



Přírodovědecká  
fakulta  
Faculty  
of Science

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

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

**Name of the student:** Christian Lukas Grechhamer

**Study program:** Biological Chemistry

**Department/Institute:**

**Thesis title:** Comparison of TEM sample preparation methods for immunogold labeling

**Supervisor:** Marie Vancová, Ph.D.

**Supervisor's affiliation:** Faculty of Science, University of South Bohemia in České Budějovice; Institute of Parasitology, Biology Centre of the CAS

	Point scale <sup>1</sup>	Points
<b>(1) FORMAL REQUIREMENTS</b>		
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

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\* Choose one

<sup>1</sup> Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

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	3
Practical requirements – points in total		14

POINTS IN TOTAL (MAX AWARDED)

23

(0-24)<sup>2</sup>

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

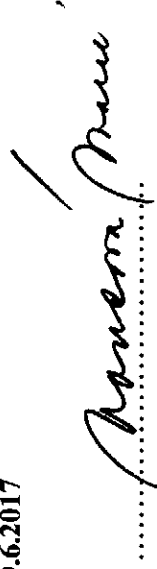
The main topic of the bachelor thesis of Christian Grechhamer was to assess the influence of specimen preparation methods, either “conventional” or recently published, on the immunogold labeling of different antigens. Surprisingly, this type of comparison is missing in the scientific literature, and moreover, we wanted to test these methods prior to their introduction to the portfolio of methods used in EM core facility. Results confirmed my personal experience that the quality of the antibody and the type of antigen belong to the key factors for successful localization of the antigens despite of “native”-like methods or denaturation steps included in several techniques.

Christian contributes to an understanding of a given issue very good. Collected data allow the evaluation of obtained results that are clearly interpreted. Christian (under supervision of Jana Schrenková-Kopecká), mastered thoroughly several techniques, including the sectioning, the TEM operation, and quantitative comparisons of immunogold labelling results.

**Conclusion:** In conclusion, I r e c o m e n d.

In **České Budějovice**

date **19.6.2017**



signature

<sup>2</sup> Enter the number of points awarded.