# **CURRICULUM VITAE**

Name: **Abbas** 

Family name: **Haghparast** 

Title: Professor

Birthday: **06-11-1967** 

Place of birth: Karbala-Iraq

Nationality: Iranian

Status: Married

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## **Educational background**

Shahid Bahonar University

Department of Biology B.Sc. in Biology 1986 - 1990

Kerman-Iran

Kerman University of Medical Sciences

Department of Physiology M.Sc. in Physiology 1990 - 1993

Kerman-Iran

Tarbiat Modarres University,

School of Medical Science Ph.D. in Physiology 1995 - 1999

Tehran-Iran

University of Saskatchewan,

Institute of Physiology Postdoctoral Fellow 1999 - 2000

Saskatoon-Canada

# **Present position**

**Position:** Professor, Unit leader

Research Unit for Neuromodulation and Behavior

Name and address of Institution: Neuroscience Research Center

Shahid Beheshti University of Medical Sciences

Evin St. | Shahid Chamran Express-way

P.O.Box 19615-1178 | Tehran-Iran

## **Academic promotion**

Professor	2015 - Present
Associate Professor	2010 - 2015
Assistant Professor	1999 - 2010
Instructor (Lecturer)	1993 - 1999

## Research experiences

#### **Electrophysiological techniques:**

Extracellular Single Unit Recording (SUR)

Local Field Potential Recording (LFP) in free moving animal

In vivo and In vitro Field Potential Recording (FPR)

#### Molecular/Cellular techniques:

Confocal laser scanning microscopy
Immunohistochemistry (IHC)
Western Blotting

#### **Behavioral techniques:**

Addictive behavioral tests in animals: Tolerance and Dependence tests;

Conditioning Place Preference (CPP) test

Pain models in animals: Tail-Flick test; Hot-Plate test; Formalin test

Stress models in animals: Forced Swim Stress; Restraint Stress

Decision-Making models in animals: Effort- and Delay-Based tests

#### **Drug Microinjection technique (Brain Local application)**

#### **Statistics**

Biological Data Analysis (GraphPad Prism®; Excellent)

## **Professional experiences**

- Chair Deputy of the 6<sup>th</sup> Basic and Clinical Neuroscience Congress, Tehran, Iran,
   20-22 December 2017.
- Associate member of the Academy of Medical Sciences Islamic Republic of Iran,
   Department of NBIC (2016 Present)

- Deputy of Executive secretary of the 4<sup>th</sup> Basic and Clinical Neuroscience Congress,
   Tehran, Iran, 23-25 December 2015.
- Editorial Board Member of the *Journal of Cellular and Molecular Anesthesia* (2015 Present)
- Director of Scientific Resources, Central Library and Archive Center, Shahid
   Beheshti University of Medical Sciences (2015 Present)
- Editorial Board Member of the *Pajouhan Scientific Journal* (2015 Present)
- Secretary of the Iran-Brazil Collaboration Desk in the Cognitive Sciences and Technologies Council (CSTC), Iranian Science and Technology Vice-Presidency (2015 - Present)
- Executive secretary of the 1<sup>st</sup> IBRO/APRC Iranian Associate School of Cognitive Neuroscience "Functional Human Brain Mapping", Tehran, Iran, **22-28 May 2015**.
- Scientific secretary of the 3<sup>rd</sup> Basic and Clinical Neuroscience Congress, Tehran, Iran, **29-31 October 2014**.
- Executive secretary of the 4<sup>th</sup> Tehran IBRO School of Neuroscience: Basic approaches in neurological diseases, Tehran, Iran, **17-28 October 2014**.
- Secretary of the Cognitive Neuroscience Committee of the Cognitive Sciences and Technologies Council (CSTC), Iranian Science and Technology Vice-Presidency (2014 - Present)
- Editorial Board Member of the *Itch & Pain* journal (**2014 Present**)
- Board Member of Research Committee of the Substance Abuse and Dependence Research Center, University of Social Welfare and Rehabilitation Sciences (2014 -Present)
- Editorial Board Member of the Anesthesiology and Pain Medicine journal (2014 Present)
- Member of the Steering Committee of the Neurobiology Research Center, Shahid
   Beheshti University of Medical Sciences (2014 Present)

- Executive secretary of the 2<sup>nd</sup> Basic and Clinical Neuroscience Congress, Tehran, Iran, **18-20 December 2013**.
- Editorial Board Member of the *Journal of Substance Abuse and Alcoholism* (2013 Present)
- Associate Member of the Neurobiology Research Center, Shahid Beheshti
   University of Medical Sciences, Tehran, Iran (2013 Present)
- Senior Editorial Board Member of the American Journal of Neuroscience Research
   (2013 Present)
- Member of the Steering Committee of the Education, Human Resources and Promotion, Cognitive Sciences and Technologies Council (CSTC), Iranian Science and Technology Vice-Presidency (2013 - Present)
- Council Member of the Iranian Pain Society; IASP Chapter (2013 Present)
- Secretary-General of the Iranian Neuroscience Society; INSS (2013 Present)
- Editorial Board Member of the *Journal of Addiction Medical Practice* (2013 Present)
- Member of the Steering Committee of the National Research Institute for Science Policy, Government Ministry of Science, Research and Technology; MSRT in Iran (2013 - Present)
- Research Vice-Chancellor of the Neuroscience Research Center, Shahid Beheshti
   University of Medical Sciences (2011 Present)
- Behavioral Neuroscience Section Editor of the Basic & Clinical Neuroscience
   Journal (2009 Present)
- Editorial Board Member of the Basic & Clinical Neuroscience Journal (2009 Present)
- Board Member of Research Committee of the Neuroscience Research Center,
   Shahid Beheshti University of Medical Sciences (2005 Present)
- Member of the Steering Committee of the Neuroscience Research Center, Shahid

Beheshti University of Medical Sciences (2005 - Present)

 Editorial Board Member of the Federation of the Asian-Oceanian Physiological Societies (FAOPS) Newsletter (2005 - Present)

## **Academic - Executive experiences**

- Scientific Committee member of the 5<sup>th</sup> Basic and Clinical Neuroscience Congress, Tehran, Iran, 20-22 December 2017.
- Scientific Committee member of the 11<sup>th</sup> Annual International Addiction Science Congress, Tehran, Iran, 13-15 September 2017.
- Scientific Committee member of the 4<sup>th</sup> Basic and Clinical Neuroscience Congress,
   Tehran, Iran, 23-25 December 2015.
- Faculty member and organizer of the 3<sup>rd</sup> Workshop on Introduction to Biostatistics and Data Analysis in Experimental Research, Tehran, Iran, 14 August 2014.
- Faculty member and organizer of the 9<sup>th</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 7 August 2014.
- Faculty member and organizer of the 8<sup>th</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 1 May 2014.
- Faculty member in Pain Fellowship Program, Tehran, Iran, 6-20 March 2014.
- Faculty member and organizer of the 2<sup>nd</sup> Workshop on Introduction to Biostatistics and Data Analysis in Experimental Research, Tehran, Iran, 23 January 2014.
- Faculty member and organizer of the 7<sup>th</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 9 January 2014.
- Faculty member and organizer of the 6<sup>th</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 20 December 2013.

- Invited speaker in Pavilion entitled "Electrophysiology". 2<sup>nd</sup> Basic and Clinical Neuroscience Congress, Tehran-Iran, 18-20 December 2013.
- Scientific Committee member of the 2<sup>nd</sup> Basic and Clinical Neuroscience Congress,
   Tehran, Iran, 18-20 December 2013.
- Faculty member and organizer of the 5<sup>th</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 5 December 2013.
- Faculty member and organizer of the 1<sup>st</sup> Workshop on Introduction to Biostatistics and Data Analysis in Experimental Research, Tehran, Iran, 28 November 2013.
- Faculty member and organizer of the 3<sup>rd</sup> Tehran IBRO School of Neuroscience:
   Molecular, Electrophysiological & Behavioral Approaches (*Section: Extracellular single unit recording*) Tehran, Iran, 26 October 6 November 2013.
- Faculty member and organizer of the 4<sup>th</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 24 October 2013.
- Scientific Committee member of the 7<sup>th</sup> National Congress on Addiction Science, Tehran, Iran, 11-13 September 2013.
- Faculty member and organizer of the 3<sup>rd</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tabriz, Iran, 25 August 2013.
- Scientific Committee member of the 21<sup>st</sup> Iranian Congress of Physiology and Pharmacology, Tabriz, Iran, 23-27 August 2013.
- Faculty member in Pain Fellowship Program, Tehran, Iran, 5-19 March 2013.
- Scientific Committee member of the 1<sup>st</sup> Basic and Clinical Neuroscience Congress, Tehran, Iran, 7-9 November 2012.
- Scientific Committee member of the 6<sup>th</sup> National Congress of Addiction Biology, Tehran, Iran, 20-22 June 2012.
- Faculty member and organizer of the 2<sup>nd</sup> Tehran IBRO School of Neuroscience:

- Molecular, Electrophysiological & Behavioral Approaches (*Section: Extracellular single unit recording*) Tehran, Iran, 12-23 May 2012.
- Faculty member of the Pain Fellowship Program, Tehran, Iran, 5-19 March 2012.
- Scientific Committee member of the 20<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Hamadan, Iran, 10-14 October 2011.
- Scientific Committee member of the 5<sup>th</sup> National Congress of Addiction Biology, Tehran, Iran, 22-24 June 2011.
- Faculty member of the 5<sup>th</sup> Workshop on Electrophysiological Recording
  Techniques, (Section: Extracellular single unit recording) Tehran, Iran, 28-30 May
  2011.
- Faculty member of the 2<sup>nd</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 19-20 May 2011.
- Faculty member of the 1<sup>st</sup> Workshop on Introducing the International Neuroscience Societies and Organizations and their funding opportunities, Tehran, Iran, 5-6 March 2011.
- Faculty member of the 2<sup>nd</sup> Workshop on Behavioral Neuroscience (*Section: Fear Conditioning and Self-administration*), Tehran, Iran, 16-17 January 2011.
- Faculty member of the 4<sup>th</sup> Workshop on Electrophysiological Recording Techniques, (Section: Extracellular single unit recording) Tehran, Iran, 2-4 October 2010.
- Faculty member of the Pain Fellowship Program, Tehran, Iran, 6-20 March 2010.
- Faculty member of the 3<sup>rd</sup> Workshop on Electrophysiological Recording Techniques, (*Section: Extracellular single unit recording technique*) Tehran, Iran, 20-22 February 2010.
- Scientific Committee member of the 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Tehran, Iran, 3-6 November 2009
- Faculty member of the 2<sup>nd</sup> Electrophysiological Techniques Workshop (*Section*:

- Extracellular single unit recording technique), Tehran, Iran, 9-11 November 1998.
- Faculty member of the 1<sup>st</sup> Electrophysiological Techniques Workshop (*Section: Extracellular single unit recording technique*), Tehran, Iran, 18-20 May 1998.

## Scholarships and Awards

- Recipient of Top Researcher Award (2013) in Basic Medical Sciences, 14<sup>th</sup>
   Research Festival, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- Invited alumnus lecturer (2011) at the alumni special symposium, 8<sup>th</sup> IBRO World Congress of Neuroscience, Florence, Italy
- Recipient of Top Researcher Award (2010) in Basic Medical Sciences, 11<sup>th</sup>
   Research Festival, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- Outstanding book translator (2009), 10<sup>th</sup> Research Festival, Shahid Beheshti
   University of Medical Sciences, Tehran, Iran
- Recipient of Top Researcher Award (2007) in Basic Medical Sciences, 8<sup>th</sup> Research
   Festival, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- Recipient of Young investigator award (2001) in 15<sup>th</sup> International Congress of Physiology and Pharmacology, Shiraz, Iran
- Recipient of 2<sup>nd</sup> student prize Award (1999) in 5<sup>th</sup> International Razi Medical Sciences Research Festival, Tehran, Iran
- Recipient of Scholarship for six months (1999) by the Iranian Ministry of Health and Medical Education to continue education abroad towards the PhD completion

## **List of Publications**

#### **International ISI Peer-reviewed Periodicals**

- [1]. Baharlouei N, Sarihi A, Moradi M, Zarrabian S, **Haghparast A\***. Microinjection of the mGluR2/3 agonist, LY379268, into the nucleus accumbens attenuates extinction latencies and the reinstatement of morphine-induced conditioned place preference in rats. Accepted in *Behavioral Pharmacology 2017*.
- [2]. Fatahi Z, **Haghparast** A\*, Khani A, Kermani M\*. Functional connectivity

- between Anterior Cingulate cortex and Orbitofrontal cortex during value-based decision making. Accepted in *Neurobiology of Learning and Memory 2017*.
- [3]. Haghparast A, Shafiei I, Alizadeh AM, Ezzatpanah S, **Haghparast A\***. Blockade of the orexin receptors in the CA1 region of hippocampus decreased the lateral hypothalamic-induced antinociceptive responses in the model of orofacial formalin test in the rats. *Peptides 2017; DOI: 10.1016/j.peptides.2017. 10.006*.
- [4]. Karimi-Haghighi S, **Haghparast A\***. Cannabidiol inhibits priming-induced reinstatement of Methamphetamine in REM sleep deprived rats. *Progress in Neuro-Psychopharmacology and Biological Psychiatry 2017; DOI: 10.1016/j.pnpbp.2017.08.022*.
- [5]. Arezoomandan R, Riahi E, **Haghparast A\***. Minocycline, a glial cell modulator, modifies the effects of morphine on nucleus accumbens neurons in reinstatement phase: An electrophysiological study. *Addiction Biology 2017; DOI: 10.1111/adb.12557; Online First*.
- [6]. Mirmohammadsadeghi Z, Shareghi Brojeni M, **Haghparast A**, Eliassi A\*. Role of paraventricular hypothalamic dopaminergic D1 receptors in food intake regulation of food-deprived rats. *European Journal of Pharmacology 2018*; 818:43-9.
- [7]. Siahposht-Khachaki A, Ezzatpanah S, Razavi Y, **Haghparast A\***. NMDA receptor dependent changes in c-fos and p-CREB signaling following extinction and reinstatement of morphine place preference. *Neuroscience Letters 2018*; 662:147-51.
- [8]. Rezaei R, Nourshahi M, Khodagholi F, **Haghparast A**, Nasoohi S, Bigdeli M, Ashabi G\*. Differential impact of treadmill training on stroke induced neurological disorders. *Brain Injury 2017; 31:1910-17*.
- [9]. Farahimanesh S, Zarrabian S, **Haghparast A\***. Role of orexin receptors in the ventral tegmental area on acquisition and expression of morphine-induced conditioned place preference in the rats. *Neuropeptides 2017; 66:45-51*.
- [10]. Khaleghzadeh-Ahangar H, **Haghparast A\***. Intra-accumbal cannabinoid agonist

- attenuated reinstatement but not extinction period of morphine-induced conditioned place preference; evidence for different characteristics of extinction period and reinstatement. *Neurochemical Research* 2017; 42:3321-30.
- [11]. Karimi S, Mesdaghinia A, Farzinpour Z, Hamidi G\*, **Haghparast A**\*\*. Reversible inactivation of the lateral hypothalamus reversed high reward choices in cost-benefit decision-making in rats. *Neurobiology of Learning and Memory* 2017; 145:135-42.
- [12]. Fatahi Z, Sadeghi B, **Haghparast** A\*. Involvement of cannabinoid system in the nucleus accumbens on delay-based decision making in the rat. *Behavioural Brain Research* 2017; 337:107-13.
- [13]. Ameri F, Vazifeshenas N, **Haghparast A\***. The Impact of audio book on the elderly mental health. *Basic and Clinical Neuroscience 2017; 8(5):361-70*.
- [14]. Alizamini MM, Farzinpour Z, Ezzatpanah S, **Haghparast A\***. Role of intraaccumbal orexin receptors in the acquisition of morphine-induced conditioned place preference in the rats. *Neuroscience Letters 2017; 660:1-5*.
- [15]. Fatahi Z, Zibaii MI, **Haghparast A\***. Effect of acute and subchronic stress on electrical activity of basolateral amygdala neurons in conditioned place preference paradigm: an electrophysiological study. *Behavioural Brain Research* 2017; 335:19-25.
- [16]. Siahposht-Khachaki A, Pourreza P, Ezzatpanah S, **Haghparast A\***. Nucleus accumbens dopamine receptors mediate hypothalamus-induced antinociception in the rat formalin test. *European Journal of Pain 2017*; 21(7):1285-94.
- [17]. Sadeghzadeh F, Babapour V, **Haghparast A\***. Food deprivation facilitates reinstatement of morphine-induced conditioned place preference: role of intra-accumbal dopamine D2-like receptors in associating reinstatement of morphine CPP with stress. *Synapse 2017; 71(4):e21951; 1-11*.
- [18]. Siahposht-Khachaki A, Fatahi Z, Yans A, Khodagholi F, **Haghparast A\***. Involvement of AMPA/kainate glutamate receptor in the extinction and reinstatement of morphine-induced conditioned place preference: a behavioral and molecular study. *Cellular and Molecular Neurobiology 2017; 37(2):315-28*.

- [19]. Esmaeili MH, Reisi Z, Ezzatpanah S, **Haghparast** A\*.Role of orexin-2 and CB1 receptors within the periaqueductal gray matter in lateral hypothalamic-induced antinociception in rats. *Behavioural Pharmacology* 2017; 28(1):83-9.
- [20]. Jahangirvand M, Yazdi F, Moradi M, **Haghparast A\***. Intra-accumbal orexin-1 receptors are involved in antinociception induced by stimulation of the lateral hypothalamus in the formalin test as an animal model of persistent inflammatory pain. *Iranian Journal of Pharmaceutical Research 2016*; 15(4):851-9.
- [21]. Zibaii MI\*, Latifi H, Asadollahi A, Bayat AH, **Haghparast A**. Label free fiber optic apta-biosensor for dopamine detection. *Journal of Lightwave Technology* 2016; 34(19):4516-24.
- [22]. Bigdeli B, Goliaei B\*, Masoudi-Khoram N, Jooyan N, Nikoofar A, Rouhani M, Haghparast A, Mamashli F. Enterolactone: A novel radiosensitizer for human breast cancer cell lines through impaired DNA repair and increased apoptosis. *Toxicology and Applied Pharmacology 2016; 313:180-94*.
- [23]. Esmaeili MH, Reisi Z, Ezzatpanah S, **Haghparast A\***. Functional interaction between orexin-1 and CB1 receptors in the periaqueductal gray matter during antinociception induced by chemical stimulation of the lateral hypothalamus in rats. *European Journal of Pain 2016; 20(10):1753-62*.
- [24]. Siahposht-Khachaki A, Fatahi Z, **Haghparast A\***. Reduction of the morphine maintenance by blockade of the NMDA receptors during extinction period in conditioned place preference paradigm of rats. *Basic and Clinical Neuroscience* 2016; 7(4):341-50.
- [25]. Faramarzi G, Zendehdel M, **Haghparast A\***. D1- and D2-like dopamine receptors within the nucleus accumbens contribute to stress-induced analgesia in formalin-related pain behaviors in rats. *European Journal of Pain 2016*; 20:1423-32.
- [26]. Assar N, Mahmoudi D, Farhoudian A, Farhadi MH, Fatahi Z, **Haghparast A\***. D1- and D2-like dopamine receptors in the CA1 region of the hippocampus are involved in the acquisition and reinstatement of morphine-induced conditioned place preference. *Behavioural Brain Research* 2016; 312:394-404.

- [27]. Yazdi F, Jahangirvand M, Ezzatpanah S, **Haghparast A\***. Role of orexin-2 receptors in the nucleus accumbens in antinociception induced by carbachol stimulation of the lateral hypothalamus in formalin test. *Behavioural Pharmacology* 2016; 27(5):431-8.
- [28]. Ezzatpanah S, Babapour V, **Haghparast A\***. Differential contribution of orexin receptors within the ventral tegmental area to modulation of persistent inflammatory pain. *European Journal of Pain 2016; 20:1090-101*.
- [29]. Arezoomandan R, Moradi M, Attarzadeh-Yazdi G, Tomaz C, **Haghparast A\***. Administration of activated glial condition medium in the nucleus accumbens extended extinction and intensified reinstatement of methamphetamine-induced conditioned place preference. *Brain Research Bulletin 2016; 125:106-16*.
- [30]. Heysieattalab S, Naghdi N, Hosseinmardi N\*, Zarrindast MR, **Haghparast A**, Khoshbouei H. Methamphetamine-induced enhancement of hippocampal LTP is modulated by NMDA and GABA receptors in the Shell-Accumbens. *Synapse* 2016; 70(8):325-35.
- [31]. Charmchi E, Zendehdel M, **Haghparast A\***. The effect of forced swim stress on morphine sensitization: Involvement of D1/D2-like dopamine receptors within the nucleus accumbens. *Progress in Neuro-Psychopharmacology and Biological Psychiatry 2016; 70:92-9*.
- [32]. Sadeghi B, Ezzatpanah S, **Haghparast A\***. Effects of dorsal hippocampal orexin-2 receptor antagonism on the acquisition, expression and extinction of morphine-induced place preference in rats. *Psychopharmacology 2016;* 233(12):2329-41.
- [33]. Molaei M, Fatahi Z, Zaringhalam J, **Haghparast A\***. CB1 cannabinoid agonist (WIN55,212-2) within the basolateral amygdala induced sensitization to morphine and increased the level of μ-opioid receptor and c-fos in the nucleus accumbens. *Journal of Molecular Neuroscience 2016; 58:446-55*.
- [34]. Parsania S, Moradi M, Fatahi Z, **Haghparast A\***. Involvement of orexin-1 and orexin-2 receptors within the dentate gyrus of the hippocampus in the acquisition, expression and extinction of lateral hypothalamic-induced conditioned place preference in the rats. *Brain Research 2016*; *1639:149-60*.

- [35]. Arezoomandan R, **Haghparast A\***. Administration of the glial cell modulator, minocycline, in the nucleus accumbens attenuated the maintenance and reinstatement of morphine-seeking behavior. *Canadian Journal of Physiology and Pharmacology* 2016; 94(3):257-64.
- [36]. Heysieattalab S, Naghdi N\*, Zarrindast MR, **Haghparast A**, Ejtemaei Mehr M, Khoshbouei H. The effects of GABAA and NMDA receptors in the shell-accumbens on spatial memory of METH-treated rats. *Pharmacology, Biochemistry and Behavior 2016; 142:23-35.*
- [37]. Sadeghzadeh F, Namvar P, Naghavi FS, **Haghparast A\***. Differential effects of intra-accumbal orexin-1 and -2 receptor antagonists on the expression and extinction of morphine-induced conditioned place preference in rats.

  Pharmacology, Biochemistry and Behavior 2016; 142:8-14.
- [38]. Arezoomandan R, Khodagholi F, **Haghparast A\***. Administration of the glial condition medium in the nucleus accumbens prolong maintenance and intensify reinstatement of morphine- seeking behavior. *Neurochemical Research 2016;* 41(4):855-68.
- [39]. Ebrahimian F, Naghavi FS, Yazdi F, Sadeghzadeh F, Taslimi Z, **Haghparast** A\*. Differential roles of orexin receptors within the dentate gyrus in stress- and drug priming-induced reinstatement of conditioned place preference in rats. *Behavioral Neuroscience* 2015; 130(1):91-102.
- [40]. Yazdi F, Jahangirvand M, Pirasteh AM, Moradi M, Haghparast A\*. Functional interaction between OX2 and CB1 receptors in the ventral tegmental area and the nucleus accumbens in response to place preference induced by chemical stimulation of the lateral hypothalamus. *Pharmacology, Biochemistry and Behavior 2015; 139:39-46.*
- [41]. Sarihi A\*, Heshmatian B, Pahlevani P, Komaki A, **Haghparast A**. Reversible inactivation of dorsal raphe nucleus increased morphine-induced antinociception in tolerated but not non-tolerated rats. *Neurophysiology* 2015; 47(3):205-11.
- [42]. Sarkaki AR, Farbood Y, Gharib-Naseri MK, Badavi M, Mansouri MT, Haghparast A, Mirshekari MA\*. Gallic acid improved behavior, brain

- electrophysiology and inflammation in a rat model of traumatic brain injury. *Canadian Journal of Physiology and Pharmacology 2015; 93(8):687-94*.
- [43]. Moradi M, Yazdanian MR, **Haghparast A\***. Role of dopamine D2-like receptors within the ventral tegmental area and nucleus accumbens in antinociception induced by lateral hypothalamus stimulation. *Behavioural Brain Research* 2015; 292:508-14.
- [44]. Nazemi S\*, Manaheji H, Noorbakhsh MS, Zaringhalam J, Sadeghi M, Mohammadzadeh M, **Haghparast A**. Inhibition of microglial activity alters spinal wide dynamic range neuron discharge and reduces microglial Toll-like receptor 4 expression in neuropathic rats. *Clinical and Experimental Pharmacology and Physiology 2015; 47(7):772-9*.
- [45]. Baharlouei N, Sarihi A\*, Komaki A, Shahidi S, **Haghparast A**. Blockage of acquisition and expression of morphine-induced conditioned preference in rats due to activation of glutamate receptors type II/III in nucleus accumbens. *Pharmacology, Biochemistry and Behavior 2015; 135:192-8*.
- [46]. Khaleghzadeh-Ahangar H, **Haghparast A\***. Intra-accumbal CB1 receptor blockade reduced extinction and reinstatement of morphine. *Physiology & Behavior 2015; 149:212-9*.
- [47]. Moradi M, Fatahi Z, **Haghparast A\***. Blockade of D1-like dopamine receptors within the ventral tegmental area and nucleus accumbens attenuates antinociceptive responses induced by chemical stimulation of the lateral hypothalamus. *Neuroscience Letters* 2015; 599:61-6.
- [48]. Sadeghzadeh F, Babapour V, **Haghparast A\***. Role of dopamine D1-like receptor within the nucleus accumbens in acute food deprivation- and drug priming-induced reinstatement of morphine seeking in rats. *Behavioural Brain Research 2015*; 287C:172-81.
- [49]. Fatahi Z, Assar N, Mahmoudi D, Pahlevani P, Moradi M, Haghparast A\*. Functional interaction between the orexin-1 and CB1 receptors within the nucleus accumbens in the conditioned place preference induced by the lateral hypothalamus stimulation. *Pharmacology, Biochemistry and Behavior 2015;* 132: 42-8.

- [50]. Riahi E, Arezoomandan R, Fatahi Z, **Haghparast A\***. The electrical activity of hippocampal pyramidal neuron is subjected to descending control by the brain orexin/hypocretin system. *Neurobiology of Learning and Memory 2015; 119:93-101*.
- [51]. Ezzatpanah S, Babapour V, Sadeghi B, **Haghparast A\***. Chemical stimulation of the lateral hypothalamus by carbachol attenuated the formalin-induced pain behaviors in rats. *Pharmacology, Biochemistry and Behavior 2015; 129:105-10*.
- [52]. Zamani N, Hassanian-Moghaddam H\*, Bayat AH, **Haghparast A**, Shadnia S, Rahimi M, Demaneh BH. Assar N. Reversal of opioid overdose syndrome in morphine-dependent rats using buprenorphine. *Toxicology Letters* 2015; 232:590-4.
- [53]. Rashidy-Pour A, Moradi M, Fatahi Z, Haghparast A, **Haghparast A\***. Role of intra-hippocampal orexin 1 and orexin 2 receptors in conditioned place preference induced by chemical stimulation of the lateral hypothalamus. *Behavioural Brain Research 2015*; 279:106-11.
- [54]. Bayat AH, **Haghparast A\***. Effect of insulin deficiency on the rewarding properties of methamphetamine in streptozotocin-induced diabetic rats. *Pharmacology, Biochemistry and Behavior 2015; 128:8-13*.
- [55]. Khani A\*, Kermani M, Hesam S, **Haghparast A**, Argandoña EG, Rainer G. Activation of cannabinoid system in anterior cingulate cortex and orbitofrontal cortex modulates cost-benefit decision making. *Psychopharmacology 2015;* 232:2097-112.
- [56]. Pahlevani P, Fatahi Z, Moradi M, **Haghparast A\***. Morphine-induced conditioned place preference and the alterations of p-ERK, p-CREB and c-fos levels in hypothalamus and hippocampus: The effects of physical stress. *Cellular and Molecular Biology* 2014; 60:48-55.
- [57]. Roohi N, Sarihi A\*, Shahidi S, Zarei M, **Haghparast A**\*\*. Microinjection of the mGluR5 antagonist MTEP into the nucleus accumbens attenuates the acquisition but not expression of morphine-induced conditioned place preference in rats. *Pharmacology, Biochemistry and Behavior 2014; 126:109-115*.

- [58]. Razavi Y, Karimi S, Bani-Ardalan M, **Haghparast A\***. Chemical stimulation of the lateral hypothalamus potentiated the sensitization to morphine in rats: involvement of orexin-1 receptor in the ventral tegmental area. *Experimental and Clinical Sciences (EXCLI) Journal 2014; 13:1120-30*.
- [59]. Yazdi-Ravandi S, Razavi Y, Haghparast A, Goudarzvand M, **Haghparast A\***. Orexin A induced antinociception in the ventral tegmental area involves D1 and D2 receptors in the nucleus accumbens. *Pharmacology, Biochemistry and Behavior 2014; 126:1-6.*
- [60]. Fatahi Z, Alamdary SZ, Khodagholi F, Shahamati SZ, Razavi Y, **Haghparast** A\*. Effect of physical stress on the alteration of mesolimbic system apoptotic factors in conditioned place preference paradigm. *Pharmacology, Biochemistry and Behavior 2014; 124:231-7.*
- [61]. Reisi Z, Haghparast A, Pahlevani P, Shamsizadeh A, **Haghparast A\***. Interaction between the dopaminergic and opioidergic systems in dorsal hippocampus in modulation of formalin-induced orofacial pain in rats. *Pharmacology, Biochemistry and Behavior 2014; 124C:220-5*.
- [62]. Zarepour L, Fatahi Z, Sarihi A\*\*, **Haghparast A**\*. Blockade of orexin-1 receptors in the ventral tegmental area could attenuate the lateral hypothalamic stimulation-induced potentiation of rewarding properties of morphine.

  Neuropeptides 2014; 48(3):179-85.
- [63]. Haghparast A\*, Shamsizadeh A, Samandari R, Omranifard A, Vaziri A, Razavi Y. Cannabinoid receptors in the basolateral amygdala are involved in the potentiation of morphine rewarding properties in the acquisition, but not expression of conditioned place preference in rats. *Brain Research* 2014; 1565:28-36.
- [64]. Attarzadeh-Yazdi G, Arezoomandan R, **Haghparast A\***. Minocycline, an antibiotic with inhibitory effect on microglial activation, attenuates the maintenance and reinstatement of methamphetamine-seeking behavior in rat. *Progress in Neuro-Psychopharmacology and Biological Psychiatry 2014;* 53C:142-8.
- [65]. Karimi S, Attarzadeh-Yazdi G, Yazdi-Ravandi S, Hesam S, Azizi P, Razavi Y,

- **Haghparast A\***. Forced swim stress but not exogenous corticosterone could induce the reinstatement of extinguished morphine conditioned place preference in rats: Involvement of glucocorticoid receptors in the basolateral amygdala. *Bahvioural Brain Research 2014; 264C:43-50.*
- [66]. Reisi Z, Bani-Ardalan M, Zarepour L, **Haghparast A\***. Involvement of D1/D2 dopamine receptors within the nucleus accumbens and ventral tegmental area in the development of sensitization to antinociceptive effect of morphine. *Pharmacology, Biochemistry and Behavior 2014; 118C:16-21.*
- [67]. Sadeghi M, Manaheji H\*, Zarringhalam J, Haghparast A, Nazemi S, Bahari Z. The Changes of GABA transporters (GAT-1 and GAT-3) and GABAA Receptor α1 subunit Expression in the Spinal Cord after Peripheral Nerve injury: Effect of GABAA Receptor Stimulation and Glial Inhibition. *Advances in Bioresearch* 2013; 4(4):54-64.
- [68]. Haghparast A\*, Fatahi Z, Alamdary SZ, Khodagholi F. Changes in apoptotic factors in hypothalamus and hippocampus after acute and subchronic stress induction during conditioned place preference paradigm. *Experimental and Clinical Sciences (EXCLI) Journal 2013; 12:1001-16*.
- **[69]. Haghparast A\***, Fatahi Z, Alamdary SZ, Reisi Z, Khodagholi F. Changes in the levels of p-ERK, p-CREB and c-fos in rat mesocorticolimbic dopaminergic system after morphine-induced conditioned place preference: the role of acute and subchronic stress. *Cellular and Molecular Neurobiology 2013; 34(2):277-88.*
- [70]. Razavi Y, Alamdary SZ, Katebi SN, Khodagholi F, **Haghparast A\***. Morphine-induced apoptosis in the ventral tegmental area and hippocampus after the development but not extinction of reward-related behaviors in rats. *Cellular and Molecular Neurobiology 2013; 34(2):235-45*.
- [71]. Shamsizadeh A, Pahlevani P, Haghparast A, Moslehi M, Zarepour L, Haghparast A\*. Involvement of dopamine receptors within the dorsal hippocampus in suppression of the formalin-induced orofacial pain.

  Pharmacology, Biochemistry and Behavior 2013; 114-115C:32-42.
- [72]. Katebi SN, Razavi Y, Alamdary SZ, Khodagholi F, **Haghparast A\***. Morphine

- could increase apoptotic factors in the nucleus accumbens and prefrontal cortex of rat brain's reward circuitry. *Brain Research* 2013; 1540:1-8.
- [73]. Haghparast A\*, Omranifard A, Arezoomandan R, Ghalandari-Shamami M, Taslimi Z, Vafaei AA, Rashidy-Pour A\*\*. Involvement of dopaminergic receptors of the rat nucleus accumbens in decreasing the conditioned place preference induced by lateral hypothalamus stimulation. *Neuroscience Letters* 2013; 556:10-4.
- [74]. Azhdari-Zarmehri H, Reisi Z, Vaziri A, Haghparast A, Shaigani P, **Haghparast** A\*. Involvement of orexin-2 receptors in the ventral tegmental area and nucleus accumbens in the antinociception induced by the lateral hypothalamus stimulation in rats. *Peptides* 2013; 47:94-8.
- [75]. Riahi E, Khodagholi F, **Haghparast A\***. Role of dorsal hippocampal orexin 1 receptors in associating morphine reward with contextual stimuli. *Behavioural Pharmacology 2013; 24:237-48*.
- [76]. Attarzadeh-Yazdi G, Karimi S, Azizi P, Yazdi-Ravandi S, Hesam S, Haghparast A\*. Inhibitory effects of forced swim stress and corticosterone on the acquisition but not expression of morphine-induced conditioned place preference: involvement of glucocorticoid receptor in the basolateral amygdala. *Behavioural Brain Research* 2103; 252:339-46.
- [77]. Samandari R, Chizari A, Hassanpour R, Mousavi Z, **Haghparast A\***. Streptozotocin-induced diabetes affects the development and maintenance of morphine reward in rats. *Neuroscience Letters* 2013; 543:90-4.
- [78]. Zarepour L, Komaki A, Shahidi S, Sarihi A, **Haghparast A\***. Potentiation of rewarding properties of morphine by concurrent chemical stimulation of lateral hypothalamus in rats. *Pharmacology, Biochemistry and Behavior 2013; 107:36-41*.
- [79]. Haghparast A\*, Esmaeili MH\*\*, Taslimi Z, Kermani M, Yazdi-Ravandi S, Alizadeh AM. Intrahippocampal administration of D2 but not D1 dopamine receptor antagonist suppresses the expression of conditioned place preference induced by morphine in the ventral tegmental area. *Neuroscience Letters* 2013; 541:138-43.

- [80]. Rashidy-Pour A, Pahlevani P, Vaziri A, Shaigani P, Zarepour L, Vafaei AA, Haghparast A\*. Involvement of CB1 receptors in the ventral tegmental area in the potentiation of morphine rewarding properties in acquisition but not expression in the conditioned place preference model. *Behavioural Brain Research* 2013; 247:259-67.
- [81]. Karimi S, Azizi P, Shamsizadeh A, **Haghparast A\***. Role of intra-accumbal cannabinoid CB1 receptors in the potentiation, acquisition and expression of morphine-induced conditioned place preference. *Behavioural Brain Research* 2013; 247:125-31.
- [82]. Sadeghi S, Reisi Z, Azhdari-Zarmehri H\*\*, **Haghparast A**\*. Involvement of orexin-1 receptors in the ventral tegmental area and the nucleus accumbens in antinociception induced by lateral hypothalamus stimulation in rats.

  Pharmacology, Biochemistry and Behavior 2013; 105:193-8.
- [83]. Heidari-Oranjaghi N, Azhdari-Zarmehri H\*, Erami E, **Haghparast A**. Antagonism of orexin-1 receptors attenuates swim- and restraint stress-induced antinociceptive behaviors in formalin test. *Pharmacology, Biochemistry and Behavior* 2012; 103(2):299-307.
- [84]. Erami E, Azhdari Zarmehri H\*, Rahmani A, Ghasemi E, Semnanian S, Haghparast A. The Blockade of orexin receptor 1 attenuates the development of morphine tolerance and physical dependence in rats. *Pharmacology, Biochemistry and Behavior 2012; 103(2):212-9.*
- [85]. Taslimi Z, Arezoomandan R, Omranifard A, Ghalandari-Shamami M, Riahi E, Vafei AA, Rashidy-Pour A\*\*, **Haghparast A**\*. Orexin A in the ventral tegmental area induces conditioned place preference in a dose-dependent manner: involvement of D1/D2 receptors in the nucleus accumbens. *Peptides* 2012; 37(2):225-32.
- [86]. Nazemi S, Manaheji H\*, Zarringhalam J, Sadeghi M, **Haghparast A**. Postinjury repeated administrations of minocycline improve the antinociceptive effect of morphine in chronic constriction injury model of neuropathic pain in rat. *Pharmacology, Biochemistry and Behavior 2012; 102(4):520-5*.
- [87]. Haghparast A\*, Ghalandari-Shamami M, Hassanpour-Ezatti M. Blockade of

- D1/D2 dopamine receptors within the nucleus accumbens attenuated the antinociceptive effect of cannabinoid receptor agonist in the basolateral amygdala. *Brain Research* 2012; 1471:23-32.
- [88]. Ashabi G, Ramin M, Azizi P, Taslimi Z, Alamdary SZ, **Haghparast A**, Ansari N, Motamedi F, Khodagholi F\*. ERK and p38 inhibitors attenuate memory deficits and increase CREB phosphorylation and PGC-1α levels in Aβ-injected rats. *Behavioural Brain Research 2012*; 232(1):165-73.
- [89]. Esmaeili MH, Kermani M, Parvishan A, Haghparast A\*. Role of D1/D2 dopamine receptors in the CA1 region of the rat hippocampus in the rewarding effects of morphine administered into the ventral tegmental area. *Behavioural Brain Research* 2012; 231(1):111-5.
- [90]. Kermani M, Azizi P, Haghparast A\*. The role of nitric oxide in the effects of cumin (Cuminum cyminum L.) fruit essential oil on the acquisition of morphine-induced conditioned place preference in adult male mice. *Chinese Journal of Integrative Medicine*; DOI:10.1007/s11655-011-0939-0.
- [91]. Chaleek N, Kermani M, Eliassi M\*, **Haghparast A**. Effects of orexin and glucose microinjected into the hypothalamic paraventricular nucleus on gastric acid secretion in conscious rats. *Neurogastroenterology and Motility 2012*; 24(2):e94-e102.
- [92]. Haghparast A\*, Farzin D, Ordikhani-Seyedlar M, Motaman S, Kermani M, Azizi P. Effects of apomorphine and β-Carbolines on firing rate of neurons in the ventral pallidum in the rats. *Behavioural Brain Research* 2012; 227(1):109-15.
- [93]. Ebrahimzadeh M, **Haghparast A\***. Analgesic effects of cannabinoid receptor agonist WIN55,212-2 in the nucleus cuneiformis in animal models of acute and inflammatory pain in rats. *Brain Research 2011; 1420:19-28*.
- [94]. Ghalandari-Shamami M, Hassanpour-Ezatti M, Haghparast A\*. Intra-accumbal NMDA but not AMPA/kainate receptor antagonist attenuates WIN55,212-2 cannabinoid receptor agonist-induced antinociception in the basolateral amygdala in a rat model of acute pain. *Pharmacology, Biochemistry and Behavior 2011; 100(2):213-9.*

- [95]. Haghparast A\*, Taslimi Z, Ramin M, Azizi P, Khodagholi F, Hassanpour-Ezatti M. Changes in phosphorylation of CREB, ERK, and c-fos induction in rat ventral tegmental area, hippocampus and prefrontal cortex after conditioned place preference induced by chemical stimulation of lateral hypothalamus.

  \*Behavioural Brain Research 2011; 220(1):112-8.
- [96]. Farzin D\*, **Haghparast A**, Motaman S, Baryar F, Mansouri N. Effects of harmane and other β-carbolines on apomorphine-induced licking behavior in rat. *Pharmacology, Biochemistry and Behavior 2011; 98(2):215-9.*
- [97]. Ramin M, Azizi P, Motamedi F, **Haghparast A**, Khodagholi F\*. Inhibition of JNK phosphorylation reverses memory deficit induced by β-amyloid (1-42) associated with decrease of apoptotic factors. *Behavioural Brain Research 2011*; 217(2):424-31.
- [98]. Taslimi Z, Haghparast A\*, Hassanpour-Ezatti M, Safari MS. Chemical stimulation of the lateral hypothalamus induces conditioned place preference in rats: involvement of OX1 and CB1 receptors in the ventral tegmental area.

  Behavioural Brain Research 2011; 217(1):41-6.
- [99]. Ataie A, Sabetkasaei M\*, **Haghparast A**, Moghaddam AH, Kazeminejad B. Neuroprotective effects of the polyphenolic antioxidant agent, Curcumin, against homocysteine-induced cognitive impairment and oxidative stress in the rat. *Pharmacology, Biochemistry and Behavior 2010; 96(4):378-85*.
- [100]. Ataie A, Sabetkasaei M\*, **Haghparast A**, Moghaddam AH, Ataie R, Moghaddam SN. An investigation of the neuroprotective effects of Curcumin in a model of Homocysteine-induced oxidative stress in the rat's brain. *Daru 2010;* 18(2):128-36.
- [101]. Ataie A, Sabetkasaei M\*, **Haghparast A**, Moghaddam AH, Ataee R, Moghaddam SN. Curcumin exerts neuroprotective effects against homocysteine intracerebroventricular injection-induced cognitive impairment and oxidative stress in rat brain. *Journal of Medicinal Food 2010; 13(4):821-6*.
- [102]. Haghparast A\*, Naderi N, Khani A, Lashgari R, Motamedi F. Formalin-induced differential activation of nucleus cuneiformis neurons in the rat: an electrophysiology-cal study. *Journal of Pain 2010; 11(1):32-43*.

- [103]. Saber-Tehrani A, Naderi N\*, Hosseini Najarkolaei A, Haghparast A, Fereshteh F. Cannabinoids and their interactions with diazepam on modulation of serum corticosterone concentration in male mice. *Neurochemical Research* 2010; 35(1):60-6.
- [104]. Haghparast A\*, Azizi P, Hassanpour-Ezatti M, Khorrami H, Naderi N. Subchronic administration of AM251, CB1 receptor antagonist, within the nucleus accumbens induced sensitization to morphine in the rat. *Neuroscience Letters* 2009; 467(1):43-7.
- [105]. Chavooshi B, Saberi M\*, Tehrani SP, Bakhtiarian A, Ahmadiani A, Haghparast A. Vigabatrin attenuates the development and expression of tolerance to morphine-induced antinociception in mice. *Pharmacology, Biochemistry and Behavior 2009; 93(2):155-9.*
- [106]. Safari MS, **Haghparast A\***, Semnanian S. Effect of lidocaine administration at the nucleus locus coeruleus level on lateral hypothalamus induced antinociception in the rat. *Pharmacology, Biochemistry and Behavior 2009;* 92(4):629-34.
- [107]. Moaddab M, Haghparast A\*, Hassanpour-Ezatti M. Effects of reversible inactivation of the ventral tegmental area on the acquisition and expression of morphine-induced conditioned place preference in the rat. *Behavioural Brain Research*; 2009; 198(2):466-71.
- [108]. Haghparast A\*, Ahamd-Molaei L. Effects of electrolytic lesion of dorsolateral periaqueductal gray on analgesic response of morphine microinjected into the nucleus cuneiformis in rat. *Neuroscience Letters* 2009; 451(2):165-9.
- [109]. Azizi P, **Haghparast** A\*, Hassanpour-Ezatti M. Effects of CB1 receptor antagonist within the nucleus accumbens on the acquisition and expression of morphine-induced conditioned place preference in morphine-sensitized rats. *Behavioural Brain Research* 2009; 197(1):119-24.
- [110]. Khatibi A, Haghparast A\*, Shams J, Dianati E, Komaki A, Kamalinejad M. Effects of the fruit essential oil of *Cuminum cyminum* L. on the acquisition and expression of morphine-induced conditioned place preference in mice.

  Neuroscience Letters 2008; 448(1):94-8.

- [111]. Haghparast A\*, Shams J, Khatibi A, Alizadeh AM, Kamalinejad M. Effects of the fruit essential oil of Cuminum cyminum Linn. (Apiaceae) on acquisition and expression of morphine tolerance and dependence in mice. *Neuroscience Letters* 2008; 440(2):134-9.
- [112]. Haghparast A\*, Ordikhani-Seyedlar M, Ziaei M. Electrolytic lesion of the nucleus raphe magnus reduced the antinociceptive effects of bilateral morphine microinjected into the nucleus cuneiformis in rats. *Neuroscience Letters* 2008; 438(3):351-5.
- [113]. Khakpour-Taleghani B, Lashgari R\*, Aavani T, **Haghparast A**, Motamedi F, Naderi N. The locus coeruleus involves in consolidation and memory retrieval, but not in acquisition of inhibitory avoidance learning task. *Behavioural Brain Research* 2008; 189(2):257-62.
- [114]. Nooshinfar E\*, Lashgari R, **Haghparast A**, Sajjadi S. NMDA receptors are involved in Ginkgo extract-induced facilitation on memory retention of passive avoidance learning in rats. *Neuroscience Letters* 2008; 432(3):206-11.
- [115]. Naderi N\*, **Haghparast A**, Saber-Tehrani A, Alizadeh AM, Rezaii N, Khani A, Motamedi F. Interaction between cannabinoid compounds and diazepam on anxiety-like behaviour of mice. *Pharmacology, Biochemistry and Behavior* 2008;89(1):64-75.
- [116]. Haghparast A\*, Khani A, Naderi N, Alizadeh AM, Motamedi F. Repeated administration of nicotine attenuates the development of morphine tolerance and dependence in mice. *Pharmacology, Biochemistry and Behavior 2008;* 88(4):385-92.
- [117]. Haghparast A\*, Khani A, Lashgari R, Fallahian S. Reducing the time and dose of morphine application for induction of morphine tolerance and dependence in mice. *Drug and Alcohol Dependence 2008; 93(1-2):185-9*.
- [118]. Haghparast A\*, Soltani-Hekmat A, Khani A, Komaki A. Role of glutamatergic receptors located in the nucleus raphe magnus on antinociceptive effect of morphine microinjected into the nucleus cuneiformis of rat. *Neuroscience Letters* 2007; 427(1): 44-9.

- [119]. Haghparast A\*, Gheitasi IP, Lashgari R. Involvement of glutamatergic receptors in the nucleus cuneiformis in modulating morphine-induced antinociception in rats. *European Journal of Pain 2007; 11(8):855-62*.
- [120]. Komaki A\*, Shahidi S, Lashgari R, **Haghparast A**, Malakouti SM, Noorbakhsh SM. Effects of GABAergic inhibition on neocortical long-term potentiation in the chronically prepared rat. *Neuroscience Letters* 2007; 422(3):181-6.
- [121]. Lashgari R\*, Motamedi F, Zahedi-Asl S, Komaki A, Shahidi S, Noorbakhsh SM, **Haghparast A**. Assessing the long-term role of L-type voltage dependent calcium channel blocker verapamil on short-term presynaptic plasticity at dentate gyrus of hippocampus. *Neuroscience Letters* 2007; 415(2):174-8.
- [122]. Sedighi B\*, **Haghparast A**, Klantary T, Taieban M. How lidocaine act in morphine dependency. *Neurosciences* 2006; 11(3):145-9.
- [123]. Haghparast A\*, Semnanian S, Fathollahi Y. Morphine tolerance and dependence in the nucleus paragigantocellularis:Single unit recording study in Vivo. *Brain Research* 1998; 814(1-2):71-7.

## **List of Publications**

#### **National and Scopus Peer-reviewed Periodicals**

- [1]. Soltani N, Mohammadi E, Allahtavakoli M, Shamsizadeh A\*, Roohbakhsh A, **Haghparast A**. Effects of dimethyl sulfoxide on neuronal response characteristics in deep layers of rat barrel cortex. *Basic and Clinical Neuroscience 2016*; 7(3):213-20.
- [2]. Dabir N\*, Moazedi A, **Haghparast A**, Khajepour L, Akhoond M. Effects of estrogen therapy on cognitive performance deficit induced by nucleus basalis magnocellularis lesion: Animal model of Alzheimer's disease. *Journal of Isfahan Medical School* 2016; 34(370):1-10.
- [3]. Fathi I\*, Nourshahi M, **Haghparast A**, Fallah-Hosseini H. Effect of eight-week aerobic continuous and high intensity interval training on levels of SIRT3 in skeletal muscle tissue of Wistar rats. *Journal of Exercise Physiology and activities*

<sup>\*</sup> Correspondent

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- [4]. Goudarzvand M\*, Choopani S, Shams AR, Javan M, Khodaii Z, Ghamsari F, Naghdi N, Piryaei A, **Haghparast A**. Focal Injection of Ethidium Bromide as a Simple Model to Study Cognitive Deficit and Its Improvement. *Basic and Clinical Neuroscience* 2016; 7(1):63-72.
- [5]. Yazdi-Ravandi S, Taslimi Z, **Haghparast A**, Ghaleiha A\*. Quality of life in patients with chronic pain disorders: Determination the role of intensity and duration of pain. *Journal of Semnan University of Medical Sciences 2016*; 17(4):836-43.
- [6]. Salimi M, Eliassi A\*, **Haghparast A**. Intra-paraventricular nucleus microinjection of D2 receptors antagonist, sulpiride, reduces food intake in 24 hours food-deprived rats. *Iranian Journal of Physiology and Pharmacology 2015;* 1(3):186-93.
- [7]. Noori-Daloii MR\*, Shahbazi A, Alizadeh Zendehrood S, Shayan Nia A, Mojarrad M, Kheirolli M, Rashidi-Nezhad A, **Haghparast A**, Zare Mehrjerdi F, Niknazar S, Mostowfi M, Hashemi Sotoobadi H, Khaksari M, Noori-Daloii AR, Mohammadi A. Knocking Down the DRD2 by shRNA Expressing Plasmids in the Nucleus Accumbens Prevented the Disrupting Effect of Apomorphine on Prepulse Inhibition in Rat. *Journal of Sciences, Islamic Republic of Iran 2015*; 26(3):205-12.
- [8]. Khakpour-Taleghani B, Reisi Z, **Haghparast A\***. The blockade of D1/D2-Like dopamine receptors within the dentate gyrus of hippocampus decreased the reinstatement of morphine-extinguished conditioned place preference in rats. *Basic and Clinical Neuroscience 2015*; 6(2):5-14.
- [9]. Sadeghi M, Manaheji H\*, **Haghparast A**, Zarringhalam J, Nazemi S, Bahari Z. Study of the effect of GABAA receptor and glial inhibition on behavioral responses in CCI model of neuropathic pain in rat. *Iranian South Medical Journal* 2015; 17(6):1120-34.
- [10]. Sadeghi ZMM, Eliassi A\*, **Haghparast A**. Intrahypothalamic paraventricular nucleus-microinjected SKF 38393, D1 receptor agonist, reduces food intake in 24 hours food-deprived rats. *Journal of Physiology and Pharmacology 2014;*

- [11]. Molaei M, Sanati MH, Zarringhalam J, Haghparast A\*. Microinjection of WIN55,212-2 as a cannabinoid agonist into the basolateral amygdala induces sensitization to morphine in rats. *Basic and Clinical Neuroscience 2014*; 5(4):295-302.
- [12]. Goudarzvand M, Rohampour K, Azizi P, Sherafat MA, Nazari-Borun A, Haghparast A\*, Taheri S. Application of Mesenchymal Stem cell intended to investigate the reward response of nucleus accumbens in a local demyelination model of rat. *Alborz University Medical Journal 2014; 3(2):89-95*.
- [13]. Moradi M, Yazdian MR, **Haghparast A\***. Lateral Hypothalamus stimulation-induced antinociception was attenuated by administration of dopamine D1 and D2 receptor antagonists in the ventral tegmental area. *Journal of Physiology and Pharmacology 2014; 18(1):36-46*.
- [14]. Sofiabadi M, Azhdari-Zarmehri H\*, Naderi F, Ghalandari-Shamami M, Sonboli A, **Haghparast A**. Effects of hydroalcoholic extract of Tanacetum sonbolii (Asteraceae) on pain-related behaviors during formalin test in mice. *Basic and Clinical Neuroscience* 2014; 5(2):162-8.
- [15]. Kaka GR, Rahmanzade R, Safaei F, **Haghparast A\***. Naloxone induces frequent jumping after chronic morphine and methamphetamine co-administration in rats. *Basic and Clinical Neuroscience* 2014;5(1):42-7.
- [16]. Haghparast A\*, Yoonessi A. Orexin in Addiction, Current State and Potential Clinical Applications (Editorial). *Journal of Substance Abuse & Alcoholism 2014*; 2(2):1015-6.
- [17]. Razavi Y, Katebi SN, Alamdary SZ, Oryan S, Khodagholi F, **Haghparast A\***. Changes in apoptotic factors caspase-3, PARP and Bax/Bcl-2 ratio in the ventral tegmental area after the acquisition and extinction of morphine-induced conditioned place preference in the rat. *Journal of Semnan University of Medical Sciences* 2013; 14(4):404-13.
- [18]. Katebi SN, Razavi Y, Alamdary SZ, Irani S, Khodagholi F, **Haghparast A\***. The effect of morphine on apoptotic factors caspase-3, PARP and Bax/Bcl-2 ratio in

- nucleus accumbens in conditioned place preference in the rat. *Journal of Physiology and Pharmacology 2013; 17(1):39-50.*
- [19]. Moaddab M, Kermani M, Azizi P, Haghparast A\*. Functional interaction between the shell sub-region of the nucleus accumbens and the ventral tegmental area in response to morphine: an electrophysiological study. *Basic and Clinical Neuroscience* 2013; 4(2):159-68.
- [20]. Komaki A\*, Shahidi S, Sarihi A, Hasanein P, Lashgari R, **Haghparast A**, Salehi I, Arami MK. Effects of neonatal C-fiber depletion on interaction between neocortical short-term and long-term plasticity. *Basic and Clinical Neuroscience* 2013; 4(2):136-45.
- [21]. Yazdi-Ravandi S, Taslimi Z, Jamshidian N, Saberi H, Shams J, **Haghparast A\***. Prediction of quality of life by Self-Efficacy, pain intensity and pain duration in patient with pain disorders. *Basic and Clinical Neuroscience* 2013; 4(2):117-24.
- [22]. Taslimi Z, Yazdi-Ravandi S, **Haghparast A\*.** Administration of cannabinoid receptor antagonist into the ventral tegmental area could inhibit conditioned place preference induced by chemical stimulation of the lateral hypothalamus. *Zahedan Journal of Research in Medical Sciences* 2013; 15(7):39-43.
- [23]. Yazdi-Ravandi S, Taslimi Z, Saberi H, Shams J, Osanlo S, Nori G, **Haghparast**A\*. The role of resilience and age on quality of life in patients with pain disorders.

  Basic and Clinical Neuroscience 2013; 4(1):24-30.
- [24]. Ghalandari-Shamami M, Hassanpour-Ezatti M, **Haghparast A\***. Glutamate receptors in nucleus accumbens can modulate canabinoid-induced antinociception in rat's basolateral amygdala. *Basic and Clinical Neuroscience 2012; 3(5):11-8*.
- [25]. Kermani M, Noorbakhsh SM\*, **Haghparast A**. A Brief Look into Spike Sorting Methods. *Basic and Clinical Neuroscience 2012; 3(3):67-71*.
- [26]. Taghavi-Rafsanjani A, **Haghparast A**, Shamsizadeh A, Haeri-Rohani SA, Roohbakhsh A, Hakimizadeh E, Amin F, Allahtavakoli M\*. The Effect of Nicotine Administration on Physical and Psychological Signs of Withdrawal Syndrome Induced by Single or Frequent Doses of Morphine in Rats. *Basic and Clinical Neuroscience* 2012; 3(3):49-57.

- [27]. Nazemi S, Manaheji H\*, **Haghparast A**, Zarringhalam J, Sadeghi M. Effect of glial inhibition in attenuation of neuropathic pain and improvement of morphine analgesic effect in a rat model of neuropathy. *Journal of Physiology and Pharmacology* 2012; 15(4):486-98.
- [28]. Haghparast A\*, Moaddab M, Ebrahimzadeh M, Kermani M. Effects of reversible inactivation of the ventral tegmental area on the firing rate of neurons in the shell sub-region of the nucleus accumbens and on morphine-induced conditioned place preference in the rat. *Journal of Semnan University of Medical Sciences* 2012; 13(2):189-200.
- [29]. Ronaghi A, Ebrahimzadeh M, **Haghparast A\***. Contribution of the nucleus cuneiformis to the antinociceptive effects of systemic morphine on inflammatory pain in rats. *Basic and Clinical Neuroscience 2011; 3(1):36-44*.
- [30]. Rahimpour M, Karami M\*, Karimi S, **Haghparast A**, Jalali MR, Sabouni F. Blockade of the naloxone-induced aversion in morphine-conditioned wistar rats by L-Arginine intra-central amygdala. *Iranian Journal of Basic Medical Sciences* 2011; 14(2):167-76.
- [31]. Sarihi A\*, Yazdi M, Heshmatian B, Salehi I, Behzadi G, Naghdi N, Shahidi S, Komaki A, **Haghparast A**, Emam AH. The effects of lidocaine reversible inactivation of the dorsal raphe nucleus on passive avoidance learning in rats. *Basic and Clinical Neuroscience 2011*; 2(4):27-35.
- [32]. Parvishan A, Taslimi Z, Ebrahimzadeh M, **Haghparast A\***. Capsazepine, a transient receptor potential vanilloid type 1 (TRPV1) antagonist, attenuates antinociceptive effect of CB1 receptor agonist, WIN55,212-2, in the rat nucleus cuneiformis. *Basic and Clinical Neuroscience* 2011; 2(4):19-26.
- [33]. Azizi P, Kermani M, **Haghparast A\***. Effect of nitric oxide on the attenuation of acquisition of morphine-induced conditioned place preference by fruit essential oil of *Cuminum Cyminum* L. in mice. *Journal of Physiology and Pharmacology* 2011; 15(3):435-43.
- [34]. Ahmad-Molaei L, Ordikhani-Seyedlar M, Ziaei M, Khademi R, Rouzmeh P, Haghparast A\*. The analgesic effect of morphine microinjected into the nucleus raphe magnus after electrolytic lesion of the nucleus cuneiformis in tail-flick and

- formalin tests in rat. *Journal of Physiology and Pharmacology* 2011; 15(3):371-84.
- [35]. Safari MS, **Haghparast A**, Semnanian S\*, Ahmadiani A. Role of Orexin-A receptors within the Locus Coeruleus in the antinociception induced by microinjection of carbachol into the lateral hypothalamus. *Journal of Physiology and Pharmacology 2011; 15(1):47-57*.
- [36]. Haghparast A\*, Ahmad-Molaei L, Alizadeh AM, Azizi P. Blockade of opioid receptors located in the rat nucleus cuneiformis reduced the antinociceptive responses of local but not systemic administration of morphine in formalin test. *Basic and Clinical Neuroscience 2010; 2(1):13-9.*
- [37]. Haghparast A\*, Ordikhani-Seyedlar M, Ziaei M, Azizi P, Ebrahimzadeh-Sarvestani M. Effects of electrolytic lesions of the ventrolateral periaqueductal gray and nucleus raphe magnus on morphine-induced antinociception in the nucleus cuneiformis. *Basic and Clinical Neuroscience 2010; 1(4):25-32*.
- [38]. Haghparast A\*, Zarringhalam J, Khatibi A, Dianati E, Shams J. The fruit essential oil of Cuminum cyminum L. reduced the acquisition but not expression of ineffective dose of morphine-induced conditioned place preference in morphine-sensitized mice. *Journal of Medicinal Plants* 2009; 8(31):64-74.
- [39]. Sabetkasaei M\*, Ataie A, Haghparast A, Hajizadeh-Moghaddam A, Ataie R, Nasiraei S. The study of the neuroprotective effects of curcumin, against homocysteine intracerebroventricular injection-induced cognition impairment and oxidative stress in the rat. *Journal of Physiology and Pharmacology 2009;* 13(3):328-39.
- [40]. Haghparast A\*, Alizadeh AM, Motamedi F. Effect of subcutaneous injection of morphine on activity of neurons in the nucleus cuneiformis of rat. *Journal of Zahedan University of Medical Sciences 2008; 10(4):253-63.*
- [41]. Haghparast A\*, Alizadeh AM, Motamedi F. The firing rate of neurons in the nucleus cuneiformis in response to formalin in male rat. *Journal of Physiology and Pharmacology 2008; 12(2):101-8.*
- [42]. Haghparast A\*, Esmaeili A. Effects of morphine and lidocaine administration

- into the cuneiformis nucleus of rats on acute and chronic pain modulation by formalin test. *Journal of Birjand University of Medical Sciences* 2007; 14(1):5-13.
- [43]. Rezvanipour M\*, **Haghparast A**, Millan H. The role of GABA<sub>A</sub> receptor inhibitor on morphine antinociception action in the cuneiformis nucleus. *International Journal of Pharmacology* 2006; 2(4):400-5.
- [44]. Haghparast A\*, Mobasher M. Effect of glutaminergic receptors antagonists in the rostral ventromedial medulla on antinociceptive response of gabapentin in rat. Journal of Zahedan University of Medical Sciences 2006; 8(2):81-91.
- [45]. Haghparast A\*, Ekhlaspour L, Navadeh-Khodadadi S, Ashraf-Ganjooei N. Role of gonadectomy in development of hyperalgesia induced by partial sciatic nerve ligation in male mice. *Journal of Zahedan University of Medical Sciences* 2006; 8(1):37-46.
- [46]. Haghparast A\*, Ghanbar-Nezhad M, Mohammadi M. Effect of infusion extract prepared from red nutshell of Pistachio (Pistacia Vera) on morphine withdrawal syndrome in rat. *Journal of Zahedan University of Medical Sciences 2006*; 8(1):1-8.
- [47]. Sepehri GR\*, **Haghparast A**. The effect of intraperitoneal administration of zinc acetate on serum prolactin in male and female rats. *Iranian Journal of Basic Medical Sciences* 2003; 6(2):155-60.
- [48]. Mahmoudi M\*, Nosratabadi SJ, Fekri A, Haghparast A, Sharifi I. Evaluation of meglumine antimonate therapy in cutaneous leishmaniasis: Comoarison of in vitro sensitivity of leishmania tropica isolates from patients treated with drug with clinical response. *Journal of Semnan University of Medical Sciences* 2003; 4(3-4):143-50.
- [49]. Haghparast A\*, Sepehri GR, Mahmoudi M, Khodadadi SN, Ashraf-Ganjooei N, Ekhlaspour L. Sex-differences in development of neuropathic pain induced by sciatic nerve ligation in mice. *Journal of Semnan University of Medical Sciences* 2002; 3(3-4):97-105.
- [50]. Meimandi MS\*, Haghparast A, Sepehri GR, Shah-Esmaeili A. Increased visceral

pain responsiveness in female mice compared to male mice after partial sciatic nerve ligation. *Journal of Kerman University of Medical Sciences* 2002; 4(3-4):194-202.

[51]. Haghparast A\*, Sepehri GR, Shafeai MN. Dose-dependent antinociceptive response of morphine microinjected into the nucleus cuneiformis and effect of inactivation of this area on pain modulation in rat. *Journal of Semnan University of Medical Sciences* 2002; 4(1-2):9-21.

## **List of Publications**

#### **Abstract in Journal**

- [1]. Optogentics and optrode technology to brain function manipulation (Conference Paper). Zibaii MI\*, Dargahi L, Ronaghi A, Abedzadeh F, Pandamoz S, Salehi S, Fatahi Z, **Haghparast A**, Latifi H. Proceedings of the 4<sup>th</sup> International Conference on Photonics, Optics and Laser Technology, PHOTOPTICS 2016, Rome, Italy, Feb. 27-29, 2016, Pages 323-334.
- [2]. Effects of CB1 receptor antagonist within the nucleus accumbens on the expression of morphine-induced conditioned place preference in morphine-sensitized rats. Azizi A\*, Moaddab M, Hassanpour-Ezatti M, **Haghparast A**. Neuroscience Research 65 (1), Suppl., Neuro2009, Nagoya, Japan, Sep. 16-18, 2009, Page S255-S256
- [3]. Effects of reversible inactivation of the ventral tegmental area on the expression of morphine induced conditioned place preference in the rat. Moaddab M\*, Azizi P, Hassanpour-Ezatti M, **Haghparast A**. Neuroscience Research 65 (1), Suppl., Neuro2009, Nagoya, Japan, Sep. 16-18, 2009, Page S255
- [4]. Electrolytic lesion of the dorsolateral periaqueductal gray attenuates the antinociceptive response of morphine microinjected into the nucleus cuneiformis. Ahmad-Molaei L\*, **Haghparast A**. Neuroscience Research 65 (1), Suppl., Neuro2009, Nagoya, Japan, Sep. 16-18, 2009, Page S126
- [5]. Effects of fruit essential oil of Quminum cyminum on development of morphine tolerance and dependence in mice. Alizadeh AM\*, Khatibi A, Shams J,

<sup>\*</sup> Correspondent

- **Haghparast A**. Neuroscience Research 61 (1), Suppl., Neuro2008, Tokyo, Japan, July 9-11, 2008, Page S281
- [6]. Inhibition of analgesic response of morphine infusion into the nucleus cuneifprmis in absence of nucleus raphe magnus and ventrolateral periaqueductal gray in rat. Ordikhani-Seyedlar M\*, Ziaei M, Khani A, **Haghparast A**. Neuroscience Research 61 (1), Suppl., Neuro2008, Tokyo, Japan, July 9-11, 2008, Page 281
- [7]. Interaction between nicotine and morphine: involvement of central nicotinic receptors. Jamal Shams\*, Alizadeh AM, Khani A, **Haghparast A**. Neuroscience Research 61 (1), Suppl., Neuro2008, Tokyo, Japan, July 9-11, 2008, Page S272
- [8]. Chronic administration of nicotine retards the development of morphine dependency and tolerance in mice. **Haghparast A\***, Naderi N, Khani A, Alizadeh AM, Motamedi F. Neuroscience Research 58 (1), Suppl., Neuro2007, Yokohama, Japan, Sep. 10-12, 2007, Page S65
- [9]. Nicotine and morphine interactions; new protocol for morphine dependency in mice. Khani A, **Haghparast A**, Naderi N, Alizadeh AM, Motamedi F. Neuroscience Research 58 (1), Suppl., Neuro2007, Yokohama, Japan, Sep. 10-12, 2007, Page S65
- [10]. The effects of opioid receptor blockade on the functional activity of the hypothalamo-pituitary-gonadal axis in adult male rats. **Haghparast A\***, Irvani MR, Bagheri H. Experimental Neurobiology 11 (2) Suppl., 3<sup>rd</sup> FAONS Congress, Seoul, Korea, Sep. 28-Oct. 01, 2002
- [11]. Analgesic response of cuneiformis nucleus to the microinjection of morphine and lidocaine in rats. Sepehri GR\*, **Haghparast A**, Shafeai N. Experimental Neurobiology 11 (2) Suppl., 3<sup>rd</sup> FAONS Congress, Seoul, Korea, Sep. 28-Oct. 01, 2002
- [12]. Effects of gonadectomy on antinociception properties of morphine in male and female rats. Meimandi MS\*, **Haghparast A**, Sepehri GR. Experimental Neurobiology 11 (2) Suppl., 3<sup>rd</sup> FAONS Congress, Seoul, Korea, Sep. 28-Oct. 01, 2002
- [13]. Anticonvulsant effect of sour orange flowers extract in experimental

- pentylenetetrazol induced seizures in Wistar rat. Mahmoodi M\*, **Haghparast A**, Heidari MA, Zoohor AR, Asadi M. Experimental Neurobiology 11 (2) Suppl., 3<sup>rd</sup> FAONS Congress, Seoul, Korea, Sep. 28-Oct. 01, 2002
- [13]. Evidences for actions of gabapentin on naloxone-precipitated withdrawal signs in morphine-dependent rat. Mobasher M\*, Hamzei-Moghadam A, **Haghparast A**, Kalantripour TP. Experimental Neurobiology 11 (2) Suppl., 3<sup>rd</sup> FAONS Congress, Seoul, Korea, Sep. 28-Oct. 01, 2002
- [14]. Morphine tolerance in the nucleus paragigantocellularis: Single unit recording study in vivo. **Haghparast A\***, Semnanian S, Fathollahi Y. Pathophysiology 5 (1) Suppl., 3<sup>rd</sup> International Congress of Pathophysiology, Lahti, Finland, June 28-July 03, 1998, Page 166
- [15]. Responsiveness of the nucleus reticularis paragigantocellularis neurons to the formalin as a peripheral noxious stimulus. Semnanian S\*, Gheibi N, Fathollahi Y, Haghparast A. Pathophysiology 5 (1) Suppl., 3<sup>rd</sup> International Congress of Pathophysiology, Lahti, Finland, June 28-July 03, 1998, Page 199

## **Book Publications**

#### Chapter in Book

- [1]. Haghparast A\*, Fatahi Z, Arezoomandan R, Karimi S, Taslimi Z, Zarrabian S. Functional roles of orexin/hypocretin receptors in reward circuit. In: Brain Research in Addition. *Progress in Brain Research* 2017; 235:139-54.
- [2]. Haghparast A\*, Azizi H, Riahi E, Azizi P, Ranjbar-Slamloo Y. *Chapter 10*: Single unit recording. In: Motamedi F, Semnanian S, Mirnajafi-Zadeh J, editors. *Techniques in neuroscience research*, Tarbiat Modares University press: Tehran, Iran; 2013, p. 67-87.
- [3]. **Haghparast A\***, Arezoomandan R, Taslimi Z. *Chapter 9*: Conditioned place preference apparatus and paradigm. In: Motamedi F, Semnanian S, Mirnajafi-Zadeh J, editors. *Techniques in neuroscience research*, Tarbiat Modares University press: Tehran-Iran; 2013, p. 59-65.

<sup>\*</sup> Correspondent

#### **Translated Book**

- [4]. Ross & Wilson Anatomy and Physiology in Health and Illness. 10<sup>th</sup> Ed., Anne Waugh and Alison Grant. Translated by **Abbas Haghparast**, Jamenegar & Salemi Publishing Co., Tehran, Iran; 2006.
- [5]. Guyton & Hall Physiology Review. John Edwad Hall. Translated by **Abbas Haghparast**, Jamenegar & Salemi Publishing Co., Tehran, Iran; 2006.
- [6]. First Aid and Cardiopulmonary resuscitation. 4<sup>th</sup> Ed., Alton Thygerson and Benjamin Gulli. Translated by **Abbas Haghparast\*** and Reza Mirzaee, Jamenegar & Salemi Publishing Co., Tehran, Iran; 2005.

## **Oral and Poster Presentations (Selected Abstracts)**

**329 abstracts** have been presented in the National and International conferences, and the **selected abstracts** are as below:

- The effect of restraint stress on morphine sensitization: involvement of D1-like dopamine receptors within the nucleus accumbens (Oral presentation). <u>Elham Charmchi</u>, Golnaz Faramarzi, Morteza Zendehdel, **Abbas Haghparast**\*. 4<sup>th</sup> Basic and Clinical Neuroscience Congress, Tehran-Iran, 23-25 December 2015.
- Orexin-2 receptors in hippocampal CA1 area are involved in expression and extinction of morphine place preference in rats (Oral presentation). <u>Bahman Sadeghi</u>, Somayeh Ezzatpanah, **Abbas Haghparast**\*. 4<sup>th</sup> Basic and Clinical Neuroscience Congress, Tehran-Iran, 23-25 December 2015.
- Interaction between OX2 and CB1 receptors in the nucleus accumbens in response to place preference induced by chemical stimulation of the lateral hypothalamus (Poster presentation). Marzieh Moradi, Amir Haghparast, Abbas Haghparast\*.
   33<sup>rd</sup> Annual Conference of Indian Academy of Neurosciences, Chandigarh-India,
   31 October 2 November, 2015.
- Potentiation of rewarding properties of morphine by concurrent chemical stimulation of lateral hypothalamus in rats. Pharmacology Biochemistry and Behavior (Poster presentation). <u>Leila Zarepour</u>, Alireza Komaki, Siamak Shahidi, Abdolrahman Sarihi, **Abbas Haghparast**\*. 33<sup>rd</sup> Annual Conference of Indian Academy of Neurosciences, Chandigarh-India, 31 October 2 November, 2015.

- Direct evidences for the involvement of orexin-1 receptor in the mesolimbic reward-related behaviors in conditioned place preference paradigm (Poster Presentation). <a href="Haghparast A">Haghparast A</a>\*. Fatahi Z. Taslimi Z. Moradi M. 45<sup>th</sup> Annual Metting of Society for Neuroscience (SfN), Chicago-USA, 17-21 October 2015.
- Brain Orexinergic System, Cognition and Addictive Behaviors (Oral Presentation).
   Abbas Haghparast\*. The 6<sup>th</sup> FAONS Congress and 11<sup>th</sup> Biennial Conference of CNS, WuZhen-China, 20-23 September 2015.
- TCS OX2 29, an orexin-2 receptor antagonist, attenuates the acquisition and expression and facilitates the extinction of morphine-related behavior in rats (Oral presentation). <u>Bahman Sadeghi</u>, Somayeh Ezzatpanah, **Abbas Haghparast**\*. 9<sup>th</sup> Annual Addiction Science Congress, Tehran-Iran, 9-11 September 2015.
- Functional interaction between Brain Orexinergic and Mesolimbic Systems in Reward-related Behaviors (Oral presentation). <u>Abbas Haghparast</u>\*, Zahra Taslimi, Leila Zarepour, Zahra Reisi. The 1<sup>st</sup> International and 22<sup>nd</sup> Iranian Congress of Physiology and Pharmacology, Kashan-Iran, 7-11 September 2015.
- Morphine reward and neural activity of subcortial areas of the brain (Oral presentation). Zahra Fatahi, Abbas Haghparast\*. The 1<sup>st</sup> International and 22<sup>nd</sup> Iranian Congress of Physiology and Pharmacology, Kashan-Iran, 7-11 September 2015.
- Activation of cannabinoid system in nucleus accumbens affects cost-benefit
  decision making (Poster presentation). <u>Zahra Fatahi</u>, **Abbas Haghparast**\*, Bahman
  Sadeghi, Abbas Khani, Marzieh Moradi. 28<sup>th</sup> ECNP Congress, AmsterdamNetherlands, 29 August 1 September 2015.
- Activation of the glial cells in the nucleus accumbens increases the maintenance
  and reinstatement of methamphetamine seeking in conditioned place preference
  paradigm (Poster presentation). <u>Abbas Haghparast</u>\*, Ghassem Attarzadeh-Yazdi
  Marzieh Moradi, Reza Arezoomandan. 9<sup>th</sup> IBRO World Congress of Neuroscience,
  Rio de Janeiro-Brazil, 7-11 July 2015.
- Effects of acute and subchronic stress on the change in ERK/CREB pathway
  activation in rat hypothalamus and hippocampus during morphine-induced
  conditioned place preference procedure (Poster presentation). Zahra Fatahi, Abbas

- **Haghparast**\*, Fariba Khodagholi. 32<sup>nd</sup> Annual Conference of Indian Academy of Neuroscience, Bengaluru-India, 1-3 November 2014.
- Effect of different stressors on electrical activity of neurons in subcortical structures in the brain (Oral presentation). Zahra Fatahi, Abbas Haghparast\*. 3<sup>rd</sup> Basic and Clinical Neuroscience Congress, Tehran-Iran, 29-31 October 2014.
- Morphine-induced conditioned place preference and the alterations of p-ERK, p-CREB and c-fos levels in amygdala: The effects of physical stress (Oral presentation). <u>Bahman Sadeghi</u>, Zahra Fatahi, **Abbas Haghparast**\*. 3<sup>rd</sup> Basic and Clinical Neuroscience Congress, Tehran-Iran, 29-31 October 2014.
- Role of D2-like dopamine receptors within the nucleus accumbens in
  antinociception induced by forced swim stress in formalin test as an animal model
  of persistent inflammatory pain (Oral Presentation). Golnaz Faramarzi, Morteza
  Zendehdel, Elham Charmchi, Abbas Haghparast\*. 3rd Basic and Clinical
  Neuroscience congress, Tehran-Iran, October 29-31, 2014.
- Effect of glia cells modulator, minocycline, in the nucleus accumbens on the
  maintenance and reinstatement of morphine-induced conditioned place preference
  in rat (Oral presentation). <u>Reza Arezoomandan</u>, **Abbas Haghparast**\*. 3<sup>rd</sup> Basic and
  Clinical Neuroscience Congress, Tehran-Iran, October 29-31, 2014.
- Administration of orexin A into the ventral tegmental area (Poster presentation).
   Marzieh Moradi, Amir Haghparast, Saeid Yazdi-Ravandi, Abbas Haghparast\*.
   The 15<sup>th</sup> World Congress on Pain, Buenos Aires-Argentina, 6-11 October 2014.
- Morphine-induced conditioned place preference increases apoptotic factors in rat prefrontal cortex (Oral presentation). <u>Zahra Fatahi</u>, **Abbas Haghparast**\*, Fariba Khodagholi. 8<sup>th</sup> International Congress of Addiction Science, Tehran-Iran, 10-12 September 2014.
- Microinjection of the Orexin 2 receptor antagonist into the CA1 is partially attenuated the lateral hypothalamus stimulation-induced conditioned place preference (Oral presentation). Marzieh Moradi, Amir Haghparast, Zahra Fatahi, Abbas Haghparast\*. 8<sup>th</sup> International Congress on Addiction Science, Tehran-Iran, 10-12 September 2014.

- LH stimulation could potentiate the effect of inefective dose of morphine and induce morphine sensitization (Poster presentation). <a href="Sara Karimi">Sara Karimi</a>, Abbas Haghparast\*, Mahtash Baniardalan, Sara Sadeghi, Alireza Omranifard. 16<sup>th</sup> International Neuroscience Winter Conference, Sölden-Austria, 8-12 April 2014.
- Aspects of morphine reward and apoptosis (Oral presentation). <u>Zahra Fatahi</u>, Fariba Khodagholi, **Abbas Haghparast**\*. 2<sup>nd</sup> Basic and Clinical Neuroscience Congress, Tehran-Iran, 18-20 December 2013.
- Methamphetamine neurotoxicity: mechanisms, consequences, and promising therapeutics (Oral presentation). <u>Riahi E</u>, Naghdi N, **Haghparast A\***. 2<sup>nd</sup> Basic and Clinical Neuroscience Congress, Tehran-Iran, 18-20 December 2013.
- Effect of morphine induced conditioned place preference on alterations of apoptotic factors in the hippocampus: involvement of acute and subchronic stress (Oral presentation). Fatahi Z, Zeighami Alamdari S, Khodagholi F, **Haghparast A\***. 7<sup>th</sup> National Congress on Addition Science, Tehran-Iran, 11-13 September 2013.
- Interaction between cannabinoid, opioid, and orexin system in reward processing (Oral presentation). <a href="#">Haghparast A</a>\*. 21st International Iranian Congress of Physiology and Pharmacology, Tabriz-Iran, 23-27 August 2013.
- Application of single-unit recording technique in basic pain research (Oral presentation). <a href="Haghparast A">Haghparast A</a>\*. 1st Basic and Clinical Neuroscience Congress, Tehran-Iran, 7-9 November 2012.
- Blocking D2 receptors in the nucleus accumbens attenuates cannabinoid agonist-induced antinociception in the basolateral amygdale (Poster presentation).
   <u>Haghparast A</u>\*, Ghalandari-Shamani M, Yazdi-Ravandi S, Hassanpour-Ezatti M.
   8th FENS Forum of Neuroscience, Barcelona-Spain, 14-18 July 2012.
- Orexin, a newly characterized peptide, and promising for the treatment of addiction and relapse to drugs of abuse (Oral presentation). <u>Haghparast A</u>\*. 6<sup>th</sup> National Congress on Addiction Biology, Tehran-Iran, 21-23 June 2012.
- Intra-accumbal administration of AP5, NMDA receptor antagonist, attenuates analgesia induces by cannabinoid receptor agonist (WIN 55,212-2) microinjection into the basolateral amygdale in tail-flick test (Poster presentation). **Haghparast**

- <u>A</u>\*, Ghalandari-Shamani M, Hassanpour-Ezatti M. 41<sup>st</sup> Annual Metting of Society for Neuroscience (SfN), Washington-USA, 12-16 November 2011.
- Existence of cannabinoid receptors in the nucleus cuneiformis: possible involvement in pain modulation (Oral presentation). <u>Haghparast A</u>\*,
   Ebrahimzadeh-Sarvestani M, Parvishan A. 20<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Hamadan, Iran, 10-14 October 2011.
- Herbal compounds in the treatment of drug abuse: Fruit essential oil of Cuminum cyminum attenuates morphine-induced conditioned place preference (Oral presentation). <a href="Haghparast A">Haghparast A</a>\*, Alizadeh AM, Khatibi A. 8<sup>th</sup> IBRO World Congress of Neuroscience, Florence-Italy, 14-18 July 2011.
- Interaction of orexin and cannabinoid systems in brain reward circuitry (Oral presentation). <u>Haghparast A</u>\*, Taslimi Z, Azizi P. 5<sup>th</sup> National Congress on Addiction Biology, Tehran-Iran, 22-24 June 2011.
- Changes of CREB, ERK and c-fos in ventral tegmental area after conditioned place preference induced by administration of carbachol into the lateral hypothalamus (Poster presentation). <u>Taslimi Z</u>, Ramin M, Azizi P, Khodagholi F, Safari MS, Hassanpour-Ezatti M, **Haghparast A\***. 5<sup>th</sup> Congress of FAONS and XXVIII Annual Meeting of IAN, Lucknow-India, 25-28 November 2010.
- Role of orexin-A receptors within the locus coeruleus in antinociception induced by microinjection of carbachol into the lateral hypothalamus (Poster presentation).
   <u>Safari MS</u>, <u>Haghparast A\*</u>. 5<sup>th</sup> Congress of FAONS and XXVIII Annual Meeting of IAN, Lucknow-India, 25-28 November 2010.
- Effect of non-selective dopamine D1 and D2 receptor agonist, apomorphine, on firing rate of neurons in the ventral pallidum (Poster presentation). <u>Haghparast A</u>\*, Ordikhani-Seyedlar M. 40<sup>th</sup> Annual Metting of Society for Neuroscience (SfN), San Diego-USA, 13-17 November 2010.
- Lateral hypothalamus stimulation-induced antinociception is mediated in part by
  the activation of locus coeruleus neurons (Poster presentation). <u>Haghparast A</u>\*,
  Safari MS, Semnanian S, Ahmadiani A. 7<sup>th</sup> FENS Forum of Neuroscience,
  Amsterdam-Netherlands, 3-7 July 2010.

- Role of orexin-1 and cannabinoid CB1 receptors within the ventral tegmental area in conditioned place preference following stimulation of the lateral hypothalamus (Oral presentation). <a href="Haghparast A">Haghparast A</a>\*, Taslimi Z. National Symposium of Neuroscience, Golestan-Iran, 16-17 February 2010.
- Electrolytic lesion of dorsolateral periaqueductal gray matter attenuates analgesic response of morphine microinjected into the nucleus cuneiformis (Poster presentation). <u>Leila Ahmad-Molaei</u>, **Abbas Haghparast**\*. 32<sup>nd</sup> Annual Meeting of the Japan Neuroscience Society (Neuro2009), Nagoya-Japan, 16-18 September 2009.
- Interaction between nicotine and morphine: involvement of central nicotinic receptors (Poster presentation). <u>Jamal Shams</u>, Alizadeh AM, Khani A, **Haghparast** A\*. 31<sup>st</sup> Annual Meeting of the Japan Neuroscience Society (Neuro2008), Tokyo-Japan, 9-11 July 2008.
- Chronic administration of nicotine retards the development of morphine dependency and tolerance in mice (Poster presentation). <u>Haghparast A</u>\*, Naderi N, Khani A, Alizadeh AM, Motamedi F. 30<sup>th</sup> Annual Meeting of the Japan Neuroscience Society (Neuro2007), Yokohama-Japan, 10-12 September 2007.
- Formalin-induced responses of nucleus cuneiformis neurons in the rat: an
  electrophysiological study (Poster presentation). <u>Haghparast A</u>\*, Naderi N,
  Motamedi F. <sup>7th</sup> IBRO World Congress of Neuroscience, Melbourne-Australia, 1217 July 2007.
- Effect of infusion extract prepared from red nutshell of Pistachio (Pistacia vera) on naloxone-induced withdrawal syndrome in morphine-dependent rat (Poster presentation). <a href="Haghparast A">Haghparast A</a>\*, Ghanbar-Nezhad M, Mohammadi M. 4<sup>th</sup> Congress of Federation of Asian-Oceanian Neuroscience Societies (FAONS), Hong Kong, November 30 December 2, 2006.
- Role of glutamatergic receptors in the nucleus raphe magnus on antinociceptive effect of morphine microinjected into the nucleus cuneiformis of the rat (Poster presentation). <a href="Haghparast A">Haghparast A</a>\*, Hekmat A. 6<sup>th</sup> IBRO World Congress of Neuroscience, Prague-Czech Republic, 10-15 July 2003.
- Role of gonadectomy in development of hyperalgesia induced by partial sciatic

- nerve ligation in male mice (Oral presentation). <u>Haghparast A</u>\*, Ashraf-Ganjooei N, Ekhlaspour L, Khodadadi SN. 16<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Tehran-Iran, 9-13 May 2003.
- Comparison of intravenous opioids actions on neuropathic pain induced by peripheral nerve injury in rat (Poster presentation). <u>Haghparast A</u>\*, Aslani H, Haghdoost N and Mir-Hosseini S. 5<sup>th</sup> FAOPS Congress, Kuala Lumpur-Malaysia, 23-26 September 2002.
- Action of morphine on nucleus cuneiformis neurons that modulate nociception in rat (Poster presentation). <a href="Haghparast A">Haghparast A</a>\*, Shafeai N, Sepehri GR and Semnanian S. 10<sup>th</sup> World Congress on Pain, San Diego-USA, 17-22 August 2002.
- Gonadal steriods affect on responses to noxious heat stimuli in male and female rats (Poster presentation). <u>Haghparast A</u>\* and Pakdaman L. 3<sup>rd</sup> FENS Forum of Neuroscience, Paris-France, 13-17 July 2002.
- Sex-differences in time-course of hyperalgesia induced by sciatic nerve ligation injury in mice (Poster presentation). <u>Haghparast A</u>\*, Ashraf-Ganjooei N, Ekhlaspour L and Navadeh KS. 4<sup>th</sup> International Congress of Pathophysiology, Budapest-Hungary, June 29 July 05, 2002.
- Role of NMDA receptor on antinociceptive effects of morphine in the cuneiformis nucleus of rat (Oral presentation). <u>Haghparast A</u>\* and Gheitasi IP. 15<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Shiraz-Iran, 5-8 November 2001.
- Effects of local application of cholinergic and anticholinergic drugs onto the
  nucleus paragigantocellularis on single cell activity in the nucleus locus coeruleus
  (Poster presentation). <u>Haghparast A</u>\*, Rezvanipour M and Sepehri GR. 34<sup>th</sup>
  International Congress of Physiological Sciences, Christchurch-New Zealand, 2631 August 2001.
- Axonal injury and its recovery in the thalamic neurons of rat after focal cerebral ischemia (Poster presentation). <u>Haghparast A</u>\*, Xing HL. 6<sup>th</sup> International Congress of Neuroethology, Bonn-Germany, July 29 August 03, 2001.
- Effects of Aluminum on degeneration of cultured astrocytes derived from rat cerebral cortex (Poster presentation). <u>Haghparast A</u>\*. 1<sup>st</sup> International Conference

- on Metals and Brain: From Neurochemistry to Neurodegeneration, Padova-Italy, 20-23 September 2000.
- Naloxone-precipitated withdrawal in the nucleus paragigantocellularis neurons of morphine-dependent rat (Poster presentation). <u>Haghparast A</u>, Semnanian S\*, Fathollahi Y. 9<sup>th</sup> World Congress on Pain, Vienna-Austria, 22-27 August 1999.
- The effect of bombesin on tail flick latency in rat (Poster presentation).
   <u>Haghparast A</u>, Semnanian S\*, Fathollahi Y, Sarihi A. 33<sup>rd</sup> International Congress of Physiological Sciences, St. Petersburg-Russia, June 30 July 05, 1997.
- The assessment of patients suffering migraine without aura using IASP pain database questionnaire (Poster presentation). <u>Haghparast A</u>, Najafi M, Semnanian S\*. 1<sup>st</sup> FAONS Congress & 1<sup>st</sup> IBRO Regional Congress, Pattaya-Thailand, 20-23 October 1996.
- The effects of SO<sub>2</sub> gas on some of the lung capacities of Sarcheshmeh inhabitants in Kerman (Oral presentation). <u>Haghparast A</u>, Sanadgol H\*, Sepehri GR. 12<sup>th</sup> Iranian Congress of Physiology & Pharmacology, Tehran-Iran, 6-9 November 1995.
- The effects of SO<sub>2</sub> gas in systolic and diastolic blood pressure of Sarcheshmeh inhabitants in Kerman (Poster presentation). Sanadgol H\*, Sepehri GR,
   <u>Haghparast A</u>. 11<sup>th</sup> Iranian Congress of Physiology & Pharmacology, Tabriz-Iran, 17-20 May 1993.

## National Research Projects (Grants)

- Academic Visit in Exchange between Chinese Academy of Sciences and Iranian Science and Technology Vice-Presidency. Abbas Haghparast\*. Grant No. 96004390 (\$1000) by Iran National Science Foundation (*INSF*), 1 October 2017.
- Role of orexin-1 and orexin-2 receptors within the hippocampus in modulating
  effect of lateral hypothalamus on orofacial pain in the rats. Abbas Haghparast\* and
  Amir Haghparast. Grant No. 943761 (\$8000) by the National Institutes for Medical
  Research Development (NIMAD), Ministry of Health and Medical Education of
  Iran, 1 August 2016.

<sup>\*</sup> Correspondent

- Using Optogenetics technique to specific blocking of the glutamatergic neurons in the prefrontal cortex for investigating functional changes in neural activity/pattern and plasticity in neural network of the reward circuit in animal model: an Electrophysiological and Immunohistochemical study. Abbas Haghparast\*, Zahra Fatahi, Mohammad Reza Daliri, Mahdi Aliyari, Mohammad Ismail Zibaii, Leila Dargahi. Grant No. 95P11 (\$125000) by Cognitive Sciences and Technologies Council (CSTC), Iranian Science and Technology Vice-Presidency, 16 July 2016.
- Effects of morphine addiction and it's withdrawal on cognitive aspects of delayand/or effort-based decision-making in rat: role of the striatum, prefrontal cortex and
  hippocampus (behavioral and electrophysiological study). Abbas Haghparast\*,
  Zahra Fatahi, Abbas Khani, Marzieh Moradi. Grant No. 808 (\$32000) by Cognitive
  Sciences and Technologies Council (*CSTC*), Iranian Science and Technology VicePresidency, 15 February 2015.
- Role of cannabinoidergic system (Hashish) in prefrontal cortex on cognitive aspects of effort- and/or delay-based decision making: the role of CB1 and TRPV1 receptors (behavioral and molecular study). Abbas Haghparast\*, Abbas Khani, Zahra Fatahi, Bahman Sadeghi, Marzieh Moradi, Fariba Khodagholi. Grant No. 93025021 (\$8000) by Iran National Science Foundation (*INSF*), 5 January 2015.
- Role of cannabinoid system in various cognitive aspects of decision-making in accumbens prefrontal cortex circuitry: Behavioural and electrophysiological study.
   Zahra Fatahi and Abbas Haghparast\*. Grant No. 92037121 (\$14800) by Iran National Science Foundation (INSF), 1 May 2014.
- Controlling of neural systems with optogenetics. Hamid Latifi\*, Mohammad Ismail Zibaii, Abbas Haghparast, Hamid Reza Pouretemad, Leila Dargahi, Fereshteh Motamedi. Grant No. 121 (\$78000) by Cognitive Sciences and Technologies Council (*CSTC*), Iranian Science and Technology Vice-Presidency, 15 March 2014.
- Investigating the effect of forced running and the glial cell inhibitor minocycline on the complications produced by long-term methamphetamine abuse. Naser Naghdi\*, Esmail Riahi, Samira Choopani, **Abbas Haghparast**. Grant No. 92024199 (\$8000) by Iran National Science Foundation (*INSF*), 12 February 2014.
- A novel approach for methamphetamine dependency and reinstatement: Role of

glial cells and their modulators. Ghassem Attarzadeh-Yazdi\*, Reza Arezoomandan, Farbia Khodagholi, **Abbas Haghparast**. Grant No. 92010596 (\$6800) by Iran National Science Foundation (*INSF*), 4 September 2013.

• Study of the effects of forced swim stress (physical stress) on expression and acquisition of morphine reward-related behaviors in male rat: a behavioral, molecular and electrophysiological study. Abbas Haghparast\*, Zahra Fatahi, Farbia Khodagholi, Shabnam Zeighamy Alamdari. Grant No. 91003540 (\$10000) by Iran National Science Foundation (INSF), 16 January 2013.

## **Direction of Dissertation/Thesis**

### **MSc and PhD Supervisor**

- [1]. Investigating the single and population activity pattern in neural network of the nucleus Accumbens in the natural- and morphine- induced reward in animal model. **Shole Jamali** (PhD) Thesis in progress
- [2]. Effect of spatial memory learning and parental gender on neuroplasticity and BDNF expression in the next generation. **Javad Riyahi Farsani** (PhD) Thesis in progress
- [3]. Effect of chemical stimulation of lateral hypothalamus on neuropathic pain in rat: Possible involvement of orexin receptors in spinal cord. Sakineh Salehi Marni (PhD) Thesis in progress
- [4]. Effects of acute and chronic restraint stress on prefrontal cortical cell firing during reinstatement of methamphetamine-seeking in rat: Role of glucocorticoid receptors in the basolateral amygdala. **Zahra Taslimi** (PhD) Thesis in progress
- [5]. Role of lateral hypothalamus orexinergic projections and orexinergic receptor 1 in the prefrontal cortex on cost and benefit decision making: Behavioral and electrophysiological study. **Sara Karimi** (PhD) Thesis in progress
- [6]. Effects of Cannabidiol on methamphetamine-induced reinstatement in paradoxical sleep-deprivated rats: behavioral, molecular & electrophysiological study. Saeideh Karimi-Haghighi (PhD) Thesis in progress

<sup>\*</sup> Correspondent

- [7]. Assessment of the possible role of serum factors, S100B, NSE, MBP and lactate, as biomarkers in acute methadone toxicity and their correlation with imaging findings in a human study and evaluation of cognitive impairment in animal model. **Leila Ahmad-Molaei** (PhD) Thesis in progress
- [8]. Role of orexin-1 and orexin-2 receptors in the CA1 region of the hippocampus in the antinociceptive responses induced by chemical stimulation of the lateral hypothalamus in formalin test as an animal model of persistent inflammatory pain. **Pooya Pourreza** (PhD) Thesis in progress
- [9]. Role of orexin receptors in the Dentate Gyrus (DG) of the hippocampus in the antinociception induced by chemical stimulation of the lateral hypothalamus in animal model of persistent inflammatory pain. **Behnaz Rasouli** (PharmD) Thesis in progress
- [10]. Role of nucleus accumbens metabotropic glutamate receptor type 7 (mGluR7) in acquisition, expression, extinction and reinstatement to morphine in the conditioned place preference paradigm. Mahsaneh Vatankhah (MSc) September 2017
- [11]. Role of orexin receptors within the nucleus accumbens in acute food deprivation- and drug priming-induced reinstatement of morphine seeking in rats. Marjan Sahafizadeh (MSc) September 2016
- [12]. Effects of Forced Swim and Restraint Stresses on devolvement of morphine sensitization: involvement of dopamine D1/D2 receptors in the nucleus accumbens. **Elham Charmchi** (PhD) September 2016
- [13]. Role of D1 and D2 dopamine receptors within the nucleus accumbens in antinociception induced by forced swim stress and restraint stress in formalin test as an animal model of persistent inflammatory pain. Golnaz Faramarzi (PhD) September 2016
- [14]. Effects of chemical stimulation of lateral hypothalamus on pain-related behaviors in formalin test as an animal model of persistent inflammatory pain: Role of orexin receptors in the rat's ventral tegmental area. Somayeh Ezzatpanah (PhD) July 2016

- [15]. Role of dopaminergic receptors in the nucleus accumbens in physical stress-induced reinstatement of morphine seeking in rat. Zahra Farzinpour (MSc) May 2016
- [16]. Examination of Behavioral and Electrophysiological Role of GABAA and NMDA Receptors in the shell of the Nucleus Accumbens on Learning in Methamphetamine-treated rats. Somayeh Heysieattalab (PhD) May 2016
- [17]. Effect of food deprivation on reinstatement of morphine: the role of intraaccumbal D1 and D2 like receptors in rats. **Fatemeh Sadeghzadeh** (PhD) March 2016
- [18]. Evaluation of the effect of excitation and inhibition of astrocytes and microglia in the nucleus accumbens on morphine extinction and reinstatement. Reza Arezoomandan (PhD) December 2015
- [19]. Role of intra-accumbal CB1 receptor in the extinction period and reinstatement to morphine in conditioned place preference paradigm: A behavioral, and electrophysiological study. **Hossein Khaleghzadeh Ahangar** (PhD) September 2015
- [20]. The effects of blockade of NMDA and AMPA receptors during extinction period on reinstatement to morphine in the rat: A behavioral and electrophysiological study. Ali Siahposht-Khachaki (PhD) August 2015
- [21]. Study of methamphetamine-induced reward in the Streptozocin-diabetic rat: A behavioral, electrophysiological and immunohistochemical study. Amir-Hossein Bayat (PhD) June 2015
- [22]. Role of mGluR2/3 receptor into the nucleus accumbens in acquisition, expression and reinstatement to morphine in the conditioned place preference paradigm. **Negar Baharlouei** (MSc) June 2015
- [23]. The role of orexin receptors within the ventral tegmental area in the sensitization to morphine by conditioned place preference paradigm in rats. Dorna Mahmoudi (MSc) September 2014
- [24]. The role of orexin receptors within the nucleus accumbens in the sensitization to morphine by conditioned place preference paradigm in rats. Nasim Asar (MSc)

- September 2014
- [25]. Role of mGluR5 receptor into the nucleus accumbens in acquisition, expression and reinstatement to morphine in the conditioned place preference paradigm.Nahid Roohi (MSc) August 2014
- [26]. The effect of insulin on acquisition and expression of morphine-induced conditioned place preference in diabetic rat. Rezvan Hassanpour (PharmD)

  July 2014
- [27]. The effect of insulin on extinction and reinstatement to morphine in the streptozotocin-induced diabetic rats. **Atieh Chizari** (PharmD) July 2014
- [28]. Study of the role of intra-basolateral amygdala (BLA) cannabinoid receptors on process of sensitization to morphine in the nucleus accumbens (NAc) of rats: a behavioral and molecular stady. Marzieh Molaei (MSc) October 2013
- [29]. Role of D1 and D2 dopaminergic receptors located in the nucleus accumbens and ventral tegmental area in antinociception induced by stimulation of lateral hypothalamus in acute model of pain in rats. Marzieh Moradi (MSc) September 2013
- [30]. Role of dorsal hippocampal orexin receptors in development of morphine-induced conditioned place preference: a behavioral, molecular, and electrophysiological study. **Esmail Riahi** (PhD) July 2013
- [31]. Effects of cholinergic stimulation of the lateral hypothalamic area on conditioned place preference induced by ineffective dose of morphine and involvement of ventral tegmental area or exinergic system. Leila Zarepour (MSc) May 2013
- [32]. Changes in apoptotic factors in the ventral tegmental area and hippocampus after extinction and reinstatement to morphine in rat. Yasaman Razavi (MSc)

  September 2012
- [33]. Study of apoptosis in the nucleus accumbens and prefrontal cortex in morphine-treated rat. **Seyedeh Najmeh Katebi** (MSc) September 2012
- [34]. Role of intra-accumbal glutamatergic and dopaminergic receptors in

- cannabinoid-induced antinociception in the basolateral amygdala in the rats. **Mohadeseh Ghalandari-Shamami** (MSc) October 2011
- [35]. Role of orexinergic projections of the lateral hypothalamic area to the ventral tegmental area and their interaction with CB1 cannabinoid receptor in development of reward-related behaviors in rat. **Zahra Taslimi** (MSc) July 2011
- [36]. Effect of cannabinoid administration into the rat cuneiformis nucleus on pain related behaviors of acute and persistent pain models. **Mohammad**Ebrahimzadeh-Sarvestani (MSc) December 2010
- [37]. The role of cannabinoid CB1 receptor on firing rate of neurons in the nucleus accumbens (core) of morphine sensitized rat. **Pegah Azizi** (MSc) August 2009
- [38]. Electrophysiological properties of neurons in shell of nucleus accumbens and its relationship with ventral tegmental area following morphine administration in rat. Mahsa Moaddab (MSc) July 2009
- [39]. Role of glutamatergic pathway between nucleus raphe magnus and cuneiformis nucleus on antinociceptive effect of morphine administered into the nucleus cuneiformis of rat. **Ava Soltani-Hekmat** (MSc) August 2002
- [40]. The role of NMDA & non-NMDA receptors in rat cuneiformis nucleus on antinociception effects of opioids. **Izad-Panah Gheitasi** (MSc) May 2001

## **Direction of Dissertation/Thesis**

#### MSc and PhD Advisor

- [1]. Effect of high intensity interval training preconditioning on BDNF and some miRNAs in hippocampus of depressed male Wistar rats. **Ayyub Babaei** (PhD) Thesis in progress
- [2]. To study role of dopaminergic receptors in the dentate gyrus of hippocampus on reinstatement of morphine following food deprivation in male adult rats and changes in phosphorylation of ERK and CREB. **Orkideh Mozafari** (MSc)

  Thesis in progress
- [3]. Effect of cannabidiol on behavior, histological, gene and miRNA expression changes related to neurogenesis after injecting methamphetamine in dentate

- gyrus of rat hippocampus. Yasaman Razavi (PhD) Thesis in progress
- [4]. Role of orexinergic receptors within the nucleus accumbens in antinociceptive responses induced by chemical stimulation of the lateral hypothalamus in animal model of orofacial pain. **Amir Haghparast** (Dentistry, DMD) Thesis in progress
- [5]. Effect of chemical stimulation of the lateral hypothalamus on formalin-induced orofacial pain: role of dopaminergic receptors in the ventral tegmental area.Tina Matini (Dentistry, DMD) Thesis in progress
- [6]. Investigating the interaction of the paraventricular nucleus dopamine D1 receptors and glucose-sensitive neurons on food intake and their effects on ghrelin and leptin serum levels in 18 hours deprived-food rats. **Masoud Shareghi-Brojeni** (MSc) Thesis in progress
- [7]. Effect of chemical stimulation of the lateral hypothalamus on formalin-induced orofacial pain: role of orexin-1 receptors in the ventral tegmental area. **Emad**Safari (Dentistry, DMD) Thesis in progress
- [8]. The effect of continuous and high intensity interval aerobic of training on spatial memory and BDNF neurotrophic in rats following ischemia. Mohadeseh
  Kavianpour (MSc) September 2017
- [9]. Investigating the effect of chronic morphine exposure during adolescence in male rats on motivational aspects of morphine and withdrawal syndrome, Paragigantocellularis and ventral tegmental area neuronal activity in male offspring. Maryam Azadi (MSc) August 2017
- [10]. Study of the possible protective effects of intra-hippocampal insulin against scopolamine-induced spatial learning and memory impairment: Involvement of MAPK signaling pathway. Ahmad Jahan Mihan (MSc) January 2017
- [11]. Investigation of Enterolactone's effect on X ray's killing efficacy in human breast carcinoma cell lines (T47D and MDA-MB231). **Bahareh Bigdeli** (PhD) January 2017
- [12]. Effect of eight-week aerobic continuous and high intensity interval training on levels of Sirt3 and PGC1 $\alpha$  in male wistar rat's skeletal muscle tissue. **Iman**

#### Fathi (PhD) December 2016

- [13]. The effect of Eight-week continuous and high intensity interval aerobic training on ischemia tolerance, VEGF-A, and VEGFR2 Levels in male Wistar rat's brain tissue: Stroke model. **Rasoul Rezaei** (PhD) October 2016
- [14]. Spiking pattern recognition for rat brain single neuron by using data classification method based on decision-making model in neuroscience by using reinforcement learning. **Masoud Moghaddasi** (MSc) February 2016
- [15]. Investigating the role ofdopamine D2-like receptors of paraventricular hypothalamic nucleus (PVN) in food intake after 24 hours food deprived male rats. Morteza Salimi (MSc) January 2016
- [16]. Improvement of the Izhikevich model based on rat brain neuron real data. Sahar Hojjatinia (MSc) September 2015
- [17]. Effectiveness of Gestalt group therapy in patients' quality of life with chronic pain. Mina Zarineh (MSc) February 2015
- [18]. Role of dopamine D1-like receptors within the paraventricular hypothalamus nucleus in food intake in 24h food-deprived rats. **Zahra Mir-Mohammad**Sadeghi (MSc) September 2014
- [19]. Evaluation of the role of GABA<sub>A</sub> receptor and GABA transporters (GAT-1 and GAT-3) in CCI model of neuropathic pain using behavioral, electrophysiological and molecular studies in rat: possible role of glia. **Mehdi Sadeghi** (PhD) May 2014
- [20]. Electrophysiology and molecular study of changes in the dorsal horn of spinal cord following reduction of morphine analgesia due to chronic constriction nerve injury (CCI) in rat: role of spinal neuroimmune activation. Samad Nazemi (PhD) January 2013
- [21]. Comparison of self-efficacy and personality traits in patients with chronic pain and healthy individuals. Laleh Amir-Soleimani (MSc) June 2012
- [22]. The role of resilience, intensity and duration of pain on quality of life of patients with pain disorder. Saeid Yazdi-Ravandi (MSc) March 2012

- [23]. The interaction between orexin and cannabinoid systems in locus coeruleus on pain modulation. **Mir-Shahram Safari** (PhD) September 2010
- [24]. Considering the effect of D1 and D2 like dopaminergic receptors on food behavior in 24 hours food deprived rat. Shiva Bakhshi (MSc) February 2010
- [25]. The study of the neuroprotective effects of curcumin against homocysteine-induced oxidative stress in the rat's brain. Amin Ataie (PhD) January 2010
- [26]. The effect of glucose and orexins microinjection into the hypothalamic paraventricular nucleus and their interactions on basal gastric acid secretion and juice volume in conscious rats. **Neda Chalik** (MSc) August 2009
- [27]. Comparison of antinociception induced by subcutaneous administration of lidocaine in morphine dependent and independent rat. Maryam Taieban (MD)

  March 2003
- [28]. The effect of inactivation of cuneiformis nucleus by lidocaine microinjection on opioid antinociception response in rat. **Mohammad-Naser Shafei** (MSc) May 2001
- [29]. The role of GABA<sub>A</sub> receptor inhibitor on morphine antinociceptive action in cuneiformis. **Hamid Sheikhcanlouyeh Milan** (MSc) April 2001

# Participation in other meetings and workshops

- IBRO-APRC School of Neuroscience
   Melbourne, Victoria, Australia, July 1-6, 2007
- IBRO Advanced Workshop in Neuroscience by Visiting Lecturer Team Program (VLTP), Tehran, Iran, February 4-13, **2002**
- Joint meeting of the Canadian Physiological Society and the Japanese Physiological Society, Lake Louise, Alberta, Canada, January 19-23, 2000
- The 5th altschul symposium and the 4th WHO summer School Saskatoon, Saskatchewan, Canada, August 18-23, 1999

## **Editorial Board Member of the Nat., OA and Intl. Journals**

• American Journal of Neuroscience Research

- Anesthesiology and Pain Medicine
- Austin Journal of Drug Abuse and Addiction
- Basic & Clinical Neuroscience Journal
- Itch & Pain
- Journal of Addiction Medical Practice
- Journal of Cellular and Molecular Anesthesia
- Journal of Substance Abuse and Alcoholism
- Pajouhan Scientific Journal

# Journal/Periodical Reviewer

- Acta Neuropsychiatrica
- Acupuncture in Medicine
- Amino Acids
- Archives of Iranian Medicine
- Behavioral and Brain Functions
- Biological Trace Element Research
- BMC Neuroscience
- BMC Pharmacology and Toxicology
- Brain Research
- Brazilian Journal of Medical and Biological Research
- Clinical and Experimental Pharmacology and Physiology
- Drug and Alcohol Dependence
- European Journal of Pain
- International Journal of Endocrinology and Metabolism
- Iranian Biomedical Journal
- Iranian Journal of Basic Medical Sciences
- Iranian Journal of Pharmaceutical Research

- Journal of Neural Transmission
- Journal of Psychopharmacology
- Journal of Spinal Cord Medicine
- Molecular Biology Reports
- Neuropsychopharmacology
- Neuroscience
- Neuroscience Letters
- Pharmacology, Biochemistry and Behavior
- Physiology and Behavior
- Progress in Neuro-Psychopharmacology & Biological Psychiatry

## **Membership in Societies**

- International Union of Physiological Sciences (*IUPS*) 1998 Present
- International Brain Research Organization (IBRO) 1999 Present
- International Association for the Study of Pain (IASP) 2002 Present
- Federation of Asian-Oceanian Neuroscience Societies (FAONS) 2004 Present
- International Society for Neurochemistry (ISN) 2005 Present
- Japan Neuroscience Society (JNS) 2007 Present
- Society for Neuroscience (SfN) 2009 Present
- Federation of Asian-Oceanian Physiological Societies (FAOPS) 2009 Present
- International Behavioral Neuroscience Society (IBNS) 2010 Present
- Canadian Association for Neuroscience (CAN) 2016 Present
- Organization for Human Brain Mapping (OHBM) 2017 Present
- Iranian Society of Physiology & Pharmacology (IRSPP) 1997 Present
- Iranian Pain Society (*IPS*; IASP Chapter) **1998 Present**
- Iranian Neuroscience Society (INSS) 1999 Present

•	Iranian Neuroscientists Community (IRNSC) 2011 - Present