

Annex No. 11 to the MU Directive on Habilitation Procedures and Professor Appointment Procedures

## **PUBLIC LECTURE EVALUATION**

| Masaryk University          |   |
|-----------------------------|---|
| Faculty                     | Faculty of Science                                      |
| Procedure field             | Environmental Health Sciences                           |
| Applicant                   | Mgr. David Bednář, Ph.D.                                |
| Lecture date                | 14. 3. 2023   |
| Lecture topic               | Computational Tools for Analysis and Design of Proteins |
| Persons present<br>(number) | 111   |
| Designated evaluators       | doc. RNDr. Karel Berka, Ph.D. (online)                  |
| (board members)             | prof. Mgr. Daniel Svozil, Ph.D. (online)                |
|                             | prof. RNDr. Jiří Vondrášek, CSc. (online)               |

The habilitation lecture of David Bednář was a hybrid event with 57 people present in the lecture room and additional 54 connected online. The chair and all four members of the evaluation board were present, together with two out of three reviewers of the thesis.

David gave a presentation on his habilitation topic, i.e. "Computational Tools for Analysis and Design of Proteins" and presented his significant research contributions to the important field of protein engineering which is one of the fundamental pillars of biotechnology and pharmacology. He showed that the successful development of non-trivial algorithms needed to address the needs of various users from life-science communities requires complex methodological approaches and original tools. At the same time, he proved himself not only as an expert in a relatively narrow field but someone who is able to see problems in a bigger picture. David demonstrated that he is not only a matured scientist but also an experienced lecturer capable of presenting results of his interdisciplinary research linking biology, chemistry, and informatics to the broad audience.

The candidate prepared the answers to the reviewer's comments and questions and had a lively discussion with the reviewers and the board members as well as audience. The discussion touched the methodological bases, interdisciplinary collaborations, and efficiency of computing tools as well as broader topics of possible applications of artificial intelligence. On-going projects and future perspectives were also discussed together with his plans for further involvement in development of new study programmes and mentoring junior scientists.



## Conclusion

The lecture delivered by David Bednář, entitled "Computational Tools for Analysis and Design of Proteins" and delivered as part of the habilitation procedure, **demonstrated** sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a habilitation procedure in the field of Environmental Health Sciences.

The lecture took place in a hybrid form at 9:30. 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. Since the evaluators were all present <u>online</u> and are <u>external</u>, the document is signed by the Chair of the board who attended the lecture <u>in person</u>.

Date:

prof. RNDr. Jana Klánová, Ph.D.

signature