

Masaryk University	
Faculty	Faculty of Medicine
Procedure field	Neurology
Applicant	doc. MUDr. Eva Vlčková, Ph.D.
Applicant's home unit, institution	Faculty of Medicine, Masaryk University
<u>Board members</u>	
Chair	prof. MUDr. Irena Rektorová, Ph.D. <i>Faculty of Medicine, Masaryk University</i>
Members	doc. MUDr. Martina Bočková, Ph.D. <i>CEITEC, Masaryk University</i> doc. MUDr. Michaela Kaiserová, Ph.D. <i>Neurologická klinika LF UP a FNOL</i> prof. MUDr. Robert Rusina, Ph.D. <i>Neurologická klinika 3. LF UK a FTN</i> Univ.-Prof. Dr. med. Claudia Sommer <i>Universitätsklinikum Würzburg Neurologische Klinik und Poliklinik</i>

Evaluation of the applicant's scholarly/artistic qualifications

Eva Vlčková started her scientific work in the 4th year of the study of General Medicine at the Medical Faculty of Masaryk University (LF MU) as part of the Student Scientific Activity project. In 1998 and 2000 she successfully defended her projects at the Student Scientific Conference of the Faculty of Medicine at MUNI, where she won first and second place respectively in the field of internal medicine. In 2000, based on these results, she represented Masaryk University at the national competition Prix de médecine 2000 (now Albert Schweizer Prize), where she was selected among the top 5 students who were allowed to spend a one-month internship abroad in France (shared 2nd-5th place). This placement took place at the Functional Investigation Clinic of the Hôpital Universitaire Pitié-Salpêtrière in Paris during XI-XII/2000.

She graduated from the LF MU with a grade point average of 1.00 and was awarded the Rector's Prize of the Masaryk University for the best graduate of the Master's programme (2000).

Since graduating in 2000, Associate Professor Vlčková has worked at the Department of Neurology of the Medical Faculty of Masaryk University and the University Hospital in Brno, successively as a resident, senior physician and then as the Deputy Head for Science and Research (2015-2021), and Deputy Head for Education (from 2023). In 2003, she completed the first Certification exam in Neurology (i.e. the first degree of Specialisation in Neurology), and in 2006 she was granted Specialized Competence (i.e. the second degree of Specialisation in Neurology). She is licensed by the Czech Medical Chamber as a senior physician and head physician in the field of neurology. She specialises in neuropathic pain, neuromuscular and vertebrogenic diseases and clinical neurophysiology.

Since completing her Master's degree in 2000, she has continued her scientific preparation by completing a PhD programme in Neurology. In 2002, she completed a short-term (2 weeks) internship at the Neurological Clinic of the University Hospital of Würzburg, Germany, focusing on the performance and evaluation of skin biopsies in the diagnosis of small fibre neuropathy. In 2005, she completed a 6-month internship at the same clinic, supported by a research grant from the European Neurological Society (ENS), focusing on polyneuropathy and neuropathic pain. Later on, she also completed short-term fellowships at the Ruhr-Universität Bochum, Germany (2013, training fellowship with focus on quantitative sensitivity testing within the German Research Network on Neuropathic Pain) and at the Spinal Cord Injury Centre of Balgrist University Hospital, Zurich, Switzerland (2015, focus on contact heat evoked potentials). After a break due to maternity leave, she successfully defended her PhD thesis in Neurology on Thin Fibre Neuropathy, Complex Diagnosis and Etiology in 2011. This thesis was awarded the Rector's Prize of the Masaryk University for outstanding dissertation (2012). In 2019, she habilitated in Neurology (i.e. successfully defended her thesis and received the title associate professor in Neurology) for her work "Neuropathic Pain: Current Classification and Diagnosis".

Associate Professor Vlčková is the author or co-author of more than 100 original scientific or review papers. She is also the editor-in-chief of 2 monographs and author or co-author of 14 chapters in published monographs (see below in the section focused on teaching activities). Her H-index is 17, the number of citations without self-citations is 987, and her cumulative IF is over 150.

Her work has been repeatedly recognized by the scientific community. She has received:

- Henner Prize of the Czech Neurological Society for young authors under 35 years of age for outstanding original work in 2008 (Vlčkova-Moravcova E, Bednarik J, Dušek L, Toyka KV, Sommer C. Diagnostic validity of epidermal nerve fiber densities in painful sensory neuropathies. *Muscle and Nerve* 2008; 37: 50-60);
- Czech Neurological Society Award for Outstanding Original Work of 2009 (for the article Bednarik J, Vlčkova-Moravcova E, Bursova S, Belobradkova J, Dusek L, Sommer C. Etiology of small-fiber neuropathy. *J Peripher Nerv Syst* 2009;14(3):177-183);
- Award of the journal *Czech and Slovak Neurology and Neurosurgery* for outstanding original communication published in this journal in 2017 (for the article Sympathetic skin response in the diagnosis of small fiber neuropathy. *Cesk Slov Neurol N* 2016; 79/112(1): 52-60);
- Special Award of the Czech Neurological Society in 2018 (for the publication of Raputova J, Srotova I, Vlčkova E, Sommer C, Üçeyler N, Birklein F, Rittner HL, Rebhorn C, Adamova B, Kovalova I, Kralickova Nekvapilova E, Forer L, Belobradkova J, Olsovsky J, Weber P, Dusek

L, Jarkovsky J, Bednarik J. Sensory phenotype and risk factors for painful diabetic neuropathy: a cross-sectional observational study. *Pain* 2017;158(12):2340-2353).

Several awards have also been received by her students whom she mentored within the framework of Student Scientific Conferences at MUNI (see below in the section focused on teaching activities and expertise).

Associate professor Vlčková was the principal investigator of the IGA grant project of the Ministry of Health of the Czech Republic NT 13823-4: "Specific characteristics of neuropathic pain of central and peripheral type" (2012-2015, evaluation A) and she has currently been the co-investigator of the ongoing Czech Health research Agency grant project (NW24-04-00349): "Multiomics approach combined with systematic data collection for elucidation of pathomechanisms in hereditary sensory neuropathy" (from 2024, principal investigator doc. MUDr. Petra Laššuthová, Ph.D.).

In addition, she has been involved as a scientific collaborator in 7 other grant projects focused on painful neuropathies, neuropathic pain, neuromuscular diseases and/or vertebrologic diseases, especially spondylogenic cervical myelopathy and non-myelopathic spinal cord compression. In 2013-2017 she participated in the collaborative project of 7th framework programme (theme: Health.2013.2.2.1-5: Understanding and controlling pain) named "Non-coding RNAs in neurogenic and neuropathic pain mechanisms and their application for risk assessment, patient stratification and personalized pain medicine (ncRNAPain)" (investigator prof. Michaela Kress, MD, PhD).

The work of Associate Professor Vlčková has significantly contributed to the advancement of the diagnostic possibilities of thin-fibre neuropathy or painful neuropathies, and neuropathic pain in general. A number of her papers have been frequently cited, including published recommendations or reviews (the paper Vlckova-Moravcova E, Bednarik J, Dušek L, Toyka KV, Sommer C. Diagnostic validity of epidermal nerve fibre densities in painful sensory neuropathies. *Muscle and Nerve* 2008; 37: 50-60 currently has 113 citations on WOS).

Through her research projects, she managed to introduce a number of diagnostic methods into clinical practice in the Czech Republic, such as intraepidermal nerve fibre density testing from skin biopsies, quantitative sensitivity testing, evaluation of thin nerve fibres from corneal confocal microscopy, and pain-related evoked potentials evoked by contact heat.

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

Evaluation of the applicant's pedagogical experience

Associate Professor Vlčková has been systematically involved in the teaching neurology in Bachelor's and Master's programmes since 2011 as an assistant professor (2011-2019) and then as an associate professor (since 2019). She is also involved in teaching a number of other subjects (Theoretical Bases of Clinical Medicine I and III, Differential Diagnostics) and currently participates in preparing of the newly created subject focused on palliative medicine. Since 2019, she has been working at the Faculty of Medicine and Dentistry of MUNI as a guarantee of the Neurology courses for students of the Master of General and Dental Medicine programmes (courses aVLNE9X1p, aVLNE9X1c, aZLNE0811p, aZLNE0811c, VLNE9X1p, VLNE9X1c, ZLNE0811p, ZLNE0811c). As a guarantee, she was involved in introducing simulation teaching into the neurology curriculum by combining several types of simulation teaching (SBL, TBL, skills training). The courses supervised by Assoc. prof. Vlčková regularly achieve above-average ratings, especially among students of general medicine, in the Student survey, in which students repeatedly appreciate teaching skills of Associate professor Vlčková.

From 2023 she is the deputy head of the Department of Neurology at the University Hospital in Brno, responsible for education.

She is also actively involved in supervising students in pre- and post-graduate research activities. She was the supervisor of 2 successful graduates of PhD studies in Neurology, i.e. MUDr. Iva Šrotová, Ph.D. (dissertation defence in 2018) and MUDr. Jana Raputová, Ph.D. (dissertation defence in 2023). Currently, she has been supervising 3 other PhD students (1 of them - MUDr. Aneta Rajdová - has interrupted her studies due to maternity leave). As part of the pregraduate scientific training, she regularly supervises students in projects of Student Scientific Activities (6 students), p-Pool (1 student, defended with A grade) or Secondary School Professional Activity (SOČ, 1 student). Five of the students she had supervised placed at the top of the internal disciplines section of the Student Scientific Conference in LF MUNI: they won the first place three times (2015, 2017 and 2021), the second place once (2013) and the third place once (2021).

From the perspective of teaching methodology, in the years 2021-2022 she participated in the EU (Erasmus+) grant project (2020-1-CZ01-KA226-HE-094424: New Era in Medical Education (NEWMED), investigator prof. MUDr. Petr Štourač, Ph.D., MBA. FESAIC) as the leader of Output 2 (development of methodological manual for online teaching).

Associate Professor Vlčková is the main editor of 2 monographs intended as teaching texts for students of Bachelor's programmes at the Faculty of Medicine at MUNI (Fundamentals of General Neurology for students of Bachelor's programmes in Nursing and Midwifery and Fundamentals of Special Neurology for students of Bachelor's programmes in Nursing and Midwifery. Brno: Masaryk University 2018). She is also co-author of the national undergraduate textbook Neurology for medical students (Růžička E et al. Neurology for medical students. Prague: Triton 2019 (1st edition), 2021 (2nd expanded edition), 2024 (3rd expanded edition)).

In addition to these publications, she has authored or co-authored a further 13 chapters in published monographs.

She has been nominated twice for the Werner von Siemens Prize (2022, 2023) and in 2024 for the Academician of the Year Award.

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

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

Associate Professor Vlčková is a recognised clinical expert in neuromuscular diseases and vertebrogenic and neuropathic pain.

She has been involved in research in these areas, including the international FP7 Health grant project (see above).

She has been a member of the Committee of the Neuromuscular Section of the Czech Neurological Society since 2014. She regularly participates in the organisation of Czech and Slovak Neuromuscular Congresses and of sections focusing on neuromuscular or vertebrogenic issues within the Czech and Slovak Neurological Congresses and Congresses of Practical Neurology.

Since 2015, she has been a delegate of the Czech Neurological Society of the Czech Medical Society of Jan Evangelista Purkyně for the EAN Subspecialty Scientific Panel Neuropathies. She is also a renowned lecturer: she has authored or co-authored more than 300 lectures or posters at professional symposia in the Czech Republic, Slovakia and European forums, of which more than 50 were invited review communications.

She is a reviewer of more than 50 articles published in Czech and foreign journals and a reviewer of several grant projects and postdoctoral theses.

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.

Evaluation Board Decision on the Nomination for Appointment to Professor

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 Medicine of Masaryk University to **appoint the applicant professor** of Neurology.

In Brno on 27.11.2024

prof. MUDr. Irena Rektorová, Ph.D.

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