

Supervisor's evaluation of PhD Thesis:

**Eva Nováková: Molecular phylogeny and genome evolution  
of insect symbiotic bacteria**

Eva Novakova started her work on symbiotic bacteria in our laboratory during her bachelor study. This may seem as a unreasonably long time spent sedentarily on one place. Fortunately, due to Eva's enthusiasm and activity this is not the case. Eva spent altogether more than a year abroad, in one of the best laboratories in this research area, laboratory of Dr. Nancy Moran in Tucson and later at Yale. During both visits she was able to obtain results for papers of very good quality.

Consequently, Eva's PhD thesis is composed of several studies dealing with different models and topics. However, they all are ultimately centered on few important evolutionary questions: is there any pattern relating phylogenetic and ecological features of symbiotic bacteria?, what happens with genetic information during the transition from free-living to symbiotic bacteria?, how much dynamic are the symbiont and host genomes in terms of horizontal gene transfer?

As supervisor I am completely satisfied with Eva's PhD Thesis and more generally with her work in the laboratory. She participated substantially in the development of the symbiosis research framework in our laboratory and the shift from descriptive and phylogenetic approaches to genomics and functional studies. It is therefore natural that Eva took part in designing our grant projects on the insect-symbiont topics, became a co-author of two invited book chapters and represented our laboratory at various international meetings. Due to her capabilities, she also managed to establish several important international collaboration that proved to be extremely helpful in our research.

In my opinion Eva's work not only fulfils the requirements of Faculty of Science on PhD thesis, but significantly contributes to the development of insect-bacteria association research.

In České Budějovice, June 17, 2012



Václav Hypša