

## EVALUATION BOARD DECISION ON THE NOMINATION FOR APPOINTMENT TO PROFESSOR

### Masaryk University

Faculty

Procedure field

Applicant

Applicant's home unit,  
institution

Faculty of Science

Zoology

Ass. Prof. Mgr. et Mgr. Josef Bryja, Ph.D.

Institute of Vertebrate Biology, Czech Academy of  
Sciences

Department of Botany and Zoology, Masaryk University

### Board members

Chair

Prof. RNDr. Miloš Macholán, CSc.

*Institute of Animal Physiology and Genetics, CAS*

*Faculty of Science, Masaryk University*

Members

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*Faculty of Forestry and Wood Sciences, Czech University of  
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*Faculty of Science, Charles University in Prague*

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*Faculty of Science, Masaryk University*

prof. Ara Monadjem, PhD.

*University of Eswatini, Kingdom of Eswatini*

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

The spectrum of research activities of J. Bryja is extraordinarily broad both in the number of questions addressed, organisms studied, methods employed, and collaborators involved. Two decisive milestones appeared in his career. The first one was a series of postdoc fellowships in leading French institutions (Université Montpellier II: 2000, 3 months; Centre de Biologie et Gestion des Populations, Montferrier-sur-Lez: 2004–2006, 11 months in total), where he made good use of his knowledge of French language and where, most importantly, he has established a wide collaborative network with leading scientists. The second impetus was building a new molecular genetic laboratory of the Institute of Vertebrate Biology in Studenec. (The importance of these milestones is evidenced by the fact that since 2007, i.e. after his return from the last postdoc stay, he has published 86% of all his research articles, with almost 9 papers per year on average.)

In the course of time, the original focus on the small mammal ecology has broadened into many fields including a vast array of organisms from viruses, bacteria and other parasites (nematodes, cestodes, fungi etc.), through insects and molluscs to fish, birds, and mammals (insectivores, rodents, bats, and threatened species such as chamois, lynx, and otter). His research involves ecology and nature conservation, systematics and taxonomy, phylogeography, population genetics, biodiversity, immunology (major histocompatibility complex, toll-like receptors), conservation genetics, sexual selection, speciation etc. Besides long-term stays (in addition to the two abovementioned stays at the Université Montpellier II

and CBGP, he spent 6 months at the Centre in Biodiversity and Genetic Resources in Vairao, Portugal, in 2018), he visited the University of Koper (Slovenia); Jagiellonian University (Kraków, Poland); University of Antwerp (Belgium); Royal Belgian Institute for Natural Sciences (Brussels, Belgium); Muséum National d'Histoire Naturelle (Paris, France); Sokoine Agriculture University (Morogoro, Tanzania); Mekelle University (Ethiopia); National Museum Nairobi (Kenya) and organized many international field expeditions, especially to East Africa. The most important current collaborating institutions are the Muséum National d'Histoire Naturelle (Paris), Royal Belgian Institute for Natural Sciences (Brussels), CBGP (Montferrier-sur-Lez), A.N. Severtzov Institute of Ecology and Evolution (Moscow), and Field Museum of Natural History (Chicago).

During his career, J. Bryja has published (according to the official application dated 30th August 2019) 132 research articles in 17.3% of which he was the first authors and in 22% corresponding author; 34% papers were published in journals from the first quartile (Q1), 29% from Q2. The most respected journals are *Emerging Infectious Diseases* (IF=7.185), *Methods in Ecology and Evolution* (IF=7.099), *Molecular Ecology Resources* (IF=7.049), *Molecular Ecology* (IF=5.855), *Evolutionary Applications* (IF=5.038), *Applied and Environmental Microbiology* (IF=4.077), *Molecular Phylogenetics and Evolution* (IF=3.992), *Journal of Biogeography* (IF=3.884), *Evolution* (IF=3.573). According to Web of Science (August 2019), his papers were cited 1998 times (1747× without autocitations), according to Scopus: 2058 citations (1796 without autocitations; h-index = 29). (On March 4th, WoS shows 140 articles, 2231 citations/1928 without autocitations.) He published further 32 papers in Czech peer-reviewed journals, presented 37 invited lectures, and in total 138 conference presentations. He was PI or Co-PI of 13 projects (Czech Science Foundation; Czech Ministry of Education, Youth and Sports; GAAS; INRA; Norwegian Projects) and 7 educational projects.

In addition to his research work, J. Bryja has been engaged in many further activities associated with science: he was or he is a member of Steering Committee of the European Science Foundation (2004–2009), Management Committee of the European Commission (COST Action; 2019–2023); ESF, vice-chairman of the sub-panel for ecological sciences (2009–present). He is a long-term major organizer of the conference Zoologické dny (2000–present), a member of the Organizing Committee of the 4th European Congress of Mammalogy (Brno 2003) and conference “Rodens et Spatium” (Olomouc 2016), major organizer of the meetings “International Summer School of Conservation Genetics” (Liblice 2008), “Utilization of genetic approaches for effective conservation of endangered species” (Zvolen 2012, Debrecen 2012), and 13th African Small Mammal Symposium (Mekelle 2019).

In 2008 J. Bryja was awarded the Otto Wichterle Award for perspective young scientists.

**Conclusion:** The applicant's scholarly capabilities meet the requirements expected of applicants participating in a professor appointment procedure in the field of Zoology.

#### **Evaluation of the applicant's pedagogical experience**

Despite the fact the employment of J. Bryja at the Masaryk University is just his part-time job, his pedagogical activities are enormous. He has been leading (alone or with colleagues) courses for gradual (master) and post-gradual (doctoral) students at the Faculty of Science of MU (Special zoology of vertebrates: 1998–2000; Population ecology: 2002–2005; Molecular ecology: 2004–present; Genetic methods in zoology: 2007–present), class exercises (Field courses in zoology: 1997–2003; Special zoology of vertebrates: 1998–2000; Evolutionary analyses: 2011–2012; Genetic methods in zoology: 2007–present). Since 2008 he has been co-organizing seminars “Advances in vertebrate zoology” (all in MU). He was/is

a supervisor of bachelor theses (22, of which 19 successfully defended), master theses (27/24), and doctoral studies (19, 13 successfully finished, 6 still in progress).

J. Bryja was/is a member of the Doctoral Board (DB), Doctoral Committee (DC) and State Examination Board (SEB) for Ecological and Evolutionary Biology (2007–2019 Biology-Zoology and Biology-Ecology; 2014–2015 Genetics) in MU; DB for Zoology (Charles Univ., Prague), and SEB in many institutions (Czech Univ. of Life Sciences, Prague; Univ. of South Bohemia, České Budějovice; Comenius Univ. in Bratislava; Palacký Univ. Olomouc; Mus. Nat. Hist. Naturelle, Paris; Charles Univ., Prague; Technical Univ. Zvolen; Univ. of Antwerp; Mendel Univ. in Brno; Univ. Montpellier II). He is a co-author of 4 textbooks (Albrecht et al.: Genetická diverzita a metodické aspekty jejího výzkumu, in Vačkář, ed. 2005: Ukazatele změn biodiverzity; Bryja et al. 2006: Využití molekulárně-genetických metod v zoologii a ekologii, in Paule et al., eds. 2006: Genetika poľovnej zveri a voľne žijúcich živočichov; Bryja a Kment 2007, Kment a Bryja 2019: Ploštice (Heteroptera), in Hudec et al.: Příroda České republiky – Průvodce faunou). In addition, he participated in presenting popular science texts (Vesmír, Živa, Akademický bulletin, Časopis Fóra ochrany přírody) and/or broadcasts in the Czech Television, Czech Radio and Radio Proglas. He was PI or a member of the steering committee of 5 projects focused on education and science popularization; he presented at least 30 invited educational lectures.

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

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

There is no doubt that Ass. Prof. Josef Bryja, PhD. is an internationally respected scientific personality. In the Institute of Vertebrate Biology, Czech Academy of Sciences, he has built a molecular genetic department which has become a training base and haven both for other colleagues of the same institute and students coming from various Czech universities and researchers from many institutions of almost all continents. The number of students passing through the laboratories in Studenec is really enormous and contribution of J. Bryja to this fact was, indeed, principal. It is only a slight exaggeration to say that without J. Bryja and the Studenec department there would be no vertebratology at the Faculty of Science of the Masaryk University. In addition, the students further pass their experience on to younger schoolmates and hence contribute to the importance of the Studenec department. Together with colleagues from the University South Bohemia in České Budějovice, J. Bryja has established a team which very soon won international renown for its research of African small mammals. The enormous scope of his working network is, actually, a characteristic quality of his scientific personality. At the same time, his activities by far extend his research work as evidenced by his frequent involvement in many evaluating panels and commissions within the Czech Republic and European Union.

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

### Secret vote results

Number of board members		5
Number of votes cast		5
of which	in favour	5
	against	0
	invalid	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 [faculty name] of Masaryk University to

appoint the applicant professor of [field name].

terminate the procedure.

Date: 1.4.2020

Miloš Macholán