

Curriculum Vitae

# Leila Dargahi



➤ **Personal Information**

**Date of Birth:** 10/31/1979

**Place of Birth:** Tehran

**Nationality:** Iranian

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➤ **Education**

**1998 - 2004**

Graduate Pharmacy Student

School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran

**2004 - 2010**

Postgraduate (Ph.D.) Student

Department of Pharmacology, School of Medicine, Shahid Beheshti University of Medical Sciences,  
Tehran, Iran

**2010**

Six months Research Fellow

Laboratory of Molecular Neuropharmacology, TCIN, Trinity College Dublin, Ireland

## ➤ **Qualifications & Appointments**

Pharm D. (2004)  
Mashhad University of Medical Sciences

PhD (2010)  
Shahid Beheshti University of Medical Sciences

Assistant Professor (2011-date)  
Neuroscience Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

## ➤ **Research Interests and Activities**

Cellular and Molecular Neuroscience, Behavioral Neuroscience; focused on the neuroinflammatory and neurodegenerative processes which is a common feature in many neuropsychiatric and neurological disorders.

## ➤ **Publications**

1. Khallaghi B, Safarian F, Nasoohi S, Ahmadiani A, **Dargahi L**. Metformin-induced protection against oxidative stress is associated with AKT/mTOR restoration in PC12 cells. *Life Sci.* **2016** Mar 1;148:286-92. doi: 10.1016/j.lfs.2016.02.024.
2. Ghasemi R, **Dargahi L**, Ahmadiani A. Integrated sphingosine-1 phosphate signaling in the central nervous system: From physiological equilibrium to pathological damage. *Pharmacol Res.* **2016**; 104:156-64. doi: 10.1016/j.phrs.2015.11.006.
3. Rahmani B, Ghasemi R, **Dargahi L**, Ahmadiani A, Haeri A. Neurosteroids; potential underpinning roles in maintaining homeostasis. *Gen Comp Endocrinol.* **2016**; 225:242-50. doi: 10.1016/j.ygcen.2015.09.030.
4. Tamijani SM, Karimi B, Amini E, Golpich M, **Dargahi L**, Ali RA, Ibrahim NM, Mohamed Z, Ghasemi R, Ahmadiani A. Thyroid hormones: Possible roles in epilepsy pathology. *Seizure.* **2015**; 155-64. doi: 10.1016/j.seizure.2015.07.021. Epub 2015 Aug 4.
5. Pandamooz S, Nabiuni M, Miyan J, Ahmadiani A, **Dargahi L**. Organotypic Spinal Cord Culture: a Proper Platform for the Functional Screening. *Mol Neurobiol.* **2015** Aug 27. [Epub ahead of print]
6. Nikseresht S, Khodagholi F, Nategh M, **Dargahi L**. RIP1 Inhibition Rescues from LPS-Induced RIP3-Mediated Programmed Cell Death, Distributed Energy Metabolism and Spatial Memory Impairment. *J Mol Neurosci.* **2015** Jul 9.

7. Kolahdooz Z, Nasoohi S, Asle-Rousta M, Ahmadiani A, **Dargahi L**. Sphingosin-1-phosphate Receptor 1: a Potential Target to Inhibit Neuroinflammation and Restore the Sphingosin-1-phosphate Metabolism. *Can J Neurol Sci.* **2015**; 42(3):195-202. doi: 10.1017/cjn.2015.19.
8. Golpich M, Amini E, Hemmati F, Ibrahim NM, Rahmani B, Mohamed Z, Raymond AA, **Dargahi L**, Ghasemi R, Ahmadiani A. Glycogen synthase kinase-3 beta (GSK-3 ) signaling: Implications for Parkinson's disease. *Pharmacol Res.* **2015**; 97:16-26. doi: 10.1016/j.phrs.2015.03.010.
9. Ahmadian-Attari MM, **Dargahi L**, Mosaddegh M, Kamalinejad M, Khallaghi B, Noorbala F, Ahmadiani A. Impairment of Rat Spatial Learning and Memory in a New Model of Cold Water-Induced Chronic Hypothermia: Implication for Alzheimer's disease. *Neurotox Res.* **2015**; 28(2):95-107. doi: 10.1007/s12640-015-9525-0.
10. Parsi S, Pandamooz S, Heidari S, Najji M, Morfini G, Ahmadiani A, **Dargahi L**. A novel rat model of Alzheimer's disease based on lentiviral-mediated expression of mutant APP. *Neuroscience.* **2015**; 284:99-106. doi: 10.1016/j.
11. Golpich M, Rahmani B, Mohamed Ibrahim N, **Dargahi L**, Mohamed Z, Raymond AA, Ahmadiani A. Preconditioning as a Potential Strategy for the Prevention of Parkinson's Disease. *Mol Neurobiol.* **2015**; 51(1):313-30. doi: 10.1007/s12035-014-8689-6.
12. Safarian F, Khallaghi B, Ahmadiani A, **Dargahi L**. Activation of S1P1 Receptor Regulates PI3K/Akt/FoxO3a Pathway in Response to Oxidative Stress in PC12 Cells. *J Mol Neurosci.* **2014** *J Mol Neurosci.* **2015**; 56(1):177-87. doi: 10.1007/s12031-014-0478-1.
13. **Dargahi L**, Razavi-Azarkhiavi K, Ramezani M, Abaee MR, Behravan J. Insecticidal activity of the essential oil of *Thymus transcaspicus* against *Anopheles stephensi*. *Asian Pacific Journal of Tropical Biomedicine.* **2014**; 4: S589–S59.
14. Ahmadian-Attari MM, Ahmadiani A, Kamalinejad M, **Dargahi L**, Shirzad M, Mosaddegh M. Treatment of Alzheimer's disease in Iranian traditional medicine. *Iran Red Crescent Med J.* **2014**;17(1):e18052. doi: 10.5812/ircmj.18052.
15. Asle-Rousta M, Kolahdooz Z, **Dargahi L**, Ahmadiani A, Nasoohi S. Prominence of Central Sphingosine-1-Phosphate Receptor-1 in Attenuating A -Induced Injury by Fingolimod. *J Mol Neurosci.* **2014**; 54(4):698-703. doi: 10.1007/s12031-014-0423-3.
16. Amini E, Rezaei M, Mohamed Ibrahim N, Golpich M, Ghasemi R, Mohamed Z, Raymond AA, **Dargahi L**, Ahmadiani A. A Molecular Approach to Epilepsy Management: from Current Therapeutic Methods to Preconditioning Efforts. *Mol Neurobiol.* **2014** Sep 9. [Epub ahead of print]
17. Omidbakhsh R, Rajabli B, Nasoohi S, Khallaghi B, Mohamed Z, Naidu M, Ahmadiani A, **Dargahi L**. Fingolimod affects gene expression profile associated with LPS-induced memory impairment. *Exp Brain Res.* **2014**; 232 (11):3687-96. doi: 10.1007/s00221-014-4052-4.

18. Ahmadian-Attar MM, Ahmadiani A, Kamalinejad M, **Dargahi L**, Mosaddegh M. Chronic Cold-Water-Induced Hypothermia Impairs Memory Retrieval and *Nepeta menthoides* as a Traditional "Hot" Herb Reverses the Impairment. *Iran J Pharm Res.* **2014**;13(Suppl):185-93
19. Zibaii MI, Latifi H, Asadollahi A, Noraeipoor Z, **Dargahi L**. Real-time monitoring of intracellular signal transduction in PC12 cells by non-adiabatic tapered optical fiber biosensor (Conference Paper) *Proceedings of SPIE - The International Society for Optical Engineering*, Volume 9157, **2014**, Article number 91574I
20. Hemmati F, Ghasemi R, Mohamed Ibrahim N, **Dargahi L**, Mohamed Z, Raymond AA, Ahmadiani A. Crosstalk Between Insulin and Toll-like Receptor Signaling Pathways in the Central Nervous system. *Mol Neurobiol.* **2014**; 50(3):797-810. doi: 10.1007/s12035-013-8631-3.
21. Enayatfard L, Rostami F, Nasoohi S, Oryan S, Ahmadiani A, **Dargahi L**. Dual Role of PPAR- in Induction and Expression of Behavioral Sensitization to Cannabinoid Receptor Agonist WIN55,212-2. *Neuromolecular Med.* **2013**; 15(3):523-35. doi: 10.1007/s12017-013-8238-x.
22. Hemmati F, **Dargahi L**, Nasoohi S, Omidbakhsh R, Mohamed Z, Chik Z, Naidu M, Ahmadiani A. Neurorestorative effect of FTY720 in a rat model of Alzheimer's disease: Comparison with Memantine. *Behav Brain Res.* **2013**; 252C:415-421. doi: 10.1016/j.bbr.2013.06.016.
23. Asle-Rousta M, Kolahdooz Z, Oryan SH, Ahmadiani A, **Dargahi L**. FTY720 (Fingolimod) Attenuates Beta-amyloid Peptide (A 42)-Induced Impairment of Spatial Learning and Memory in Rats. *J Mol Neurosci.* **2013**; 50(3):524-32. doi: 10.1007/s12031-013-9979-6.
24. Ghasemi R, **Dargahi L**, Haeri A, Moosavi M, Mohamed Z, Ahmadiani A. Brain Insulin Dysregulation: Implication for Neurological and Neuropsychiatric Disorders. *Mol Neurobiol.* **2013**; 47(3):1045-65. doi: 10.1007/s12035-013-8404-z.
25. Sedaghat Z, Kadkhodae M, Seifi B, Salehi E, Najafi A, **Dargahi L**. Remote preconditioning reduces oxidative stress, downregulates cyclo-oxygenase-2 expression and attenuates ischaemia-reperfusion-induced acute kidney injury. *Clin Exp Pharmacol Physiol.* **2013**; 40(2):97-103. doi: 10.1111/1440-1681.12044.
26. Ghasemi R, Haeri A, **Dargahi L**, Mohamed Z, Ahmadiani A. Insulin in the Brain: Sources, Localization and Functions. *Mol Neurobiol.* **2013**; 47(1):145-71. doi: 10.1007/s12035-012-8339-9.
27. Nasiraei-Moghadam S, Sherafat MA, Safari MS, Moradi F, Ahmadiani A, **Dargahi L**. Reversal of Prenatal Morphine Exposure-Induced Memory Deficit in Male But Not Female Rats. *J Mol Neurosci.* **2013**; 50(1):58-69. doi: 10.1007/s12031-012-9860-z.
28. Rostami F, Oryan S, Ahmadiani A, **Dargahi L**. Morphine preconditioning protects against LPS-induced neuroinflammation and memory deficit. *J Mol Neurosci.* **2012**; 48(1):22-34.
29. Dutta P, **Dargahi L**, Ivankovic D, Healy LM, Dev KK. Trafficking of the GPR37/Pael receptor by interacting proteins. *Irish Journal of Medical Science.* **2011**; 180: 30.

30. Khalaj L, Peirovi H, Khodaghohi F, Abdi A, **Dargahi L**, Ahmadiani A. Acute 17  $\beta$ -estradiol pretreatment protects against abdominal aortic occlusion induced spinal cord ischemic-reperfusion injury. *Neurochem Res.* **2011**; 36(2):268-80. doi: 10.1007/s11064-010-0314-0.
31. Abdi A, Sadraie H, **Dargahi L**, Khalaj L, Ahmadiani A. Apoptosis inhibition can be threatening in A  $\beta$ -induced neuroinflammation, through promoting cell proliferation. *Neurochem Res.* **2011**; 36: 39-48.
32. **Dargahi L**, Nasiraei-Moghadam S, Abdi A, Khalaj L, Moradi F, Ahmadiani A. Cyclooxygenase (COX)-1 activity precedes the COX-2 induction in A  $\beta$ -induced neuroinflammation. *J Mol Neurosci.* **2011**; 45(1):10-21. doi: 10.1007/s12031-010-9401-6.
33. Ansari N, Khodaghohi F, Ramin M, Amini M, Irannejad H, **Dargahi L**, Amirabad AD. Inhibition of LPS-induced apoptosis in differentiated-PC12 cells by new triazine derivatives through NF- $\kappa$ B-mediated suppression of COX-2. *Neurochem Int.* **2010**; 57(8):958-68. doi: 10.1016/j.neuint.2010.10.002.
34. Nasiraei-Moghadam S, Kazeminezhad B, **Dargahi L**, Ahmadiani A. Maternal oral consumption of morphine increases Bax/Bcl-2 ratio and caspase 3 activity during early neural system development in rat embryos. *J Mol Neurosci.* **2010**; 41(1):156-64. doi: 10.1007/s12031-009-9312-6.
35. Khalaj L, Peirovi H, Khaodaghohi F, Abdi A, **Dargahi L**, Mohagheghi F and Ahmadiani A. Acute Administration of Estradiol Protects against Spinal Ischemic-Reperfusion Injury in Male Rabbits. *Physiology and Pharmacology*, **2010**; 14(1): 1-11.
36. Abdi A, Mohagheghi F, Sadraie SH, **Dargahi L**, Khalaj L, Ahmadiani A. Caspase inhibition in neuroinflammation induced by soluble  $\beta$  amyloid monomer, protects cells from abnormal survival and proliferation, via attenuation of NF  $\kappa$ B activity. *Physiology and Pharmacology*, **2010**; 14(3): 211-219.
37. Dutta P, Deb D, **Dargahi L**, Ivankovic D and Dev KK. The GPR37/Pael receptor; Finding a way to the cell surface. *Drug discovery*, **2010**; 7: 36-40.

### ➤ **National & International Conferences**

1. 4<sup>th</sup> Basic and Clinical Neuroscience Congress, 2015, Tehran: Pandamooz S, Ahmadiani A, Nabiuni M, Dargahi L. Valproic Acid preserves Motoneurons following contusion in organotypic spinal cord slice culture. *Poster presentation*
2. 4<sup>th</sup> Basic and Clinical Neuroscience Congress, 2015, Tehran: **Dargahi L**, Zibaii MI, Latifi H, Haghparast A, Janahmadi M, Motamedi F, Ahmadiani A. Opsin gene delivery and expression; behavioral and electrophysiological proof. *Oral presentation*

3. 4<sup>th</sup> Basic and Clinical Neuroscience Congress, 2015, Tehran: Heravi M, Morshedi D, **Dargahi L**. Cytotoxic assessment of alpha-synuclein aggregates on primary hippocampal neurons compared to PC12 and SHS-Y5Y cell lines: a reliable model of synucleinopathies. *Oral presentation*
4. 4<sup>th</sup> Basic and Clinical Neuroscience Congress, 2015, Tehran: Zibaii MI, Latifi H, **Dargahi L**. Fabrication and application of optic and optoelectronic devices for optogenetics. *Oral presentation*
5. 3<sup>rd</sup> Basic and Clinical Neuroscience Congress, 2013, Tehran: Siroosi Sh, Manaheji H, **Dargahi L**. GABA-transporter GAT-1 inhibition attenuates the expression of morphine antinociceptive tolerance. *Oral presentation*
6. 4<sup>th</sup> International Symposium on Molecular Technology (Biotechnology in Progress), 2014, Tehran: Bakhtiary E, Ahmadian-Attari MM, Salehi P, Khallaghi B, **Dargahi L**, Kamalinejad M, Ahmadiani A. Protective effect of Maviz (a specific kind of dried grape) against beta amyloid peptide induced-memory impairment: role of non-polyphenolic compounds. *Poster presentation*
7. 2<sup>nd</sup> Basic and Clinical Neuroscience Congress, 2013, Tehran: Allahverdi F, Abolfathi N, Dargahi L. Measurement of biomechanical properties of PC12 neurites by using innovative MEMS device. *Poster presentation*
8. 2<sup>nd</sup> Basic and Clinical Neuroscience Congress, 2013, Tehran: Nikseresht S, Dargahi L, Khodagholi F. Apoptosis and neuroinflammation counteraction in the hippocampus neuron loss in Lipopolysaccharide (LPS)-injected rats: A timedependent study. *Poster presentation*
9. 45<sup>th</sup> European Brain and Behavior Society Meeting, 2013, Munich: Nasoohi S, **Dargahi L**, Enayatifard L, Rostami F, Ahmadiani A. Dual Role of PPAR- in Induction and Expression of Behavioral Sensitization to Cannabinoid Receptor Agonist WIN55,212-2. *Poster presentation*
10. 21<sup>st</sup> Iranian Congress of Physiology and Pharmacology, 2013, Tabriz: **Dargahi L**, Asle-Rousta M, Kolahdooz Z, Omidbakhsh R, Hemmati L, Ahmadiani A. Therapeutic potential of S1P1 receptors in Alzheimer's disease. *Oral presentation*
11. 20<sup>th</sup> Iranian Congress of Physiology and Pharmacology, 2011, Hamedan: Enayatifard L, Rostami F, Oryan Sh, Ahmadianin A, **Dargahi L**. PPAR activity is necessary for the development of behavioral sensitization to WIN55212-2 but plays an inhibitory role in the expression phase. *Poster presentation*
12. 20<sup>th</sup> Iranian Congress of Physiology and Pharmacology, 2011, Hamedan: Rostam F, Oryan Sh, Ahmadiani A, **Dargahi L**. Morphine preconditioning exerts anti-inflammatory and protective roles in Lipopolysaccharide induced neuroinflammation and memory deficit. *Poster presentation*
13. 20<sup>th</sup> Iranian Congress of Physiology and Pharmacology, 2011, Hamedan: Asle Rousta M, Kolahdooz Z, Oryan Sh, Ahmadiani A, **Dargahi L**. FTY720 (Fingolimod) attenuates the A $\beta$ -induced neuroinflammation and spatial memory deficit in an animal model of Alzheimer's disease. *Oral presentation*

14. 20<sup>th</sup> Iranian Congress of Physiology and Pharmacology, 2011, Hamedan: Kolahdooz Z, Asle Rousta M, Oryan Sh, Ahmadiani A, **Dargahi L**. Lipopolysaccharide induced neuronal injury and memory deficit can be reversed by sphingosine-1-phosphate receptor modulators. *Poster presentation*
15. 1<sup>st</sup> National Congress of Neuroscience, 1389 (2011), Golestan University of Medical Sciences, Gorgan, Iran: Nasiraei-Moghadam Sh, Sherafat A, Safari M-Sh, Ahmadiani A and **Dargahi L**. Sexual Maturation Repairs Prenatal Morphine Exposure Induced Memory Deficit in Male but not Female Rats. *Oral presentation*
16. 7<sup>th</sup> FENS Forum of European neuroscience, July 3-7, 2010, Amsterdam: **Dargahi L**, Nasiraei-Moghadam Sh, Abdi A, Khalaj L, Moradi F, Ahmadiani A. COX-1 activity precedes the COX-2 induction in A $\beta$  induced neuroinflammation. *Poster presentation*
17. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, 2009, Tehran: Nasiraei-Moghadam Sh, Kazeminezhad B, **Dargahi L**, Ahmadiani A. Maternal oral consumption of morphine increases bax/bcl-2 ratio and caspase-3 activity during early neural system development in rat embryos. *Poster presentation*
18. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, 2009, Tehran: Khalaj L, Peirovi H, Khodaghali F, Abdi A, **Dargahi L**, Mohagheghi F, Ahmadiani A. Estradiol neuroprotection against spinal cord ischemia-reperfusion; focus on cyclooxygenase, heat shock protein 70 and cleaved caspase 3. *Poster presentation*
19. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, 2009, Tehran: Abdi A, Sadraie H, **Dargahi L**, Khalaj L, Ahmadiani A. Apoptosis inhibition can be threatening in A $\beta$ -induced neuroinflammation, through promoting cell proliferation. *Poster presentation*
20. The 9<sup>th</sup> International Conference and Exhibition on Drug Discovery, 2006, Basel: Behravan J, Ramezani M, **Dargahi L**, Abaei MR. Larvicidal Activity of *Thymus transcaspicus* essential oil against *Anopheles stephensi* (Celia). *Poster presentation*

### ➤ Teaching Experiences

- **2014:** Teaching organotypic spinal cord slice culture and immunohistochemistry techniques at the 4<sup>th</sup> Tehran IBRO School of Neuroscience.
- **2012-2013:** Teaching molecular cloning and basics of animal cell culture techniques at the 2<sup>nd</sup> and 3<sup>rd</sup> Tehran IBRO School of Neuroscience.
- **2011-2012:** Teaching pharmacology to medical, dentistry, obstetrics and anesthesiology students at Qazvin University of Medical Sciences.
- **2011-date:** Teaching neuropharmacology and methodology to neuroscience PhD students at Neuroscience Research Center, Shahid Beheshti University of Medical Sciences.

## ➤ **Special Skills and Laboratory Techniques**

- Molecular biology techniques including gene cloning, hybridization, PCR and RT-PCR and protein-protein interaction assays
- Immunoblotting techniques including western blot, immunohistochemistry and immunocytochemistry
- Animal cell and tissue culture techniques
- Behavioral experiments on laboratory animals

## ➤ **Memberships**

1. Iranian Society of Physiology and Pharmacology (ISPP)
2. Iranian Pharmaceutical Association-IphA
3. Iranian Medical Council, I.R.IRAN
4. Iranian Cell Death Association

## ➤ **References**

### **1. Prof. Fereshteh Motamedi**

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### **3. Prof. Mohammad Javan**

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