



Přírodovědecká
fakulta
Faculty
of Science

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

SUPERVISOR'S STATEMENT ON BACHELOR THESIS

Name of the student: Barbara Jetzinger
Study program: Biological Chemistry
Department/Institute: Department of Molecular Biology and Genetics
Thesis title: Proteomic analysis of hemolymph during immune response of *Drosophila melanogaster* larvae by UPLC-MS.

Supervisor: doc. Mgr. Tomáš Doležal, Ph.D.
Supervisor`s affiliation: Faculty of Science, University of South Bohemia

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	2,5
Ability to work with literature	0-3	3
Language and stylistics	0-3	2,5
Formal requirements – points in total		8
(2) PRACTICAL REQUIREMENTS		
Fulfillment of the aims	0-3	2,5
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0-3	3
Discussion quality – interpretation of results and their discussion with the literature	0-3	2,5

¹ Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

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		12

POINTS IN TOTAL (MAX/AWARDED)	24	20 ²
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Comments of the supervisor on the student and the thesis:

Barbara was supposed to try to establish proteomic analysis of Drosophila larval hemolymph upon infection with parasitoid wasps. We have never tried this analysis in our laboratory before. Barbara had to learn basic handling and culture of fruit flies, precise larval staging, infection by parasitoids, verification of the infection and most importantly a rapid hemolymph collection from quite a large number of larvae. It is hard to learn these things for someone who is in the same time busy with lectures because it requires precise timing spread in 3 days in various hours. Therefore it took Barbara rather longer time to be able to successfully prepare samples for proteomic analysis. Initial analysis failed and had to be tried couple times before at least two final experiments worked and we got some results. This was just before Barbara had to finish her stay in Budweiss. Nevertheless, she was able to discuss the obtained results with her co-supervisor and analyze the data, obtaining finally quite exciting results – changes in proteins which were previously linked to immune response in general and in few cases to specific response to parasitoid wasps. That was very important for our laboratory to see results which made sense. They are very limited, with just two experiments at the end, but very promising and thus Barbara reached the goal of her work – to establish the measurements in Budweiss proteomic facility which we can now use. Barbara was very independent and she understood her experimental and theoretical work very well. She was able to find completely by herself important literature about the proteins which she identified in her analysis and put her results into the context. She was able to put together simple and clear thesis, again pretty much independently, correcting just few parts after discussion with me. In the very limited time that was available for Barbara (in this time, other students barely learn the basic methodology, with very few experimental attempts), I was very happy about what

² Enter the number of points awarded.

she achieved and that we can now continue in her work.

Conclusion:

In conclusion, I

r e c o m m e n d

without a slight hesitation her thesis for the defense.

In České Budějovice, 17.9.2018



signature