



Přirodovědecká
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: Julia Gobl

Study program: Biochemistry

Department/Institute: Department of Parasitology, Faculty of Sciences, University of South Bohemia

Thesis title: Isolation and molecular characterization of the histone methyltransferase DOT1L from the soft tick *Ornithodoros moubata*

Supervisor: Alejandro Cabezas-Cruz

Supervisor's affiliation: University of South Bohemia / Institute of Parasitology

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	3
Ability to work with literature	0-3	3
Language and stylistics	0-3	3
Formal requirements - points in total		9
(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	3
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		15

* Choose one

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

Comments of the supervisor on the student and the thesis:

It is with great pleasure that I do this evaluation of the work of Julia under my supervision. Julia is an exceptional student. Among her many qualities as a young scientist are hard work, independent thinking and proactivity. In consequence, working with Julia was like working with an experienced researcher. Julia was given the task of the molecular characterization of a histone methyltransferase from the soft tick *Ornithodoros moubata*, DOT1L. The thesis was a straightforward project where the student needed to use standard molecular biology tools to amplify, clone and perform sequence analyses of *O. moubata dot1l*. However, from the beginning of the project Julia showed an interest beyond what was mandatory. In consequence, Julia proposed new experiments, established independent collaborations to achieve her aims and analyzed successfully the results generated. Students that connect with their scientific topic/question in such manner are rare and show promise for the future in science.

Histone modifications by histone modifying enzymes (HMEs) is one of the best characterized epigenetic mechanisms in model organisms. However, little is known about tick epigenetics. One first step toward increasing our understanding of tick epigenetics could be the characterization of tick HMEs. In this context, the relevance of Julia's thesis resides in the fact that her results suggest that *O. moubata* DOT1L is involved in tick molting. This opens interesting questions on the role of histone methylation in the regulation of arthropods molting.

I strongly recommend the defense of the thesis and the maximum evaluation for Julia. I also encourage Julia to pursue a career in science. Who knows where her scientific curiosity may lead her in the future?

Conclusion:

In conclusion, I

r e c o m m e n d / d o n o t r e c o m m e n d *

the thesis for the defense.

In **Paris** date 14-09-2018



signature

² Enter the number of points awarded.