MASARYKOVA UNIVERZITA

Annex No. 12 to the MU Directive on Habilitation Procedures and Professor Appointment Procedures

Public Lecture Evaluation

Masaryk University	
Faculty	Faculty of Science
Procedure field	Animal physiology
Applicant	**Assoc. Prof., Mgr. Vítězslav Bryja Ph.D.**
Lecture date	25.5.2018
Lecture topic	„Non-canonical Wnt signalling as a therapeutic target"
Persons present (number)	77
Designated evaluators (board members)	prof. RNDr. Alois Kozubík, CSc., PřF MU, Brno prof. RNDr. Jan Černý, PhD., UK Praha prof. RNDr.Marek Jindra, CSc., BC AVČR, Č. Budějovice

As a part of his Professor Appointment Procedure, Vítězslav Bryja gave a public lecture entitled „Non-canonical Wnt signalling as a therapeutic target" on May 25, 2018.

In the first part of the lecture V. Bryja gave an overview of the mechanisms of cellular communication especially with respect to current knowledge of the Wnt signaling pathway. He has clearly defined what is the importance of canonical Wnt pathway in development, homeostasis and pointed to the importance of this signaling machinery in the tumor formation. Then he described in detail non-canonical Wnt/planar cell polarity pathway, which was the major topic of his talk.
From this point V. Bryja structured the presentation as a historical perspective that reflected his personal contribution to the field in context of major breakthrough discoveries in biology in the period 2003-2018. He has described how novel methodologies affected his research and opened new possibilities in the studied topic. Special focus has been paid in the advances in molecular biology (Crispr/Cas9-editing), proteomics, genomics (next generation sequencing, single cell transcriptomic), cell biology (organoid culture) and structural biology (single particle CryoEM). He has explained how his group implemented these methodologies at Masaryk University and how they helped/are helping to answer scientific questions related to the biochemistry and biology of the non-canonical Wnt pathway. He has selected as an example of his research achievements a line that described identification of casein kinase 1 as an important component of the non-canonical Wnt pathway, identification of chronic lymphocytic leukemia and ovarian carcinoma as pathological conditions driven by non-canonical Wnt pathway, mechanistical dissection of the role of aberrant signalling in these diseases and finally, he introduced a proof-of-principle work that demonstrated that targeting Wnt/PCP pathway may represent a viable strategy for treatment of these diseases.
In the final part of his talk he presented ongoing research and his plans for the near future. Last but not least V. Bryja acknowledged help from his world-wide network of collaborators as well as support/collaborations that he established locally at the MU Campus in Bohunice.

In the following discussion V. Bryja answered a number of questions prom the audience including the board members.
V. Bryja managed to explain detail of his work at the background of current knowledge in the studied field, demonstrated his extensive understanding of his research specialization in a broad context. The board members concluded that V. Bryja is an excellent teacher. This was shown well by his abilities to capture an audience and present his work in a clear and convincing manner.

Conclusion

The lecture delivered by **Vítězslav Bryja**, entitled „Non-canonical Wnt signalling as a therapeutic target" and delivered as part of the professor appointment procedure, ***demonstrated*** sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a professor appointment procedure in the field of Animal Physiology.

In Brno on May 25, 2018

Alois Kozubík

Jan Černý

Marek Jindra