

# CURRICULUM VITAE

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## Address and position

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## Academic Background

2003-2004 Post-doctoral Fellow in Molecular Pharmacology, Dept. Pharmacology and Toxicology, Kyorin University School of Medicine, Shinkawa, Mitaka, Tokyo, Japan.

1998-2003 Ph.D. Student in Medical Physiology, Dept. Physiology, Neuroscience Research Center, Shaheed Beheshti Univ. Med. Sci., Tehran, Iran

1994-1997 M.Sc. Student in Physiology, Dept. Biology, Shaheed Beheshti Univ., Tehran, Iran.

1990-1994 B.Sc. Student in Biology, Dept. Biology, Mashhad Univ., Mashhad, Iran.

## **Honors and Awards**

1. First ranked student, 2nd festival of research, Shahid Beheshti Univ. Med. Sci. 2001, Tehran, Iran.
2. Best Presentation Award, Second Annual meeting of the Iranian Pain Society, 2-3 May 2002. Tehran, Iran.
3. Best presentation Award, 5th congress of Federation of Asian- Oceanian Neuroscience Societies (FAONS), Lucknow, India, 2010, 25-28 Nov.

## **Extracurricular Courses**

1. Work Shop of Functional Genomic, IBRO School of Brain Functions, Hong Kong Univ. Hong Kong, Dec. 2000.
2. Work Shop of Molecular Biology, Shaheed Beheshti Univ. Med. Sci., Tehran, May 2000.
3. Work shop of Electrophysiology, Neuroscience Research Center, Shaheed Beheshti Univ. Med. Sci., Tehran, Sep. 2002.
4. Work Shop of Molecular Biology and Recombinant Proteins, National institute for Genetic and Biotechnology, Tehran, Jun. 2003.

5. Work Shop of Cloning and Hybridization, Research Center for Cellular and Molecular Biology, Shaheed Beheshti Univ. Med. Sci., Tehran, Feb. 2003.

## **Membership of Scientific Societies**

1. International Brain Research Organization (IBRO)
2. Iranian Society of Physiology and Pharmacology (Council Member)
3. Iranian Cell Death Society (Council Member)
4. Iranian Neuroscience Society
5. Japanese Pharmacological Society

## **Selected Publications**

1. Dehghan S, Hesaraki M, Soleimani M, Mirnajafi-Zadeh J, Fathollahi Y, Javan M. Oct4 transcription factor in conjunction with valproic acid accelerates myelin repair in demyelinated optic chiasm in mice. *Neuroscience*. 2016 Mar 24;318:178-89.
2. Mohajeri M, Sadeghizadeh M, Javan M. Pertussis toxin promotes relapsing-remitting experimental autoimmune encephalomyelitis in Lewis rats. *J Neuroimmunol*. 2015 Dec 15;289:105-10.
3. Yazdi A, Baharvand H, Javan M. Enhanced remyelination following lysolecithin-induced demyelination in mice under treatment with fingolimod (FTY720). *Neuroscience*. 2015 Dec 17;311:34-44.

4. Mohajeri M, Sadeghizadeh M, Najafi F, Javan M Polymerized Nano-curcumin attenuates neurological symptoms in EAE model of multiple sclerosis through down regulation of inflammatory and oxidative processes and enhancing neuroprotection and myelin repair. *Neuropharmacology*. 2015 Jul 23. doi: 10.1016/j.neuropharm.2015.07.013.
5. Ghasemi-Kasman M, Hajikaram M, Baharvand H, Javan M. MicroRNA-Mediated In Vitro and In Vivo Direct Conversion of Astrocytes to Neuroblasts. *PLoS One*. 2015 Jun 1;10(6):e0127878.
6. Dehghan S, Asadi S, Hajikaram M, Soleimani M, Mowla SJ, Fathollahi Y, Ahmadiani A, Javan M. Exogenous Oct4 in combination with valproic acid increased neural progenitor markers: an approach for enhancing the repair potential of the brain. *Life Sci*. 2015 Feb 1;122:108-15. doi: 10.1016/j.lfs.2014.12.007. Epub 2014 Dec 19.
7. Pourabdolhossein F, Mozafari S, Morvan-Dubois G, Mirnajafi-Zadeh J, Lopez-Juarez A, et al. Nogo Receptor Inhibition Enhances Functional Recovery following Lysolecithin-Induced Demyelination in Mouse Optic Chiasm. *PLoS ONE* 9(9): e106378. doi:10.1371/journal.pone.0106378.
8. Movaghar B, Tiraihi T, Javan M, Taheri T, Kazemi H. Induced bone marrow stromal cells into Schwann cells by progesterone improved the outcome of transected sciatic nerve model. *J Neurosurg Sci*. 2015 May 12. [Epub ahead of print].
9. Mahdieh Azin, M.Sc., Javad Mirnajafi-Zadeh, Ph.D., Mohammad Javan, Fibroblast Growth Factor-2 Enhanced The Recruitment of Progenitor Cells and Myelin Repair in Experimental Demyelination of Rat Hippocampal Formations. *Cell J*. 2015; 17(3): 540-546.
10. Asadi S, Dehghan S, Hajikaram M, Mowla SJ, Ahmadiani AA, Javan M. Comparing The Effects of Small Molecules BIX-01294, Bay K8644, RG-108 and Valproic Acid, and Their Different Combinations on Induction of Pluripotency Marker-Genes by Oct4 in The Mouse Brain. *Cell J*. 2015 Winter;16(4):416-25. Epub 2015 Jan 13.

11. Parvini M, Satarian L, Parivar K, Javan M, Tondar M, Ahmad S, Baharvand H. (2014) Human pluripotent stem cell-derived retinal pigmented epithelium in retinal treatment: from bench to bedside. *Mol Neurobiol* 2014 Oct;50(2):597-612. doi: 10.1007/s12035-014-8684-y. Epub 2014 Apr 3.
12. Satarian L, Javan M, Kiani S, Hajikaram M, Mirnajafi-Zadeh J, Baharvand H. Engrafted human induced pluripotent stem cell-derived anterior specified neural progenitors protect the rat crushed optic nerve. *PLoS One*. 2013 Aug 19;8(8):e71855. doi: 10.1371/journal.pone.0071855. eCollection 2013.
13. Pazhoohan S, Satarian L, Asghari AA, Salimi M, Kiani S, Mani AR, Javan M. Valproic Acid attenuates disease symptoms and increases endogenous myelin repair by recruiting neural stem cells and oligodendrocyte progenitors in experimental autoimmune encephalomyelitis. *Neurodegener Dis*. 2014;13(1):45-52. doi: 10.1159/000352021. Epub 2013 Aug 16.
14. Nazm Bojnordi M, Movahedin M, Tiraihi T, Javan M, Ghasemi Hamidabadi H. Oligoprogenitor cells derived from spermatogonia stem cells improve remyelination in demyelination model. *Mol Biotechnol*. 2014 May;56(5):387-93. doi: 10.1007/s12033-013-9722-0.
15. Nazm Bojnordi M, Movahedin M, Tiraihi T, Javan M, Ghasemi Hamidabadi H. Oligoprogenitor Cells Derived from Spermatogonia Stem Cells Improve Remyelination in Demyelination Model. *Mol Biotechnol*. 2014 May;56(5):387-93. doi: 10.1007/s12033-013-9722-0.
16. Azin M, Goudarzvand M, Mirnajafi-Zadeh J, Javan M. Field potential recording from rat hippocampus provides a functional evaluation method for assessing demyelination and myelin repair. *Neurol Res*. 2013 Oct;35(8):837-43. doi: 10.1179/1743132813Y.0000000221. Epub 2013 May 14.

17. Asghari AA, Azarnia M, Mirnajafi-Zadeh J, Javan M. Adenosine A1 receptor agonist, N6-cyclohexyladenosine, protects myelin and induces remyelination in an experimental model of rat optic chiasm demyelination; electrophysiological and histopathological studies. *J Neurol Sci.* 2013 Feb 15;325(1-2):22-8. doi: 10.1016/j.jns.2012.11.008. Epub 2012 Dec 20.
18. Khezri S, Javan M, Goudarzvand M, Semnanian S, Baharvand H. Dibutyryl Cyclic AMP Inhibits the Progression of Experimental Autoimmune Encephalomyelitis and Potentiates Recruitment of Endogenous Neural Stem Cells. *J Mol Neurosci.* 2013 Oct;51(2):298-306. doi: 10.1007/s12031-013-9959-x. Epub 2013 Jan 19.
19. Nazm Bojnordi M, Movahedin M, Tiraihi T, Javan M. Alteration in genes expression patterns during in vitro differentiation of mouse spermatogonial cells into neuroepithelial-like cells. *Cytotechnology.* 2013 Jan;65(1):97-104. doi: 10.1007/s10616-012-9465-y. Epub 2012 Oct 27.
20. Nazm Bojnordi M, Movahedin M, Tiraihi T, Javan M. A simple co-culture system for generation of embryonic stem like cells from testis. *Iran Red Crescent Med J.* 2012 Dec;14(12):811-5. doi: 10.5812/ircmj.4051. Epub 2012 Dec 6.
21. Sherafat MA, Heibatollahi M, Mongabadi S, Moradi F, Javan M, Ahmadiani A. Electromagnetic field stimulation potentiates endogenous myelin repair by recruiting subventricular neural stem cells in an experimental model of white matter demyelination. *J Mol Neurosci.* 2012 Sep;48(1):144-53. doi: 10.1007/s12031-012-9791-8. Epub 2012 May 17.
22. Dehghan S, Javan M, Pourabdolhossein F, Mirnajafi-Zadeh J, Baharvand H. Basic Fibroblast Growth Factor Potentiates Myelin Repair Following Induction of Experimental Demyelination in Adult Mouse Optic Chiasm and Nerves. *J Mol Neurosci.* 2012 Sep;48(1):77-85. doi: 10.1007/s12031-012-9777-6. Epub 2012 May 3.

23. Pouya A, Sattarian L, Kiani S, Javan M, Baharvand H. Human Induced Pluripotent Stem Cells Differentiation into Oligodendrocyte Progenitors and Transplantation in a Rat Model of Optic Chiasm Demyelination. *PLoS One*. 2011;6(11):e27925. doi: 10.1371/journal.pone.0027925. Epub 2011 Nov 18.
24. Sherafat MA, Javan M, Mozafari S, Mirnajafi-Zadeh J, Motamedi F. Castration attenuates myelin repair following lysolecithin induced demyelination in rat optic chiasm: an evaluation using visual evoked potential, marker genes expression and myelin staining. *Neurochem Res*. 2011 Oct;36(10):1887-95. doi: 10.1007/s11064-011-0510-6. Epub 2011 May 28.
25. Mahdavi S, Gharibzadeh S, Ranjbar B, Javan M. Voltage-gated sodium channel gating modifiers: valuable targets for multiple sclerosis treatment. *J Neuropsychiatry Clin Neurosci*. 2011 Winter;23(1):E17. doi: 10.1176/appi.neuropsych.23.1.E17.
26. Mozafari S, Javan M, Sherafat MA, Mirnajafi-Zadeh J, Heibatollahi M, Pour-Beiranvand S, Tiraihi T, Ahmadiani A. Analysis of Structural and Molecular Events Associated With Adult Rat Optic Chiasm and Nerves Demyelination and Remyelination; Possible Role for 3rd Ventricle Proliferating Cells. *Neuromolecular Med*. 2011 Jun;13(2):138-50. doi: 10.1007/s12017-011-8143-0. Epub 2011 Feb 3.
27. Mozafari S, Sherafat MA, Javan M, Mirnajafi-Zadeh J, Tiraihi T. Visual evoked potentials and MBP gene expression imply endogenous myelin repair in adult rat optic nerve and chiasm following local lysolecithin induced demyelination. *Brain Res* 2010, 1351: 50-56. *Brain Res*. 2010 Sep 10;1351:50-6. doi: 10.1016/j.brainres.2010.07.026. Epub 2010 Jul 15.
28. Goudarzvand M, Javan M, Mirnajafi-Zadeh J, Mozafari S, Tiraihi T. Vitamins E and D3 attenuate Demyelination and potentiate Remyelination Processes of Hippocampal Formation of Rats following Local Injection of Ethidium Bromide. *Cell Mol Neurobiol*. 2010 Mar;30(2):289-99. doi: 10.1007/s10571-009-9451-x. Epub 2009 Sep 19.

## Other publications:

1. Moradpour F, Fathollahi Y, Naghdi N, Hosseinmardi N, Javan M. Pre-pubertal Castration-Associated Developmental Changes in Sigma-1 Receptor Gene Expression Levels Regulate Hippocampus Area CA1 Activity During Adolescence. *Hippocampus*. 2016 Feb 9. doi: 10.1002/hipo.22576.
2. Dokanehiifard S, Soltani BM, Parsi S, Hosseini F, Javan M, Mowla SJ. Experimental verification of a conserved intronic microRNA located in the human TrkC gene with a cell type-dependent apoptotic function. *Cell Mol Life Sci*. 2015 Jul;72(13):2613-25. doi: 10.1007/s00018-015-1868-4. Epub 2015 Mar 14.
3. Kaeidi A, Azizi H, Javan M, Ahmadi Soleimani SM, Fathollahi Y, Semnanian S. Direct Facilitatory Role of Paragigantocellularis Neurons in Opiate Withdrawal-Induced Hyperactivity of Rat Locus Coeruleus Neurons: An In Vitro Study. *PLoS One*. 2015 Jul 31;10(7):e0134873
4. Bakhtiari N, Soulemani M, Javan M, Hemmati R, Hosseinkhani S. Ursolic acid induces myoglobin expression and skeletal muscle remodeling in mice. Published by Iranian society of Physiology and Pharmacology. Volume 18, Number 4 (Winter 2014)
5. Mousavi Y, Azizi H, Mirnajafi-Zadeh J, Javan M, Semnanian S. Blockade of orexin type-1 receptors in locus coeruleus nucleus attenuates the development of morphine dependency in rats. *Neurosci Lett*. 2014 Aug 22;578:90-4. doi: 10.1016/j.neulet.2014.06.038. Epub 2014 Jun 24.
6. Safari F, Anvari Z, Moshtaghioun S, Javan M, Bayat G, Forosh SS, Hekmatimoghaddam S. Differential expression of cardiac uncoupling proteins 2 and 3 in response to myocardial ischemia-reperfusion in rats. *Life Sci*. 2014 Mar 11;98(2):68-74. doi: 10.1016/j.lfs.2013.12.230. Epub 2014 Jan 13.



7. Ahmadirad N, Shojaei A, Javan M, Pourgholami MH, Mirnajafi-Zadeh J. Effect of minocycline on pentylenetetrazol-induced chemical kindled seizures in mice. *Neurol Sci.* 2014 Apr;35(4):571-6. doi: 10.1007/s10072-013-1552-0. Epub 2013 Oct 15.
8. Hajiasgharzadeh K, Tavangar SM, Javan M, Dehpour AR, Mani AR. Does hepatic vagus nerve modulate the progression of biliary fibrosis in rats? *Auton Neurosci.* 2014 Oct;185:67-75. doi: 10.1016/j.autneu.2014.07.005. Epub 2014 Jul 17.
9. Ahmadirad N, Shojaei A, Javan M, Pourgholami MH, Mirnajafi-Zadeh J. Effect of minocycline on pentylenetetrazol-induced chemical kindled seizures in mice. *Neurol Sci.* 2014 Apr;35(4):571-6. doi: 10.1007/s10072-013-1552-0. Epub 2013 Oct 15.
10. Moradpour F, Naghdi N, Fathollahi Y, Javan M, Choopani S, Gharaylou Z. Pre-pubertal castration improves spatial learning during mid-adolescence in rats. *Prog Neuropsychopharmacol Biol Psychiatry.* 2013 Oct 1;46:105-12. doi: 10.1016/j.pnpbp.2013.07.005. Epub 2013 Jul 16.
11. Davoudi M, Shojaei A, Palizvan MR, Javan M, Mirnajafi-Zadeh J. Comparison between standard protocol and a novel window protocol for induction of pentylenetetrazol kindled seizures in the rat. *Epilepsy Res.* 2013 Sep;106(1-2):54-63. doi: 10.1016/j.eplesyres.2013.03.016. Epub 2013 Apr 22.
12. Mongabadi S, Firoozabadi SM, Javan M, Shojaei A, Mirnajafi-Zadeh J. Effect of different frequencies of repetitive transcranial magnetic stimulation on acquisition of chemical kindled seizures in rats. *Neurol Sci.* 2013 Nov;34(11):1897-903. doi: 10.1007/s10072-013-1401-1. Epub 2013 Apr 2.
13. Alavian F, Hajizadeh S, Bigdeli MR, Javan M. The role of protein kinase c in ischemic tolerance induced by hyperoxia in rats with stroke. *EXCLI Journal* 2012; 11:188-197.
14. Ali T, Javan M, Sonboli A, Semnianian S. Evaluation of the antinociceptive and anti-inflammatory effects of essential oil of *Nepeta pogonosperma* Jamzad et Assadi in rats. *Daru.* 2012 Oct 4;20(1):48. doi: 10.1186/2008-2231-20-48

15. Bayat Gh, Hajizadeh S, Javan M, Forouzandeh-Moghadam M, Safari F, Azizi H, Mazloom R. Decreased Uncoupling Protein 2 and 3 (UCP2 and UCP3) mRNA expression by endurance exercise training with and without chronic administration of nandrolone in rat heart. *Physiology and Pharmacology*, 15 (3), 330-340.
16. Bayat Gh, Hajizadeh S, Javan M, Safari F, Goudarzvand M, Shokri S, Pourkhalili Kh, Alavian F. Effect of exercise and chronic administration of nandrolone decanoate on expression of rat heart sarcolemmal ATP- sensitive potassium channels. *Feyz, Journal of Kashan University of Medical Sciences* 2012; 16: 102-111.
17. Sadegh M, Fathollahi Y, Javan M, Semnanian S. Tolerance to anti-nociceptive effects of sodium-salicylate and morphine decreases adenosine deaminase activity in the rat hippocampus. *Koomesh* 2012, 13 (3): 390-396.
18. Alavian F, Hajizadeh S, Bigdeli MR, Bayat Gh, Javan M. Evaluation of UCP2 expression in the phenomenon of ischemic resistance induced by alternating normobaric hyperoxia in a rat model of stroke. *Physiology and Pharmacology* 16 (1): 54-61.
19. Alavian F, Hajizadeh S, Bigdely MR, Javan M. Effect of intermittent normobaric hyperoxia and PKC activity on blood - brain barrier (BBB) permeability. *J Sharekord Univ Med Sci* 2012, 14(3): 40-50.
20. Alavian F, Hajizadeh S, Javan M, Bigdeli MR. Evaluation of HIF1 $\alpha$  expression in ischemic tolerance induced by intermittent normobaric hyperoxia in the rat model of stroke. *J Sabzevar Univ Med Sci* 2012, 19: 287-295.
21. Haghani M, Shabani M, Javan M, Motamedi F, Janahmadi M. CB1 Cannabinoid Receptor Activation Rescues Amyloid  $\beta$ -Induced Alterations in Behaviour and Intrinsic Electrophysiological Properties of Rat Hippocampal CA1 Pyramidal Neurons. *Cell Physiol Biochem*. 2012;29(3-4):391-406. doi: 10.1159/000338494. Epub 2012 Apr 3.
22. M. Navidhamidi, S. Semnanian, M. Javan, M. Goudarzvand, K. Rohampour, H. Azizi. Examining the effect of the CaMKII inhibitor administration in the locus coeruleus on

- the naloxone-precipitated morphine withdrawal signs in rats. *Behav Brain Res.* 2012 Jan 15;226(2):440-4. doi: 10.1016/j.bbr.2011.09.043. Epub 2011 Oct 10.
23. Ali T, Javan M, Sonboli A, Semnanian S. Antinociceptive and anti-inflammatory activities of the essential oil of *Nepeta crispa* Willd. in experimental rat models. *Nat Prod Res.* 2012;26(16):1529-34. doi: 10.1080/14786419.2011.565284. Epub 2011 Oct 10.
24. Hosseinmardi N, Azimi L, Fathollahi Y, Javan M, Naghdi N. In vivo sodium salicylate causes tolerance to acute morphine exposure and alters the ability of high frequency stimulation to induce long-term potentiation in hippocampus area CA1. *Eur J Pharmacol.* 2011 Nov 30;670(2-3):487-94. doi: 10.1016/j.ejphar.2011.09.008. Epub 2011 Sep 21.
25. Khezri Sh, Javan M, Baharvand H, Semnanian S. Reaction of subventricular zone stem cells to the induction of experimental autoimmune encephalomyelitis in mouse. *Physiology and Pharmacology* 1390, 15(2): 229-240.
26. Khezri Sh, Javan M, Baharvand H, Semnanian S. The Effect of Systemic Administration of dbcAMP on Neural Stem Cells Migration in EAE Model of Multiple Sclerosis. *Journal of Sabzevar University of Medical Sciences*, 1390, 18: 179-187.
27. Pourabdolhossein F, Javan M, Mirnajafi-Zadeh J, Dehghan S, Sherafat M, Mozafari S, Ahmadiani A. PKC Mediates endogenous inhibition of myelin repair in the context of local demyelination induced in mice optic chiasm. *Feyz J Kashan Univ Med Sci* 1389, 14: 369-379.
28. Mozafari S, Sherafat MA, Javan M, Mirnajafi-Zadeh J, Electrophysiological and histological comparison of the processes of demyelination and remyelination in optic chiasm and nerves of male-castrated and female rats. *The Modares Semiannual Biological Sciences* 1389, 1: 9-20.
29. Namvar S, Mirnajafi-Zadeh J, Javan M, Zeraati M. Investigating the changes in expression of RGS4 and RGS10 proteins in the anticonvulsant effects of low frequency

- stimulation on perforant path kindling in male adult rats. *Physiology and Pharmacology* 1389, 14: 234-241.
30. Pourabdolhossein F, Mozafari S, Javan M, Mirnajafizadeh J. Electrophysiological and Histological study of Lysolecithin-Induced Local Demyelination in Adult Mice Optic Chiasm. *Physiology and Pharmacology* 1389, 14(4): 324-336.
31. Zeraati M, Mirnajafi-Zadeh J, Javan M, Semnanian S, Namvar S. Effect of an endonucleotidase inhibitor on anticonvulsant actions of low-frequency electrical stimulation in perforant path rapid kindling in rats. *Physiology and Pharmacology*, 1389, 14, 115 -126.
32. Khakpay R, Semnanian S, Javan M, Janahmadi M. Is the pain modulatory action of  $17\beta$ -estradiol in locus coeruleus of male rats mediated by GABAA receptors? *Physiology and Pharmacology* 1389, 14: 252-261.
33. Kourosch Arami M, Semnanian S, Javan M, Hajizadeh S, Sarihi A. Postnatal developmental alterations in the locus coeruleus neuronal fast excitatory postsynaptic currents mediated by ionotropic glutamate receptors of rat. *Physiology and Pharmacology* 1389, 14(4): 338-348.
34. J. Ghorbi, M. Javan, V. Sheibani, A. Zarebkohan, Changes in beta 1 and beta 2 integrin genes expression in rat lumbar spinal cord is supportive of the inhibitory effect of chronic pain on the development of tolerance to morphine analgesia. *Physiology and Pharmacology* 1389, 14: 94-104.
35. Navidhamidi M, Javan M, Fatholahi Y, Semnanian S. Effect of chronic morphine administration on  $Ca^{2+}$ /Calmodulin-Dependent protein kinase II $\alpha$  activity in rat locus coeruleus and its possible role in morphine dependency. *Physiology and Pharmacology* 1389, 14: 105-114.

36. Khakpay R, Semnianian S, Javan M, Janahmadi M. The effect of intra-locus coeruleus injection of 17-estradiol on inflammatory pain modulation in male rat. *Behav Brain Res.* 2010 Dec 25;214(2):409-16. doi: 10.1016/j.bbr.2010.06.012. Epub 2010 Jun 20.
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38. Ghorbi J, Javan M, Sheibani V. changes in the gene expression of beta1 and beta2 integrin following development of tolerance to analgesic effect of morphine in rats. *Yakhteh*, 11 (2010) 448-455.
39. Hosseinmardi N, Fathollahi Y, Naghdi N, Javan M. Theta pulse stimulation: A natural stimulus pattern can trigger long-term depression but fails to reverse long-term potentiation in morphine withdrawn hippocampus area CA1. *Brain Res.* 2009 Nov 3;1296:1-14. doi: 10.1016/j.brainres.2009.08.020. Epub 2009 Aug 15.
40. Zarebkohan A, Javan M, Satarian L, Ahmadiani A. Effect of chronic administration of morphine on the gene expression level of sodium-dependent vitamin C transporters in rat hippocampus and lumbar spinal cord. *J Mol Neurosci.* 2009 Jul;38(3):236-42. doi: 10.1007/s12031-009-9203-x. Epub 2009 May 6.
41. Jahanshahi A, Mirnajafi-Zadeh J, Javan M, Mohammad-Zadeh M, Rohani R. The antiepileptogenic effect of electrical stimulation at different low frequencies is accompanied with change in adenosine receptors gene expression in rats. *Epilepsia.* 2009 Jul;50(7):1768-79. doi: 10.1111/j.1528-1167.2009.02088.x. Epub 2009 Apr 27.
42. Hosseinmardi N, Azimi L, Javan M, Naghdi N, Fathollahi Y. Augmentation of paired pulse index as short-term plasticity due to morphine dependence. *Physiology and Pharmacology*, 13 (2), 108 – 119.
43. Mohammad-Zadeh M, Mirnajafi-Zadeh J, Fathollahi Y, Javan M, Jahanshahi A, Noorbakhsh S M, Motamedi F. The role of adenosine A1 receptors in mediating the

- inhibitory effects of low frequency stimulation of perforant path on kindling acquisition in rats. *Neuroscience*, 2009, 158, 1632-43. doi:10.1016/j.
44. Asadi S, Javan M, Ahmadiani A, Sanati M H. Alternative splicing in the synaptic protein interaction site of rat Cav2.2 ( $\alpha$ 1B) calcium channels: Changes induced by chronic inflammatory pain. *J Mol Neurosci*. 2009 Sep;39(1-2):40-8. doi: 10.1007/s12031-008-9159-2. Epub 2009 Jan 6.
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  49. Satarian L, Javan M, Motamedi F. Changes in gene expression levels of the enzymes involved in biosynthesis and degradation of catecholamines following chronic administration of morphine and pain in rats. *Physiology and Pharmacology*. 2008, 12(1), 14 – 21.
  50. Esmaeili-Mahani S, Javan M, Motamedi F, Ahmadiani A. Post-adrenalectomy changes in the gene expression of specific G-protein subunits involved in morphine sensitization.

Neuropeptides. 2008 Apr;42(2):169-75. doi: 10.1016/j.npep.2007.12.002. Epub 2008 Jan 30.

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52. Amini H, Javan M, Gazerani P, Ghaffari A, Ahmadiani A. Lack of Bioequivalence between Two Aciclovir Tablets in Healthy Subjects. *Clin Drug Invest*. 2008, 28, 47-53.
53. Esmaeili-Mahani S, Shimokawa N, Javan M, Maghsoudi N, Motamedi F, Koibuchi N, Ahmadiani A. Low-dose morphine induces hyperalgesia through activation of G(alphas), protein kinase C, and I-type Ca(2+) channels in rats. *J Neurosci Res*. 2008, 86:471-479.
54. Sadegh M, Mirnajafi-Zadeh J, Javan M, Fathollahi Y, Mohammad-Zadeh M, Jahanshahi A, Nourbakhsh S M. The role of galanin receptors in anticonvulsant effects of low frequency stimulation in perforant path kindled rats. *Neuroscience*. 2007 Dec 5;150(2):396-403. Epub 2007 Oct 9.
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### **Supervised Post-graduate thesis**

1. Leila Satarian, M.Sc. Thesis; Effect of epinephrine on tolerance development to analgesic effect of intrathecally administrated morphine, a study based on Ca<sup>2+</sup>/calmodulin dependent protein kinase II $\alpha$  (CaMK II $\alpha$ ) expression, 2006.
2. Jamal Ghorbi, M.Sc. Thesis; Study of the possible changes in beta integrins 1 and 2 mRNA in lumbar spinal cord of rats tolerated to the analgesic effect of morphine, 2007.
3. Amir Zarebkohan, M.Sc. Thesis; Effect of repetitive administration of morphine on expression and splicing variation of vitamin C transporters (SVCT1 and SVCT2) in hippocampus and dorsal horn of spinal cord in rats, 2007.
4. Sabah Mozafari, M.Sc. Thesis; Study of possible involvement of Endogenous Adult Neural Stem Cells as a physiological capacity in remyelination of lysolecithin-induced demyelination in rat optic nerve & chiasm. 2008.
5. Mohammad Amin Sherafat, M.Sc. Thesis; Effect of gonadectomy on demyelination and remyelination induced by lysolecithin in rat optic nerve and chiasm. 2008.
6. Mahdi Goudarzvand, PhD Dissertation; Effect of vitamins E and D3 on cell death and remyelination of hippocampal formation of rat following local injection of ethidium bromide. 2009.

7. Fereshteh Pourabdolhosein; PhD Dissertation; Studying the effect of Nogo signaling inhibition on neural stem cells participation in remyelination of mouse optic nerve and chiasma following lysolecithin-induced demyelination. 2010.
8. Samaneh Dehghan, M.Sc. Thesis; Molecular and electrophysiological study of the effect of fibroblast growth factor-2 on remyelination of mouse optic nerve and chiasma following lysolecithin-induced demyelination. 2009.
9. Mahdieh Azin, M.Sc. Thesis; Molecular and electrophysiological study of the remyelination process in mouse dentate gyrus following lysolecithin-induced demyelination. 2009.
10. Shiva Khezri, PhD Dissertation; Studying the effect of Nogo signaling inhibition on the symptoms and endogenous neural stem cells migration in EAE model of multiple sclerosis in C57BL/6 mice. 2011.
11. Leila Satarian, PhD Dissertation; Transplantation of neural progenitors derived from induced pluripotent stem cells for repair of rat optic nerve. 2013.
12. Saeed Pajoohan, M.Sc. Thesis; Effect of valproic acid on myelin repair in local EAE model of multiple sclerosis. 2011
13. Mahboubeh Malakouti-khah, M.Sc. Thesis; Effects of vitamins D and E on proliferation and differentiation of oligodendrocyte precursors derived from human induced pluripotent stem cells. 2012.
14. Saman Esmaeilnejad, M.Sc. Thesis; Application of small molecules effective on pluripotency induction to enhance repair in kainic acid induced hippocampal degeneration. 2012.
15. Narges Pachenari, M.Sc. Thesis; Studying the effect of Glycogen synthase kinase (GSK) inhibitor on proliferation of neural stem cells and oligodendrocyte precursors. 2013.

16. Maryam Seyed Sadr, MSc thesis; The protective effects of RPE-conditioned medium and hiPSC-derived neural progenitors in experimental model of optic nerve. 2013.
17. Sareh Asadi, PhD Dissertation; Studying the repair and neurogenesis in kainic acid-degenerated hippocampus following pluripotency inducers administration in mouse. 2013.
18. Samaneh Dehghan, PhD Dissertation; Studying the possibility of increasing repair capacity of central nervous system using the pluripotency inducers and its effect on myelin repair in mouse optic nerve and chiasm. 2014.
19. Maryam Ghasemi, Ph.D. Dissertation; Investigating the effect of miR-302/367 cluster on brain progenitor cells population and myelin repair in an experimental model of demyelination. 2015.
20. Maryam Mohajeri, Ph.D. Dissertation; Effect of Polymer Nano Curcumin on the MS symptoms & regeneration of myelin in CNS of in vitro model Experimental Autoimmune Encephalomyelitis. 2015.
21. Azadeh Yazdi, PhD Dissertation; Studying the effect of fingolimod administration on neural progenitor cells-mediated myelin repair in experimental model of demyelination. 2015.