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Supervisor's Report on Jan BRABEC

Jan (Honza) Brabec, called Brabino, finished his degrees in 2004 (Bc. degree) and 2006 (MSc. degree). In his undergraduate studies, which resulted in a publication of an article in the *International Journal for Parasitology* (Brabec et al., 2006), Honza clearly demonstrated his pre-dispositions for scientific work and dedication to molecular systematics and phylogenetics. Therefore, I was quite happy that he started his PhD studies in October 2006.

The original project included two main topics:

(1) to search for new molecular markers that would help us unravel the still controversial and unclear evolution of the most basal groups of tapeworms ("splice-leader project"); and

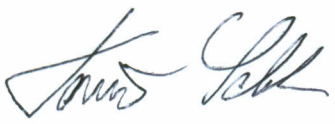
(2) to use molecular markers (nuclear ribosomal and mitochondrial gene sequences) to provide the information necessary for more robust taxonomic conclusions in lower-level studies on the systematics of fish tapeworms and their diagnostics.

The first topic was a big challenge and would represent a real thaw in our rather "frozen" understanding of how several key adaptations of tapeworms, especially the lack of an intestine and the appearance of a proglottization, have evolved. This is because standard molecular markers widely used in phylogenetic studies did not provide unequivocal support of any scenario of the early branching of tapeworms. Honza actually spent a lot of time and an extraordinary amount of effort in looking for the splice-leader sequences of selected representatives of basal tapeworms. Even though he did not succeed in reaching the expected outcome, he has learned very much and demonstrated his ability for top-level molecular phylogenetic work. In this sense, he was quite successful.

The second topic was apparently less risky and less exciting, but Honza fulfilled this objective by obtaining a numerous amount of data. They have enabled him to contribute significantly to our knowledge of the suitability of specific molecular markers in phylogenetic and taxonomic studies (results were summarized in his key paper published in the *International Journal for Parasitology*), of the availability of molecular diagnostics of human tapeworms (paper in the *Journal of Clinical Microbiology*) and by providing molecular support for taxonomic conclusions inferred from morphological data (another five papers or manuscripts in review).

Honza is a key member of our small cestode team because he provides invaluable molecular data, without which our studies on tapeworm diversity, systematics and phylogeny would not reach an internationally competitive level. Honza is a smart guy, totally reliable and able to write well in English, which is not always the case of graduate students. I see just one flaw in him: he is too slow in presenting his interesting results that are worthy of publication because he is not self-confident enough and he highly underestimates his knowledge and skills.

Without any hesitation, I strongly recommend Honza's thesis for defence and wish him success in his future career. I am also much obliged to Miroslav Oborník, co-supervisor and head of the laboratory in which Honza spent most of his time, and to Pete Olson from the Natural History Museum in London, external supervisor, who intellectually guided Honza during his PhD studies, especially with his splice-leader project.



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