Přírodovědecká fakulta
Faculty of Science

Jihočeská univerzita v Českých Budějovicích
University of South Bohemia in České Budějovice

STATEMENT OF THE BACHELOR THESIS SUPERVISOR

Name of the student: Paraskevi Tziortzouda
Study program: **Biological chemistry**
Department/Institute: **Deaprtment of molecular biology, University of South Bohemia**
Thesis title: **Creation of Drosophila melanogaster mutants for multiple sirtuin genes (Sirt2, Sirt6 and Sirt7)**

Supervisor: RNDr. Alena Krejci, Ph.D.
Supervisor's affiliation: **University of South Bohemia, Faculty of Science**

	Point scale[1]	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0–3	3
Ability to work with literature	0–3	1
Language and stylistics	0–3	3
Formal requirements - points in total		7
(2) PRACTICAL REQUIREMENTS		
Fulfillment of the aims	0–3	3
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0–3	2
Discussion quality - interpretation of results and their discussion with the literature	0–3	2
Experimental difficulty of the thesis, independence in experimental work	0–3	3
Contribution of the thesis to the knowledge in the field and the possibility to publish the results (after eventual supplementary experiments)	0–3	3
Practical requirements - points in total		13
POINTS IN TOTAL (MAX./AWARDED)	20	(0-24)[2]

[1] Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.
[2] Enter the number of points awarded.

Comments of the supervisor on the student and the thesis:

Paraskevi worked on her bachelor thesis in my laboratory as part of her international study program of Biological chemistry from November 2015 till Juy 2016. She got a project that was started by other Linz students from the previous year and that aimed to create flies with multiple loss of function alleles of sirtuin genes (as we call it the Superfly). The ultimate goal was to take advantage of the Drosophila system to create a fly where all five sirtuin genes would be missing, a goal hardly achievable in vertebrate systems. Sirtuin genes are well studied in mouse but very little is known about them in Drosophila so the project could be of a broad interest. To combine five mutations present in three different chromosomes into one fly is easier to say than to do. One of the obstacles was the fact that three of the sirtuin genes are present on the same chromosome (Sirt2,6,7 on III.). Therefore, Paraskevi's goal was to combine the preexisting Sirt2 mutation with Sirt6 and Sirt7 mutant alleles, either by meiotic recombination or by introducing the de novo mutations by Crispr system.

Paraskevi did a great job to achieve this goal. She quickly mastered the fly genetics as well as basic molecular biology techniques. She not only reached the main goal of her thesis but she went even further and created the triple recombinant fly. If time alocated to the Linz students was longer she would have created the superfly by herself. She created useful tools for us that allowed us to finish the project while she returned back to Linz. She worked independently, carefully, she understood the project and she was not afraid to ask when necessary. We enjoyed having her in the lab, also because she had a permanent smile on her face.

The only downside of the thesis was the fact that she did not write it while here results were still freshly in her mind but she decided to write up only 9 month later. I think it was then hard to recall all the details of the experiments and to find all the important gel pictures and sequencing data. The thesis was written quite a bit in a hurry and not all the bugs were cought. A lesson for Paraskevi not to leave things at the last moment and also a lesson for me as a supervisor to be more persistent for making the students write up their thesis straight after the finish. Nevertheless, I think we should appreciate the vast amount of work that Paraskevi did in the lab. The results she achieved were extremely useful for us and I hope the knowledge she gained in our lab will be useful for her during her master studies in Edinborough.

Conclusion:

In conclusion, I r e c o m m e n d the thesis to be defended.

In **Ceske Budejovice** date **29th May 2017**

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signature