals (BMC Genomics and Blood). In this respect I would like to highlight that Jindra has not published numerous papers, but ones he wrote a MS, it was excellent.

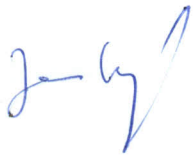
To improve his skills in molecular biology and immunology Jindra twice visited the Laboratory of Malaria and Vector Research, NIH, Rockville, Maryland, USA (Prof. J. Ribeiro), where he first met his second supervisor Michail Kotsyfakis, and Swedish University of Agricultural Sciences, Department of Anatomy, Physiology and Biochemistry (Prof. G. Pejler).

Jindra helped our Department a lot. He introduced methods of molecular biology into our labs and his cDNA libraries provided the starting information for people dealing with salivary proteins and their effects on the host haemostasis, inflammation and immunity. He has also broadened our knowledge about the tick saliva effect on platelet aggregation and inflammatory reaction.

I found Jidřich Chmelař intelligent, highly motivated, focused and hard working student. He is willing to learn and always ready to teach and help anybody who needs it. He is very good team player and a valuable addition for any group of scientists.

In my opinion, Jindra proved his ability to be an independent scientist.

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