In the name of Allah; the Beneficent, the Merciful

Curriculum Vitae

Kazem Sharifi MD. PhD.

Assistant Professor Department of Biotechnology and Molecular Medicine Faculty of Advanced Technologies Shahid Beheshti University of Medical Sciences



EDUCATION

2014	PhD in Molecular and Cellular Medicine, Yamaguchi University Graduate School of Medicine, Department of system control medicine / organ anatomy, Yamaguchi, Japan
2003	Medical Doctor, Tehran University of Medical Sciences, Tehran, Iran
1994	High school Diploma, National Organization for Development of Exceptional Talents, Allameh Helli high school, Tehran, Iran

RESEARCH ACTIVITIES and INTERESTS

Fields of interest: Molecular and cellular medicine; stem cell biology, cell therapy and regenerative medicine, cancer biology, tissue engineering

Research Area:

- Human cell based *in vitro* organ and disease modeling as platforms for food safety, drug toxicity testing, drug discovery, and personalized medicine
- RNA based therapeutics

Past research activity: Study on the expression and roles of Fatty acid binding proteins (FABPs) and their ligands (FAs) in macroglia and their involvement in brain regenerative programs including reactive astrogliosis and oligodendrogenesis as well as their

association with pathophysiology of CNS diseases including neuropsychiatric disorders, traumatic and demyelinating injuries, and glioma.

PhD Thesis title: Expression and biological roles of FABPs in macroglia: implications for molecular and regenerative medicine

MD Thesis title: A situation analysis study on educational resources used by undergraduate medical students in medical faculty of Tehran University of medical science (TUMS) between 1995 and 2000 and designing a model for reform in educational resources through development of Study Guides

PROFESSIONAL MEMBERSHIP

2017-present	Iranian Association of Molecular Medicine, Member
2012-2018	International Society for Stem Cell Research (ISSCR), Member
2011-2014	Japan Neuroscience Society (JNS), Member
2011-2014	Molecular Biology Society of Japan (MBSJ), Member
2011-2012	Japanese Association of Anatomists, Member
2003-present	Iranian medical council, Life member

AWARDS AND HONORS

2014	President award, Yamaguchi University, for the highest achievements
	during PhD course in graduate school of medicine
2009	Japanese Government Scholarship (Monbukagakusho) for PhD program

- 2000 Avicenna festival award, Tehran University of medical sciences, for contribution in writing "Medical Physiology Textbook of Tehran University"
- 1994 10th position in annual Iranian universities' Admittance examination among 300,000 students in Experimental sciences group
- 1987-1994 Student in National Organization for Development of Exceptional Talents, Allameh Helli junior highschool and high school, Tehran- Iran

SELECTED PROFESSIONAL EXPERIENCES

2016- present Shahid Beheshti University of Medical Sciences, Faculty of Advanced Technologies, Department of Biotechnology and Molecular Medicine, *assistant professor*, Tehran, Iran

2017-2018	Iranian Red Crescent Society, vice president for education, research and technology, Tehran, Iran
2017-2018	Iranian red crescent higher education institute , <i>president</i> , Tehran, Iran
2017-present	Shahid Beheshti University of Medical Sciences Faculty of advanced technology, <i>Member</i> of Research committee
2016-2019	Journal of Regeneration, Reconstruction, & Restoration, Editorial board <i>member</i>
2017-present	Shahid Beheshti University of Medical Sciences, Anesthesiology Research Center, Board of directors <i>member</i>
2016-present	Journal of Cellular & Molecular Anesthesia, Editorial board <i>member</i>
2015 -present	Shahid Beheshti University of Medical Sciences, President's Advisor, Tehran, Iran
2014-2015	Shahid Beheshti University of Medical Sciences, <i>deputy director</i> of President's office, Tehran, Iran
2010 -2014	Yamaguchi University Graduate School of Medicine, <i>PhD</i> student (molecular and cellular medicine), Department of system control medicine/ organ anatomy, Yamaguchi, Japan
2009 – 2010	Yamaguchi University Graduate School of Medicine, <i>Research</i> student Department of system control medicine/ Organ Anatomy, Yamaguchi, Japan
2008 - 2009	Shahid Beheshti University of Medical Sciences, President's Advisor, Tehran, Iran
2006 - 2009	Shahid Beheshti University of Medical Sciences, Treatment Department, <i>R&D director</i> , Tehran, Iran
2008 - 2009	Shahid Beheshti University of Medical Sciences, Clinical Excellence Center, <i>Director</i> , Tehran, Iran
2005 - 2009	Iranian Medical Council, President's advisor, Tehran, Iran

2005 – 2006	Iranian Medical Council , Department of education, <i>director</i> , Tehran, Iran
2002-2005	Iranian Legal Medicine Organization, President's Advisor, Tehran, Iran

PUBLICATIONS

Shojaei S, Hashemi SM, Ghanbarian H, Sharifi K, Salehi M, Mohammadi-Yeganeh S (2021) Delivery of miR-381-3p Mimic by Mesenchymal Stem Cell-Derived Exosomes Inhibits Triple Negative Breast Cancer Aggressiveness; an In Vitro Study. Stem Cell Reviews and Reports, https://doi.org/10.1007/s12015-020-10089-4

Eftekhary M, Mohammadi-Yeganeh S, Bolandi Z, Hashemi SM, Mokhberian N, Sharifi K, Ghanbarian H (2020). A novel natural antisense transcript at human SOX9 locus is down-regulated in cancer and stem cells. Biotechnology Letters, 42(2): 329-339

Mokhberian N, Bolandi Z, Eftekhary M, Hashemi SM, Jajarmi V, Sharifi K, Ghanbarian H (2020). Inhibition of miR-34a reduces cellular senescence in human adipose tissuederived mesenchymal stem cells through the activation of SIRT1. Life Sciences, 257,118055

Bolandi Z, Mokhberian N, Eftekhary M, Sharifi K, Soudi S, Ghanbarian H, Hashemi SM (2020). Adipose derived mesenchymal stem cell exosomes loaded with miR-10a promote the differentiation of Th17 and Treg from naive CD4 + T cell. Life Sciences, 259,118218

Hara T, Umaru BA, Sharifi K, Yoshikawa T, Owada Y, Kagawa Y (2020). Fatty Acid Binding Protein 7 is Involved in the Proliferation of Reactive Astrocytes, but not in Cell Migration and Polarity. Acta Histochemica et Cytochemica, 53(4): 73-81

Tarhriz V, Eyvazi S, Musavi M, Abbasi M, Sharifi K, Ghanbarian H, Hejazi MS (2019). Transient induction of Cdk9 in the early stage of differentiation is critical for myogenesis. Journal of Cellular Biochemistry 120(11): 18854-1886.1

Musavi M, Kohram F, Abbasi M, Ajoodanian M, Mohammadi-Yeganeh S, Hashemi SM, Sharifi K, Fathi HR, Ghanbarian H (2019). Rn7SK small nuclear RNA is involved in cellular senescence. Journal of Cellular Physiology 234 (8), 14234-14245

Bastami F, Nazeman P, Moslemi H, Rezai Rad M, Sharifi K, Khojasteh A (2017). Induced pluripotent stem cells as a new getaway for bone tissue engineering: A systematic review. Cell Proliferation 50 (2), e12321.

Ebrahimi M, Yamamoto Y, Sharifi K, Kida H, Kagawa Y, Yasumoto Y, Islam A, Miyazaki H, Shimamoto C, Maekawa M, Mitsushima D, Yoshikawa T, Owada Y (2016) Astrocyte-expressed FABP7 regulates dendritic morphology and excitatory synaptic function of cortical neurons. Glia 64(1): 48-62. Kagawa Y, Yasumoto Y, **Sharifi K**, Ebrahimi M, Islam A, Miyazaki H, Yamamoto Y, Sawada T, Kishi H, Kobayashi S, Maekawa M, Yoshikawa T, Takaki E, Nakai A, Kogo H, Fujimoto T, Owada Y (2015) Fatty acid-binding protein 7 regulates function of caveolae in astrocytes through expression of caveolin-1. Glia 63(5):780-94.

Ebrahimi M*, **Sharifi K***, Islam A, Miyazaki H, Yasumoto Y, Kagawa Y, Yamamoto Y, Kitagawa T, Kuramitsu Y, Nakamura K and Yuji Owada (2015) Proteomic Differential Display Analysis Reveals Decreased Expression of PEA-15 and Vimentin in FABP7-Deficient Astrocytes. J Proteomics Bioinform 8(1):9-14. *Equally contributing authors

Islam A, Kagawa Y, Sharifi K, Ebrahimi M, Miyazaki H, Yasumoto Y, Kawamura S, Yamamoto Y, Sakaguti S, Sawada T, Tokuda N, Sugino N, Suzuki R, Owada Y(2014) Fatty Acid Binding Protein 3 Is Involved in n-3 and n-6 PUFA Transport in Mouse Trophoblasts. J Nutr 144 (10):1509-16.

Miyazaki H, Sawada T, Kiyohira M, Yu Z, Nakamura K, Yasumoto Y, Kagawa Y, Ebrahimi M, Islam A, **Sharifi K**, Yamamoto Y, Adachi Y, Tokuda N, Ishikawa T, Owada Y (2014) Fatty acid binding protein 7 regulates phagocytosis and cytokine production in Kupffer cells during liver injury. Am J Pathol 184 (9):2505-15.

Sharifi K, Ebrahimi M, Kagawa Y, Islam A, Tuerxun T, Yasumoto Y, Hara T, Yamamoto Y, Miyazaki H, Tokuda N, Yoshikawa T, Owada Y (2013) Differential expression and regulatory roles of FABP5 and FABP7 in oligodendrocyte lineage cells. Cell Tissue Res 354 (3):683-695.

Adachi Y, Hiramatsu S, Tokuda N, **Sharifi K**, Ebrahimi M, Islam A, Kagawa Y, Koshy Vaiduan L, Sawada T, Hamano K, Owada Y (2012) Fatty acid-binding protein 4 (FABP4) and FABP5 modulate cytokine production in the mouse thymic epithelial cells. Histochem Cell Biol 138 (3):397-406.

Sharifi K, Morihiro Y, Maekawa M, Yasumoto Y, Hoshi H, Adachi Y, Sawada T, Tokuda N, Kondo H, Yoshikawa T, Suzuki M, Owada Y (2011) FABP7 expression in normal and stab-injured brain cortex and its role in astrocyte proliferation. Histochem Cell Biol 136 (5):501-513.

Morihiro Y, Yasumoto Y, Vaidyan LK, Sadahiro H, Uchida T, Inamura A, Sharifi K, Ideguchi M, Nomura S, Tokuda N, Kashiwabara S, Ishii A, Ikeda E, Owada Y, Suzuki M (2013) Fatty acid binding protein 7 as a marker of glioma stem cells. Pathol Int 63 (11):546-553.

Tokuda N, Adachi T, Adachi Y, Higashi M, Sharifi K, Tuerxun T, Sawada T, Kondo H, Owada Y (2010) Identification of FABP7 in fibroblastic reticular cells of mouse lymph nodes. Histochem Cell Biol 134 (5):445-452.

A contributor of "Medical Physiology Textbook of Tehran University of Medical Science (TUMS)", TUMS press, 2000, ISBN: 964-92640-3-5, Book in Persian

A contributor of "Family Health Textbook of Tehran University of Medical Science (TUMS)", TUMS press, 2006, ISBN: 964-8941-35-0, Book in Persian

PRESENTATIONS IN SCIENTIFIC CONFERENCES

Oral presentations

Sharifi K, Owada Y (2016). Roles of FABPs in regenerative potentials of macroglia. The 12th Iranian congress on anatomical sciences. May 4-6, 2016, Tehran, Iran.

Sharifi K, Ebrahimi M, Kagawa. Y, Islam A, Koshy Vaiduan L, Hara T, Yasumoto Y, Tokuda N, Owada Y (2012). FABP5 and FABP7; novel markers in oligodendrocyte lineage. 35th Annual meeting of the Japan Neuroscience Society. Sep 18-21, 2012, Nagoya, Japan.

Sharifi K, *Morihiro Y*, *Yasumoto Y*, *Maekawa M*, *Ebrahimi M*, *Tokuda N*, *Yoshikawa T*, *Owada Y (2011)* Expression of FABP7 in normal and injured brain cortex and its role in astrocyte proliferation. 34th annual meeting of the Japan Neuroscience Society. Sep 14-17, 2011, Yokohama, Japan.

Ebrahimi M, Sharifi K, Kagawa Y, Yamamoto Y, Islam A, Yasumoto Y, Miyazaki H, Hara T, Sawada T, Tokuda N,Yoshikawa T and Owada,Y (2013) Neuronal plasticity is regulated by glial fatty acid binding protein (FABP7). 36th Annual meeting of the Japan Neuroscience Society. Jun 23-27, 2013, Kyoto, Japan

Kagawa Y, Ebrahimi M, Sharifi K, Miyazaki H, Yasumoto Y, Sawada T, Tokuda N, Kobayashi S, Kogo H, Fujimoto T, Yoshikawa T, Owada Y (2013) Fatty acid-binding protein 7 (FABP7) regulates lipid raft formation in the astrocytes. 36th Annual meeting of the Japan Neuroscience Society. Jun 23-27, 2013, Kyoto, Japan

Poster presentations

Yamamoto Y, Sharifi K, Islam A, Ebrahimi M, Yasumoto Y, Miyazaki H, Kagawa Y, Sawada T, Tokuda N, Fukunaga K, and Owada Y (2014). Localization of FABP3 in the mouse cingulate cortex and its possible role in the regulation of inhibitory neurons. Neuroscience 2014, Nov 15-19, Washington D.C., USA

Ebrahimi M, Sharifi K, Kagawa Y, Islam A, Yasumoto Y, Miyazaki H, Kawamura S, Yamamoto Y, Sawada T, Yoshikawa T and Owada Y (2014). Role of astrocytic FABP7 in medial prefrontal cortex (mPFC) as a regulator of mouse emotional behavior. Neuroscience 2014, Nov 15-19, Washington D.C., USA

Sharifi K, Ebrahimi M, Kagawa. Y, Islam A, Koshy Vaiduan L, Hara T, Yasumoto Y, Tokuda N, Owada Y (2012). FABP5 and FABP7 as novel markers and biological regulators for oligodendrocyte lineage. 35th Annual meeting of the Molecular biology Society of Japan. Dec 11-14, 2012, Fukuoka, Japan.

Sharifi K, Kagawa Y, Ebrahimi M, Islam A, Koshy Vaiduan L, Hara T, Yasumoto Y, Adachi Y, Tokuda N, Owada Y (2012) Differential expression of FABP7 and FABP5 in mouse oligodendrocyte lineage cells. 10th annual meeting of international society for stem cell research (ISSCR), June 13-16, 2012, Yokohama, Japan.

Kagawa Y, Ebrahimi M, **Sharifi K**, Islam A, Yasumoto Y, Miyazaki H, Kawamura S, Yamamoto Y, Sawada T, Tokuda N, Kogo H, Fujimoto T, Yoshikawa T, Owada Y (2013) Fatty acid-binding protein 7 (FABP7) regulates lipid raft formation in the astrocytes through the expression of caveolin-1. The 86th Annual Meeting of the Japanese Biochemical Society. Sep 11-13, 2013, Yokohama, Japan

Kagawa Y, Yasumoto Y, Sharifi K, Brahimi M, Islam A, Miyazaki H, Kawamura S, Yamamoto Y, Yoshikawa T, Kogo H, Sato S, Sugino N, Fujimoto T, Owada Y (2013) FABP7 is involved in epigenetic modification in astrocyte. 36th Annual meeting of the Molecular biology Society of Japan. Dec 3-6, 2013, Kobe, Japan

Yamamoto Y, **Sharifi K**, Islam A, Ebrahimi M, Kagawa Y, Yamamoto Y, Miyazaki H, Kawamura S, Sawada T, Tokuda N, Fukunaga K, Owada Y (2013) Fatty acid binding protein 3 (FABP3) regulates cognitive function and anxiety behavior. Neuroscience 2013, Nov 9-13, 2013, San Diego, USA

Kagawa Y, Ebrahimi M, Sharifi K, Islam A, Yasumoto Y, Miyazaki H, Kawamura S, Yamamoto Y, Sawada T, Tokuda N, Owada Y (2013) FABP7-deficiency in astrocytes resulted in altered membrane lipid raft formation. Neuroscience 2013, Nov 9-13, 2013, San Diego, USA

Ebrahimi, M., Sharifi, K., Kagawa, Y., Islam, A., Yasumoto, Y., Miyazaki, H., Kawamura, S., Yamamoto, Y., Sawada, T., Yoshikawa, T., Owada, Y. (2013) FABP7 is expressed in astrocytes and regulates the excitatory synapse formation in mouse cerebral cortex. Neuroscience 2013, Nov 9-13, 2013, San Diego, USA

Y. Yasumoto, H. Sadahiro, K. Sharifi, Y. Kagawa, M. Ebrahimi, A. Islam,

H. Miyazaki, S. Kawamura, Y. Yamamoto, T. Sawada, M. Suzuki, Y. Owada (2013) Expression and function of fatty acid binding protein 7 in glioma stem cells. Neuroscience 2013, Nov 9-13, 2013, San Diego, USA

Hara T, Sharifi K, Ebrahimi M, Kagawa Y, Yasumoto Y, Miyazaki H, Islam A, Sawada T, Tokuda N, Owada Y (2013) FABP7 as a regulator of reactive astrocyte proliferation.118th annual meeting of the Japanese association of Anatomists. March 2013, Kagawa, Japan

Ebrahimi M, Sharifi K, Kagawa Y, Yasumoto Y, Miyazaki H, Islam A, Hara T, Adachi Y, Sawada T, Tokuda N, and Owada,Y (2012) Control of neuronal dendritic formation by brain-type fatty acid binding protein (FABP7). Neuroscience 2012, Oct 13-17, 2012, New Orleans, USA

Kagawa Y, Ebrahimi M, Miyazaki H, Yasumoto Y, **Sharifi K**, Islam A, Adachi Y, Sawada T, Tokuda N, and Owada Y(2012) Fatty acid-binding protein 7(FABP7) regulates LPS-induced TNF- α production in the astrocytes. Neuroscience 2012, Oct 13-17, 2012, New Orleans, USA

Ebrahimi M, Kagawa Y, Sharifi K, Yasumoto Y, Islam A, Miyazaki H, Tomonori H, Adachi Y, Sawada T, Tokuda N, Owada Y (2012) FABP7 is involved in the control of neuronal dendritic formation. 35th Annual meeting of the Japan Neuroscience Society. Sep 18-21, 2012, Nagoya, Japan.

Islam A, Tokuda N, Adachi Y, Sawada T, Sharifi K, Ebrahimi M, Suzuki R, and Owada Y(2012) Fatty acid binding protein3 (FABP3) as a cellular regulator of fatty acid transport from mother to fetus in rodent placenta. International Federation of Placenta Associaion (IFPA) 2012 congress, Sep 18-21, 2012, Hiroshima, Japan.

Ebrahimi M, Kagawa Y, Sharifi K, Adachi Y, Sawada T, Tokuda N, Owada Y (2012). FABP7 in astrocytes is involved in control of neuronal dendritic formation. 117th annual meeting of the Japanese association of Anatomists March 26-28, 2012, Yamanashi, Japan

Tokuda N, Adachi Y, Adachi T, Higashi M, Sharifi K, Tuerxun T, Sawada T, Owada Y (2011) Identification of FABP7 in fibroblastic reticular cells of mouse lymph nodes. 88th annual meeting of the physiological society of Japan and the 116th annual meeting of the Japanese association of Anatomists March 28-30, 2011, Yokohama, Japan

Sharifi.K, Yasumoto.Y, Adachi.Y, Tuerxun.T, Islam.A, Ebrahimi.M, Sawada.T, Tokuda.N, Owada.Y (2011). FABP7 Expression in injured brain cortex and its role in astrocyte proliferation. 88th annual meeting of the physiological society of Japan and the 116th annual meeting of the Japanese association of Anatomists March 28-30, 2011, Yokohama, Japan

Yasumoto Y, Sharifi K, Morihiro Y, Adachi Y, Tokuda N, Sawada T, Owada Y (2010) Roles of FABP7 in astrocytes. 115th annual meeting of the Japanese association of Anatomists March 28-30, 2010, Morioka, Japan

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