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Supervisor's statement

Doctoral thesis: "A study of queuosine tRNA modification in the parasitic protist *Trypanosoma brucei*" by Sneha Kulkarni, University of South Bohemia, Faculty of Science, České Budějovice, 2021

I must admit that Sneha showed great courage since she was the first PhD student, who joined the newly established Laboratory of RNA Biology of Parasitic Protists in September 2015, which was rather virtual at that time.
The goal of Sneha's project was to evaluate the role of the "enigmatic" tRNA modification called queuosine in the parasitic protist *Trypanosoma brucei*. The topic of the thesis soon turned out to be challenging since the Q phenotype was not entirely evident at the beginning.
Because of Sneha's previous lab experience, she quickly oriented herself in our laboratory and soon mastered a broad spectrum of advanced molecular biology and biochemistry methods. Thanks to Sneha's effort, we have uncovered several aspects of this intriguing tRNA modification. This includes the role of Q in subcellular trafficking, cytosolic and organellar photosynthesis, and last but not least, in *T. brucei* virulence. During her Ph.D., Sneha was involved in several projects, which resulted in high-quality publications, including her recent first-author paper published in Nucleic Acids Research. Here, I must highlight that in this story, Sneha contributed to the study's experimental design. She carried out most of the demanding experiments herself and wrote the first draft of the manuscript. Within five years, Sneha successfully finished most of the experiments, which were planned for her project.
Thanks to her friendly nature and willingness, Sneha is very popular in the team. Many other students from all three trypanosome laboratories often use her professional advice and expertise. Since Sneha is too kind and can't refuse anyone, sometimes I even have to intervene so that Sneha has peace of mind for her work. Her other strong advantage lies in the scientific discussions she manages, even with such experienced and critical scientists as our collaborator Juan Alfonzo.
Based on the plethora of experimental methods used, which led to obtaining valuable data, together with critical thinking, Sneha has most certainly acquired all the essential skills needed to continue her future career in Natural Sciences, and I will be happy to help Sheha with searching for the next scientific position. At the same time, I am glad that Sneha does not want to leave the lab immediately after the defense. I appreciate her decision to finish some of the ongoing projects before her next move.

In conclusion, I think of Sneha as an exceptional student and my friend. I was pleased to have Sneha in my laboratory. In my opinion, her thesis is of a very high standard, and my recommendation is, therefore to grant Sneha Kulkarni the doctoral degree.

In České Budějovice, October 1st 2021

RNDr. Zdeněk Paris, PhD.