

Jury Member Report – Doctor of Philosophy thesis.

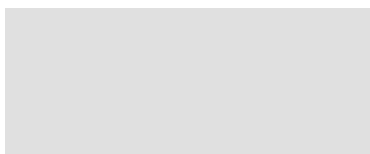
Name of Candidate: Mariia Vlasenok

PhD Program: Life Sciences

Title of Thesis: Transcriptomic analysis of the interaction between pre-mRNA splicing and intronic polyadenylation

Supervisor: Associate Professor Dmitri Pervouchine,

Name of the Reviewer:

I confirm the absence of any conflict of interest	
Assistant Professor Dmitry Ivankov	
(Alternatively, Reviewer can formulate a possible conflict)	
	Date: 11-12-2023

The purpose of this report is to obtain an independent review from the members of PhD defense Jury before the thesis defense. The members of PhD defense Jury are asked to submit signed copy of the report at least 30 days prior the thesis defense. The Reviewers are asked to bring a copy of the completed report to the thesis defense and to discuss the contents of each report with each other before the thesis defense.

If the reviewers have any queries about the thesis which they wish to raise in advance, please contact the Chair of the Jury.

Reviewer's Report

Reviewers report should contain the following items:

- Brief evaluation of the thesis quality and overall structure of the dissertation.
- The relevance of the topic of dissertation work to its actual content
- The relevance of the methods used in the dissertation
- The scientific significance of the results obtained and their compliance with the international level and current state of the art
- The relevance of the obtained results to applications (if applicable)
- The quality of publications

The summary of issues to be addressed before/during the thesis defense

In the presented PhD thesis “Transcriptomic analysis of the interaction between pre-mRNA splicing and intronic polyadenylation”, Mariia Vlasenok investigated the interplay between alternative splicing and cleavage and polyadenylation.

Mariia considered the kinetic model for the interplay and showed that a substantial fraction of intronic polyadenylation events are unaccompanied by alternative splicing and can be attributed to byproducts of the dynamic interaction between cleavage and polyadenylation and splicing mechanisms.

The thesis has one of the standard organization. It consists of seven chapters, “Introduction”, “Background”, “Thesis objectives”, “Materials and methods”, “Results”, “Discussion”, and “Conclusion”.

The dissertation conforms to international standards. It has a clear structure; the topic corresponds to the actual content; the conclusions are fully supported.

The thesis is written at a very good level of English. The thesis is formatted accurately; the number of typos is very low. I would only suggest a couple of corrections:

1. P. 22: “... protein primary sequence.” This should be corrected either to “... protein primary structure” or to “... protein amino acid sequence”.
2. Sometimes terms are linked to its position in the Glossary, sometimes not. I did not understand the pattern, so maybe to consider making the terms in the same format throughout the text?

However, the remarks listed above do not diminish the overall good impression from the thesis.

To summarize, I rate the PhD thesis of Mariia Vlasenok as very interesting and important, of a high quality and scientifically significant.

Provisional Recommendation

I recommend that the candidate should defend the thesis by means of a formal thesis defense

I recommend that the candidate should defend the thesis by means of a formal thesis defense only after appropriate changes would be introduced in candidate’s thesis according to the recommendations of the present report

The thesis is not acceptable and I recommend that the candidate be exempt from the formal thesis defense