

BIOGRAPHICAL SKETCH

NAME: **Krizbai, Istvan**

POSITION TITLE: **Professor**

EDUCATION/TRAINING



Semmelweis University, Budapest, Hungary	M.D.	09/1990	Medicine
University of Szeged, Hungary	Ph.D.	06/1996	Medicine
Institute of Molecular Biology, Austrian Academy of Sciences, Salzburg, Austria	Postdoc.	1998-1999	
Hungarian Academy of Sciences	D.Sc.	2013	Biology
Habilitation		2015	Biology

A. Contribution to Science

Dr Krizbai is scientific advisor and head of the Neurovascular Unit Research Group at the Biological Research Centre, Szeged, Hungary, honorary professor at the University of Szeged, Hungary and professor at the Vasile Goldis Western University of Arad, Romania. The focus of his research has been the neurovascular unit. By using in vitro, in vivo and ex vivo models of the neurovascular unit, he elucidated the role of important signalling molecules (glutamate, Axl, Src, and ROCK) in cerebral endothelial cells and pericytes. In the past several years, his research group identified the pattern recognition receptors expressed in cerebral endothelial cells and pericytes. They have also demonstrated that cerebral endothelial cells and pericytes are able to form functionally active inflammasomes and consequently modulate inflammatory pathways in the brain. Besides, using two-photon imaging, they described how metastatic cells transmigrate through the blood-brain barrier, which is the initial step of brain metastasis formation. Furthermore, his research group identified several important mechanisms of brain metastasis formation and they have shown that pericyte-secreted IGF2 promotes breast cancer brain metastasis formation. A further intriguing question his laboratory has been studying is how the neurovascular unit reacts to aging-related conditions and how aging-associated dysfunctions of the neurovascular unit can be alleviated using cell-based therapies.

B. Positions and Honors

Positions and Employment

2013 - present	Professor , Vasile Goldis Western University, Arad, Romania
2013 - present	Scientific advisor and group leader , Institute of Biophysics, Biological Research Centre, Szeged, Hungary
2000 - 2013t	Senior research scientist and group leader (tenure) , Institute of Biophysics, Biological Research Centre, Szeged, Hungary
1998 - 1999	Post-Doc Position at the Institute of Molecular Biology, Austrian Academy of Sciences, Salzburg, Austria

Other Experience and Professional Memberships

2021-	Editorial Board member "Frontiers in Aging Neuroscience"
2012-	Editorial Board member "Acta Neurobiologiae Experimentalis"
2022-	Member, General Assembly and member, Section of Biological Sciences, Hungarian Academy of Sciences
2022-	Member, Faculty Council, Medical School, University of Szeged, Hungary
2022-	Member, Cell Biology Section of the Hungarian Scientific Research Fund
2021-	Member, Habilitation Committee, University of Szeged, Hungary
2020-	President, Biology Section, Szeged Branch of the Hungarian Academy of Sciences
2017-	Member, Neurobiology Scientific Committee, Hungarian Academy of Sciences
2014-2022	Member, Doctoral Council, University of Szeged, Hungary
2015-	Member, Scientific Council, Biological Research Centre, Szeged, Hungary

Honors

2019	Straub Medal
2016, 2017	Dr. Tibor Farkas Award for mentoring Ph.D. students
2011	Maya and Nicolae Simionescu Award for Excellence in Cell Biology, Romanian Society for Cell Biology
2004	János Bolyai certificate of merit, Hungarian Academy of Sciences
2000	János Bolyai Research Award, Hungarian Academy of Sciences
1997	Academy Award for Young Scientists, Hungarian Academy of Sciences

Complete List of Published Work

<https://pubmed.ncbi.nlm.nih.gov/?term=krizbai+i&sort=date>