

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:

Michael Holzer

Study program:

**Joint Biological Chemistry** 

Department/Institute:

**Department of Molecular Biology & Genetics** 

Thesis title:

Assaying the effect of VEGFR2 receptor inhibition on

preimplantation mouse embryo development.

Supervisor:

doc. Alexander W. Bruce Ph.D.

Co-supervisor (Consultant): Mgr. Lenka Gahurová Ph.D.

Supervisor's affiliation:

Faculty of Science, University of South Bohemia

	Point scale <sup>1</sup> 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	2
Logic in the plan of the experimental work	0-3	3
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	1
Practical requirements – points in total		15
POINTS IN TOTAL (MAX/AWARDED)	27	23

Overall classification: 3-excellent

Choose one

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

## Eventual additional comments of the supervisor on the student and the thesis:

It was my pleasure to have Michael working in my laboratory. He is an incredibly polite and charming individual; well liked by myself and other members of the research group (particularly, my post-doc and his co-supervisor, Lenka Gahurová, with whom he worked closely on a daily basis). Moreover, he proved to be a diligent and careful worker and exceeded our collective anticipation of what is expected of a Bachelors' level research student. Preimplantation mouse embryo research is very technically demanding and by its very nature requires an unavoidably long training period before any experimental work can be undertaken (in this way our group's research is not ideally suited to short Bachelors level research projects). Notwithstanding this fact, Michael was able to pick up nearly all the necessary skills required to work independently and whilst his experiments, in the main, have largely disproved our initial hypotheses regarding a major potential functional role for Vegfr2 during cell-fate specification in preimplantation mouse embryos (albeit with some modest potential effect on the timing of trophectoderm versus ICM cell fate specification being potentially uncovered), he conducted the experiments with a high level of skill. One slight criticism I would make is that he did not write up his research project immediately after finishing in the lab. This has made the writing up process more labored than necessary and also exposed some weaknesses in the original hypothesis about a potential role for Vegfr2, that have emerged in the intervening two years. However, this I am sure is not a problem unique to Michael amongst his peers, and as a collective of supervisors on this programme we should be more forceful in suggesting students write-up expediently. Overall, I am more than satisfied he has received a solid foundation in experimental design, execution, interpretation and presentation and would be able to successfully draw on this training in his future career (should he decided to stay in science - that I understand is far from a given at the moment). I have not the slightest hesitation in recommending his Bachelors project thesis is accepted as successfully defended (with the grade 3-excellent).

Conclusion:

In conclusion, I,

Alexander W. Bruce

recommend/ do not recommend\*.

In: České Budějovice

Date: 3<sup>rd</sup> December 2018

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