

## PUBLIC LECTURE EVALUATION

### Masaryk University

<b>Faculty</b>	Faculty of Science
<b>Procedure field</b>	Molecular Biology and Genetics
<b>Applicant</b>	Mgr. Lukáš Čajánek, PhD
<b>Lecture date</b>	15. 5. 2026
<b>Lecture topic</b>	Cilia as signaling organelles
<b>Persons present (number)</b>	64
<b>Designated evaluators (board members)</b>	Prof. Mgr. Petr Beneš, PhD (on-site) Prof. RNDr. Marcela Buchtová, PhD (on-site) Prof. Mgr. Marek Eliáš, PhD (on-site)

The lecture delivered by Dr. Čajánek addressed the role of cilia as signaling hubs in eukaryotes. In the introductory part of the lecture, the candidate briefly outlined the discovery of cilia, their classification, and the impact of ciliary defects on human health.

In the subsequent section, the candidate focused on the role of cilia in the development of tissues and organ systems. He then provided a detailed discussion of ciliary assembly, including its individual components and the regulatory mechanisms governing this process. This was followed by a section addressing the regulation of ciliary maintenance and disassembly.

The central part of the lecture was devoted to ciliary signaling pathways and their broader biological significance, particularly in coordinating cellular responses and ensuring proper tissue homeostasis. In conclusion, the candidate formulated several open questions and key challenges that need to be addressed in cilia research, thereby offering his perspective on future directions in this field.

Overall, the lecture was clear, logically organized, well-structured, and easy to follow. The candidate presented a substantial body of his own original results, which were appropriately integrated into the context of current knowledge in the field. The presentation demonstrated not only a deep understanding of the topic but also pedagogical skills and the ability to communicate complex concepts in a coherent and accessible manner.

During the subsequent discussion, in responding to questions from the reviewers of his habilitation thesis, committee members, and other participants, Dr. Čajánek convincingly demonstrated his extensive expertise in the field of cilia biogenesis and function. His answers were clear, well-reasoned, comprehensive and reflected a high level of scientific maturity.

## Conclusion

The lecture delivered by Lukáš Čajánek, entitled “Cilia as signaling organelles” and delivered as part of the habilitation appointment procedure, **demonstrated** sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a habilitation appointment procedure in the field of Molecular Biology and Genetics.

The lecture took place in a hybrid form at 10 a.m. The above-mentioned members of the board attended the lecture and provided its evaluation. All designated evaluators are familiar with the text of the evaluation and agree with it.

Date: May 15<sup>th</sup>, 2026

Prof. Mgr. Petr Beneš, Ph.D.

Prof. RNDr. Marcela Buchtová, Ph.D.

Prof. Mgr. Marek Eliáš, Ph.D.