



Supervisor's evaluation of Lucie Novotná's master's project: "Functional analysis of subunit MRB3010 of the mitochondrial RNA binding complex 1 in *Trypanosoma brucei*"

Lucie Novotná joined the Laboratory of Molecular Biology of Protists in 2005, soon after beginning her bachelor's studies at the Department of Molecular Biology. She soon became very active in the laboratory both in terms of performing experiments as well as taking on many responsibilities in the daily operation of the lab. During this time she was involved in the publication of a manuscript that was accepted to the journal RNA, in which she is a co-author.

Her master's project was a continuation of this line of research, dealing with understanding the function and composition of the provisionally named mitochondrial RNA complex 1 (MRB1) in *T. brucei*. This has proven to be a difficult project since it deals with the rather Byzantine complexity of the RNA metabolism present in the organelle of this organism, and which has virtually no precedent outside of the encompassing order Kinetoplastida, and thus is a blank slate. In her thesis, she describes major contributions to understanding one of the subunits of this complex, called MRB3010, which seems to be a core member of MRB1. This work was done in collaboration with the Laurie Read laboratory at SUNY Buffalo, and will be part of a manuscript that is currently under preparation.

In the thesis, she describes experiments that reveal her increasing facility with basic molecular biology methods, which were used to generate RNAi knockdown cell lines in both stages of the parasite, as well as more difficult techniques such as real time PCR and glycerol gradient sedimentation. In addition, she also learned indirect immunofluorescence, which may prove to be a powerful tool for addressing the composition of MRB1.



More importantly, however, she has begun to think about her work critically and we have had several fruitful discussions pertaining to this project as well as general mitochondrial and trypanosome biology. Also, she has written and presented this work in English, as well as participated in several international conferences, which is a vast improvement from when she first started and only communicated with me in Czech (which is a high price to pay for my answers in a rather primitive rendition of the language). I feel that this reflects her profound personal development and bodes well for her future as a researcher.

She will be continuing the laboratory working on a different project than the one she worked on so diligently during her bachelor's and master's studies. While I am sorry to see her leave to pursue this goal, I understand her choice since it is better for her continued development to tackle different challenges. I wish her much success in her future endeavors and hope that we continue to be in contact, since I really enjoyed our discussions. Lucko, I thank you very much for your excellent work, as well as being an enthusiastic and pleasant colleague on this project-I look forward to hearing about the progress in your next projects.

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Hassan Hashimi, Ph.D.