

<b>Masaryk University</b>	
<b>Faculty</b>	Faculty of Science
<b>Procedure field</b>	Molecular Biology and Genetics
<b>Applicant</b>	doc. RNDr. Roman Pantůček, Ph.D.
<b>Applicant's home unit, institution</b>	Faculty of Science, Masaryk University
<b>Board members</b>	
<b>Chair</b>	prof. RNDr. Jan Šmarda, CSc. <i>Faculty of Science, Masaryk University</i>
<b>Members</b>	prof. MUDr. David Šmajs, Ph.D. <i>Faculty of Medicine, Masaryk University</i> prof. MUDr. Milan Kolář, Ph.D. <i>Palacký University Olomouc</i> prof. MUDr. Pavel Dřevínek, Ph.D. <i>Charles University; Motol University Hospital</i> Prof. Dr. Jan Maarten van Dijk <i>University of Groningen, Netherlands</i>

### Evaluation of the applicant's scholarly/artistic qualifications

Dr. Pantůček has long been engaged in the research of clinically important bacterial strains of the genus *Staphylococcus* and their bacteriophages, especially in terms of their molecular taxonomy and identification. By studying the patterns of horizontal transfer of bacterial genes responsible for antibiotic resistance through bacteriophages and searching for new methodological approaches for their detection, his originally basic research naturally extends into research applied with overlaps in clinical medicine, in which he develops an attractive field of phagotherapy. In addition, he is involved in development of new detection methods and kits with commercial value.

His scientific performance is documented by a total of 96 publications registered in the Web of Science database, of which he is the first or corresponding author in 25 cases (to March 5, 2021). These works were cited a total of 1228 times (without self-citations). Its h-index reaches 22. More than half of the original and review articles were published in journals ranked in the Q1 or Q2 quartile, and they include the top publications in the most prestigious journals, such as *Nature Communications* or *PNAS*. In addition, he is a co-author of one domestic patent and several utility models. As a member of the team, he participated in 13 research grant projects, in seven other cases he was in the position of the principal investigator or co-PI.

The board concluded that Dr. Pantůček is a mature personality with adequate scientific performance for appointment as a professor.

**Conclusion:** The applicant's scholarly/artistic capabilities **meet** the requirements expected of applicants participating in a professor appointment procedure in the field of Molecular Biology and Genetics.

### Evaluation of the applicant's pedagogical experience

Throughout his career, Dr. Pantůček has worked as a university teacher at the Department of Genetics and Molecular Biology and later at the Department of Experimental Biology, Faculty of Science, Masaryk University: in the period 1996-2005 as an Assistant Professor and since 2005 as an Associate Professor. The list of courses that he has taught is respectable and includes lectures, practical training courses and seminars for students of both bachelor's and master's degree programs. From lectures he has long provided courses such as Methods of Molecular Biology (20 semesters) and Bioinformatics (19 semesters). He has been teaching four additional lectures for shorter time. From practical laboratory training courses, he teaches Gene Engineering (21 semesters), Bioinformatics (19 semesters), Molecular Biology of Prokaryotes (20 semesters), Molecular Biology (17 semesters), etc. In all cases, these are frequently attended courses of the most popular biological programs at the Faculty of Science, MU.

In addition, Dr. Pantůček has frequently acted as supervisor providing students with individual projects for their theses and guiding them through to the final defense. He has supervised 19 Bachelor's, 26 Master and 9 Ph.D. theses, which have been successfully defended or are still in progress. For his professional knowledge and pedagogical experience, Dr. Pantůček has been a sought-after expert for various professional committees, degree program boards and commissions for final state and rigorous examinations. For example, he has been a member of the Ph.D. degree program boards Molecular and Cellular Biology since 2010 and Microbiology since 2012, in both cases he is also a member of final state exam commissions of these programs. For an even longer period he has been a member of the final state exam commissions of the master's programs Molecular Biology and Genetics (since 2007), Biochemistry (since 2008) and Microbiology since 2020. Since the same year, he has been the chairman of the commission for final state exams of the bachelor's program Experimental and Molecular Biology. The Evaluation Board also positively assessed other pedagogical activities of Dr. Pantůček, such as preparation of teaching materials, textbooks, teaching aids, popularization texts and lectures given to the general public.

Overall, the Evaluation Board considers the pedagogical performance of Dr. Pantůček to be well above standard and his pedagogical competence to be unquestionable.

**Conclusion:** The applicant's pedagogical capabilities **meet** the requirements expected of applicants participating in a professor appointment procedure in the field of Molecular Biology and Genetics.

**Evaluation of the applicant as a respected and recognized scholarly or artistic figure in a given field**

Following Prof. Doškař, Dr. Pantůček is another representative of the Brno school of molecular biology established by prof. Rosypal, which laid the foundations of this field in former Czechoslovakia. Dr. Pantůček continues in this tradition and has developed himself into a prominent scientific figure in the field of molecular taxonomy of staphylococci and their bacteriophages. There are many research teams from universities in Germany, Belgium, the Netherlands, Switzerland, Australia and Canada seeking cooperation with him. Interestingly, since 2019 he has become a member of the international expert group for acceptance and re-implementation of bacteriophage therapy of the Eliava Institute for Bacteriophage Research in Georgia. He is also a member of several domestic and international scientific societies. He is regularly invited to world staphylococcal congresses, such as the Gordon Conferences and the International Symposium on Staphylococci and Staphylococcal Infections. The Evaluation Board notes that Dr. Pantůček is an internationally known and recognized personality in the scientific community.

**Conclusion:** The applicant **is** a respected and recognized scholarly figure in his/her field. The applicant **has** made a significant contribution to the development of his/her field. The applicant **constitutes** a leading figure in his/her field of scholarship or research.

### Secret vote results

Voting took place: electronically

Number of board members		5
Number of votes cast		5
of which	in favour	5
	against	0

### Board decision

Based on the outcome of the secret vote and following an evaluation of the applicant's scholarly or artistic qualifications, pedagogical experience and role as a respected and recognized scholarly or artistic figure, the board hereby submits a proposal to the Scientific Board of the Faculty of Science of Masaryk University to **appoint the applicant professor** of Molecular Biology and Genetics.

In Brno on 21.09.2021

prof. RNDr. Jan Šmarda, CSc. ....