

Review of the thesis of Marie Zelená:

Functional study of the SUF pathway in the cell of *Monocercomonoides exilis* and *Paratrimastix pyriformis*

Marie Zelená was not a newcomer to our team, because she wrote a bachelor's thesis under my supervision and she continued without change of the topic to her master studies. The motivation of the diploma project was to find evidence for functionality of the unique system of FeS cluster assembly in *Monocercomonoides exilis* – the SUF pathway. This goal was fulfilled.

Marie was in the laboratory supervised by consultant Priscila Pena Diaz, who joined our team at the beginning of Marie's diploma project and this circumstance played a key role in the success of the whole work. The initial project was quite ambitious and due to the nature of the organism we work with, most of the techniques required in vitro assessment and the experiments that in other labs are performed with the aid of molecular genetics, in our case were strictly heterologous. Under the systematic and strict supervision of Priscila, Maruška was not only able to fulfil the goal of the thesis and gather important experimental data broader significance for our team, but more importantly learned laboratory discipline, systematic and precise work and careful data interpretation, not mentioning the plethora of methods of molecular biology, and enzymology. It was not as smooth as it sounds, crises came, and tears appeared, but it was worth the effort, the thesis was finished and Marie is a well-trained experimenter.

Maruška decided to write her diploma thesis in English mainly for Priscila to be able to revise the text. I was curious about the process of writing but positively surprised. Maruška was keeping the deadlines I was giving her and partly thanks to the COVID crisis and extension she finished the writing without visible stress. The criticisms of the manuscript versions coming from Priscila and me were extensive, but our interventions to the texts were minimal. I also appreciate the series of images on reaction schemes and protein structures in the introductory chapter, which Maruška made by herself, not copy-pasting images from published papers or internet. From Maruška's writing I gained the impression that she understands the techniques, her data and the overall context very well. Also, she displays the skills of a very good writer, particularly because the work was not in her native language, and her writing was not only accurate and scientifically sound, but it also had the tint of elegance and style.

I am going to conclude my evaluation at this point and leave other critical evaluation of the thesis to the opponent. I would like to state that in my opinion the thesis is high quality and Marie Zelená is a good candidate for a master degree.