

fakulta v Českých Budějovicích
Faculty University of South Bohemia
of Science in České Budějovice

## STATEMENT OF THE BACHELOR/DIPLOMA\* THESIS SUPERVISOR

Name of the student:

Lucia Svoboda

Study program:

**Biological Chemistry Bsc** 

Department/Institute:

Thesis title:

Characterization of mitochondrial proteins in Trypanosoma brucei

Supervisor:

Priscila Pena-Diaz, Ph.D

Supervisor's affiliation:

Institute of Parasitology, Biology Centre, Ceske Budejovice

	Point scale <sup>1</sup>	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	2
Ability to work with literature	0-3	2,5
Language and stylistics	0-3	2,5
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	2,5
Practical requirements – points in total		12,5

POINTS IN TOTAL (MAX/AWARDED)	19,5	$(19,5)^2$
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Choose one

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

Enter the number of points awarded.

## Comments of the supervisor on the student and the thesis:

When Lucia arrived at the laboratory of Julius Lukes, she joined a collaborative group of two students and two postdocs. Together with a group in Oxford we were going to test a small group of mitochondrial proteins, found by live-imaging of in situ tagged proteins with mNeonGreen. The high throughput data aimed to tag the genome.

Lucia was allocated two proteins for characterization using RNAi and subcellular localisation analysis. The project quickly changed into something completely different, as we noticed that the data we had been given suffered from artifacts and very probable methodological errors. Regardless, the project interested me a lot and allowed Lucia to develop a range of cell biology techniques in the small window of time they obtain for their bachelor projects.

She was a quick learner and became proficient with the techniques and the assays required for her project. She also was capable of working with others and even guiding them performing experiments. However, learning discipline and time management saw a frustrated Lucia in many instances, especially when working in a hurry and under the pressure of multitasking. Solving problems at the bench and looking for solutions when experiments failed at some point became a challenge rather than a task to perform. The standarisation of these trials was usually performed by herself and she would show me the results of her trials and errors before I even knew about the problem. Also, the integration of data processing was a leap of discipline that Lucia grew into after months in the lab. The interpretation of data and the concatenation of concepts in order to be presented have been the steepest mountain to climb. Hopefully, the experience she will now gain from her short experience connecting wet-lab results, evolutionary history, bioinformatics and lots of reading, will serve her as a strong basis for her future studies in science.

signature

## Conclusion:

In conclusion, I recommend the thesis for the defense.

In Ceske Budejovice, 18 June 2018