



Přirodovědecká
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: Aljosa Smajic
Study program: Biological chemistry
Department/Institute: Department of molecular biology, University of South Bohemia
Thesis title: Creation of *Drosophila melanogaster* mutants for Sirt2 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	2
Language and stylistics	0-3	3
Formal requirements – points in total		8
(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	2
Contribution of the thesis to the knowledge in the field and the possibility to publish the results (after eventual supplementary experiments)	0-3	2
Practical requirements – points in total		11
POINTS IN TOTAL (MAX/AWARDED)	19	(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:

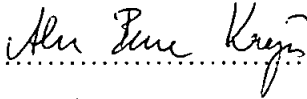
Aljosa worked on his bachelor thesis in my laboratory as part of his international study program of Biological chemistry from November 2015 till July 2016. He got a project that was started by other Linz students from the previous year and that aimed to create flies with multiple loss of function alleles of sirtuin genes. 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 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, Aljosa's goal was to combine the preexisting Sirt2 mutation with Sirt7 mutant allele, either by meiotic recombination or by introducing the de novo mutations by Crispr system.

Aljosa did a good job to achieve this goal. He quickly learned the fly genetics as well as basic molecular biology techniques and he was not afraid to ask when he was lost. His constant smile and infectious optimism guided him through any troubles in the lab. Sometimes I was not entirely sure what the codes in his lab book mean and what are the unlabeled gel pictures; and I would say Aljosa might not always be sure either. This was most apparent when he decided to write up his thesis one year after he finished his project and suddenly it was difficult to put all the details together. Nevertheless, Aljosa succeeded at the end and he created very useful tools for us that allowed us to finish the entire project while he returned back to Linz. He worked with enthusiasm and we enjoyed having him in the lab. The results he achieved were extremely useful for us and I hope the knowledge he gained in our lab will be useful for him in the future.

Conclusion:

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

In Ceske Budejovice date 9th September 2017

..... 

signature