



Posudek na magisterskou práci Michaely Veselíkové

Misa has the notable distinction of being the first student to join our lab. She joined our group after initially starting her MSc studies in the lab of Lukas and Silva Trantirkovi. After Trantirkovi left for the Netherlands, they asked us to continue with Silva's project and to supervise Misa while she attempted to finish her Master studies.

It was a challenging time for all of us. We were just establishing a new lab while Misa needed to change to a new supervisor. Furthermore, the focus of our projects are very different from the one that Misa brought to our lab. However, Misa's enthusiasm about her project helped us to quickly dive into the world of methylation. This transition was also greatly aided by Misa's good understanding of the English language, which helps with every day communication in the lab.

The status of Misa's project when she came to us one year ago was one of disarray. This was mostly due to the fact that multiple people had contributed small pieces of data to this project and the supervisor that wrote the grant was no longer in direct contact. Further, the initial experiments showed that MT420 is not involved in methylation of SL RNA as predicted. Thus the original hypothesis about the function of MT420 was not correct. Suddenly we were dealing with a protein of unknown function and unknown localization within the cell. Since Misa had already spent 1+yr on her MSc. studies, she was determined to finish in May 2010. While I remained skeptical of this deadline, we focused her efforts on the basic characteristics of this unknown protein. At the beginning we performed very detailed bioinformatics studies to get as much insight into the putative function of this protein as we can. The bioinformatics showed that this protein may be mitochondrial and may be involved in the methylation of the mitochondrial translation release factor. Next strategy was then clear. We have to show the localization of this protein, produce enough recombinant protein for subsequent in vitro analysis and create DKO or RNAi cell line in which MT420 will be silenced for further studies. The work just presented by Misa was all completed within the last year. This progress is quite significant and I am very pleased with Misa's productivity. She takes on every challenge with confidence, she is not afraid to learn new methods and she can be very efficient. As she continues to grow as a scientist, I wish that she could show the same enthusiasm for performing the experiments as in analyzing the results and demonstrating more critical thinking.

Misa's last year was full of change, but she adapted well. She joined new lab, learned a lot of new methods, and participated in labmeetings and journal clubs. Furthermore, she recently presented her work at Jirovcovy protozoological days and in a few weeks she will be presenting her work at the EMBO Young Scientist Forum. With her improving presentation skills, writing skills and better critical thinking, she has become a valuable lab member and a promising scientist. Thus, I am very pleased that Misa decided to stay in our lab for her PhD studies.

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