Přírodovědecká fakulta
Faculty of Science

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

SUPERVISOR'S STATEMENT ON BACHELOR/DIPLOMA* THESIS

Name of the student: Jessica Drozd
Study program: Biological Chemistry
Department/Institute:
Thesis title: Methods for studying gut parasites and their interaction with the host and the host microbiome.

Supervisor: Mgr. Martin Kolisko, PhD
Supervisor`s affiliation: Biology Centre, CAS

	Point scale[1]	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	2
Ability to work with literature	0-3	3
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	3
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
Practical requirements – points in total		13
POINTS IN TOTAL (MAX/AWARDED)	**24**	**(0-24)[2]**

* Choose one

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:

Jessica's project was basically a pilot experiment into understanding the interactions between gut-inhabiting eukaryotic microbes, the host and gut microbiome. Her model was *Blastocystis hominis* in the rat host – an unique model, that is practically available only at our institution. Her main task was to test whether we can gain enough transcriptomic sequence data originating from *Blastocystis* when isolated directly from the gut content. Fecal and gut content samples are famously hard to work with, so this was not an easy task.

Jessica has spent countless hours trying to obtain "decent" RNA sample from infected rat gut content and have shown unusual perseverance. The main issue we had was initial storage of the samples in Trizol, which has been mostly my fault as a supervisor. Jessica managed to get two good RNA samples in the end which have been sequences. She then followed with bioinformatics analyses to establish the proportion of data originating form *Blastocystis*.

Overall, Jessica work hard and independently, and demonstrated rare responsibility for. Undergraduate student.

Conclusion:

In conclusion, I

recommend / ~~**do not recommend***~~

the thesis for the defense.

In **České Budějovice** date **27.7.2020**

.....

signature