

Masaryk University	
Faculty	Faculty of Medicine
Procedure field	Neurology
Applicant	MUDr. Štefania Aulická, Ph.D.
Applicant's home unit, institution	Faculty of Medicine, Masaryk University
Habilitation thesis	Biomarkers of epileptogenesis and pharmacoresistance in epilepsy
<u>Board members</u>	
Chair	prof. MUDr. Blanka Adamová, Ph.D. <i>Faculty of Medicine, Masaryk University</i>
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Evaluation of the applicant's scholarly/artistic qualifications

Štefania Aulická, MD, Ph.D., graduated the Faculty of Medicine of Comenius University in Bratislava, Slovakia (study program: general medicine) in 2006. After her graduation, she started her early career at the 1th Department of Neurology, St'Anne University Hospital in Brno where she worked until 2009. Simultaneously, she started her Ph.D. study. In January 2009 she started to work at the Department of Paediatric Neurology, University Hospital Brno, where she has been working until now. She successfully completed her specialization in electroencephalography (2010), neurology (2011), paediatric neurology (2015) and epileptology & epileptosurgery (2015). In 2014 she successfully defended her doctoral thesis focusing on neurocognitive networks assessed by electroencephalography (EEG) and executive functions.

Dr. Aulicka is a physician-scientist with successful academic and clinical track records. Her work contributes to scientific breakthroughs in the field of paediatric neurology, particularly in children suffering from epilepsy and rare disorders leading to improvement in healthcare management and better health outcomes. Dr. Aulicka (nee Rusnakova) worked at the University of Minnesota (UMN) during her fellowship in 2019. She was granted a prestigious Fulbright Scholarship to investigate brain alterations by magnetic resonance imaging (MRI) and electroencephalography (EEG) in paediatric patients, including those suffering from rare diseases. The scientific collaboration with UMN has been continuing ever since with significant results (publications in journals with Q1 IF). In the *NeuroImage* (IF 6.556, Q1) article, she was part of the team dissecting 14 white matter bundles in diffusion MRI. She contributed with her admirable knowledge of neuroanatomy and neurophysiology leading to the successful completion of the project. She had a leadership role in the study mapping immune effects on the pathophysiology of mesial temporal lobe epilepsy, the article was accepted in the journal *Epilepsy Research* (IF 3.045).

The sum of scholarly journal publications and citations exceeds the recommended habilitation standards of the Faculty of Medicine, Masaryk University. Currently, Dr. Aulická is the author of 35 scholarly journal articles based on international, national and multidisciplinary cooperation, of these, 12 publications are in journals with a WoS impact factor, and in 9 of these publications, she's the first or corresponding author. Two first-author articles were published in a journal with an IF above the median of the WoS category. The current sum of citations of Dr. Aulicka's scholarly articles is 59 citations according to WoS and 80 according to SCOPUS. The current H-index of the applicant is 4 (according to WoS). Štefania Aulická MD, Ph.D. is involved in a total of 4 research grant projects of the Czech Health Research Council of the Ministry of Health of the Czech Republic. Since 2018 she is part of Ondřej Slabý research group, CEITEC. Also, she is an honest member of the Czech paediatric neurology panel in EAN (European Academy of Neurology) and simultaneously she is a member of the European Paediatric Neurology Society (EPNS), Czech Neurological Society, Czech Society of Paediatric Neurology and Czech League against Epilepsy.

Conclusion: The applicant's scholarly/artistic capabilities **meet** the requirements expected of applicants participating in a habilitation appointment procedure in the field of Neurology.

Evaluation of the applicant's pedagogical experience

Since 2006, Štefania Aulická, MD, Ph.D. has participated in regular teaching of pre-graduate students of the master's degree program in general medicine and dentistry at the Faculty of Medicine, Masaryk University. Actually, she has been working as an assistant professor and she has been teaching neurology and paediatric neurology regularly. She is a member of the State Examination Committee for Paediatric Neurology. Regarding doctoral studies, Dr Aulicka is a supervisor of two doctoral students in the field of Neurology and Paediatrics, at the Faculty of Medicine, Masaryk University and one P-pool pre-gradual medical student. She also regularly participates (as a lecturer) in

postgraduate training in the field of electroencephalography. She is the author of the textbooks "Acute states in paediatric neurology" and "Developmental neurology". Additionally, she is the co-author of 4 chapters in other textbooks.

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

Habilitation thesis evaluation

The applicant submitted a habilitation thesis entitled "Biomarkers of epileptogenesis and pharmacoresistance in epilepsy". This habilitation thesis is conceived as a collection of 6 scholarly articles (2 review articles, 3 original articles, and 1 case report) previously published by the author and her colleagues. The individual works are mainly devoted to the development of biomarkers of epileptogenesis and pharmacoresistance in epilepsy which could lead to personalised treatment in epilepsy in the future. The thesis contains individual chapters dealing with the basic aspects of epileptogenesis and pharmacoresistance in epilepsy. Each chapter is followed by commentaries introducing the topic of each publication, describing the current state of knowledge and how the author has contributed to knowledge in this field. The habilitation thesis was reviewed by three respected experts in the field of epileptology. All reviewers agreed that the habilitation thesis of Dr. Aulicka presents new knowledge in the field of epileptology and has good scientific potential. Dr. Aulická is accused by all reviewers of a large number of typos and grammatical errors, which unnecessarily reduce the quality of the habilitation thesis. Based on all the three reviews, the presented habilitation thesis meets the standard requirements for habilitation theses in the field of Neurology at the Faculty of Medicine, Masaryk University.

Conclusion: The applicant's habilitation thesis **meet** the requirements expected of habilitation theses in the field of Neurology.

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 habilitation thesis, the board hereby submits a proposal to the Scientific Board of the Faculty of Medicine of Masaryk University to **appoint the applicant associate professor** of Neurology.

In Brno on 10.06.2022

prof. MUDr. Blanka Adamová, Ph.D.

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