

PUBLIC LECTURE EVALUATION

Masaryk University

Faculty	Faculty of Medicine
Procedure field	Anatomy, Histology and Embryology
Applicant	Mgr. Tomáš Bárta, Ph.D.
Lecture date	April 10, 2025, 2 p.m.
Lecture topic	Modelling Vision in a Dish
Persons present (number)	38
Designated evaluators (board members)	prof. RNDr. Petr Dubový, CSc prof. MUDr. Jaroslav Mokry, Ph.D. doc. MUDr. Marek Joukal, Ph.D.

The lecture followed the standard structure required within the framework of the habilitation procedures in the field of Anatomy, Histology and Embryology. It was presented clearly and comprehensibly, accompanied by illustrative and graphically appropriately adjusted images that corresponded to the topic. The lecture introduction provided a basic overview of the structural organization and physiological processes of the retina. This was followed by an overview of human retinal organoids used to study retinal development and diseases, including the limitations of this experimental approach.

In the following parts of the lecture, an overview of the research group's results to date (led by the habilitation candidate) was presented, focusing on the use of retinal organoids to better understand the development, function, and disease of the human retina.

The second part of the lecture was focused on the involvement of miRNA in colour adaptation and circadian rhythm. Selected molecular pathways involved in neuroectodermal developmental program were also mentioned.

In the third part, Mgr. Tomáš Bárta presented his own findings on the role of cilia in retinopathy. The speech and graphic level of the lecture demonstrated the candidate's high-quality pedagogical skills. During discussion, the candidate answered the numerous questions promptly and clearly.

Conclusion

The lecture delivered by Mgr. Tomáš Bárta, Ph.D., entitled "Modelling Vision in a Dish" and delivered as part of the habilitation, **demonstrated** sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a habilitation procedure in the field of Anatomy, Histology and Embryology.

MUNI

Date: April 10, 2025

Petr Dubový

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Jaroslav Mokřý

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Marek Joukal

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