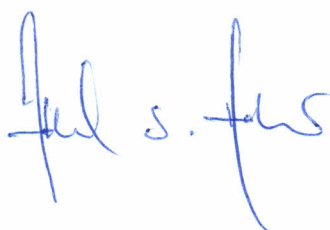


### **Evaluation of Master thesis of Martina Hrabcová by her supervisor:**

The MSc thesis of Martina Hrabcová was a side project which arose in the Laboratory of Fish Protistology due to the encounter of malacosporean SSU rDNA sequences in fish kidneys, when screening for infections with other myxzoans. The aim of this project was to obtain an idea of the biodiversity of malacosporeans in fish from central European freshwater environments, to try and set up a malacosporean life cycle in our new in-house aquaria system and to culture specific pathogen-free freshwater bryozoans, which serve as hosts for Myxozoa belonging to the Malacosporea. Additionally, Martina screened marine bryozoans for malacosporean infections since there is no information on the presence or absence of malacosporeans in marine bryozoans.

Martina completed her BSc at the Laboratory of Veterinary and Medical Protistology (head: M. Kvac) and she came to my laboratory in the search for new techniques and challenges. I was quite surprised how quickly Martina picked up on the new topic, how easy it was for her to understand the related literature and how fast she learned both, laboratory and computational techniques. The cultivation of bryozoans and life cycle studies on malacosporeans had not previously been done in our laboratory and required a creative mind for attaching colonies to petri dishes, hatching bryozoans from statoblasts etc. Martina did this incredibly well and with a high degree of independence. She also organised, without my contribution, different algal colonies from the Hydrobiology Department of the university, for feeding the cultivated bryozoans. As a result of these efforts she set up a culture of SPF bryozoans, for the first time, in our laboratory. A single aspect of Martina's thesis has not been successful, i.e. the experimental transmission of malacosporeans from bryozoans to fish and vice versa. The outcome of this experiment could potentially have been improved by getting a better idea of the infection status of the donor animals and by cohabitating them for a longer period of time, however, the latter was impossible in the limited time frame of the Master thesis. With regard to the biodiversity aspect of the thesis, Martina invested a lot of energy in PCR screening hundreds of fish, thus obtaining enough novel sequences and interesting phylogenetic results to publish the related work in the *International Journal for Parasitology* (including cover picture of related edition). This is an outstanding contribution for a master student. I was impressed by the quality of her writing and the high level of her scientific English, and I am, overall, highly satisfied with her thesis and can only recommend it for defense. I believe Martina has a great potential as a scientist, but unfortunately she does not currently plan to continue in research. However, judging from her parenting and social skills she probably does well in all chosen aspects of her future.

In Ceske Budejovice, 18. 5. 2015



Astrid Holzer