Supervisor's assessment of the bachelor thesis

Name, surname of student: Marek Tobiáš

Thesis title: Biophysical Conditions Triggering Depolarization Block in Excitatory Neurons

Aim of the thesis: Adapt a computational model of an excitatory neuron to model depolarization block dynamics and investigate biophysical conditions underlying these dynamics.

Does the thesis include an experimental part? Yes (Simulation code for virtual experiments)

Evaluation of each aspect of the thesis (indicate with a mark on a standard scale of 1 to 4)

1. Independence of the candidate

At the stage of refining the topic of the thesis:	1
When working with literature and databases:	1
During the elaboration of the assigned topic:	1
While writing the thesis:	1

2. Communicative, collaborative skills:

1

3. Interest in work and work commitment of the candidate:

1

4. Reliability and performance of assigned tasks:

1

5. If the work includes the applicant's achievements, what is your assessment of the work:

1

Verbal comments on the above points, if any:

The student achieved the goal of adapting a computer model of an excitatory neuron to simulate depolarization block dynamics and explore underlying biophysical conditions. He worked independently on literature research, the elaboration of precise research questions, and while writing the thesis. He showed high interest, not only in the focused topic but also in its broader context and in this way shaped the direction of his work to an extent exceeding expectations. The supervision of the student worked seamlessly thanks to his good communicative and collaborative attitude as well as his structured and independent working style.

Opinion on correcting errors in the paper:

Correction of errors in the text ~~**IS**~~ / **IS NOT** (circle) a condition of acceptance of the thesis.

C. Overall Proposal

I recommend the thesis for acceptance for further proceedings: **YES** ~~/ NO~~

Proposed overall classification: Excellent

Date of assessment: 13.5.2024

Name and surname, signature of supervisor:

David Maximilian Berling, M.Sc.

Instructions for the preparation and submission of the report:

- Use this form to prepare your bachelor thesis report, the text in standard font serves as a guide
- You can enter the report in SIS or send it in advance in electronic form to: marian@natur.cuni.cz, and ensure delivery of the signed original (in 1 copy, as part of the defence protocol) to the secretariat of the Department of Cell Biology, Faculty of Arts, Charles University, Viničná 7, 128 44 Prague 2. The signed original of the report must be delivered before the defence, without it the defence may not start!
- The student should be familiar with the report at least three days before the defence - you or your forwarder can send the report to the student.