

DOMENIUL TEZEI DE ABILITARE: BIOLOGIE

FISA VERIFICARE PRIVIND INDEPLINIREA STANDARDELOR MINIMALE

A. Conditii preliminare

1. Director proiect/responsabil

OTKA-PD-100958 (Hungarian Research Fund) **“Role of the neural environment in the transmigration of melanoma cells through the blood-brain barrier”**; perioada de implementare: 2012-2015; pozitia in proiect: director proiect

BO/00320/12/8 (Hungarian Academy of Sciences) **“Effect of CNS-derived factors on the transmigration of melanoma cells across the blood-brain barrier”**; perioada de implementare: 2012-2015; pozitia in proiect: director proiect

2. Membru în proiect

OTKA K-116158 (Hungarian Research Fund) **“Role of brain endothelial cells and pericytes in the inflammatory responses of the neurovascular unit”**; perioada de implementare: 2016-2019; pozitia in proiect: membru in proiect

OTKA K-100807 (Hungarian Research Fund) **“The role of the interaction between metastatic cells and brain endothelium in the development of brain metastases”**; perioada de implementare: 2012-2016; pozitia in proiect: membru in proiect

HURO/1101/173/2.2.1 (European Regional Development Fund) **“Integrated Cross-Border Research Platform to Identify Cellular Processes as Potential Targets for Personalized Cancer Therapies”**; perioada de implementare: 2012-2015; pozitia in proiect: membru in proiect

NKM-103/294 (Hungarian Academy of Sciences, Polish Academy of Sciences) **“Bivalent peptid ligands targeting receptor dimers”**; perioada de implementare: 2013-2016; pozitia in proiect: membru in proiect

XTTPSRT1 (Hungarian Office for Research and Technology) **“Xenobiotics Transporter Technology Platform – Therapeutical and Toxicological Applications”**; perioada de implementare: 2006-2009; pozitia in proiect: membru in proiect

Standarde minimale

Nr. crt.	Referință bibliografică (articole in reviste cotate ISI)	Autor principal	Contributor	Article influence score (AI)	Nr. citari independente (Scopus) (c)	Punctaj cf. formulei (1) sau (2)
1	Molnár J, Fazakas C, Haskó J, Sipos O, Nagy K, Nyúl-Tóth Á, Farkas AE, Végh AG, Váró G, Galajda P, Krizbai IA, Wilhelm I . Transmigration characteristics of breast cancer and melanoma cells through the brain endothelium: role of Rac and PI3K. <i>Cell Adh Migr</i> . 2015 Dec 8:0. [Epub ahead of print] IF2014: 4,505	Da		1		15
2	Nagyörszi P, Nyúl-Tóth Á, Fazakas C, Wilhelm I , Kozma M, Molnár J, Haskó J, Krizbai IA. Regulation of NOD-like receptors and inflammasome activation in cerebral endothelial cells. <i>J Neurochem</i> . 2015 Nov;135(3):551-64. IF2014: 4,281		Da	1,2		11,2
3	Krizbai IA, Gasparics A, Nagyörszi P, Fazakas C, Molnár J, Wilhelm I , Bencs R, Rosivall L, Sebe A. Endothelial-mesenchymal transition of brain endothelial cells: possible role during metastatic extravasation. <i>PLoS One</i> . 2015 Mar 5;10(3):e0119655. IF2014: 3,234		Da	1,4	1	12,6
4	Hajdu Z, Haskó J, Krizbai IA, Wilhelm I , Jedlinszki N, Fazakas C, Molnár J, Forgo P, Hohmann J, Csupor D. Evaluation of lignans from <i>Heliopsis helianthoides</i> var. <i>scabra</i> for their potential antimetastatic effects in the brain. <i>J Nat Prod</i> . 2014 Dec 26;77(12):2641-50. IF2014: 3,798		Da	0,8	1	10,5
5	Wilhelm I , Fazakas C, Tamás A, Tóth G, Reglódi D, Krizbai IA. PACAP enhances barrier properties of cerebral microvessels. <i>J Mol Neurosci</i> . 2014 Nov;54(3):469-76. IF2014: 2,343	Da		0,7		13,5
6	Haskó J, Fazakas C, Molnár J, Nyúl-Tóth Á, Herman H, Hermenean A, Wilhelm I , Persidsky Y, Krizbai IA. CB2 receptor activation inhibits melanoma cell transmigration through the blood-brain barrier. <i>Int J Mol Sci</i> . 2014 May 8;15(5):8063-74. IF2014: 2,862		Da	0,6	2	10,5
7	Wilhelm I , Krizbai IA. In vitro models of the blood-brain barrier for the study of drug delivery to the brain. <i>Mol Pharm</i> . 2014 Jul 7;11(7):1949-63. IF2014: 4,384	Da		1,5	4	21,5

8	Kosson A, Krizbai I, Lesniak A, Beresewicz M, Sacharczuk M, Kosson P, Nagyszó P, Wilhelm I , Kleczkowska P, Lipkowski AW. Role of the blood-brain barrier in differential response to opioid peptides and morphine in mouse lines divergently bred for high and low swim stress-induced analgesia. <i>Acta Neurobiol Exp (Wars)</i> . 2014;74(1):26-32. IF2014: 1,286	Da	0,5	1	9,45
9	Wilhelm I , Fazakas C, Molnár J, Haskó J, Végh AG, Cervenak L, Nagyószó P, Nyúl-Tóth A, Farkas AE, Bauer H, Guillemin GJ, Bauer HC, Váró G, Krizbai IA. Role of Rho/ROCK signaling in the interaction of melanoma cells with the blood-brain barrier. <i>Pigment Cell Melanoma Res</i> . 2014 Jan;27(1):113-23. IF2014: 4,619	Da	2	2	22
10	Bálint Z, Zabini D, Konya V, Nagaraj C, Végh AG, Váró G, Wilhelm I , Fazakas C, Krizbai IA, Heinemann A, Olschewski H, Olschewski A. Double-stranded RNA attenuates the barrier function of human pulmonary artery endothelial cells. <i>PLoS One</i> . 2013 Jun 3;8(6):e63776. IF2013:3,534	Da	1,4	1	12,6
11	Wilhelm I , Molnár J, Fazakas C, Haskó J, Krizbai IA. Role of the blood-brain barrier in the formation of brain metastases. <i>Int J Mol Sci</i> . 2013 Jan 11;14(1):1383-411. IF2013: 2,339	Da	0,6	18	31
12	Sziráki I, Erdő F, Trampus P, Sike M, Molnár PM, Rajnai Z, Molnár J, Wilhelm I , Fazakas C, Kis E, Krizbai I, Krajcsi P. The use of microdialysis techniques in mice to study P-gp function at the blood-brain barrier. <i>J Biomol Screen</i> . 2013 Apr;18(4):430-40. IF2013: 2,012	Da	0,7		9,45
13	Mallareddy JR, Tóth G, Fazakas C, Molnár J, Nagyószó P, Lipkowski AW, Krizbai IA, Wilhelm I . Transport characteristics of endomorphin-2 analogues in brain capillary endothelial cells. <i>Chem Biol Drug Des</i> . 2012 Apr;79(4):507-13. IF2012: 2,469	Da	0,6	3	16
14	Végh AG, Fazakas C, Nagy K, Wilhelm I , Molnár J, Krizbai IA, Szegletes Z, Váró G. Adhesion and stress relaxation forces between melanoma and cerebral endothelial cells. <i>Eur Biophys J</i> . 2012 Feb;41(2):139-45. IF2012: 2,274	Da	0,8	2	11,2
15	Glavinas H, von Richter O, Vojnits K, Mehn D, Wilhelm I , Nagy T, Janossy J, Krizbai I, Couraud P, Krajcsi P. Calcein assay: a high-throughput method to assess P-gp inhibition. <i>Xenobiotica</i> . 2011 Aug;41(8):712-9. IF2011: 1,791	Da	0,6	7	14
16	Sziráki I, Erdo F, Beéry E, Molnár PM, Fazakas C, Wilhelm I , Makai I, Kis E, Herédi-Szabó K, Abonyi T, Krizbai I, Tóth GK, Krajcsi P. Quinidine as an ABCB1 probe for testing drug interactions at the blood-brain barrier: an in vitro in vivo correlation study. <i>J Biomol Screen</i> . 2011 Sep;16(8):886-94. IF2011: 2,049	Da	0,7	7	14,35

17	Fazakas C*, Wilhelm I* , Nagyszi P, Farkas AE, Haskó J, Molnár J, Bauer H, Bauer HC, Ayaydin F, Dung NT, Siklós L, Krizbai IA. Transmigration of melanoma cells through the blood-brain barrier: role of endothelial tight junctions and melanoma-released serine proteases. <i>PLoS One</i> . 2011;6(6):e20758. IF2011: 4,092 *first authors	Da	1,4	23	40
18	Wilhelm I , Fazakas C, Krizbai IA. In vitro models of the blood-brain barrier. <i>Acta Neurobiol Exp (Wars)</i> . 2011;71(1):113-28. IF2011: 2,110	Da	0,5	87	99,5
19	Végh AG, Fazakas C, Nagy K, Wilhelm I , Krizbai IA, Nagyszi P, Szegletes Z, Váró G. Spatial and temporal dependence of the cerebral endothelial cells elasticity. <i>J Mol Recognit</i> . 2011 May-Jun;24(3):422-8. IF2011: 3,310	Da	0,8	6	14
20	Bauer HC, Traweger A, Zweimueller-Mayer J, Lehner C, Tempfer H, Krizbai I, Wilhelm I , Bauer H. New aspects of the molecular constituents of tissue barriers. <i>J Neural Transm</i> . 2011 Jan;118(1):7-21. IF2011: 2,730	Da	0,8	16	21
21	Nagyszi P, Wilhelm I , Farkas AE, Fazakas C, Dung NT, Haskó J, Krizbai IA. Expression and regulation of toll-like receptors in cerebral endothelial cells. <i>Neurochem Int</i> . 2010 Nov;57(5):556-64. IF2010: 3,601	Da	0,7	42	38,85
22	Wilhelm I , Nagyszi P, Farkas AE, Couraud PO, Romero IA, Weksler B, Fazakas C, Dung NT, Bottka S, Bauer H, Bauer HC, Krizbai IA. Hyperosmotic stress induces Axl activation and cleavage in cerebral endothelial cells. <i>J Neurochem</i> . 2008 Oct;107(1):116-26. IF2008: 4,500	Da	1,2	8	24
23	Vajda S, Bartha K, Wilhelm I , Krizbai IA, Adam-Vizi V. Identification of protease-activated receptor-4 (PAR-4) in puromycin-purified brain capillary endothelial cells cultured on Matrigel. <i>Neurochem Int</i> . 2008 May;52(6):1234-9. IF2008: 3,228	Da	0,7	5	12,95
24	Hutamekalin P, Farkas AE, Orbók A, Wilhelm I , Nagyszi P, Veszélka S, Deli MA, Buzás K, Hunyadi-Gulyás E, Medzihradzky KF, Meksuriyen D, Krizbai IA. Effect of nicotine and polycyclic aromatic hydrocarbons on cerebral endothelial cells. <i>Cell Biol Int</i> . 2008 Feb;32(2):198-209. IF2008: 1,619	Da	0,4	17	20,3
25	Wilhelm I , Farkas AE, Nagyszi P, Váró G, Bálint Z, Végh GA, Couraud PO, Romero IA, Weksler B, Krizbai IA. Regulation of cerebral endothelial cell morphology by extracellular calcium. <i>Phys Med Biol</i> . 2007 Oct 21;52(20):6261-74. IF2007: 2,528	Da	1	8	23
26	Bálint Z, Krizbai IA, Wilhelm I , Farkas AE, Párducz A, Szegletes Z, Váró G. Changes induced by hyperosmotic mannitol in cerebral endothelial cells: an atomic force microscopic study. <i>Eur Biophys J</i> . 2007	Da	0,8	14	19,6

	Feb;36(2):113-20. IF2007: 2,238					
27	Krizbai IA, Lenzser G, Szatmari E, Farkas AE, Wilhelm I , Fekete Z, Erdos B, Bauer H, Bauer HC, Sandor P, Komjati K. Blood-brain barrier changes during compensated and decompensated hemorrhagic shock. <i>Shock</i> . 2005 Nov;24(5):428-33. IF2005: 3,122		Da	0,7	17	21,35
28	Szabó H, Novák Z, Bauer H, Szatmári E, Farkas A, Wejksza K, Orbók A, Wilhelm I , Krizbai IA. Regulation of proteolytic activity induced by inflammatory stimuli in lung epithelial cells. <i>Cell Mol Biol (Noisy-le-grand)</i> . 2005 Sep 2;51 Suppl:OL729-35. IF2005: 1,018		Da	0,2	5	11,2
29	Farkas A, Szatmári E, Orbók A, Wilhelm I , Wejksza K, Nagyoszi P, Hutamekalin P, Bauer H, Bauer HC, Traweger A, Krizbai IA. Hyperosmotic mannitol induces Src kinase-dependent phosphorylation of beta-catenin in cerebral endothelial cells. <i>J Neurosci Res</i> . 2005 Jun 15;80(6):855-61. IF2005: 3,239		Da	0,8	22	25,2

Formula (1): $1 \times [10+(5 \times AI1)+c1] + 1 \times [10+(5 \times AI2)+c2] + \dots$ -pentru autor principal

Formula (2): $0,7 \times [10+(5 \times AI1)+c1] + 0,7 \times [10+(5 \times AI2)+c2] + \dots$ -pentru contributor

Formula (1): $=15+13,5+21,5+22+31+16+40+99,5+24+23=305,5$

Formula (2):

$=11,2+12,6+10,5+9,45+12,6+9,45+11,2+14+14,35+14+21+38,85+12,95+20,3+19,6+21,35+11,2+25,2=300,3$

Parametrul recunoaștere internațională = Formula (1) + Formula (2) = **605,8**

Total general: 605,8

Parametrul	ABILITARE
Recunoaștere internațională	605,8
Performanța totală	605,8

SEMNATURA CANDIDAT,