

PUBLIC LECTURE EVALUATION

Masaryk University

Faculty

Faculty of Science

Procedure field

Experimental Animal Biology

Applicant

Mgr. Jakub Harnoř, Ph.D

Lecture date

2.10.2026

Lecture topic

Prickle proteins in vertebrate neurulation and beyond

Persons present

(number)

60

Designated evaluators

(board members)

prof. RNDr. Marcela Buchtová, Ph.D., MBA (on-site)

doc. RNDr. Vladimír Krylov, Ph.D. (on-site)

prof. Alexander William Bruce, Ph.D. (on-site)

Assoc. Prof. Máté Varga, Ph.D. (on-site)

The public habilitation lecture delivered by Mgr. Jakub Harnoř, Ph.D., entitled "Rethinking Prickle Function in Vertebrate Planar Polarity," provided a clear, well-structured, and scientifically engaging overview of the role of Prickle proteins in planar cell polarity (PCP) signaling and vertebrate morphogenesis.

The lecture introduced the fundamental principles of PCP signaling and placed the applicant's research into a broader developmental and cell biological context. Particular attention was given to the changing view of Prickle proteins from relatively passive components of PCP complexes toward active and paralog-specific regulators of cellular behavior and tissue morphogenesis. This concept is also central to the applicant's habilitation thesis and is supported by his work on the regulation of actomyosin contractility and VANGL protein stability.

The applicant presented complex molecular and cellular mechanisms in a logical and accessible manner and successfully connected molecular interactions with cell behavior and tissue-level processes, particularly during vertebrate neurulation. The lecture demonstrated his broad knowledge of the field as well as his ability to critically interpret experimental findings and place them within the context of current concepts in developmental biology. These qualities are consistent with the reviewers' assessment of the habilitation work as providing important new insights into PCP signaling, actomyosin regulation, and developmental morphogenesis.

Importantly, the lecture was delivered in a manner appropriate for a student audience. The applicant explained the biological problem clearly, introduced the necessary background

before discussing more complex mechanisms, and used the experimental findings to illustrate broader biological concepts. He thereby demonstrated not only scientific expertise but also the ability to communicate advanced scientific topics effectively and to use his own research as a basis for university-level teaching.

The subsequent discussion further demonstrated the applicant's ability to respond to questions, critically discuss the limitations and interpretation of his findings, and consider broader implications and future directions of his research. The lecture and discussion therefore provided convincing evidence of both his scholarly qualifications and pedagogical capabilities.

Conclusion

The lecture delivered by Jakub Harnoš, entitled "Prickle proteins in vertebrate neurulation and beyond" 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 Experimental Animal Biology.

The lecture took place in a hybrid form at 10:00. 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: 2.10.2026

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