

Supervisor's review on the master thesis of Lukáš Calk:

„Detection of positive selection in reproductive genes of songbirds“

The aim of the Lukáš Calk's thesis was to identify genes expressed in songbird spermatozoa and female reproductive fluid that evolve under positive selection and could therefore play an important role in postcopulatory sexual selection. Lukáš worked very independently on his project, the results are interesting, and I believe that after some additional analyses they can be published in a high quality scientific journal. The evolution of reproductive genes is generally understudied in birds, and the Lukáš's findings bring new and important insights into the mechanisms driving the sperm evolution in songbirds and possibly also the evolution of postcopulatory reproductive isolation, which can accelerate the radiation of songbirds. The thesis is very well written, and I have no important comments to it. I appreciate the way how Lukáš combined the biological and bioinformatic view on the problematics. I think this is generally the Lukáš's greatest strength, that he is an excellent programmer and bioinformatician and at the same time understands biological problems. This is still not very common, and I am glad that thanks to the Master's program in Bioinformatics we have such students. Lukáš was generally a very active student. During the last 4 years, he spent in our lab, he actively participated in our lab meetings and gave useful advice to other students in our group. So I am glad to have Lukáš in my team and I am looking forward to our future work together as he plans to continue his work in our lab during his PhD studies.

In Prague, 19.1.2024

RNDr. Radka Reifová, Ph.D.