

Curriculum Vitae

Saeed Semnanian MD PhD

December 2022



Name: Saeed Semnanian

Date & place of birth: 1956, Tehran, Iran

Academic status: Professor of Physiology

Education:

Medical Doctor- Shaheed Beheshti Medical Sciences University, Tehran, Iran
1976

PhD in Physiology- Shaheed Beheshti Medical Sciences University, Tehran,
Iran 1986

Academic background:

Department of Physiology, Shaheed Beheshti Medical Sciences University,
1990-1993

Institute of Biochemistry & Biophysics, Tehran University, 1993-1997

Department of Physiology, Tarbiat Modares University, 1997- present

Academic and scientific positions:

- Head of Physiology Department, Tarbiat Modares University, 1990-1996

- Research Vice Chancellor, Tarbiat Modares University, 1986-1992

- Head of Institute of Biochemistry & Biophysics, Tehran University, 1992-
1997

- Treasurer, Iranian Physiology and Pharmacology Society, 1994- 2002
- (FAOPS) Federation of Asian and Oceanic Physiological Societies council member 2004-2011
- President of Tarbiat Modares University, 1997- 2005
- General Secretary of Iranian Society of Physiology and Pharmacology, 2005-2007
- Editor of Iranian Journal of Physiology and Pharmacology, 2005 - 2012
- President of Iranian Society of Physiology and Pharmacology, 2007-2009
- The Federation of Asian-Oceanian Neuroscience Societies (FAONS) Executive Committee Members (2011-12)
- IBRO Governing Council member
- President of Iranian Neuroscience society – 2009 - 2013
- International Union of Physiological Societies (IUPS) council member and membership committee chair

Scientific society membership:

- Iranian Physiology and Pharmacology Society 1991
- Iranian society for the study of pain -1995
- International Brain Research Organization (IBRO) - 1989
- International Association for the Study of Pain (IASP) -1990
- Iranian Society for Advancement of Science - 2005

Journal editorial board member:

- Iranian Journal of Physiology and Pharmacology
- (Iranian Journal of) The Cell
- Razi Pharmacy Journal
- Modares Medical Journal
- Rafsanjan Medical Science University Journal
- Hakim Medical Journal
- Semnan Medical Science University Journal
- Journal of Addiction
- Turkish Journal of Medical Sciences – 2012

This author profile is generated by Scopus [Learn more](#)

Semnanian, Saeed

[Tarbiat Modares University, Tehran, Iran](#)

[55929207800](#) <https://orcid.org/0000-0001-7312-6294>

[Edit profile](#) [Set alert](#) [Potential author matches](#) [Export to SciVal](#)

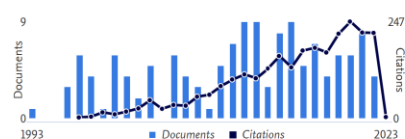
Metrics overview

136
Documents by author

2559
Citations by 1826 documents

28
h-index [View h-graph](#)

Document & citation trends



Most contributed Topics 2017–2021

Narcolepsy; Orexins; Suvorexant
[11 documents](#)

Ethanol; Cocaine; Progeny
[3 documents](#)

Animals; Cyclic Nucleotides; Cardiac Rhythm Management Device
[2 documents](#)

[View all Topics](#)

Congress Presentations:

9th Iranian Physiology & Pharmacology Congress, 1989, Shaheed Beheshti Medical Sciences University, Tehran, Iran.

- Evaluating the age and the lung parameters on chemical warfare casualties.
Mishmast Gh, Motamedi F., Eftekhari H. A., Semnani S.

- Assessing the mechanism of electrical stimulation on analgesia and comparing it with morphine's effect.
Manaeji H., Motamedi F., Semnani S., Amir Teymour T.

- The effect of adrenergic system on electrical stimulation induced analgesia.
Semnani S., Motamedi F., Manaeji H., Mahdavi M.

- The effect of GABAergic system on Electrical stimulation induced analgesia of rats.
Kesmati M., Motamedi F., Manaeji H., Semnani S., Singh S.

Second Congress of Asian and Oceanic Physiological Societies, 12-15 Nov 1990 New Delhi/ India

- Central role of alpha-2 activity in TENS analgesia
Shojaeefard M., Semnani S., Motamedi F.

- Comparison of the involvement of opiate and noradrenergic systems on TENS induced analgesia.
Semnani S., Motamedi F., Manaeji H.

10th Iranian Physiology & Pharmacology Congress, 1993, Ahwaz Medical Sciences University, Ahwaz, Iran.

- Assessing the neurochemical systems involved in transcutaneous electrical nerve stimulation.
Kesmati M., Motamedi F., Semnani S., Manaeji H., Hajizadeh E.

- Comparing the central effects of Alpha-1 and Alpha-2 receptors on electrical stimulation induced analgesia.
Shojaeefard M., Semnani S., Motamedi F.

- GABA and stress induced analgesia in mouse.
Khajepour L., Pourgholami M.H., Semnani S.

11th Iranian Physiology & Pharmacology Congress, Tabriz Medical Sciences University, Tabriz, Iran.

-Assessing the effect of locus coeruleus lesioning and peripheral alpha-adrenergic receptors on tonic pain
Dashti M., Semnani S., Motamedi F.

-Partial elimination of rat male sex hormones by gonadectomy and its effect on formalin induced tonic pain.
Mahdavi M.R., Haeri A., Motamedi F., Semnani S.

- The effect of central Alpha-2 adrenergic receptors on tonic pain.
Hajsayah S., Semnianian S., Zarrindast M.R.

-Assessing the effect of GABAergic system on tonic pain.
Shafizadeh M., Semnianian S., Zarrindast M.R.

2nd Iranian Biological Congress, Tehran University, 1993.

- The effect of monosialoganglioside GM1 on rat spatial learning using Y-maze.

Moazedi A., Motamedi F., Semnianian S., Hosseini A., Hajizadeh E.

7th World Congress on pain, Paris, France, Aug 22-27, 1993.

-The assessment of GABAergic and alpha-adrenergic receptors' effect on tonic pain.

-Semnianian S., Shafizadeh M., Zarrindast MR.

2nd Iranian Biochemical Congress, Tehran University, 1993.

- The effect of monosialoganglioside GM2 on rat spatial learning using Y-maze.

Moazedi A., Motamedi F., Semnianian S., Hosseini A., Hajizadeh E.

3rd Congress of Federation of Asian and Oceanic Physiological Societies, 7-10 Nov 1994, Shanghai, China, Published in Clinical & Experimental Pharmacology & Physiology 19: (3).

-Discriminating the alpha-adrenergic receptors effect on formalin induced pain
Moazedi A., Motamedi F., Semnianian S., Eftekhar Hosseini A., Hajizadeh E.

- Dose related effect of monosialoganglioside GM2 on Y-maze discrimination learning in the rat

Moazedi A., Motamedi F., Semnianian S., Eftekhar Hosseini A., Hajizadeh E.

- Intrahippocampal injection of MK-801 impairs classical conditioned eye blink in rabbit.

Sarkaki A.R., Motamedi F., Semnianian S., Hajizadeh E., Zarrindast MR.

12th International Congress of Pharmacology, July 24-29 1994 Montreal Canada, In: Canadian Journal of Physiology And Pharmacology, Supp. 1, P13-15, Vol 42, National Research Council

- Dose related effect of monosialoganglioside GM1 on Y-Maze spatial learning task in rat.

Moazedi A., Motamedi F., Semnianian S., Eftekhar Hosseini A., Hajizadeh E.

Fourth IBRO world congress of neuroscience 9-14 July 1995, Kyoto-Japan

- Increased electrical activity of dorsal hippocampus during rabbit's eyeblink conditioning is not abolished by extinction.

Sarkaki A.R., Motamedi F., Firoozabadi S.M., Semnianian S.

- Effect of pentylentetrazole induced kindling on long term potentiation in rats hippocampal slices.

Fathollahi Y., Motamedi F., Semnanian S., Zardoshti M., Firoozabadi M.

- The effects of yohimbine on formalin induced pain response of saphenous nerve of the rat.

Pakdell F. G., Semnanian S., Nejad M. S.

- The effect of nucleus reticularis paragigantocellularis lesions on tonic pain. Semnanian S., Azizi Z.

- Phasic and tonic pain assessment in Locus Coeruleus lesioned rats. Azizi Z., Semnanian S., Dashti M., Motamedi F.

- Interaction of exogenous GMI with MK- 801 on spatial learning task in rats. Moazedi A. A., Motamedi F., Semnanian S., Eftekhar Hosseini A., Hajizadeh E.

- Effect of red nucleus lesion on the eye blink conditioning response in rabbit. Taherianfard M., Motamedi F., Semnanian S., Sarkaki A., Hajizadeh E.

XIth International neurobiological symposium on learning and memory, Magdeburg, Germany, 1995

- Interaction of exogenous GM2 with MK-801 on discrimination learning in the rat.

The 4th National congress on Biology, Gorgan, Iran, 1995

- Formalin induced activity of rat Gigantocellularis neurons.

Soleimannejad E., Semnanian S., Fathollahi Y., Firoozabadi M.P.

- The central effect of Dexmedetomidine, a novel alpha-2 adrenoceptor agonist on acute pain.

Attarzadeh G., Semnanian S., Pourgholami M.

- Thyrotropin-releasing hormone (TRH) ameliorates trace conditioning impairment induced by scopolamine in the rabbit.

Zarifkar A., Oryan S., Semnanian S., Zarrindast MR., Firoozabadi MP.

- Effects of treatment with U-74389G on motor function following experimental spinal cord injury in rats.

Kalalian H., Hashemi G.M.R., Eftekhar H. A., Semnanian S., Firoozabadi MP.

- Altered synaptic transmission in hippocampus of Y-maze trained rats.

Fathollahi Y., Motamedi F., Semnanian S., Eftekhar H. A., Zardoshti M.

12th Iranian Physiology & Pharmacology Congress, Tehran, 6-9 Nov 1995

- The influence of GM1 on spatial learning deficiency after MK-801 administration of rats.

Moazedi A.A., Motamedi F., Semnanian S., Eftekhar H. A., Hajizadeh E.

- The role of dorsal hippocampal N-Methyl-D-Aspartate Acid (NMDA) receptors in classical conditioning of rabbits eyeblink.
Sarkaki A., Motamedi F., Semnian S., Hajizadeh E.
- The effect of nucleus reticular paragigantocellularis electrolytic lesion on tonic pain.
Azizi Z., Semnian S.
- Assessing the nociceptive effects of dexmedetomidine a novel alpha-2 adrenoceptor agonist.
Attarzadeh G., Semnian S., Pourgholami M.
- Altered synaptic transmission in hippocampus of PTZ-kindled rats: as an in-vitro study on CA1 of hippocampal slices.
Fathollahi Y., Motamedi F., Semnian S., Eftekhar H. A., Zardoshti M.
- Sensitivity of febrile rats to the formalin test.
Yousefi M., Semnian S., Fathollahi Y.
- Studies on the diffusion and effects of alkylating agents on synaptosome.
Eghtesadi Araghi P., Riazi G., Semnian S., Taghikhani M.
- Effects of chemical lesioning of lateral paragigantocellularis (LPGI) nucleus on blood pressure of rat.
Chaghagerdi N., Semnian S.
- The effects of intrathecal dexmedetomidine, a novel alpha-2 agonist on tonic pain.
Eftekhary H., Semnian S.
- Electrophysiological recording of paragigantocellular neurons during formalin test.
Soleimannejad E., Semnian S., Zardoshti M., Fathollahi Y.
- The effects of chemical lesioning of lateral paragigantocellular nucleus in chronic pain.
Atashbiz M., Semnian S.
- Effects of tyrotropin-releasing hormone (TRH) on trace conditioning of the rabbit's eyeblink response.
Zarifkar A., Oryan S., Semnian S., Zarrindast MR., Firoozabadi MP.
- Role of the red nucleus NMDA receptors on rabbit's eyeblink classical conditional response.
Taherianfard M., Motamedi F., Semnian S., Firoozabadi MP., Tabei.
- Neurological recovery in experimental spinal cord injury by the 21-aminosteroid, U-74389G, a potent inhibitor of iron dependent lipid peroxidation.

Kalalian H., Eftekhari H. A., Hashemi-Golpayegani M.R., Firoozabadi M., Semnani S.

- The effect of partial elimination of sex hormones on phasic and tonic pain and electroacupuncture induced analgesia in male Albino rats.

Vaez Mahdavi M.R., Haeri A., Motamedi F., Molayemi E., Semnani S.

- Assessment of peripheral alpha-adrenergic receptors' role in tonic pain.

Dashti M., Semnani S., Motamedi F.

- A survey concerning physiology and pharmacology in Iran.

Sadeghipour-Roudsari H.R., Semnani S.

- Nociceptive effects of formalin on saphenous neuronal response.

Pakdel F.G., Semnani S., Nejad M.S.

32nd Congress of the international union of physiological societies. Glasgow, England, Aug 1993

- Overall study of involvement of neurochemical systems in Transcutaneous Electrical Nerve Stimulation.

4th Anesthesiology and critical care congress of Iran Tehran, 1996

- International Association for the Study of Pain's pain questionnaire: A new tool for quantifying pain.

Najafi M., Semnani S.

]

8th World Congress on Pain, Aug 17-22, Vancouver, Canada

- The effect of DSP-4 lesioning of lateral paragigantocellular neurons on rat nociception and blood pressure.

- Chorda tympani neuronal response to tastants following topical administration of formalin on the rats tongue.

First FAONS congress & first IBRO regional congress 20-23 Oct 1996, Pattaya, Thailand

- Antinociception induced by L-Glutamate microinjection into the nucleus reticularis gigantocellularis of the rat in formalin test.

Aminmoghadam S., Semnani S., Fathollahi Y.

- The assessment of patients suffering migraine without aura using IASP pain database questionnaire

Haghpourast A., Najafi M., Semnani S.

- Thyrotropin-releasing hormone (TRH) ameliorates trace conditioning impairment induced by scopolamine in the rabbit.

Oryan S.H., Zarifkar A., Semnanian S., Zarrindast MR.

- Chronic morphine administration facilitates induction of LTP by primed-burst tetanic stimulation in hippocampal CA1 area of the rat.

Mansouri F., Motamedi F., Fathollahi Y., Atapour N., Semnanian S.

- Developmental changes in field potential characteristics of rat visual cortex: An in-vitro study.

Atapour N., Esteky H., Motamedi F., Fathollahi Y., Alizadeh M.F., Semnanian S.

- Antinociceptive effects of *Elaeagnus Angostifolia* fruit extract

Ahmadiani A., Semnanian S., Kamalinejad M., Hosseini J.

- The role of spinal and supraspinal alpha-2 adrenergic receptors on pain by using dexmedetomidine.

Attarzadeh Yazdi G., Semnanian S., Pourgholami M.

- Antinociceptive effects of *Trigonella Foenum-graecum*.

Ahmadiani A., Kamalinejad M., Javan M., Semnanian S.

- Studies on the diffusion and effects of alkylating agents on synaptosomes.

Eghtesadi Araghi P., Riazi G., Semnanian S., Taghikhani M.

1st Iranian Neuroscience Congress, 1996, Tehran

- Migraine's effect on patients socio-economic situation

Najafi M., Semnanian S., Rezaei O., Ghargozli K.

-Alpha-2 adrenergic receptors on the nociception primary afferent terminals.

Ghaderi F., Shokohi Nejad M., Semnanian S.

- Nociception induced by L-Glutamate injection into PGI

Ammini S., Semnanian S., Fathollahi Y.

- Antinociceptive effects of *Trigonella foenum-graceum* extract.

Ahmadiani A., Semnanian S., Kamalinejad M., Javan M.

- Analgesic effects of *Sambucus ebulus* rhizome.

Ahmadiani A., Semnanian S., Kamalinejad M., Fereidoni M.

- Antinociceptive effects of *Elaeagnus angostifolia* fruit.

Ahmadiani A., Semnanian S., Kamalinejad M., Hosseini J.

- Assessing infiltration and effects of alkylating agents on synaptosomes.

Araghi P., Semnanian S. Taghikhani M., Riazi G.

- Changes in visual cortex field potential due to aging.

Atapour N., Esteki H., Motamedi F., Fathollahi Y., Semnanian S.

- TRH and hippocampal cholinergic system interaction in NRM.
Zarrifkar A., Oryan S., Semnianian S., Zarrindast M.R.

- Participation of GM1 in temporal learning and LTP.
Moazedi A., Motamedi F., Semnianian S., Hosseini A.

- Rubral GABAergic interneurons role in rabbit NMR.
Taherianfard M., Motamedi F., Semnianian S.

- Adrenergic agonist and antagonists role in physotigmine induced yawning.
Tabaei S., Zarrindast M.R., Semnianian S.

- The effect of adrenergic agonist and antagonists on apomorphine induced climbing behavior.
Shafizadeh S., Semnianian S., Zarrindast M.R.

XXXIII International Congress of Physiological Sciences, St. Petersburg, June 30- July 5, 1997

- The role of alpha-2 adrenoceptors on anesthesia.
Atarzadeh Yazdi G., Semnianian S., Pourgholami M.

- Anti-inflammatory and antinociceptive effects of Trigonella-graecum leaves extract.
Javan M., Ahmadiani M., Semnianian S., Kamalinejad M.

- Chronic morphine administration inhibits the decay of LTP in hippocampal CA1 area of rat.
Semnianian S., Alizadeh Mansouri F., Motamedi F., Fathollahi Y., Atapour N.

- The effect of bombesin on tail flick latency on rat.
Haghparast A., Semnianian S., Fathollahi Y., Sarihi A.

- Electrical stimulation of nucleus paragigantocellular (PGI) produces antinociception in formalin test.
Semnianian S., Aminimoghadam S., Fathollahi Y.

- Antinociceptive and antiinflammatory activity of Sambucus ebulus Rhizome extract.
Fereidoni M., Ahmadiani A., Semnianian S., Kamalinejad M.

- A comparison between the effect of locus coeruleus lesioning on tonic pain.
Dashti M.H., Semnianian S.,

- Assessing the effect of age on formalin induced pain.
Semnianian S., Shafizadeh M., Zarrindast MR, Fathollahi Y.

8th Congress of the international headache society. Amesterdam, Netherland, 10-14 June 1997

- The study of migraine impact on economic status and quality of life using the IASP pain database.
Najafi M., Semnanian S., Fathollahi Y.

13th Iranian Physiology & Pharmacology Congress, Isfahan, Iran, 1997

- The effects of TRH on electrical activity of hippocampus during NMR conditioning.
Zarifkar A., Oryan S., Semnanian S., Zarrindast M.R.

- Assessing the effect of Enalapril (ACEI) on the decrease of nerve conduction velocity of diabetic rats.
Tavakoli A. Asgari A., Semnanian S.

- The effect of electrical stimulation and L-Glutamate injection in rats' PGI on phasic pain.
Amini Moghaddam S., Semnanian S., Fathollahi Y.

- Evaluating the effect of age on formalin induced analgesia.
Shafizadeh M., Semnanian S., Fathollahi Y.

- Electrophysiological and behavioral evaluation of 21 amino-steroid effect on spinal injury.
Kalalian Moghaddam H., Eftekhar Hosseini S.A., Hashemi Golpayegani M.R., Firoozabadi S.M., Semnanian S.

- Chronic morphine induction attenuates the LTP of CA1 region of rat hippocampal slices.
Motamedi F., Mansouri F., Fathollahi Y., Semnanian S.

- Evaluating the change in synaptic conduction of hippocampal CA1 region of Y-maze trained rats.
Motamedi. F., Semnanian S., Zartoshti M.

- The adrenergic system function during the apomorphine induced licking behavior of rats.
Fazl Tabaei S., Zarrindast M.R., Semnanian S.

III International congress of pathophysiology, June 1998, Lahti, Finland

- Responsiveness of the nucleus reticularis paragigantocellularis neurons to the formalin as a peripheral noxious stimulus.
Semnanian S., Gheibi, Fathollahi Y., Haghparast A.

- Morphine tolerance in the nucleus paragigantocellularis: single unit recording study in vivo.
Haghparast A., Semnanian S., Fathollahi Y.

Iranian Biological society congress, 1998

- Mechanism of aspirin effect on nerve growth in DRG of chicken fetus.
Saboni, Firouzi, Taghikhani, Ziaei, Semnanian

14th Iranian Physiology & Pharmacology Congress, Tehran, Iran, 1999

- Analgesic effects of some new compounds.
Miri, Shafiei, Kebriaei, Semnanian.

- Comparing different methods of nerve cut.
Hajizadeh S., Banasadegh S., Semnanian S.

- Assessing the effect of ketamine on synaptic transmission.
Rahmati B., Fathollahi Y., Semnanian S., Mahdavi M.R., Shafizadeh M.

- Wound healing after nerve cut.
Banasadegh S., Hajizadeh S., Semnanian S.

- Assessing the synaptic plasticity due to tetanic stimulation.
Mohajerani, Fathollahi Y., Semnanian S., Omrani A.

- The outcomes of reticular gigantocellular nucleus lesioning.
Soleimannejad E., Heydari M., Fathollahi Y. Semnanian S.

- Change in synaptic transmission of CA1 region.
Fathollahi Y., Motamedi F., Semnanian S., Zartoshti M.

Federation of Asian-oceanian neuroscience societies symposium 2000 Dec 7-10 Hong Kong, China

- Caffeine increases Paragigantocellularis neuronal firing rate and induces withdrawal signs in morphine-dependent rats.
Khalili M., Semnanian S., Fathollahi Y.

- Effects of cysteamine on long-term potentiation and paired-pulse stimulation in the CA1 region of rat hippocampal slices.
Rostampour M., Fathollahi Y., Semnanian S., Hajizadeh S., Mirnajafizadeh J.

15th Iranian Congress of Physiology & Pharmacology - Nov. 5-8 2001, Shiraz, Iran

- New and cheap method for acquisition and analysis of biological signals
G. Pakdel, S. Semnanian, Y. Fathollahi, M. Firoozabadi

- The role of locus coeruleus in morphine dependence of paragigantocellular neurons in rats
Khadjui K., Semnanian S., Fathollahi Y.

- Effect of adenosine and caffeine on paragigantocellularis neuronal firing rate in morphine dependent rats
Khalili M., Semnanian S., Fathollahi Y.

- Differential effects of pentylentetrazole-kindling on long term potentiation of population excitatory postsynaptic potentials and population spikes in the CA1 region of rat hippocampus

Palizvan MR., Fathollahi Y., Semnanian S., Hajizadeh S., Mirnajafizadeh J.

- Different physiological role of nucleus Paragigantocellularis

Semnanian S.

5th Scientific Congress Federation of Asian & Oceanian Physiological Societies (FAOPS)

- In vivo measurements of noradrenaline in the Locus Coeruleus in formalin test: A microdialysis study

Sajedianfard J., Semnanian S., Khatami Sh., Naghdi N., Jorjani M.

Experimental Biology, Proceedings for the 3rd FAONS Congress, Volume 11, 2, Supplement Sept 2002, Malaysia

- Effects of electrical stimulation of nucleus Paragigantocellularis on acute and chronic pain in morphine-dependent rats.

Jalalifar A., Semnanian S., Fathollahi Y.

Second Iranian Congress of Neuroscience, Oct 29-31 2002, Tehran

- Dose epileptogenic insult drive synapses of CA1 pyramidal cells to an asymptotic level or cause a shift in forms of long-term potentiation

M.R. Palizvan, Y. Fathollahi, S. Semnanian

16th Congress of Physiology and Pharmacology, Tehran, Iran, May 9-13, 2003

- Chronic morphine administration decreases spontaneous paragigantocellularis nucleus neuronal firing rate in rats.

Ghaderi Pakdel F., Semnanian S., Fathollahi Y.

- The effect of morphine injection in the periaqueductal gray matter on the neuronal response of nucleus reticularis paragigantocellularis to formalin.

N. Gheibi, S. Semnanian, Y. Fathollahi

- Differential effects of pentylentetrazol-kindling on long-term potentiation in the CA1 region of rat hippocampus.

M. R. Palizvan, Y. Fathollahi, S. Semnanian, S. Hajizadeh, Mirnajafizadeh J.

- Effect of cysteamine on tetanic stimulus-induced long-term potentiation (LTP) in the CA1 region of rat hippocampal slices.

M. Rostampour, Y. Fathollahi, S. Semnanian, S. Hajizadeh, J. Mirnajafizadeh

- Measurement of noradrenaline and its metabolite in the locus coeruleus in formalin test by using HPLC-ECD.

J. Sajedianfard, S. Semnanian, S. Khatami, N. Naghdi, M. Jorjani

- Effect of forskolin on Paragigantocellularis neuronal firing rate: Single unit recording

Azhdari H., Semnianian S., Fathollahi Y., Ghaderi Pakdel F.

- Changes of cerebral blood flow in morphine dependent & morphine withdrawal rats: Effects of adenosine, theophiline & naloxone.

M. Zahedi, S. Hajizadeh, S. Semnianian, Y. Fathollahi

- Study on articles which have been presented in 10th to 15th Iranian congress of Physiology and Pharmacology

Bahrami F., Semnianian S., Sahraei H., Hajizadeh S., Norooz Zadeh A., Ghoshooni H., Fathollahi Y., Asgari A., Khoshbaten A.

2nd Symposium of Federation of Asian-Oceanic Neuroscience Societies (FAONS) & 3rd Iranian Congress of Neuroscience May 16-19 2004 Tehran, Iran

- Electrophysiological, pharmacological and behavioral studies of different physiological roles of the nucleus Paragigantocellularis

S. Semnianian

- The effect of ketamine on NMDA receptor mediated LTP depends on ketamine effects on non-NMDA mediated synaptic transmission in CA1 area of rat hippocampal slices

B. Rahmati, Y. Fathollahi, S. Semnianian, M.R.Vaez Mahdavi, M. Shafizadeh

- Cysteamine pretreatment reduces Mg²⁺-free medium-induced plasticity in the CA1 region of the rat hippocampal slices

M.Rostampour, Y. Fathollahi, S. Semnianian, S. Hajizadeh, J. Mirnajafizadeh

- The effect of morphine on some electrophysiological parameters of paragigantocellularis and locus coeruleus nuclei interconnections

F. Ghaderi Pakdel, S. Semnianian, Y. Fathollahi

American Society of Neuroscience Congress, 2004, Washington, DC

- Dependence of morphine enhances transient pentylentetrazole induced plastic and epileptic changes in rat hippocampal CA1 excitability

Y. Fathollahi, Z. Jafarzadeh, F. Nugent, A. Omrani, S. Semnianian

11th World Congress on pain, Sydney, Australia, 1995

- Effect of peripheral noxious stimulus on neuronal activity of the nucleus paragigantocellularis, in capsaicin treated morphine dependent rats.

Rohampour, Kambiz; Semnianian, Saeed; Fathollahi, Yaghoub

11th National health sciences research symposium. Understanding and managing Pain, Sept 6 & 7, 2006, Agha Khan University, Karachi, Pakistan

- The role and interaction between the Locus Coeruleus and Nucleus Paragigantocellularis in pain sensation and opiate withdrawal
Saeed Semnanian

18th Congress of Physiology and Pharmacology, Mashad, Iran, Aug 26-30, 2007

- Chronic stress inhibition of ultra low dose morphine-induced hyperalgesia and HPA axis role
Fereidoni M., Semnanian s., Javan M., Ahmadiani A.
- Electrophysiological assessment and Pharmacological dissection of inputs to Locus Coeruleus neurons
Semnanian S., Kato F., Yamgucci K., Launey T., Ito M.
- The role of hippocampal CA1 GABAA receptors in formalin-induced pain
Alinaghi, Rohampour, Soleimannejad, Naghdi, Semnanian
- Pretreatment effect of morphine on serum BDNF level during Carrageenan induced inflammation
Hatami, Oryan, Ahmadiani, Semnanian, Negar, Kazemi

12th World Congress on Pain, August 17-22 2008, Glasgow, UK

- Electrophysiological assessment and Pharmacological dissection of inputs to Locus Coeruleus neurons
Semnanian S., Kato F., Yamagucci K., Launey T., Ito M.
- Ritanserin administered to the Ca1 region of the hippocampus could not improve formalin-induced spatial learning impairment
N. Naghdi, E. Soleimannejad, S. Semnanian, Y. Fathollahi, M. Javanshir

**1st South Asian Conference of Physiological Societies
11th Biennial Conference of Pakistan Physiological Society
November 10 – 12, 2008**

- Brain Sciences & Neuroethics
Saeed Semnanian (Plenary lecturer)
- Locus Coeruleus and Pain

Mir-Shahram Safari, Abbas Haghparast, Abolhasan Ahmadiani, Saeed Semnanian (Plenary lecturer)

The 6th Asian Biophysics Association (ABA) Symposium

11-15 Jan 2009 HKUST, Hong Kong

- Effect of reversible inactivation of the nucleus Locus Coeruleus on lateral hypothalamus induced antinociception in the rat

M Safari, A Haghparast, S Semnanian

- Effect of Rolipram, a type 4 specific phosphodiesterase inhibitor on unit activity of Paragigantocellularis neurons and withdrawal signs in morphine dependent rats

H Azizi, S Semnanian, Y Fathollahi, F G Pakdell, H Azhdari Zarmehri, K Rohampour

36th International Congress of Physiological Sciences (IUPS 2009)

July 27th – August 1st, 2009, Kyoto, Japan

- Intrahippocampal injection of Baclofen attenuates nociceptive behaviors in formalin induced pain

K Rohampour, M Alinaghi Khani, E Soleimannejad, N Naghdi, S Semnanian

6th Asian Biophysics Association (ABA) Symposium 27th Hong Kong Society of Neuroscience Annual Meeting

Jan. 11-15, 2009 Hong Kong Uni. Sci. Tech.

- Effect of reversible inactivation of the nucleus locus coeruleus on lateral hypothalamus induced antinociception in the rat

Mir-Shahram Safari, Abbas Haghparast, Saeed Semnanian

13th World Congress on Pain, August 29- September 3 2010, Montreal, Canada

- The effect of intra-locus coeruleus injection of 17-beta estradiol on inflammatory pain modulation in male rat

R Khakpai, M Javan, M Janahmadi, T Ali, S Semnanian

- Circuitry underlying for orexin-A induced analgesia action in the nucleus raphe magnus

H Azhdari Zarmehri, Y Fathollahi, S Semnanian, H Azizi, R Khakpai, K Rohampour

Abstracts of the 10th Biennial meeting of the Asia-Pacific Society of Neurochemistry, Phuket, Thailand, 18-20 October 2010
Journal of Neurochemistry 115, supplement 1, October 2010

- Microinjection of orexin-A into the locus coeruleus area induces opioid withdrawal behaviors in morphine dependent rats

Azizi H., Semnanian s., Mirnajafizadeh J., Rohampour K.

Federation of European Neurosciences Societies (FENS), FENS Forum 2010 – Amsterdam

- The effect of nucleus locus coeruleus inactivation on antinociception induced by lateral hypothalamus inactivation

Safari M. S., Haghparast A., Semnanian S., Ahmadiani A.

- Lateral hypothalamus stimulation-induced antinociception is mediated in part by the activation of locus coeruleus neurons

Haghparast A., Safari M. S., Semnanian S., Ahmadiani A.

Society for Neuroscience (SFN) Annual meeting, Nov 13-17 2010 San Diego, USA

- Orexin A-induced antinociception in the locus coeruleus originates from the lateral hypothalamus

M.S. Safari, A. Haghparast, S. Semnanian, A. Ahmadiani

The 5th Congress of Federation of Asian and Oceanian Neuroscience Societies (FAONS), Lucknow, India November 25-28, 2010

- Role of Orexin-A receptors within the Locus Coeruleus in antinociception induced by microinjection of carbachol into the lateral hypothalamus

M.S. Safari, A. Haghparast, S. Semnanian, A. Ahmadiani

- The Orexin-1 receptor antagonist SB-334867 attenuates signs of naloxone precipitated morphine withdrawal in rats

H. Azizi, S. Semnanian, J. Mirnajafizadeh, K. Rohampour, H. Azhdari

- Orexin-A modulated pain through the rostral ventromedial medulla

H. Azhdari, S. Semnanian, Y. Fathollahi, E. Erami

8th IBRO world congress of neuroscience, Florence, Italy, July 14-18, 2011

- Orexin-A potentiates excitatory synaptic transmission to the locus coeruleus neurons

H. Azizi, S. Semnanian, S.J. Mirnajafi-Zadeh, K. Rohampour & H. Azhdari Zarmehri

- Studying the effect of cyclic AMP on the symptoms of EAE model of multiple sclerosis and

myelin repair by neural stem cells in mice

S. Khezri, M. Javan, S. Semnanian & H. Baharvand

- Nogo receptor knockdown in EAE-mice potentiates myelin repair by mobilizing endogenous

neural stem cells

M. Javan, S. Khezri, S. Semnanian & H. Baharvand

- Amygdala kindling causes robust alterations in the intrinsic electrophysiological properties

of hippocampal CA1 pyramidal neurons in brain slices

Z. Ghotbeddin, J. Mirnajafizadeh, S. Semnanian, M. Janahmadi & M. Haghani

- Antinociceptive and anti-inflammatory activities of essential oil of nepeta crispa in experimental

rat models

T. Ali1, M. Javan, A. Sonboli, S. Semnanian & N. Begum

- The interaction between orexin and cannabinoid systems in locus coeruleus on pain modulation

M.S. Safari, A. Haghparast, A. Ahmadiani & S. Semnanian

- Orexin-A modulated pain through the brain stem

H. Azhdari Zarmehri, S. Semnanian, Y. Fathollahi & E. Erami

7th FAOPS congress, Taipei, Taiwan, Sept 11-14, 2011

- Low frequency stimulation prevent alterations in the electrophysiological properties of hippocampal ca1 pyramidal neurons induced by amygdala kindling

Zohre Ghotbeddin, Javad MirNajafizadeh, Saeed Semnanian, Masoud Haghani, Mahyar Janahmadi

- Localization of the brain stem antinociceptive effects of orexin-A on formalin induced nociceptive behaviors

Hassan Azhdari, Saeed Semnanian, Yaghoub Fathollahi, Elaheh Erami, Firouz Ghaderi

20th Iranian Physiology and Pharmacology congress 10-14 Oct 2011, Hamedan, Iran

- Effects of morphine induced preconditioning on arrhythmias during reperfusion period in isolated rat heart

Sohrab Hajizadeh, Saeed Semnanian, Khalil Pourkhalili, Bita Hooshmand Fini, Gholamreza Bayat, Fatemeh Safari, Firoozeh Alavian

-Voluntary exercise ameliorates cognitive deficits in morphine dependent rats: The role of hippocampal brain-derived neurotrophic factor
Hossein Miladi-Gorji, Ali Rashidy-Pour, Yaghoub Fathollahi, Maziar M. Akhavan, Saeed Semnanian, Manouchehr Safari

- Orexin-a postsynaptically increases excitatory synaptic transmission to the locus coeruleus neurons
Saeed Semnanian, Kambiz Rohampour, Seyed Javad Mirnajafi-Zadeh, Hassan Azhdari Zarmehri

-Low frequency stimulations prevent amygdala kindling-induced neuronal hyperexcitability in CA1 pyramidal neurons possibly through inhibition of ih potassium channels
Zohre Ghotbeddin, Masoud Haghani, Javad MirNajafi-Zadeh, Saeed Semnanian, Mahyar Janahmadi

-Evaluation of physiology and pharmacology situation and planning for future
Narges Hosseinmardi, Saeed Semnanian, Fereshteh Pourabdolhossein, Samaneh Dehghan, Mehdi Sadegh

-Nogo receptor knockdown in EAE-induced mice
Shiva Khezri, Mohammad Javan, Hossein Baharvand, Saeed Semnanian

-Orexin type-1 receptor contributes to tolerance development to antinociceptive effect of morphine in rats
Saeed Semnanian, Yaghoub Fathollahi, Hossein Azizi

-Tolerance to anti-nociceptive effects of sodium-salicylate and morphine, decreases adenosine deaminase activity in the rat hippocampus
Mehdi Sadegh, Yaghoub Fathollahi, Mohammad Javan, Saeed Semnanian, Nasser Naghdi

-Potentiation of the glutamatergic synaptic input to rat locus coeruleus neurons by astrocytic P2X7 receptors
Roghaieh Khakpay, Thomas Riedel, Laszlo Kles, Kerstin Wirkner, Peter Illes, Saeed Semnanian

Australian Neuroscience Society Annual Meeting • Melbourne • 3 - 6 February 2013

- Orexin receptor type 1 blockade attenuates the spontaneous activity of lpgi neurons during naloxone-precipitated morphine withdrawal syndrome in rats
Ahmadi Soleimani M., Azizi H., Ghaemi M. and Semnanian S.

- Orexin type-1 receptor mediates the development of tolerance to morphine in lateral paragigantocellularis nucleus
Ghaemi Jandabi M., Azizi H., Ahmadi Soleimani S.M. and Semnanian S.

**21st International Iranian Congress of Physiology and Pharmacology
23-27 August, Tabriz, Iran**

- The effect of orexin receptor type 1 in locus coeruleus neurons on development of morphine dependency in rats: A behavioral study
Yousuf Mousavi, Javad Mirnajafi-Zadeh, Mohammad Javan, Saeed Semnanian
- Orexin type 1 receptor blockade in Lateral Paragigantocellularis nucleus attenuates naloxone precipitated morphine withdrawal symptoms in rats
S.M Ahmadi Soleimani, Masoumeh Ghaemi Jandabi, Hossein Azizi, Saeed Semnanian
- The effect of orexin and SB334867 administration into nucleus Locus coeruleus on pain induction by formalin
Hossein Mohammad pour Kargar, S. Javad Mirnajafizadeh, Ali R. Mani, Saeed Semnanian
- The role of hepatic branch of vagus nerve in development of endotoxin tolerance in rats
Golnar Eftekhari, Khalil Hajiasgharzadeh, Saeed Semnanian, Ali R Mani
- The effect of repeated transcranial magnetic stimulations during amygdala kindling on passive intrinsic electrophysiological properties of CA1 pyramidal neurons of the hippocampus in rats
Amir Shojaei, Saeed Semnanian, Mahyar Janahmadi, Homeyra Moradi, Sayyed Mohammad Firoozabadi, Javad Mirnajafi-Zadeh

**The 6th FAONS congress & the 11th Biennial congress of CNS
Sept 20-23 2015, Wuzhen, China**

- Involvement of Paragigantocellularis neurons in opiate withdrawal-induced hyperactivity of rat Locus Coeruleus neurons: an electrophysiological study
A. Kaeidi., H. Azizi, S.M. Ahmadi Soleimani, M. Javan, Y. Fathollahi, S. Semnanian

**The Journal of Physiological Sciences Proceedings of the 8th Congress
of FAOPS, Nov 22-25, 2015, Bangkok, Thailand**

- Symposium 16: Orexinergic mechanisms in drug addiction and pain modulation

Saeed Semnanian, Hossein Azizi, H. Mohammad pour Karegar, Y. Mousavi, H. Abdollahi, Y. Ranjbar

- Effect of low frequency stimulation on seizure-induced impairment in synaptic potentiation of hippocampal slices of kindled rats
S. Ghafouri, S. Semnanian, A. Shojaei, J. Mirnajafi-zadeh

16th World Congress on Pain, 26-30 Sept 2016, Yokohama, Japan

- The role of nucleus locus coeruleus CB1 cannabinoid receptors in orexin induced analgesia in rats: Behavioral and electrophysiological study
H. Mohammad- Pour Kargar, H. Azizi, J. Mirnajafi-Zadeh, S. Semnanian

5th Neuroscience Congress, 2016, Tehran

- Opiate Exposure in Male Adolescent Rats Increases Naloxone Induced Morphine Withdrawal Sign and Conditioned Place Aversion in Offspring
Maryam Azadi, Hossein Azizi, Saeed Semnanian

- Morphine exposure in adolescent rats facilitates the development of morphine tolerance during adulthood
Hamed Salmanzadeh, Hossein Azizi, Saeed Semnanian

10th Annual International Addiction Science Congress, 2016, Tehran

- The effect of paternal morphine exposure during adolescence on ventral tegmental area dopamine neuron activity and morphine conditioned place preference on male offspring
Maryam Azadi, Dr. Hossein Azizi, Dr. Abbas Haghparast, Dr. Saeed Semnanian

- Adolescent morphine exposure increases physical dependence to morphine during adulthood
Hamed Salmanzadeh, Hossein Azizi, Saeed Semnanian

12th International Addiction Science Congress (ASC) September 5-7, 2018, Tehran

Title of panel: Attention and Decision Making Problems in Addiction: From Animal Models to Cognitive Interventions in the Clinics

Chair: Saeed Semnanian MD PhD

Secretary: Hossein Azizi PhD

- Opiate exposure during adolescence induces long-lasting cognitive disorders

National journal articles:
65 articles published in Iranian Journals in Persian.

International journal articles:

- 1- The effect of Locus Coeruleus lesioning on tonic pain,
Dashti M., Semnanian S.
Medical journal of the Islamic Republic of Iran, May 1994, (18)1.
- 2- The effect of clonidine on chorda tympani neural response to salt and sweet tastes in the rat
M. Kesmati, M.S. Nejad, S. Semnanian
Iranian Journal of Medical Sciences, Vol. 21, No 3&4 Dec 1996
- 3- Effect of reversible inactivation of the medial septal area on long term potentiation and recurrent inhibition of hippocampal population spikes in rats.
Rashidi-pour A., Motamedi F., Semnanian S., Zarrindast M.R.,
Brain Research, 734 (1996) 43-48.
- 4- Repeated administration of pentylentetrazole alters susceptibility of rat CA1 hippocampus primed-burst stimulation: evidence from in vitro study on hippocampal slices.
Fathollahi Y., Motamedi F., Semnanian S., Zartoshti M.
Brain Research, 738 (1996), 138-141.
- 5- Involvement of GABA-B receptors in the antinociception induced by baclofen in the formalin test.
Semnanian S., Zarrindast M.R., Shafizadeh M., Hashemi.
General Pharmacology, 28(4), 611-615, 1997.
- 6- Involvement of supraspinal alpha-adrenergic receptors in tonic pain.
Semnanian S., Hajsayah S., Zarrindast M.R.
Medical Journal of the Islamic Republic of Iran, 10(4), 1997.
- 7- Altered synaptic transmission in hippocampus of pentylentetrazole kindled rats: evidence from in vitro study on hippocampal slices.
Fathollahi Y., Motamedi F., Semnanian S., Zartoshti M.
Brain Research, 1997.
- 8- Examination of persistent effects of repeated administration of pentylentetrazole on rat hippocampal CA1: evidence from in vitro study on hippocampal slices.
Fathollahi Y., Motamedi F., Semnanian S., Zartoshti M.
Brain Research, 758, 1-2 1997.
- 9- Augmentation of LTP induced by primed-burst titanic stimulation in hippocampal CA1 area of morphine dependent rats.
Mansouri F., Motamedi F., Fathollahi Y., Atapour N., Semnanian S.
Brain Research, 769, 1997.

- 10- Antinociceptive effects of *Trigonella foenum-graecum* leaves extract.
Javan M., Ahmadiani A., Semnianian S., Kamalinejad.
Ethnopharmacology, 58, 1977.
- 11- The role of the noradrenergic system in electrical stimulation-induced analgesia
S. Semnianian, F. Motamedi
Medical Journal of the Islamic Republic of Iran, 11-3, 1997, 219-222
- 12- Influences of different adrenoceptor agonists and antagonists on apomorphine-induced climbing in mice.
Shafizadeh M., Semnianian S., Zarrindast M., Fathollahi Y.
Pharmacology, Biochemistry & Behavior, 1998.
- 13- Involvement of NMDA receptors and voltage-dependent calcium channels on augmentation of Long Term Potentiation in hippocampal CA1 area of morphine dependent rats.
Pourmotabbed, Motamedi F., Fathollahi Y., Mansouri F., Semnianian S.
Brain Research, 804, 1998.
- 14- Neurite outgrowth of dorsal root ganglia is delayed and arrested by aspirin.
Sabouni, Firoozi, Taghikhani M., Ziaee, Semnianian S.
Biochemical & Biophysical Research Communication, 248, 165-167 (1998).
- 15- Antinociceptive and anti-inflammatory effects of *Sambucus ebulus* rhizome extract in rats.
Ahmadiani A., Fereidoni M., Semnianian S., Kamalinejad M., Saremi S.
Journal of Ethnopharmacology 61, 1998.
- 16- Influence of different adrenoceptor agonists and antagonists on physostigmine-induced yawning in rats.
Zarrindast M. Fazl Tabaei S., Semnianian S., Fathollahi Y.
Pharmacology, Biochemistry & Behavior. 1998.
- 17- Morphine tolerance and dependence in the nucleus paragigantocellularis: single unit recording study in vivo.
Haghparast A., Semnianian S., Fathollahi Y.
Brain Res. 1998 Dec 14;814(1-2):71-7
- 18- Effects of adrenoceptor agents on apomorphine licking behavior in rats
Zarrindast M. Fazl Tabaei S., Semnianian S., Fathollahi Y., Yahyavi S.H.
Pharmacology Biochemistry & Behavior, 65-2, pp. 275-279, 2000.
- 19- Primed-burst potentiation occludes the potentiation phenomenon and enhances the epileptiform activity induced by transient pentylentetrazole in the CA1 region of rat hippocampal slices.
Omrani A., Fathollahi Y., Mohajerani H.R., Semnianian S.
Brain Research, 877(2):176-183, 2000.

- 20- Differential effect of dark rearing on long-term potentiation induced by layer IV and white matter stimulation in rat visual cortex.
Salami M., Fathollahi Y., Semnianian S., Atapour N.
Neuroscience Research, 2000.
- 21- Antinociceptive and anti-inflammatory effects of *Elaeagnus angustifolia* fruit extract.
Journal of Ethnopharmacology 72 (2000) 287-292.
- 22- Systemic naloxone enhances cerebral blood flow in anesthetized morphine-dependent rats.
Zamani R., Semnianian S., Fathollahi Y., Hajizadeh S.
European Journal of Pharmacology 408 (2000) 299-304.
- 23- An accurate and simple method for measurement of paw edema
Fereidoni M., Ahmadiani A., Semnianian S., Javan M.
Journal of Pharmacological and Toxicological Methods 43 (2000) 11-14.
- 24- Influences of different adrenoceptor agonists and antagonists on amphetamine-induced climbing in mice.
Shafizadeh M., Zarrindast M., Fathollahi Y., Semnianian S.
Medical Journal of the Islamic Republic of Iran 14 (3) 2000
- 25- Occurrence of morphine tolerance and dependence in the nucleus paragigantocellularis neurons.
Saeipour M., Semnianian S., Fathollahi Y.
European Journal of Pharmacology 411 (2001) 85-92.
- 26- Anti-inflammatory and antipyretic effects of *Trigonella foenum-graecum* leaves extract in the rat.
Ahmadiani A., Javan M., Semnianian S., Barat E., Kamalinejad M.
Journal of Ethnopharmacology 75 (2001) 283-286.
- 27- Differential effects of pentylenetetrazole-kindling on long-term potentiation of population excitatory postsynaptic potentials and population spikes in the CA1 region of rat hippocampus.
Palizvan M. Fathollahi Y., Semnianian S., Hajizadeh S., Mirnajafizadeh J.
Brain Research 898(2001)82-90.
- 28- Caffeine increases Paragigantocellularis neuronal firing rate and induces withdrawal signs in morphine-dependent rats.
Khalili M., Semnianian S., Fathollahi Y.
European Journal of Pharmacology (2001).
- 29- Effects of formalin as a peripheral noxious stimulus on the nucleus reticularis paragigantocellularis neurons of anesthetized rats.
N. Gheibi. S. Semnianian, Y. Fathollahi
Medical Journal of the Islamic Republic of Iran 15(2) 2001.

- 30- Intrahippocampal injections of Thyrotropin-releasing hormone (TRH) facilitate trace conditioning of the rabbit's eyeblink response.
Zarifkar A., Oryan S., Semnianian S.
Iranian International Journal of Science 3(1). 2002. 1-10.
- 31- Formalin as a peripheral noxious stimulus causes a biphasic response in nucleus paragigantocellularis neurons.
E. Soleiman-Nejad, Y. Fathollahi, S. Semnianian
Medical Journal of the Islamic Republic of Iran, 15(4), 2002. 231-237.
- 32- Cysteamine pre-treatment reduces pentylentetrazole-induced plasticity and epileptiform discharge in the CA1 region of rat hippocampal slices.
M. Rostampour, Y. Fathollahi, S. Semnianian, S. Hajizadeh, J. Mirnajafizadeh, M. Shafizadeh.
Brain Research 955 (2002) 98-103.
- 33- The ability of hippocampal CA1 area for induction of long-term potentiation is persistently reduced by prior treatment with cysteamine: an in vitro study.
M. Rostampour, Y. Fathollahi, S. Semnianian, S. Hajizadeh, J. Mirnajafizadeh, M. Shafizadeh.
Neuropeptides (2002) 36 (4), 263-270
- 34- Intrahippocampal Injections of Thyrotropin-Releasing hormone (TRH) facilitates conditioning of the rabbit eyeblink response.
Zarifkar A., Oryan S., Semnianian S.
Iranian Int. J. Sci. 3(1), 2002, 1-10
- 35- Synthesis and evaluation of pharmacological activities of 3, 5-dialkyl 1, 4-dihydro-2,6-dimethyl-4-nitroimidazole-3, 5-pyridine dicarboxylates.
Miri R, Javidnia K, Kebriaie-Zadeh A, Niknahad H, Shaygani N, Semnianian S, Shafiee A.
Arch Pharm (Weinheim). 2003 Sep;336(9):422-8.
- 36- Dependence on morphine leads to a prominent sharing among the different mechanisms of long-term potentiation in the CA1 region of rat hippocampus
F. Salmanzadeh, Y. Fathollahi, S. Semnianian, M. Shafizadeh, A. Kazemnejad
Brain Research 963 (2003) 93-100.
- 37- Dependence on morphine impairs the induction of long-term potentiation in the CA1 region of rat hippocampal slices
F. Salmanzadeh, Y. Fathollahi S. Semnianian M. Shafizadeh
Brain Research 965 (2003), 108-113
- 38- Long term potentiation as an electrophysiological assay for morphine dependence and withdrawal in rats: an in vitro study
F. Salmanzadeh, Y. Fathollahi, S. Semnianian, M. Shafizadeh
Journal of Neuroscience Methods 124 (2003) 189-196

- 39- In vivo measurement of noradrenaline in the locus coeruleus of rats during the formalin test: A microdialysis study
Sajedianfard J., Khatami S., Semnanian S., Naghdi N., Jorjani M.
European Journal of Pharmacology 512 (2005) 153-156
- 40- Epileptogenic insult causes a shift in the form of long-term potentiation expression
M. R. Palizvan, Y. Fathollahi, S. Semnanian
Neuroscience 134 (2005) 415-423
- 41- Cerebral blood flow regulations in anesthetized morphine dependent rats: The role of the adenosine system
M. Zahedi, S. Hajizadeh, S. Semnanian, Y. Fathollahi
Medical Journal of Islamic Republic of Iran Feb 2005 18-4 353-359
- 42- Microinjection of ritanserine into the dorsal hippocampal CA1 and dentate gyrus decrease nociception behavior in adult male rat
Soleimannejad E., Semnanian S., Fathollahi Y., Naghdi N.
Behav Brain Res. 2006 Apr 3; 168(2):221-5
- 43- Interaction of adenosine and naloxone on regional cerebral blood flow in morphine-dependent rats.
Khorasani MZ, Hajizadeh S, Fathollahi Y, Semnanian S.
Brain Res. 2006 Apr 21; 1084(1):61-6.
- 44- Antinociceptive effect of intra-hippocampal CA1 and dentate gyrus injection of MK801 and AP5 in the formalin test in adult male rats.
Soleimannejad E, Naghdi N, Semnanian S, Fathollahi Y, Kazemnejad A.
Eur J Pharmacol. 2007 May 7;562 (1-2):39-46.
- 45- Additive effect of dextromethorphan on the inhibitory effect of anti-NT4 on morphine tolerance.
Hatami H, Oryan S, Semnanian S, Kazemi B, Ahmadiani A.
Pharmacology. 2006;78(3):105-12.
- 46- Alterations of BDNF and NT-3 genes expression in the nucleus paragigantocellularis during morphine dependency and withdrawal
Homeira Hatami, Shahrbanoo Oryan, Saeed Semnanian, Bahram Kazemi, Mojgan Bandepour, Abolhassan Ahmadiani
Neuropeptides 41 (2007) 321–328
- 47- Administration of corticosterone after memory reactivation disrupts subsequent retrieval of a contextual conditioned fear memory: Dependence upon training intensity.
Abrari K, Rashidy-Pour A, Semnanian S, Fathollahi Y.
Neurobiol Learn Mem. 2007 Aug 14
- 48- Chronic forced swim stress inhibits ultra-low dose morphine-induced hyperalgesia in rats.

Fereidoni M, Javan M, Semnanian S, Ahmadiani A.
Behav Pharmacol. 2007 Nov;18(7):667-72.

49- Post-training administration of corticosterone enhances consolidation of contextual fear memory and hippocampal long-term potentiation in rats.
Abrari K, Rashidy-Pour A, Semnanian S, Fathollahi Y, Jadid M.
Neurobiol Learn Mem. 2009 Mar;91(3):260-5.

50- Morphine dependence increases the response to a brief pentylenetetrazol administration in rat hippocampal CA1 in vitro
Zakaria Jafarzadeh, Yaghoub Fathollahi, Saeed Semnanian, Azar Omrani, Feresteh Salmanzadeh, and Mahmoud Elahdadi Salmani
Epilepsia. 2009 Apr;50(4):789-800.

51- Effect of lidocaine administration at the nucleus locus coeruleus level on lateral hypothalamus-induced antinociception in the rat.
Safari MS, Haghparast A, Semnanian S.
Pharmacol Biochem Behav. 2009 Jun;92(4):629-34.

52- Antagonism of Orexin Type 1 Receptors in the Locus Coeruleus Attenuates Signs of Naloxone-Precipitated Morphine Withdrawal in Rats.
Azizi H, Mirnajafi-Zadeh J, Rohampour K, Semnanian S.
Neurosci Lett. 2010 Oct 4;482(3):255-9

53- Epileptogenic insult alters endogenous adenosine control on long-term changes in synaptic strength by theta pattern stimulation in hippocampus area CA1.
Salmani ME, Fathollahi Y, Mirnajafizadeh J, Semnanian S.
Synapse. 2010 Jul 27.

54- The effect of intra-locus coeruleus injection of 17beta-estradiol on inflammatory pain modulation in male rat.
Khakpay R, Semnanian S, Javan M, Janahmadi M.
Behavioural Brain Research 214 (2010) 409–416

55- Curcuminoids rescue LTP impaired by amyloid peptide in rat hippocampal slices
T Ahmed, AH Gilani, N Hosseinmardi, S Semnanian, S A Enam, Y Fathollahi
Synapse 65:572-582 (2010)

56- Formalin pain increases the concentration of serotonin and its 5-hydroxyindoleacetic acid metabolite in the CA1 region of hippocampus
Soleimannejad E., Naghdi N., Khatami Sh., Semnanian S., Fathollahi Y.
DARU Vol. 18, No. 1 2010

57- Intra-Periaqueductal Gray Matter Microinjection of Orexin-A Decreases Formalin-Induced Nociceptive Behaviors in Adult Male

Rats

Hassan Azhdari Zarmehri, Saeed Semnianian, Yaghoub Fathollahi, Elaheh Erami, Roghaieh Khakpay, Hossein Azizi, Kambiz Rohampour
The Journal of Pain, Vol 12, No 2 (February), 2011: pp 280-287

58- Voluntary exercise ameliorates cognitive deficits in morphine dependent rats: The role of hippocampal brain-derived neurotrophic factor Hossein Miladi-Gorji, Ali Rashidy-Pour, Yaghoub Fathollahi, Maziar M. Akhavan, Saeed Semnianian, Manouchehr Safari
Neurobiology of Learning and Memory, 96(2011), 479-491

59- Antinociceptive and anti-inflammatory activities of the essential oil of *Nepeta crispa* Willd. in experimental rat models.
Ali T, Javan M, Sonboli A, Semnianian S.
Nat Prod Res. 2011 Oct 10.

60- Examining the effect of the CaMKII inhibitor administration in the locus coeruleus on the naloxone-precipitated morphine withdrawal signs in rats.
Navidhamidi M, Semnianian S, Javan M, Goudarzvand M, Rohampour K, Azizi H.
Behavioural Brain Research 226 (2012) 440– 444

61- Orexin receptor type-1 antagonist SB-334867 inhibits the development of morphine analgesic tolerance in rats.
Ranjbar-Slamloo Y, Azizi H, Fathollahi Y, Semnianian S.
Peptides. 2012 May;35(1):56-9.

62- Height-dependent difference in the expression of naloxone-induced withdrawal jumping behavior in morphine dependent rats.
Azizi H, Ranjbar-Slamloo Y, Semnianian S.
Neurosci Lett. 2012 May 2;515(2):174-6.

63- Intra-paragigantocellularis lateralis injection of orexin-A has an antinociceptive effect on hot plate and formalin tests in rat.
Erami E, Azhdari Zarmehri H, Ghasemi E, Esmaeili MH, Semnianian S.
Brain Res. Brain Res. 2012 Oct 10;1478:16-23.

64- Blockade of orexin receptor 1 attenuates the development of morphine tolerance and physical dependence in rats.
Erami E, Azhdari-Zarmehri H, Rahmani A, Ghasemi-Dashkhasan E, Semnianian S, Haghparast A.
Pharmacol Biochem Behav. 2012 Aug 27;103(2):212-219

65- Evaluation of the antinociceptive and anti-inflammatory effects of essential oil of *Nepeta pogonosperma* Jamzad et Assadi in rats
Ali, T., Javan, M., Sonboli, A., Semnianian, S.
DARU, Journal of Pharmaceutical Sciences 20 (1) , art. no. 48

66- Electrical low frequency stimulation of the kindling site preserves the electrophysiological properties of the rat hippocampal CA1 pyramidal neurons from the destructive effects of amygdala kindling: The basis for a possible promising epilepsy therapy

Ghotbedin, Z., Janahmadi, M., Mirnajafi-Zadeh, J., Behzadi, G., Semnanian, S. Brain Stimul. 2013 Jul;6(4):515-23

67- Dibutyryl Cyclic AMP Inhibits the Progression of Experimental Autoimmune Encephalomyelitis and Potentiates Recruitment of Endogenous Neural Stem Cells.

Khezri S, Javan M, Goudarzvand M, Semnanian S, Baharvand H. J Mol Neurosci. 2013 Oct;51(2):298-306

68- Morphine deteriorates spatial memory in sodium salicylate treated rats.

Sadegh M, Fathollahi Y, Naghdi N, Semnanian S.

Eur J Pharmacol. 2013, 704(1-3):1-6.

69- The chronic treatment in vivo of salicylate or morphine alters excitatory effects of subsequent salicylate or morphine tests in vitro in hippocampus area CA1.

Sadegh M, Fathollahi Y, Semnanian S.

Eur J Pharmacol. 2013 Oct 3

70- Circuitry underlying orexin-A induced analgesia in the rostral ventromedial medulla

Hassan Azhdari-Zarmehri, Saeed Semnanian, Yaghoub Fathollahi, Firouz Ghaderi Pakdel

The Cell (Yakhteh) Vol:16, No.2 1393 summer

71- Tail flick modification of orexin-A induced changes of electrophysiological parameters in the rostral ventromedial medulla.

Azhdari-Zarmehri H, Semnanian S, Fathollahi Y, Pakdel FG.

Cell J. 2014 Summer; 16(2):131-40. 2014.

72- Blockade of orexin type-1 receptors in locus coeruleus nucleus attenuates the development of morphine dependency in rats.

Mousavi Y, Azizi H, Mirnajafi-Zadeh J, Javan M, Semnanian S.

Neurosci Lett. 578, 2014, 90-94.

73- Combined sub-threshold dosages of phenobarbital and low-frequency stimulation effectively reduce seizures in amygdala-kindled rats.

Asgari A, Semnanian S, Atapour N, Shojaei A, Moradi H, Mirnajafi-Zadeh J.

Neurol Sci. 2014

74- Orexin-A microinjection into the rostral ventromedial medulla causes antinociception on formalin test.

Azhdari-Zarmehri H, Semnanian S, Fathollahi Y.

Pharmacol Biochem Behav. 2014 Jul

75- Orexin type 1 receptor antagonism in Lateral Paragigantocellularis nucleus attenuates naloxone precipitated morphine withdrawal symptoms in rats.
Ahmadi-Soleimani SM, Ghaemi-Jandabi M, Azizi H, Semnian S.
Neurosci Lett. 2014

76- Effects of voluntary exercise on hippocampal long-term potentiation in morphine-dependent rats.
Miladi-Gorji H, Rashidy-Pour A, Fathollahi Y, Semnian S, Jadidi M.
Neuroscience. 2014

77- Combined sub-threshold dosages of phenobarbital and low-frequency stimulation effectively reduce seizures in amygdala-kindled rats
Azam Asgari, Saeed Semnian, Nafiseh Atapour, Amir Shojaei, Homeira Moradi, Javad Mirnajafi-Zadeh
Neurol Sci (2014) 35:1255–1260

78- Activation of central muscarinic receptor type1 prevents development of endotoxin tolerance in rat liver
Golnar Eftekhari, Khalil Hajiasgharzadeh, S. Mohammad Ahmadi-Soleimani, Ahmad R. Dehpour, Saeed Semnian, Al iR. Mani
European Journal of Pharmacology 740(2014) 436–441

79- Effect of low frequency repetitive transcranial magnetic stimulation on kindling-induced changes in electrophysiological properties of rat CA1 pyramidal neurons.
Chameh HM, Janahmadi M, Semnian S, Shojaei A, Mirnajafi-Zadeh J.
Brain Res. 2015 Feb 24.

80- Repeated transcranial magnetic stimulation prevents kindling-induced changes in electrophysiological properties of rat hippocampal CA1 pyramidal neurons.
Shojaei A, Semnian S, Janahmadi M, Moradi-Chameh H, Firoozabadi SM, Mirnajafi-Zadeh J.
Neuroscience. 2014 Nov 7;280:181-92

81- Blockade of orexin type 1 receptors inhibits the development of morphine tolerance in lateral paragigantocellularis nucleus: an electrophysiological approach.
Ghaemi-Jandabi M, Azizi H, Semnian S.
Brain Res. 2014 Aug 26;1578:14-22.

82- In vitro differentiation of neural stem cells into noradrenergic-like cells.
Pirhajati Mahabadi V, Movahedin M, Semnian S, Mirnajafi-Zadeh J, Faizi M.

Int J Mol Cell Med. 2015 Winter;4(1):22-31.

83- Direct Facilitatory Role of Paragigantocellularis Neurons in Opiate Withdrawal-Induced Hyperactivity of Rat Locus Coeruleus Neurons: An In Vitro Study

Ayat Kaeidi, Hossein Azizi, Mohammad Javan, S. Mohammad Ahmadi Soleimani, Yaghoob Fathollahi, Saeed Semnanian
PLoS ONE 10(7): e0134873. doi:10.1371/journal.pone.0134873
July 31, 2015

84- Chronic sodium salicylate administration enhances population spike long-term potentiation following a combination of the theta frequency primed-burst stimulation and the transient application of pentylentetrazol in rat CA1 hippocampal neurons

Masoumeh Gholami, Farshad Moradpour, Saeed Semnanian, Nasser Naghdi, Yaghoob Fathollahi
European Journal of Pharmacology 767 (2015) 165–174

85- Effects of low frequency stimulation on spontaneous inhibitory and excitatory post-synaptic currents in hippocampal CA1 pyramidal cells of kindled rats"

Cell Journal (Yakhteh) Vol: 18 , No:4 Winter 95
S. Ghafouri, Y. Fathollahi, S. Semnanian, A. Shojaei, S.J. Mirnajafi-zadeh

86- Low-frequency electrical stimulation enhances the effectiveness of phenobarbital on GABAergic currents in hippocampal slices of kindled rats. Asgari, Semnanian, Atapour, Shojaei, Moradi-Chameh, Ghafouri, Sheibani, Mirnajafi-Zadeh.

Neuroscience. 2016 May 26.

87- The blockade of GABAA receptors attenuates the inhibitory effect of orexin type 1 receptors antagonist on morphine withdrawal syndrome in rats.

Davoudi M, Azizi H, Mirnajafi-Zadeh J, Semnanian S.
Neurosci Lett. 2016 Feb 12;617:201-206.

88- Microinjection of orexin-A into the rat locus coeruleus nucleus induces analgesia via cannabinoid type-1 receptors.

Kargar HM, Azizi H, Mirnajafi-Zadeh J, Reza MA, Semnanian S.
Brain Res. 2015 Oct 22;1624:424-32

89- Orexin-a modulates firing of rat rostral ventromedial medulla neurons: an in vitro study.

Azhdari-Zarmehri H, Semnanian S, Fathollahi Y.
Cell J. 2015 Spring;17(1):163-70.

90- The role of orexin type-1 receptors in the development of morphine tolerance in locus coeruleus neurons: An electrophysiological perspective.
Abdollahi H, Ghaemi-Jandabi M, Azizi H, Semnanian S.
Brain Res. 2016 May 25. pii: S0006-8993(16)30406-1. doi:
10.1016/j.brainres.2016.05.043

91- Postnatal development changes in excitatory synaptic activity in the rat locus coeruleus neurons.
Arami MK, Hajizadeh S, Semnanian S.
Brain Res. 2016 Oct 1;1648(Pt A):365-71. doi:

92- Effects of 3 Hz and 60 Hz Extremely Low Frequency Electromagnetic Fields on Anxiety-Like Behaviors, Memory Retention of Passive Avoidance and Electrophysiological Properties of Male Rats.
Rostami A, Shahani M, Zarrindast MR, Semnanian S, Rahmati Roudsari M, Rezaei Tavirani M, Hasanzadeh H.
J Lasers Med Sci. 2016 Spring;7(2):120-5. doi.

93- Intra-LC microinjection of orexin type-1 receptor antagonist SB-334867 attenuates the expression of glutamate-induced opiate withdrawal like signs during the active phase in rats.
Bitra Hooshmand, Hossein Azizi, Mohammad Javan, Saeed Semnanian
Neuroscience Letters 636 (2017) 276–281

94- Effects of low frequency stimulation on spontaneous inhibitory and excitatory post-synaptic currents in hippocampal ca1 pyramidal cells of kindled rats.
Ghafouri S, Fathollahi Y, Semnanian S, Shojaei A, Mirnajafi-Zadeh J.
Cell J. 2017 Winter;18(4):547-555.

95- Intracoerulear microinjection of orexin-A induces morphine withdrawal-like signs in rats.
Ghaemi-Jandabi M, Azizi H, Ahmadi-Soleimani SM, Semnanian S.
Brain Res Bull. 2017 ;130:107-111

96- Peripheral nerve injury potentiates excitatory synaptic transmission in locus coeruleus neurons.
Rohampour K, Azizi H, Fathollahi Y, Semnanian S.
Brain Res Bull. 2017;130:112-117.

- 97- Adolescent chronic escalating morphine administration induces long lasting changes in tolerance and dependence to morphine in rats
Hamed Salmanzadeh, Hossein Azizi, Saeed Semnanian
Physiology & Behavior, Volume 174, 2017, Pages 191–196
- 98- Enhancement of μ -opioid receptor desensitization by orexin-A in rat locus coeruleus neurons.
Mohammad Ahmadi Soleimani S, Azizi H, Pachenari N, Mirnajafi-Zadeh J, Semnanian S.
Neuropeptides. 2017 Mar 23. pii: S0143-4179(16)30212-8.
- 99- Role of orexin type-1 receptors in paraventricular-coerulear modulation of opioid withdrawal and tolerance: A site specific focus
S. Mohammad Ahmadi-Soleimani, Hossein Azizi, Heinrich S. Gompf, Saeed Semnanian
Neuropharmacology 126 (2017) 25-37
- 100- Central antagonism of orexin type-1 receptors attenuates the development of morphine dependence in rat locus coeruleus neurons.
Fakhari M, Azizi H, Semnanian S.
Neuroscience. 2017 Nov 5;363:1-10. doi: 10.1016/j.neuroscience.2017.08.054. Epub 2017 Sep 6.
- 101- Chronic adolescent morphine exposure alters the responses of lateral paraventricular neurons to acute morphine administration in adulthood.
Salmanzadeh H, Azizi H, Ahmadi Soleimani SM, Pachenari N, Semnanian S.
Brain Res Bull. 2017 Dec 12;137:178-186.
- 102- Exposure to opiates in male adolescent rats alters pain perception in the male offspring.
Pachenari N, Azizi H, Ghasemi E, Azadi M, Semnanian S.
Behav Pharmacol. 2018 Apr;29(2 and 3 - Special Issue):255-260.
- 103- Orexin A presynaptically decreases inhibitory synaptic transmission in rat locus coeruleus neurons.
Kargar HM, Azizi H, Mirnajafi-Zadeh J, Mani AR, Semnanian S.
Neurosci Lett. 2018 Sep 14;683:89-93. doi: 10.1016/j.neulet.2018.06.022. Epub 2018 Jun 13.
- 104- Adolescent morphine exposure induces immediate and long-term increases in impulsive behavior

Parisa Moazen, Hossein Azizi, Hamed Salmanzadeh, Saeed Semnanian
Psychopharmacology (Berl). 2018 Dec;235(12):3423-3434

105- Decrease of inhibitory synaptic currents of locus coeruleus neurons via orexin type 1 receptors in the context of naloxone-induced morphine withdrawal.

Davoudi M, Azizi H, Mirnajafi-Zadeh J, Semnanian S.
J Physiol Sci. 2019 Mar;69(2):281-293. doi: 10.1007/s12576-018-0645-1.
Epub 2018 Nov 7.

106- Ca²⁺ Channels Involvement in Low-Frequency Stimulation-Mediated Suppression of Intrinsic Excitability of Hippocampal CA1 Pyramidal Cells in a Rat Amygdala Kindling Model.

Ghotbeddin Z, Heysieattalab S, Borjkhani M, Mirnajafi-Zadeh J, Semnanian S, Hosseinmardi N, Janahmadi M.
Neuroscience. 2019 Mar 16;406:234-248.

107- Synergistic effect of orexin-glutamate co-administration on spontaneous discharge rate of locus coeruleus neurons in morphine-dependent rats

Bitah Hooshmand, Hossein Azizi, S. Mohammad Ahmadi Soleimani, Saeed Semnanian
Neuroscience Letters, 30 April 2019

108- Adolescent Morphine Exposure in Male Rats Alters the Electrophysiological Properties of Locus Coeruleus Neurons of the Male Offspring

Narges Pachenari, Hossein Azizi, Saeed Semnaniann
Neuroscience 410 (2019) 108–117

109- Deep brain stimulation restores the glutamatergic and GABAergic synaptic transmission and plasticity to normal levels in kindled rats.

Ghafouri S, Fathollahi Y, Semnanian S, Shojaei A, Asgari A, Ebrahim Amini A, Mirnajafi-Zadeh J.
PLoS One. 2019 Nov 7;14(11):e0224834. eCollection 2019.

110- Neonatal Sepsis Alters the Excitability of Regular Spiking Cells in the Nucleus of the Solitary Tract in Rats.

Eftekhari G, Shojaei A, Raoufy MR, Azizi H, Semnanian S, Mani A.
Shock. 2019 Oct 15. [Epub ahead of print]

111- PKC inhibitor reversed the suppressive effect of orexin-A on IPSCs of locus coeruleus neurons in naloxone-induced morphine withdrawal.

Davoudi M, Vijeepallam K, Azizi H, Mirnajafi-Zadeh J, Semnanian S.
J Neural Transm (Vienna). 2019 Nov;126(11):1425-1435. Epub 2019 Sep 6

112- "Metformin protects myelin from degeneration in mouse model of lysophosphatidylcholine (LPC)-induced demyelination in optic chiasm
Saman Esmailnejad, Saeed Semnanian, Mohamamd Javan
Cell Journal, "Volume 23, Number 2, Jul-Sep (Summer) 2021 , Serial Number: 90

113- Intracoeular microinjection of orexin-A induces morphine withdrawal-like signs in rats.

Ghaemi-Jandabi M, Azizi H, Ahmadi-Soleimani SM, Semnanian S.
Brain Res Bull. 2017 Apr;130:107-111. doi:
10.1016/j.brainresbull.2017.01.010. Epub 2017 Jan 16.
PMID: 28093335

114- Adolescent morphine exposure increases nociceptive behaviors in rat model of formalin test.

Ghasemi E, Pachenari N, Semnanian S, Azizi H.
Dev Psychobiol. 2019 Mar;61(2):254-260. doi: 10.1002/dev.21790. Epub 2018 Oct 11.
PMID: 30311240

115- Chronic adolescent morphine exposure alters the responses of lateral paraventricular neurons to acute morphine administration in adulthood.

Salmanzadeh H, Azizi H, Ahmadi Soleimani SM, Pachenari N, Semnanian S.
Brain Res Bull. 2018 Mar;137:178-186. doi: 10.1016/j. Brain Res Bull. 2017.12.007. Epub 2017 Dec 12.PMID: 29246865

116- Adolescent morphine exposure induces immediate and long-term increases in impulsive behavior.

Moazen P, Azizi H, Salmanzadeh H, Semnanian S.
Psychopharmacology (Berl). 2018 Dec;235(12):3423-3434. doi:
10.1007/s00213-018-5051-0. Epub 2018 Oct 23.

117- Orexin A presynaptically decreases inhibitory synaptic transmission in rat locus coeruleus neurons.

Kargar HM, Azizi H, Mirnajafi-Zadeh J, Mani AR, Semnanian S.
Neurosci Lett. 2018 Sep 14;683:89-93. doi: 10.1016/j.neulet.2018.06.022. Epub 2018 Jun 13. PMID: 29908258

118- Role of orexin type-1 receptors in paraventricular-coerulear modulation of opioid withdrawal and tolerance: A site specific focus.

Ahmadi-Soleimani SM, Azizi H, Gompf HS, Semnani S.

Neuropharmacology. 2017 Nov;126:25-37. doi:

10.1016/j.neuropharm.2017.08.024. Epub 2017 Aug 18.

PMID: 28826827 Review.

119- Ca²⁺ Channels Involvement in Low-Frequency Stimulation-Mediated Suppression of Intrinsic Excitability of Hippocampal CA1 Pyramidal Cells in a Rat Amygdala Kindling Model.

Ghotbeddin Z, Heysieattalab S, Borjkhani M, Mirnajafi-Zadeh J, Semnani S,

Hosseiniardi N, Janahmadi M. Neuroscience. 2019 May 15;406:234-248. doi:

10.1016/j.neuroscience.2019.03.012. Epub 2019 Mar 16. PMID: 30885638

120- Inhibition of orexin receptor 1 contributes to the development of morphine dependence via attenuation of cAMP response element-binding protein and phospholipase C β 3.

Kourosh-Armani M, Javan M, Semnani S. J Chem Neuroanat. 2020

Oct;108:101801. doi: 10.1016/j.jchemneu.2020.101801. Epub 2020 May

11. PMID: 32404265

121- Maternal deprivation induces persistent adaptations in putative dopamine neurons in rat ventral tegmental area: in vivo electrophysiological study.

Masrouji H, Azadi M, Semnani S, Azizi H. Exp Brain Res. 2020

Oct;238(10):2221-2228. doi: 10.1007/s00221-020-05884-x. Epub 2020 Jul

23. PMID: 32705295

122- Neonatal Sepsis Alters the Excitability of Regular Spiking Cells in the Nucleus of the Solitary Tract in Rats.

Eftekhari G, Shojaei A, Raoufy MR, Azizi H, Semnani S, Mani AR. Shock.

2020 Aug;54(2):265-271. doi:

123- PKC inhibitor reversed the suppressive effect of orexin-A on IPSCs of locus coeruleus neurons in naloxone-induced morphine withdrawal.

Davoudi M, Vijeepallam K, Azizi H, Mirnajafi-Zadeh J, Semnani S. J Neural

Transm (Vienna). 2019 Nov;126(11):1425-1435. doi: 10.1007/s00702-019-

02064-2. Epub 2019 Sep 6.

124- Deep brain stimulation restores the glutamatergic and GABAergic synaptic transmission and plasticity to normal levels in kindled rats.

Ghafouri S, Fathollahi Y, Semnanian S, Shojaei A, Asgari A, Ebrahim Amini A, Mirnajafi-Zadeh J. PLoS One. 2019 Nov 7;14(11):e0224834. doi: 10.1371/journal.pone.0224834. eCollection 2019. PMID: 31697763 Free PMC article.

125- Long-term potentiation enhancing effect of epileptic insult in the CA1 area is dependent on prior-application of primed-burst stimulation.

Gholami M, Hosseinmardi N, Mirnajafi-Zadeh J, Javan M, Semnanian S, Naghdi N, Fathollahi Y. Exp Brain Res. 2020 Apr;238(4):897-903. doi: 10.1007/s00221-020-05766-2. Epub 2020 Mar 12. PMID: 32166345

126- The locus coeruleus noradrenergic system gates deficits in visual attention induced by chronic pain.

Moazen P, Torabi M, Azizi H, Fathollahi Y, Mirnajafi-Zadeh J, Semnanian S. Behav Brain Res. 2020 Jun 1;387:112600. doi: 10.1016/j.bbr.2020.112600. Epub 2020 Mar 18. PMID: 32198106

127- Orexin type-1 receptor inhibition in the rat lateral paraventricular nucleus attenuates development of morphine dependence.

Rezaei Z, Kouros-Arami M, Azizi H, Semnanian S. Neurosci Lett. 2020 Apr 17;724:134875. doi: 10.1016/j.neulet.2020.134875. Epub 2020 Feb 27. PMID: 32114118

128- Metformin Protects Myelin from Degeneration in A Mouse Model of Iyso-phosphatidylcholine-Induced Demyelination in The Optic Chiasm
Saman Esmailnejad, M.Sc.1, Saeed Semnanian, Ph.D.1, Mohammad Javan, Ph.D.1, 2*

119 Cell J, Vol 23, No 1, April-June (Spring) 2021

129- Preconception paternal morphine exposure leads to an impulsive phenotype in male rat progeny

Maryam Azadi, Parisa Moazen, Joost Wiskerke, Saeed Semnanian, Hossein Azizi

Psychopharmacology, <https://doi.org/10.1007/s00213-021-05962-0>

Received: 29 March 2021 / Accepted: 9 August 2021

130- Early life maternal deprivation attenuates morphine induced inhibition in lateral paraventricular neurons in adult rats.

Masrouri H, Azadi M, Semnanian S, Azizi H.

Brain Res Bull. 2021 Apr;169:128-135. doi:

10.1016/j.brainresbull.2021.01.011. Epub 2021 Jan 19.

- 131- Formalin-induced inflammatory pain increases excitability in locus coeruleus neurons.
Farahani F, Azizi H, Janahmadi M, Seutin V, Semnanian S.
Brain Res Bull. 2021 Jul;172:52-60. doi: 10.1016/j.brainresbull.2021.04.002.
Epub 2021 Apr 6.
- 132- Prenatal exposure to morphine impairs attention and impulsivity in adult rats.
Alaee E, Moazen P, Pattij T, Semnanian S, Azizi H.
Psychopharmacology (Berl). 2021 Oct;238(10):2729-2741. doi:
10.1007/s00213-021-05888-7. Epub 2021 Aug 18.
- 133- Circadian rhythm influences naloxone induced morphine withdrawal and neuronal activity of lateral paraventricular nucleus.
Rahmati-Dehkordi F, Ghaemi-Jandabi M, Garmabi B, Semnanian S, Azizi H.
Behav Brain Res. 2021 Sep 24;414:113450. doi: 10.1016/j.bbr.2021.113450.
Epub 2021 Jul 12.
- 134- Central blockade of orexin type 1 receptors reduces naloxone induced activation of locus coeruleus neurons in morphine dependent rats.
Aghajani N, Pourhamzeh M, Azizi H, Semnanian S.
Neurosci Lett. 2021 Jun 11;755:135909. doi: 10.1016/j.neulet.2021.135909.
Epub 2021 Apr 20.
- 135- Paternal preconception exposure to chronic morphine alters respiratory pattern in response to morphine in male offspring.
Azadi M, Aref E, Pazhoohan S, Raoufy MR, Semnanian S, Azizi H.
Respir Physiol Neurobiol. 2022 Feb;296:103811. doi:
10.1016/j.resp.2021.103811. Epub 2021 Nov 2.
- 136- Sex-specific transgenerational effects of adolescent morphine exposure on short-term memory and anxiety behavior: Male lineage.
Azadi M, Zare M, Pachenari N, Shojaei A, Semnanian S, Azizi H.
Neurosci Lett. 2021 Sep 14;761:136111. doi: 10.1016/j.neulet.2021.136111.
Epub 2021 Jul 13.
- 137- Novel Fat Taste Receptor Agonists Curtail Progressive Weight Gain in Obese Male Mice
Amira Sayed Khan, Aziz Hichami, Babar Murtaza, Marie-Laure Louillat-Habermeyer, Christophe Ramseyer, Maryam Azadi, Semen Yesylevskyy, Floriane Mangin, Frederic Lirussi, Julia Leemput, Jean-Francois Merlin, Antonin

Schmitt, Muhtadi Suliman, Jérôme Bayardon, Saeed Semnanian, Sylvain Jugé,
Naim Akhtar Khan
Cell Mol Gastroenterol Hepatol. 2022 Nov 19;S2352-345X(22)00236-3. doi:
10.1016/j.jcmgh.2022.11.003.

Post-Doctoral supervision:

- Dr Hossein Azizi – January 2011
- Dr Masoumeh Koroush Arami 2013
- Dr Narges Pachenari – 2021
- Dr Shiva Hashemizadeh - 2022

Thesis Supervision:

24 MSc and 29PhD, Physiology and Biophysics students.

Books author:

Blood Physiology, 1990, Jihad Daneshgahi (in Persian).
Pain measurement, in: Pains and their treatment, 1994 (in Persian).
Golchin Sher Haj, 2002, Mashar. (in Persian).

Book translation:

Human Physiology & Anatomy, by Solomon, 1992, Bonyad Pub. Co.
Zendegi Salem, Vigh Nashr Publications, 2001

Delegate:

Iranian delegate to the second council of FAOPS, 1994, Shanghai, China
Iranian delegate to the 8th world congress on pain, 1996, Vancouver, Canada
Iranian delegate to the 33rd international congress of physiology (IUPS), 1997,
St. Petersburg, Russia
Iranian delegate to the 9th world congress on pain, 1999, Wien, Austria
Iranian delegate to South Africa, 2000.
Delegate to the 3rd FAONS Congress, 2002, Kuala Lumpur, Malaysia
Iranian delegate to the 11th world congress on pain, 2005, Sydney, Australia
- Member of the International advisory committee in the international
conference on Integrative physiology: Modern perspective along with Jubilee
celebration of the physiological society of India, 12-14 Nov 2009 Kolkata -
India

Workshop Director:

- 1st Electrophysiology research workshop 18-20 Aug 1997, Tehran
- Electrophysiology workshop: 11 May 2011, TMU, Tehran
- 2nd Seminar of Iranian Patch Clamp workers: 4 May 2011, TMU,
Tehran
- Whole cell patch clamp practical workshop; 27-29 June, 2011, TMU,
Tehran
- Tehran IBRO-VLTP Course in Neuroscience 2002
- Tehran Associate IBRO School of Neuroscience 2006, 26-Aug

- 2nd Tehran IBRO SCHOOL OF NEUROSCIENCE: Molecular, Electrophysiological & Behavioral Approaches May 12-23, 2012
- Tehran IBRO School Neuroscience 2013, 26-Oct
- Tehran IBRO School Neuroscience 2014, 17-Oct
- Tehran IBRO School Neuroscience 2015, 22-May
- Tehran IBRO School Neuroscience 2016, 23 Sept
- Tehran Advanced IBRO School Neuroscience 2017, 29-Apr
- Tehran Patch clamp workshop 2018, 06-May
- Tehran IBRO-VLTP Course in Neuroscience 2019, 30 Sept

Participated workshops:

- IBRO Intensive neuroscience workshop
Shanghai Institute of Physiology, Shanghai, China, 1989.
- Postdoctoral research workshop
Shanghai Brain Research Institute, Chinese academy of sciences, 1990.
- IBRO Intensive neuroscience workshop
All India Medical Sciences University, New Delhi, India, 1990.
- Postdoctoral workshop on neuroscience
Riken, Tokyo, Japan, 1991
- Postdoctoral workshop on neuroscience
University of British Columbia- Vancouver, Canada, 1992
- Research visit
Riken- Tokyo- Japan, July 2002
- Cellular and molecular mechanisms of pain (workshop)
Prague, Jul 7-9, 2003

Sabbatical:

- July 2006- July 2007, Memory & Learning lab (Lab Head Professor Masao Ito), Brain Science Institute (BSI) Riken- Tokyo- Japan

POSTER AWARD:

- 8th IBRO World Congress in Florence, Italy (July 14-18, 2011)
A prize given by the Italian Society of Neuroscience.
Orexin-A modulated pain through the Brain Stem
Hassan Azhdari Zarmehri, Saeed Semnianian, Yaghoub Fathollahi, Elaheh Erami
- 7th FAOPS congress, 11-14 Sept 2011, Taipei, Taiwan
- International advisory committee member