



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: IDA RAMZY
Study program: Biological Chemistry
Department/Institute: Faculty of Sciences University of South Bohemia
Thesis title: Detection of persistent forms of *Borrelia Burgdorferi* sensu stricto in infected mice after antibiotic treatment

Supervisor: Rudenko Natalie, PhD
Supervisor's affiliation: Biology Centre CAS, 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 |
| 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.

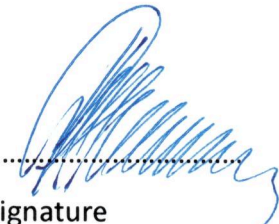
Comments of the supervisor on the student and the thesis:

The topic of Ida's bachelor project reflects the interest of our laboratory in study of persistent forms of Lyme disease spirochetes, their viability and impact in relapse of the disease. The major burden of the project, that some other students denied to carry, was the work with model laboratory animals. Ida managed it with patience, accuracy and responsibility that was required for this kind of experiments. Each step of the project, starting from the preparation of cultivation media, maintenance of spirochetes, infection of mice, blood sample collection, molecular analyses and controls, antibiotic treatment of infected animals, mice dissection and tissue collection with the following cultivation of original cause of infection from the tissues Ida completed under the supervision, but independently. The value of the samples that Ida obtained was significant enough to start the bigger collaborative project of our laboratory with the Laboratory of Electron Microscopy and Institute of Entomology. This project is directed on the analysis of ability of persistent forms of spirochetes to disseminate into the sites of secondary infection of vertebrate hosts, which might include human as well. The results of Ida's bachelor project were included into the oral and poster presentations on local and international conferences and will be included into the research paper that is under the preparation at the moment with the collaborators mentioned above. I would like to say that Ida possesses all necessary features to become a successful researcher and that she confirmed it by the results of her project that, on my opinion, overcomes the requirements for the standard bachelor project.

Conclusion:

In conclusion, I would like to recommend the thesis for the defense.

In **Ceske Budejovice** date **03.02.2020**


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signature