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Supervisor's Report on Dagmar Jirsová

I met Dagmar Jirsová (Dáša) in early 2009, when she came to ask for a possibility of a doctoral study on African fish parasites. There were research topics deserving attention and growing collection of samples in place, hence, shortly after, Dáša became my doctoral student. The original idea of phylogenetic study on a large taxonomic scale of East African fish parasites was overrun by more tempting, but also more difficult task. The allied basins of the Nile and Lake Turkana host similar faunistic assemblages and Dáša was supposed to reveal genetic consequences of five millennia of separation of maternal and derived populations of model host and its parasite. Till 2006, literally nothing was known about Turkana fish parasite fauna. It took years and much effort of numerous specialists to characterize Turkana's fish parasite communities. Multiple new species of helminth parasites were described, including some biogeographically interesting ones. However, it remained unclear whether the observed patterns reflect Turkana's isolation and its specific environmental setting, or merely a lack of knowledge. Thanks to Dáša's work, we can now say that the largest desert lake on Earth is not just a temporary puddle awaiting its dry end. Instead, Turkana poses an evolutionary whirlpool where some parasitic organisms rapidly diverge in contrasting aquatic environments.

The way to this point was not easy. Dáša collected extensive samples of her model hosts and parasites during two field trips in Kenya (2009 and 2010). In the field, Dáša turned out to be hardy and hardworking, as well as easy going fellow. Subsequently, Dáša proved to be remarkably systematic, precise and independent in terms of managing large datasets and finding solutions to methodological troubles she met. She also organized her two stays in the Natural History Museum in London in 2011 and obtained partial funding for her project from the Grant Agency of South Bohemia University.

As reflected by her publication history, Dáša has multiple cooperations and participates on several projects. I am not sure whether she inherited this tendency from her parents, or she gained it from supervisor. However, this characteristic had both positive and negative effects on her doctoral study and career. It allowed her to get broader experience in different molecular techniques and to establish lasting cooperation with different research teams. As a result, Dáša made marked progress in terms of methods and analytical tools she acquired during her doctoral studies. On the other hand, Dáša's multiple interests delayed completion of the doctoral study itself. Dáša had always many ideas, sometimes even too many, but their formulation took her time and she remained rather uncertain in writing. Coupled with always busy and slow supervisor and a Dáša's working position at the Mendel University in Brno, where she became head of molecular lab in 2015, the delay of publication of results was inevitable. However, the long formulated papers are finished and I am very satisfied with the output.

I recommend Dáša's thesis for defence and wish her success in future life and career. I would like to thank all colleagues who helped Dáša run and complete her doctoral project, especially the consultant Jan Štefka, who's input was essential from the very beginning, as well as Tomáš Scholz (both from the Institute of Parasitology, BC CAS, České Budějovice) and Lukas Rüber (Natural History Museum, London) who were of great help and assistance throughout Dáša's doctoral study.

Miloslav Jirků

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