RESUME

Principal Investigator
Lab for Dynamics of Cortical Circuits, Neuroscience Research Center, Shahid Beheshti University of Medical Sciences,
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Mir-Shahram Safari

Mir Shahram Safari

PERSONAL

Name:	Mir Shahram
Surname:	Safari
Title:	Dr.
Father's name:	Mir Hamzeh
Place of birth:	Oroumieh, IRAN
Date of birth:	12.12.1973
Nationality:	Iranian
Gender:	Male

EDUCATIONAL QUALIFICATIONS

Jan 2012-Oct 2015	Post-Doctoral Fellow in Neuroscience, Lab for Cortical Circuit Plasticity, RIKEN Brain Science Institute (RIKEN-BSI)	Wako-Japan
2004 – 2010	Ph.D. in Physiology (Major), Neurophysiology (Minor), Tarbiat Modares University (TMU) (Dissertation = 19.80/20)	Tehran, Iran
1999-2002	M.Sc. in Physiology, Tehran University of Medical Sciences (TUMS) (GPA = 17.58/20)	Tehran, Iran
1992–1996	B.Sc. in Nursing, Urmia University of Medical Sciences (OUMS) (GPA = 17.48/20 Honored)	Urmia, Iran

SCHOLARSHIPS & AWARDS

B-Grade Grant from Iranian Cognitive Science Research Council, 2016
International Brain Research Organization (IBRO) ***Return Home Program*** (RHP), 2014.
Asian-Pacific Society for Neurochemistry ***(APSN) travel award*** for presenting a talk in 12th meeting APSN, August 23-26 2014, Kaohsiung, Taiwan.
Gratis membership of Asian-Pacific Society for Neurochemistry (APSN) for two years (2014-2016).
IBRO alumni award to present lecture in IBRO symposium in 43rd annual meeting of sfn, Nov 9-13, 2013 San Diego, California.
Post-Doctoral fellow in Laboratory for Cortical Circuit Plasticity, Brain Science Institute (BSI), RIKEN from Jan 2012, Wako, Japan.
2011B Asia-Pacific Regional Committee (APRC)-***IBRO Exchange Fellowship*** to spend six months at the Brain Science Institute (BSI), RIKEN, Wako, Japan.
IBRO ***Young Investigator Training Program Fellowship*** for funding to participate in the program in one of the hosting laboratories in Europe for 4 weeks (Prof. Pistis lab in University of Cagliary, Italy), June-July 2011 and participate in 8th world congress of IBRO, Florence, Italy, July 14-19, 2011.
IBRO-FOANS Travel Award to participate in ***5th Congress of the Federation of Asian-Oceanian Neuroscience Societies (FAONS)***, Lucknow, India, Nov 25th to 28th, 2010.
IBRO Award to participate in IBRO ***Advanced School of Neuroscience***, 6th Symposium of the Asian Biophysics Association & 27th

Annual Meeting of the Hong Kong Society of Neurosciences, Hong Kong, Jan 6-17, 2009.

Federation of Asian and Oceanic Physiological Societies (FAOPS) Travel Award: ***6th Congress of Federation of Asian and Oceanic Physiological Societies (FAOPS)*** Seoul, South Korea, October 16-18, 2006.

IBRO ***Fellowship of Associate School of Neuroscience***: 3rd Asia-Pacific Region Associate School of Neuroscience, Cochin, India, September 12-17, 2004.

PROFESSIONAL AFFILIATIONS

1. Iranian Elites Foundation (Bonyad Melli Nokhbegan), 2015-present.
2. Asian-Pacific Society for Neurochemistry (APSN), 2014-present.
3. Iranian Neuroscientists Community (IRNSC), 2013-present.
4. Society for Neuroscience (SFN), USA, 2012-present.
5. Japan Neuroscience Society (JNS), 2012-present.
6. International Brain Research Organization (IBRO), 2002 – present.
7. International Society of Cell Death (ISCD), 2005 – present.
8. Biotechnologists Society of India, 2004 – present.
9. Iranian Society of Neuroscience (ISN), 2003 – present.
10. Federation of Asian-Oceanic Neuroscience Societies (FAONS), 2004-present.
11. Federation of Asian-Oceanic Physiological Societies (FAOPS), 2006-present.
12. Iranian Society of Physiology & Pharmacology (IRSPP), 2002 – present.
13. Knowledge Diffusion Network, Canada, 2004 – present.

BOARD MEMBERSHIPS

1. 8th Annual Meeting of the Iranian Association for Vision and Ophthalmology (IRAVO), April 19-20, 2018.
2. Member of Jury Board of ***"Neuroengineering Committee"*** of Iranian Cognitive Science and Technology Council, 2017-present
3. Elected Member of Governing Council of ***Iranian Neuroscience Society (INSS)***, 2016-2020.
4. Head of Research Committee of ***"Iranian Neuroscience Society"***, 2016-2020.
5. Panel Board Member of ***5nd Basic and Clinical Neuroscience*** Congress, 7-9 Dec 2016, Tehran, Iran
6. Jury Member of ***"1th Iranian Talk Master Event",*** Dec 8 2016, Tehran, Iran
7. Board Member of ***Neuroscience Entrance Examination Interview,*** Iranian Ministry of Health and Medical Education, Aug 21 2016, SBMU, Iran
8. Panel Board Member of ***4nd Basic and Clinical Neuroscience*** Congress, 23-25 Dec 2015, Tehran, Iran.
9. Jury member of ***"1th Iranian Neuroweekend Startup",*** Aug 27 2015, IUMS, Tehran, Iran
10. Member of Research Council of NRC-SBMU, 2015- present.

PUBLICATIONS

Publications in Peer-Reviewed Journals:

1. Parviz Ghaderi, Hamid-Reza Marateb*, **Mir-Shahram Safari***, "Electrophysiological Profiling of Neocortical Neural Subtypes: A semi-supervised method applied to in-Vivo whole cell patch-clamp data", Frontiers in Neuroscience, 12(823), 22 Oct 2018, doi: 10.3389/fnins.2018.00823, ***Impact factor: 3.877***
2. **Mir-Shahram Safari**, Seyyed-Javad Mirnajafi-zadeh, Hiroyuki Hioki, Tadaharu Tsumoto; "Parvalbumin-expressing interneurons can act solo while somatostatin-expressing interneurons act in chorus in most cases on cortical pyramidal cells", **Scientific Reports,** Oct 6 2017, 7:12764 | DOI:10.1038/s41598-017-12958-4, ***Impact factor: 5.578***
3. Rui Kimura *, **MIR-SHAHRAM SAFARI***, J Mirnajafi-Zadeh, Rie Kimura, T Ebina, Y Yanagawa, K Sohya, T Tsumoto "Curtailing effect of awakening on Visual responses of cortical cholinergic Neurons by activation of inhibitory Circuits" **Journal of Neuroscience**, 23 July 2014, 34(30): 10122-10133; doi: 10.1523/ JNEUROSCI.0863-14.2014, ***Impact factor: 6.908***
4. Abdolrahman Sarihi, Javad Mirnajafi-Zadeh, Bin Jiang, Kazuhiro Sohya, **MIR-SHAHRAM SAFARI**, Masoumeh Kourosh Arami, Yuchio Yanagawa and Tadaharu Tsumoto; Cell type-specific, presynaptic LTP of inhibitory synapses on fast-spiking GABAergic neurons in the mouse visual cortex; **Journal of Neuroscience**, 32(38), September 19, 2012, 13189 –13199, ***Impact factor: 7.271***
5. Shiva Nasiraei-Moghadam, Amin Sherafat, **MIR-SHAHRAM SAFARI**, Fatemeh Moradi, Abolhassan Ahmadiani, Leila Dargahi; Reversal of Prenatal Morphine Exposure-Induced Memory Deficit in Male But Not Female Rats; **Journal of Molecular Neuroscience**, May 2013, Volume 50, Issue 1, pp 58-69, ***Impact factor: 2.891***
6. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, Abolhassan Ahmadiani, "Role of Orexin-A receptors

within the Locus Coeruleus in antinociception induced by microinjection of carbachol into the lateral hypothalamus" **Physiology & Pharmacology**, Vol. 15, No. 1, Spring 2011, 47-56.

7. Zahra Taslimi, Abbas Haghparast, Majid Hassanpour-Ezatti, **Mir-Shahram Safari**, Lateral hypothalamus chemical stimulation -induced conditioned place preference in the rat: involvement of OX1 and CB1 receptors in the ventral tegmental area, **Behavioral Brain Research**, 217, 2010, 41-46, ***Impact factor: 3.393***
8. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, Effect of lidocaine administration at the nucleus locus coeruleus level on lateral hypothalamus-induced antinociception in the rat; **Pharmacology, Biochemistry and Behavior**, 92, 2009, 629–634, ***Impact factor: 2.976***
9. **Safari M.Sh.,** Faghihi M., Kadkhodayi M., Parviz M., Farzami B., The effect of renal ischemia-reperfusion on hydroxyl radical production and plasma concentration of copper and zinc: an in vivo study, **Physiology and Pharmacology**, Vol. 8, No. 1, Spring & Summer 2004.

*These authors contributed equally to this work.

MANUSCRIPTS UNDER PEER REVIEW AND PREPARATION

1. Parnaz Golnar Nik, sajjad Farashi, **Mir-Shahram Safari; "**The application of electroencephalography (EEG) for the prediction of consumer preferences: A neuromarketing study" under review in Physiology and Behavior.
2. Parviz Ghaderi, Gelareh Vakilzadeh, **Mir Shahram Safari***, "Cell-type and layer-specific cholinergic modulation of membrane potential dynamics in primary visual cortex", in preparation.
3. Seyyed Mohammad Reza Govahi, Sepehr Alaeen, **Mir-Shahram Safari,** "Cell-type specific degeneration of cortical inhibitory neurons in Alzheimer disease", in preparation.
4. Parviz Ghaderi, **Mir-Shahram Safari**, "Cell-type and layer-specific cholinergic modulation of membrane potential dynamics in primary visual cortex" in preparation.
5. Hamid-Reza Azimi, **Mir-Shahram Safari**, "Toward automatic classification of neurons by In vivo whole-cell clamp", in preparation.
6. **Mir-Shahram Safari**, Sina Farahmand, Hanif Vahedian, Maziar Abedinkhan Eslami, Abbas Haghparast, Amir M. Sodagar; A Telemetry System for Microstimulation and plasticity induction in various areas of central nervous system in freely moving rat; in preparation.
7. Sina Farahmand, Hanif Vahedian, Maziar Abedinkhan Eslami, **Mir-Shahram Safari**, Abbas Haghparast, Amir M. Sodagar; Wearable, Battery-Powered, Wireless, Programmable 8-Channel Neural Stimulator; in preparation.
8. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, Abolhassan Ahmadiani, Orexin A-induced antinociception in the locus coeruleus originates from the lateral hypothalamus; in preparation.

*corresponding author.

INVITED TALKS

1. **Mir-Shahram Safari,** "Electrophysiological Profiling of Neurons in the Cerebral Cortex", BCNC2018, 12-14 Dec 2018, Tehran, Iran.
2. **Mir-Shahram Safari,** "Cortical Microcircuit Mapping: Electrophysiological Profiling of Neocortical Neural Subtypes", IPM, Tehran, Iran, 10 Oct 2018.
3. **Mir-Shahram Safari,** "Cortical Microcircuit Mapping: Electrophysiological Profiling of Neocortical Neural Subtypes", 5th Iranian Human Brain Mapping (IHBM2018), Tehran, Iran, 30 Sept 2018.
4. **Mir-Shahram Safari,** "How cognition emerges at molecular and cellular levels: how to study neural microcircuits in vivo", National Brain Mapping Laboratory, Tehran University, 5 Sept 2018.
5. **Mir-Shahram Safari,** "Specific roles of GABAergic interneurons in sensory processing of primary visual cortex", Faculty of Biology, Tehran University, 11 June 2018.
6. **Mir-Shahram Safari,** "Optics and genetics", Faculty of Physics, Damghan University, 12 May 2018.
7. **Mir-Shahram Safari,** "Optogenetic Application in Eye Research**",** The 8th Annual Meeting of the Iranian Association for Vision and Ophthalmology (IRAVO), April 19-20, 2018, Razi Meeting Center, Tehran, Iran.
8. **Mir-Shahram Safari,** "Cell-type specific cholinergic modulation of cortical microcircuits", 2nd Winter School for Neuroscience, Dec 28 2017, SBU, Tehran, Iran.
9. **Mir-Shahram Safari,** "Distinct Roles of Parvalbumin- and Somatostatin-Expressing inhibitory Interneurons in shaping visual responses in primary visual cortex", 6nd Basic and Clinical Neuroscience Congress (BCNC 2017), Dec 20-22 2017, Tehran, Iran
10. **Mir-Shahram Safari, "**Inhibition in Visual Cortex", Nov 15 2017, Institute for Biophysics and Biochemistry (IBB), Tehran, Iran.
11. **Mir-Shahram Safari, "**Distinct Roles of Parvalbumin- and Somatostatin-Expressing Interneurons", Oct 22 2017, School of Cognitive Sciences, IPM, Tehran, Iran.
12. **Mir-Shahram Safari,** "Brain Science and Cognitive Neuroscience: Future Directions", 2nd Iranian Cognitive Science

Summer School, July 29- Aug 3 2017, National Brain Mapping Laboratory, Tehran, Iran.

13. **Mir-Shahram Safari, "**Modulatory Role of Serotonergic System on Orientation Selectivity and Contrast Response Function of Excitatory and Inhibitory Neurons in Layers I and II/III of Primary Visual Cortex, an Optogenetics and *in vivo* Whole-Cell Optopatch-Clamp Study" 7th International Conference of Cognitive Science, April 30 – May 4 2017, Razi intl. Conference Center, Tehran, Iran.
14. **Mir-Shahram Safari,** "Cell-type and Layer-dependent Cholinergic Modulation of Visual Responses in V1 Cortex**",** 7th Annual Meeting of the Iranian Association for Vision and Ophthalmology (IRAVO), April 13 2017, Tehran, Iran.
15. **Mir-Shahram Safari,** Hamid Azimi, "Neuroimaging", 1 day School of Cognitive Neuroscience hold by Iranian COGC, 23 Feb 2017, SBU, Tehran, Iran.
16. **Mir-Shahram Safari,** "Laminar dependent modulation of basal forebrain stimulation on contrast response function of neurons in primary visual cortex: an *in vivo* whole-cell patch clamp study" 5nd Basic and Clinical Neuroscience Congress, 7-9 Dec 2016, Tehran, Iran.
17. **Mir-Shahram Safari, "**Neural Basis of Cognition/Where and When Brain Codes Were Emerged: Worldwide Initiatives", Symposium of Brain and Cognitive Science, Isfahan University of Medical Sciences, Oct 25 2016, Isfahan, Iran
18. **Mir-Shahram Safari, "**Network-level Brain Activity Mapping: Worldwide Initiatives", 1st Iranian IBRO/APRC School of Cognitive Neuroscience on Human Brain Mapping, September 23 - October 4, 2016, Tehran, Iran
19. **Mir-Shahram Safari,** "Cracking the Brain's Codes", 1th Iranian Cognitive Science Summer School, Sep 18 2016, National Brain Mapping Laboratory, Tehran, Iran
20. **Mir-Shahram Safari,** "Brain Activity Mapping at the Neural Microcircuits-level, future challenges", March 9, Introducing Neuroscience, Faculty of Engineering, Tehran University, Tehran, Iran.
21. **Mir-Shahram Safari,** "Brain Activity Mapping (BAM) at the neural circuits-level", 31 Jan 2016, School of Cognitive Sciences, IPM, Tehran, Iran
22. **Mir-Shahram Safari,** "Optogenetic approaches for deciphering cell-type specific inhibition of visual responses in primary visual cortex", 4nd Basic and Clinical Neuroscience Congress, 23-25 Dec 2015, Tehran, Iran.
23. **Mir-Shahram Safari,** "Shaping Visual Responses by Cell Type-specific Inhibition in Primary Visual Cortex", Faculty of Biology, Ferdowsi University, 6 Dec 2015, Mashhad, Iran.
24. **Mir-Shahram Safari, "**Brain Activity Mapping in Rodents: Applications of Two-photon Imaging, Optogenetics and In vivo Patch-clamp"; Institute for Cognitive Science Studies (ICSS), 22 Nov 2015, Tehran, Iran.
25. **Mir-Shahram Safari,** "Optogenetic and two-photon laser scanning microscopy approaches for functional mouse brain mapping", 2nd Iranian Brain Mapping Congress, 14-16 Nov 2015, Tehran, Iran.
26. **Mir-Shahram Safari**, "Inhibition in primary visual cortex from "Brain Activity Mapping" perspective, School of Advanced Technologies in Medicine, Tehran University of Medical Sciences, 28 Oct 2015, Tehran, Iran.
27. **Mir-Shahram Safari,** "Cell type-specific inhibition in primary visual cortex", Institute for Brain and Cognitive Sciences, Shahid Beheshti University, 25 Oct 2015, Tehran, Iran.
28. **Mir-Shahram Safari,** "Computational Neuroscience and Beyond", School of Computer Sciences, Shahid Beheshti University, 21 Oct 2015, Tehran, Iran.
29. **Mir-Shahram Safari,** "Shaping visual responses in primary visual cortex through cell type-specific inhibition", Neuroscience Research Center, Shahid Beheshti University of Medical Sciences, 5 Oct 2015, Tehran, Iran.
30. **Mir-Shahram Safari,** "Shaping visual responses in primary visual cortex through cell-type specific inhibition", Institute for Advanced Studies in Basic Science, 6 September 2015, Zanjan, Iran
31. **Mir-Shahram Safari,** Inhibition in visual cortex, 9th annual symposium of Academic Society of Iranians in Japan (ASIJ), 18-19 April 2015, Tokyo, Japan.
32. **Mir-Shahram Safari,** R. Kimura, T. Tsumoto, "Cholinergic activation of inhibitory circuits mediates awakening effects on visual responses of cortical neurons" the 12th meeting of the Asian-Pacific Society for Neurochemistry (APSN2014), August 23-26 2014, Kaohsiung, Taiwan, Journal of Neurochemistry, 130:19-19.
33. **Mir-Shahram Safari, "**Inhibition shapes visual responses in primary visual cortex" 43rd annual meeting of sfn, Nov 9-13, 2013 San Diego, California, USA.
34. **Haghparast Abbas**, Safari Mir-Shahram, Sleep and Pain, Full article in supplement of 10th Annual Scientific Meeting of Iranian Pain Society (IPS), May 13 - 14, 2010, Tehran, Iran.
35. Mir Shahram Safari, Abbas Haghparast, Abolhassan Ahmadiani, **Saeed Semnanian**, "Locus Coeruleus and Pain" proceeding in 1st South Asian Conference of Physiological Societies & 11th Biennial Conference of Pakistan Physiological Society, Pakistan Journal of Physiology, V.4, No.1 (Suppl), November 10-12, 2008, Islamabad, Pakistan.

ORAL PRESENTATIONS

1. Mohammad Hamid Azimi, Parviz Ghaderi, Abdol-Hossein Vahabie, **Mir-Shahram Safari,** "An automatic electrophysiological classification of inhibitory neural subtypes" 5nd Basic and Clinical Neuroscience Congress, 7-9 Dec 2016, Tehran, Iran.

2. **Mir-Shahram Safari,** Tadaharu Tsumoto, "Functional connections from GABAergic to pyramidal neurons of the mouse visual cortex in vivo, as revealed by double whole-cell recordings combined with optogenetics", The 38th Annual Meeting of the Japan Neuroscience Society, July 28-31, 2015, Kobe, Japan.
3. **Mir-Shahram Safari** and Tadaharu Tsumoto; Quantitative analysis of inhibitory functional connections from GABAergic to pyramidal neurons in the mouse visual cortex, an in vivo double whole-cell recording study with optogenetics; Bridging Biomedical Worlds: From Neural Circuitry to Neurotechnology, May 11-12 2015, Tokyo, Japan.
4. **Mir-Shahram Safari**, Inhibition in visual cortex, 9th annual symposium of Academic Society of Iranians in Japan (ASIJ), 18-19 April 2015, Tokyo, Japan.
5. **Mir-Shahram Safari** and Tadaharu Tsumoto; Functional connections from GABAergic to pyramidal neurons of the mouse visual cortex in vivo; 101rd brain lunch seminar of RIKEN-BSI, Dec 18 2014, Japan.
6. **Mir-Shahram Safari**, R. KIMURA, T. TSUMOTO; "An optogenetic and double whole-cell recording analysis of functional connections from GABAergic to pyramidal neurons in layer 2/3 of the mouse visual cortex, *in vivo*" 44th annual meeting of SfN, November 15-19, 2014, Washington DC, USA.
7. **Mir-Shahram Safari,** R. Kimura, T. Tsumoto, **"**Cholinergic activation of inhibitory circuits mediates awakening effects on visual responses of cortical neurons" the 12th meeting of the Asian-Pacific Society for Neurochemistry (APSN2014), August 23-26 2014, Kaohsiung, Taiwan.
8. **Mir-Shahram Safari, "**Inhibition shapes visual responses in primary visual cortex" 43rd annual meeting of sfn, Nov 9-13 2013 San Diego, California.
9. **Mir-Shahram Safari,** Rui Kimura, Kazuhiro Sohya, Teppei Ebina, Yuchio Yanagawa and Tadaharu Tsumoto; Differential cholinergic effects on visual responses of inhibitory and excitatory cortical neurons; 78rd brain lunch seminar of RIKEN-BSI, Oct 17 2013, Japan.
10. Shiva Nasiraei-Moghadam, Amin Sherafat, **Mir-Shahram Safari**, Abolhassan Ahmadiani, Ali Haeri, Leila Dargahi, "Sexual Maturation Repairs Prenatal Morphine Exposure Induced Memory Deficit in Male but not Female Rats" proceeding in 1st Iranian National Symposium of Neuroscience, 16-17 February 2011, Gorgan, Iran.
11. Zahra Taslimi, Majid Hassanpour-Ezatti, **Mir-shahram Safari**, Abbas Haghparast, "Changes of CREB phosphorylation in the ventral tegmental area, prefrontal cortex and hippocampus after lateral hypothalamus stimulation induced conditioned place preference" proceeding in 1st Iranian National Symposium of Neuroscience, 16-17 February 2011, Gorgan, Iran.
12. Haghparast Abbas, **Mir-Shahram Safari**, Sleep and Pain, Full article in supplement of 10th Annual Scientific Meeting of Iranian Pain Society (IPS), May 13 - 14, 2010, Tehran, Iran.
13. **Mir-Shahram Safari**, Abbas Haghparast, Abolhassan Ahmadiani, Saeed Semnanian, "Locus Coeruleus and Pain" proceeding in 1st South Asian Conference of Physiological Societies & 11th Biennial Conference of Pakistan Physiological Society, Pakistan Journal of Physiology, V.4, No.1 (Suppl), November 10-12, 2008, Islamabad, Pakistan.
14. **Mir Shahram Safari,** Fereshteh Motamedi, "Endogenous LTP impairs LTP induction in Hippocampal Dentate Gyrus of Morphine dependent anesthetized rats" proceeding in 18th Iranian congress of Physiology and Pharmacology, August 26-30, 2007 Mashhad, Iran.
15. **Mir Shahram Safari,** Fereshteh Motamedi; "Morphine addiction alters recurrent inhibition responses in hippocampal Dentate gyrus neurons in rats" proceeding in 17th Iranian congress of Physiology and Pharmacology, Oct 1-4, 2005, Kerman, Iran.
16. **Safari M.Sh.,** Faghihi M., Kadkhodayi M., Parviz M., Farzami B., Deferrioxamine and Neocuproine effects on Hydroxyl radical formation and plasma Zn and Cu concentration in rat renal ischemia reperfusion In vivo, proceeding in 16th Iranian congress of Physiology and Pharmacology, May 9-13, 2003, Tehran, Iran.

POSTER PRESENTATIONS

1. Parviz Ghaderi, **Mir-Shahram Safari,** "The effect of Basal forebrain activation on the subthreshold response entropy of single neuron, in the mice visual cortex", Champalimaud Research Symposium - Quantitative Approaches to Behaviour and Neural Systems, 23-26 October 2018, Lisbon, Portugal.
2. Parviz Ghaderi, Hamid Reza Marateb*, **Mir-Shahram Safari*, "**Neocortical Neural Subtypes identification: Application in in-Vivo whole cell patch-clamp data", proceeding in The Necessity of Cell Types for Brain Function-FENS fall brain conferences 2018, 7-10 October 2018, Copenhagen, Denmark.
3. Sareh Rostami, Parviz Ghaderi, Leila Dargahi, **Mir-Shahram Safari**;"The electrical stimulation of the dorsal raphe nucleus (DRN) changes visual responses of neurons in primary visual corte", proceeding in 48rd annual meeting of sfn (Neuroscience 2018), Nov 3-7, 2018, San Diego, California, USA.
4. Vinícius Cordeiro, Parviz Ghaderi, Sareh Rostami, Rodrigo F. O. Pena, Renan O. Shimoura, Antônio C. Roque, **Mir-Shahram Safari**; "Acetylcholine modulation in a biophysical model of cortical neuron", 27th Annual Computational

Neuroscience Meeting (CNS* 2018): Part One, July 13-18, 2018, Seattle, US, proceeding in BMC Neuroscience, 19 (Suppl 2):64, 29 Oct 2018, DOI: 10.1186/s12868-018-0452-x.

5. Parviz Ghaderi, Hamid Reza Marateb, **Mir-Shahram Safari**; "Electrophysiological Profiling of Neocortical Neural Subtypes based on spike's waveform: Application in in-Vivo whole cell patch-clamp data" Brain Engineering & Computational Neuroscience Conference (BECNC 2018), Jan 31 – Feb 2 2018, IPM, Tehran, Iran.
6. Shahriar Hosseinjani, Babak Mohammadzadeh, **Mir-Shahram Safari**, "Correlation of LFPs, spike and membrane potential in evoked responses of neurons in the Mouse Auditory Cortex", 6nd Basic and Clinical Neuroscience Congress (BCNC 2017), Dec 20-22 2017, Tehran, Iran.
7. Sareh Rostami, Parviz Ghaderi, Hamid Azimi, Leila Dargahi, **Mir-Shahram Safari**, "The electrical stimulation of the dorsal raphe nucleus (DRN) changes visual responses of neurons in primary visual cortex", 6nd Basic and Clinical Neuroscience Congress (BCNC 2017), Dec 20-22 2017, Tehran, Iran.
8. **Mir-Shahram Safari,** Tadaharu Tsumoto, "Functional connections from GABAergic to pyramidal neurons of the mouse visual cortex in vivo, as revealed by double whole-cell recordings combined with optogenetics", The 38th Annual Meeting of the Japan Neuroscience Society, July 28-31, 2015, Kobe, Japan.
9. **Mir-Shahram Safari,** Tadaharu Tsumoto, "Functional connections from GABAergic to pyramidal neurons in layer 2/3 of the mouse visual cortex, *in vivo*" International symposium of Vision, Memory, Thought: how cognition emerges from neural network; December 6-7 2014; Tokyo, Japan.
10. **Mir-Shahram Safari,** Javad Mirnajafi-Zadeh, Rui Kimura, Kazuhiro Sohya, Teppei Ebina, Yuchio Yanagawa and Tadaharu Tsumoto; Differential cholinergic effects on visual responses of inhibitory and excitatory cortical neurons, an *in vivo* whole-cell patch clamp study, 16th RIKEN BSI Retreat, Nov 21-22 2013, Karuizawa, Nagano, Japan.
11. Rui Kimura, Kazuhiro Sohya, **Mir-Shahram Safari,** Teppei Ebina, Yuchio Yanagawa and Tadaharu Tsumoto; Differential wakening effects on visual responses of inhibitory and excitatory cortical neurons through the basal forebrain cholinergic system: in vivo two photon imaging study; 16th RIKEN BSI Retreat, Nov 21-22 2013, Karuizawa, Nagano, Japan.
12. **Mir-Shahram Safari,** R. Kimura, K. Sohya, T. Ebina, Y. Yanagawa, T. Tsumoto, "Differential awakening effects on visual responses of inhibitory and excitatory cortical neurons through the basal forebrain cholinergic system." proceeding in The Networked Brain: satellite meeting of 43rd annual meeting of sfn, Nov 7-8, 2013, San Diego, California, USA
13. R. Kimura, **Mir-Shahram Safari,** K. Sohya, T. Ebina, Y. Yanagawa, T. Tsumoto, "Differential wakening effects on inhibitory and excitatory neurons in visual cortex, revealed by in vivo two-photon functional imaging" proceeding in 43rd annual meeting of sfn, Nov 9-13, 2013, San Diego, California, USA.
14. Z. TASLIMI, P. AZIZI1, M. HASSANPOUR-EZATTI, **M.-S. SAFARI1**, A. HAGHPARAST "Microinjection of cannabinoid CB1 receptor antagonist AM251 into the ventral tegmental area could inhibit the lateral hypothalamus stimulation-induced conditioned place preference" proceeding in 41rd annual meeting of sfn, Nov 12-16, 2011, Washington DC, USA.
15. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, Abolhassan Ahmadiani, "The interaction between orexin and cannabinoid systems in locus coeruleus on pain modulation" proceeding in 8th International Brain Research Organization (IBRO) World Congress of Neuroscience, July 14-18, 2011, Florence, Italy.
16. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, Abolhassan Ahmadiani, "Role of Orexin-A receptors within the Locus Coeruleus in antinociception induced by microinjection of carbachol into the lateral hypothalamus" proceeding in 5th Federation of Asian- Oceanic Neuroscience Societies (FANOS) Symposium, November 25-28, 2010, Lucknow, India
17. Zahra Taslimi, Mahmoudreza Ramin, Pegah Azizi, Fariba Khodagholi, **Mir-Shahram Safari**, Majid Hassanpour-Ezzati, Abbas Haghparast, "Changes of CREB, ERK and c-fos in ventral tegmental area after conditioned place preference induced by administration of carbachol into the lateral hypothalamus" proceeding in 5th Federation of Asian- Oceanic Neuroscience Societies (FANOS) Symposium, November 25-28, 2010, Lucknow, India.
18. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, "Effect of Reversible Inactivation of the Nucleus Locus Coeruleus on Lateral Hypothalamus Induced Antinociception in the Rat" proceeding in 40th Annual meeting of Neuroscience, San Diego, CA, November 13 – 17, 2010.
19. Zahra Taslimi, Majid Hassanpour-Ezatti, **Mir-Shahram Safari**, Pegah Azizi, Abbas Haghparast "Blockade of orexin-A receptor in the ventral tegmental area suppressed the development of conditioned place preference induced by chemical stimulation of the lateral hypothalamus in the rats" proceeding in 40th Annual meeting of Neuroscience, San Diego,CA, November 13 – 17, 2010.
20. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, Abolhassan Ahmadiani, "The effect of nucleus locus coeruleus inactivation on antinociception induced by the lateral hypothalamus inactivation" proceeding in 7th FENS forum of EUROPEAN NEUROSCIENCE, July 3-7, 2010, Amsterdam, the Netherlands.
21. Abbas Haghparast, **Mir-Shahram Safari**, Saeed Semnanian, Abolhassan Ahmadiani, "Lateral Hypothalamus stimulation-induced antinociception is mediated in part by Locus Coeruleus neurons" proceeding in 7th FENS forum of EUROPEAN

NEUROSCIENCE, July 3-7, 2010, Amsterdam, the Netherlands.

22. **Mir-Shahram Safari**, Abbas Haghparast, Saeed Semnanian, "Effect of Reversible Inactivation of the Nucleus Locus Coeruleus on Lateral Hypothalamus Induced Antinociception in the Rat" proceeding in 6th Symposium of the Asian Biophysics Association & 27th Annual Meeting of the Hong Kong Society of Neurosciences, January 11-15, 2009, The Hong Kong University Of Science And Technology, Hong Kong.
23. **Mir Shahram Safari,** Fereshteh Motamedi, "Effect of Morphine Addiction on LTP Induction and Paired-Pulse Stimulation Responses in Hippocampal Dentate Gyrus Neurons", proceeding in 6th Congress of Federation of Asian and Oceanic Physiological Societies (FAOPS), October 16-18, 2006, Seoul, South Korea, KOREAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY, 10, P.
24. **Mir Shahram Safari,** Hasan Emami; "Strategic planning of Neuroscience Research Center" " Proceeding in Symposium of University and future Twenty years perspective of IRAN Development**,** March 10, 2005, SBMU, Tehran, Iran.
25. R.Lashgari, **M.Sh. Safari,** F. Motamedi, S.Zahedi ASL. "The effect of chronic oral administration of verapamil on learning and retrival in rats using passive avoidance learning task." proceeding in 2th Federation of Asian- Oceanic Neuroscience Societies (FANOS) Symposium and 3th Iranian Neuroscience Congress, May 16-19, 2004, Tehran-Iran, Iranian Journal of Pharmaceutical Research, 61-6.
26. **Safari M.Sh.,** Faghihi M., Kadkhodayi M., Parviz M., Farzami B., Formation of 2,5 Dihydroxy Benzoic Acid by Salicylate trapping as a good marker of hydroxyl radical production, proceeding in 7th congress of Biochemistry, Jan 26-29, 2004, Ahvaz, Iran.

ACKNOWLEDGMENTS

1. Shiva Nasiraei-Moghadam Nasiraei-Moghadam, Kazem Parivar, Abolhasan Ahmadiani, Mansoureh Movahhedin, Mohammad Reza Vaez Mahdavi, "Protective Effect of Melatonin against Inequality-Induced Da mages on Testicular Tissue and Sper m Para meters", International journal of fertility & sterility, 2014 Jan-Mar; 7(4): 313–322.
2. Abbas Haghparast, Zahra Taslimi, Mahmoudreza Ramin, PegahAzizi, Farbia Khodagholi, Majid Hassanpour-Ezatti. 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. 220, 2011, 112–118.
3. Sarkaki A, Assaei R, Motamedi F, Badavi M, Pajouhi N. Effect of parental morphine addiction on hippocampal long-term potentiation in rats offspring. Behav Brain Res. 2008 Jan 10;186(1):72-7.
4. Sarkaki A, Assaei R, Motamedi F, Badavi M, Pajouhi N. Effect of parental morphine addiction on induction and maintenance of hippocampal perforant-path to dentate gyrus pathway long-term potentiation in rats offspring. Yafteh, 2006 Winter; 8(4): 49-57.

EDITED ARTICLES:

1. Szabadi E., "Modulation of physiological reflexes by pain: role of the locus coeruleus", Frontiers in Integrative Neuroscience 6:94, 2012.
2. Drummond P.D., "A possible role of the locus coeruleus in complex regional pain syndrome", Frontiers in Integrative Neuroscience 6:104, 2012.

BOOKS, BOOKLETS & MANNUALS

1. Barmak Heydar Asadi, **Mir-Shahram Safar**i (Scientific Editor of Neuroscience Chapters), "Vehicles: Experiments in Synthetic Psychology" by Valentino Braitenberg (Translation to Persian), 2017, Tehran.
2. Neda Mihami, **Mir-Shahram Safari**, "The Autistic Brain" by Temple Grandin (Translation to Persian), 2017, Tehran.
3. NeuroComet Mannual, Software for Single-unit Recording, ScienceBeam Company, 2011, Tehran.
4. NeuroTrace Mannual, Software for LFP and EEG recording, ScienceBeam Company, 2011, Tehran.
5. Potentalize Mannual, Software for Electrophysiologic Data Analysis, ScienceBeam Company, 2011, Tehran.
6. NeuroSound Mannual, Software for Single-unit recording, ScienceBeam Company, 2011, Tehran.
7. **Mir Shahram Safari**, Elham Hariri, "Neurological Foundations of Cognitive Neuroscience" by Esposito (Translation to Persian).
8. **Mir Shahram Safari**, Reza Lashgari, Fereshteh Motamedi, "*In vivo* Field Potential Recording", 2006, Tehran.
9. **Mir Shahram Safari**, Fereshteh Motamedi, Guidelines for using laboratory animals in research, 2004, Tehran.

JOURNAL REVIEW

1. Journal of Neuroscience
2. Frontiers in Physiology

3. Frontiers in Integrative Neuroscience
4. Basic and Clinical Neuroscience
5. Physiology and Pharmacology
6. Archives of Iranian Medicine
7. Acta Medica Iranica

GRANT REVIEW

1. Iranian Cognitive Science and Technology Council
2. Iranian National Science Foundation (INSF), Tehran, Iran.
3. Research Deputy of Ministry of Health and Medical Education, Tehran, Iran.
4. Research Deputy of Shahid Beheshti Uni. Med. Sci, Tehran, Iran.
5. Stem cell research network of Iran
6. Neuroscience Research Center, Shahid Beheshti Uni. Med. Sci, Tehran, Iran.

TEACHING EXPERIENCES

1. Teaching basics and practical points of **"In vivo Whole-cell Patch Clamp"** in the 1st workshop on In vivo Whole-cell Patch Clamp in Iran, NRC-SBMU, Nov 12 2018
2. Teaching "***Brain Facts and Neuroscience- Science of Brain"*** in National Organizations for Exceptional Talents (NODET) school: Farzanegan#1, Aug-Dec 2018
3. Teaching ***"Comparative Animal Physiology"*** for B.Sc. students, 3 scores, Faculty of Biology, Tehran University, Sep-Nov 2018.
4. Teaching ***"Cell Physiology"*** for BSc students, 2 scores, Faculty of Biology, Tehran University, Sep-Nov 2018.
5. Teaching **"In vivo Patch Clamp"** as Part of Practical Course of Neuroscience Techniques for PhD Students of Neuroscience, 0.5 Scores, NRC-SBMU, March-May 2018
6. Teaching ***"Physiology"*** for M.Sc. students of Medical Engineering, 4 Scores, Iran University of Science and Technology, Fall term 2017, Tehran, Iran.
7. Teaching ***"Brain Activity Mapping In Microcircuits Level"***, National Brain Mapping Lab, July 28 2017, Tehran, Iran
8. Teaching ***"Principles and Techniques for Study of Cortical Circuits Dynamics"***, IBRO-APRC Tehran Advanced School of Neuroscience, Lab for Dynamics of Cortical Circuits, NRC-SBMU, April 29 – May 11 2017, Tehran, Iran.
9. Teaching 12 courses of ***"From Basic Neuroscience to Advanced Researches",*** for students from various fields of study (Physics, Psychology, Biology, Medicine…), 25 hours in each course, 2016-2017, Tehran, Iran
10. Teaching 4 workshops of ***"MATLAB for Neuroscientist"*** in collaboration with Hamid Azimi, 2016-2017, Tehran, Iran
11. Teaching 4 courses of ***"Optogenetics"*** for students from various fields of study (Physics, Psychology, Biology, Medicine…), 25 hours in each course, 2016, Tehran, Iran
12. Teaching **"In vivo Patch Clamp"** as Part of Practical Course of Neuroscience Techniques for PhD Students of Neuroscience, 0.5 Scores, NRC-SBMU, Nov-Dec 2016
13. Teaching **"EEG/ERP, Human Psychophysics"** in 5th Tehran IBRO School of Neuroscience, Basic Approaches in Neurological Disease, May 10, 2016, Tehran, Iran
14. Teaching **"Behavioral Techniques for Study of Addiction"** in 5th Tehran IBRO School of Neuroscience, Basic Approaches in Neurological Disease, May 9, 2016, Tehran, Iran
15. Teaching **"Spinal Cord Single Unit Recording"** in 5th Tehran IBRO School of Neuroscience, Basic Approaches in Neurological Disease, May 7, 2016, Tehran, Iran
16. Teaching multiple topics in 5th Tehran IBRO School of Neuroscience, Basic Approaches in Neurological Disease, April 30 - May 11 2016, Tehran, Iran
17. Teaching **"Electrophysiology, Optogenetics and Imaging for Brain Activity Mapping"** for PhD Students of Neuroscience, 2 Scores, NRC-SBMU, Jan-Sep 2016
18. Teaching **"Mind and Consciousness"** for PhD Students of Neuroscience, 2 Scores, NRC-SBMU, Jan-Sep 2016
19. Teaching **"In vivo Patch Clamp"** as Part of Practical Course of Neuroscience Techniques for PhD Students of Neuroscience, 0.5 Scores, NRC-SBMU, Nov-Dec 2015
20. Teaching ***Principals of Neural Science*** for members of Science Beam Company, Tehran, Jan-Sep 2011.
21. Teaching ***Neurophysiology*** for MSc students of Developmental Biology, 2 Scores, Azad University of Karaj, Feb-June 2011.
22. Teaching ***Cell Culture*** for MSc students of Molecular Biology-Microbiology**,** 2 Scores, Azad University of Karaj, Feb-June 2011.
23. Teaching ***Physiology*** for BSc students of Biology**,** 4 Scores, Azad University of Karaj, Feb-June 2011.
24. Teaching ***Pharmacology*** for operation room students (51 hours), 3 Scores, Iranian Army University of Medical Sciences, Tehran, Iran, Sep 2010-Jan 2011.
25. Teaching ***In vivo Single Unit Recording*** in workshops of electrophysiological recording techniques, NRC, Feb, July and Oct 2010.

26. Teaching in ***Research Worker Training Course*** in SBMU research deputy, Tehran, Iran, June 2007.
27. Teaching ***Scientific Citation, Medical Data Banks and Search Skills*** as a workshop in SBMU research deputy, Tehran, Iran, May 2007.
28. Teaching ***Review of Medical Physiology*** for applicants of Ph.D. entrance examination of Iranian Universities, Iran University of Medical Sciences, Tehran, Iran, 2006-2009.
29. Several lectures on ***Patch Clamp Technique***, Neuroscience Research Center, SBMU, Tehran, Iran, 2006.
30. Teaching ***In vivo Field Potential Recording*** in 6th IBRO Associate School of Neuroscience, 26th - 30th August, 2006 and Neuroscience Orientation Summer Program 2nd-21st September, 2006, Tehran, Iran.
31. Teaching ***Laboratory Methods in Biomedical Sciences*** for MSc students, 2 Scores, TMU and SBMU, 2005 – 2011.
32. Teaching ***Field Potential recording*** techniques for PhD and MSc students at neuroscience research center, 2 Scores, 2003 – 2007.
33. Teaching ***Electrophysiology and Behavioral Experiments*** in Pre congress Workshop of 2nd Federation of Asian- Oceanic Neuroscience Societies (FAONS) Symposium and 3rd Iranian Neuroscience Congress, May 14-16, 2004.
34. Teaching ***Physiology*** for M.Sc. in Physiology students, 0.5 Scores, TMU, 2004.
35. Teaching in ***CCU and ECG*** workshops in SBMU, 2001-2003.
36. Teaching of ***Atomic Absorption Spectrophotometry*** techniques for MSc students, TUMS, 2002
37. Teaching ***Physiology*** for dentistry students, 2 Scores TUMS, 2001.
38. Teaching ***Physiology Laboratory Techniques*** for students of medicine, 1 Scores, TUMS, 2000.
39. Teaching ***Health***, Urmia University of Medical Sciences, 1995-1996.

PROFESSIONAL TRAININGS & CERTIFICATES

1. ***"Patch Clamp Workshop" by*** by ***Prof. Alasdair Gibb***, TMU, May 6-10 2018, Tehran-Iran.
2. First ***"Iranian Symposium of Brain Mapping(ISBM 2017)",*** National Brain Mapping Lab, Sep 24-25 2017, Tehran, Iran
3. Workshop on ***"Optogenetics"*** by Dr. Saab from Zurich Uni, TMU, Aug 23 2017, Tehran, Iran.
4. 1 day workshop on ***"Analysis of Spiking Data"*** by Dr. Amin Mirzaei, Dec 28 2016, NRC-SBMU, Tehran, Iran
5. Symposium on ***"Brain Engineering"***, Dec 21 2016, IPM, Tehran, Iran
6. Workshop on ***"Applied Bioinformatics for CRISPR/Cas9"***, Dec 9 2016, SBU, Tehran, Iran
7. 2nd "National Symposium on ***Genetics and Stem Cells***", Dec 8 2016, SBU, Tehran, Iran
8. ***5nd Basic and Clinical Neuroscience*** Congress, 7-9 Dec 2016, Tehran, Iran
9. ***5th Tehran IBRO School of Neuroscience***, Basic Approaches in Neurological Disease, April 30 – May 11, 2016, Tehran, Iran
10. 2 day workshop on ***"Advanced Neurostereology"*** by Prof. Mark J. West and Prof. Bente Pakkenberg, 17-18 May 2016, NRC-SBMU, Tehran, Iran
11. Workshop on ***"How to Register an International Patent",*** Dec 7 2015, SBMU, Tehran, Iran
12. ***22nd Iranian Congress of Physiology & Pharmacology,*** Sep 7-11, 2015, Kashan, Iran.
13. ***The 38th Annual Meeting of the Japan Neuroscience Society***, July 28-31, 2015, Kobe, Japan.
14. ***RIKEN BSI Summer Program 2015,*** "Sculpting Neural Circuits and Behaviour", July 20-24, 2015, RIKEN, Japan.
15. International symposium of ***Vision, Memory, Thought***: how cognition emerges from neural network; December 6-7 2014; Tokyo, Japan.
16. ***44th annual meeting of SfN***, November 15-19, 2014, Washington DC, USA.
17. ***17th RIKEN BSI Retreat***, Nov 5th 2014, Ito International Research Centre, Tokyo, Japan.
18. The 12th meeting of the Asian-Pacific Society for Neurochemistry (***APSN2014***), August 23-26 2014, Kaohsiung, Taiwan.
19. ***RIKEN BSI Summer Program 2014,*** "Disentangling Mental Disorders: from Genes to Circuits", July 15-22, 2014, RIKEN, Japan.
20. 16th RIKEN BSI Retreat, Nov 21-22 2013, Karuizawa, Nagano, Japan.
21. ***Neuroscience 2013***, 43rd annual meeting of sfn, Nov 9-13, 2013 San Diego, California, USA.
22. ***The Networked Brain***: satellite meeting of Neuroscience 2013, 43rd annual meeting of sfn, Nov 7-8, 2013, San Diego, California, USA.
23. International Symposium Optogenetics 2013, Keio University, Tokyo, Japan, September 26-27, 2013.
24. ***RIKEN BSI Summer Program 2013,*** "Neural Circuits from Top to Bottom", July 2 - July 10, 2013, RIKEN, Japan.
25. The Sixth International Neural Microcircuit Conference, ***Functional Mechanism of Cortical Microcircuit***, 24th-26th June 2013, Okazaki, Japan.
26. ***The 36th Annual Meeting of the Japan Neuroscience Society***, 20-23 June 2013, Kyoto, Japan.
27. ***Molecular and Cellular Cognition Society (MCCS)*** Asia 6th Annual Meeting, June 19th 2013, Kyoto, Japan.

28. 15th RIKEN BSI Retreat, Nov 12-13 2012, Karuizawa, Nagano, Japan.
29. Hundreds seminars, lectures, forums of the world most eminent scientists in RIKEN BSI, Japan, 2012-present.
30. INCF Japan Node International Symposium, ***ADVANCES IN NEUROINFORMATICS*** 2012, RIKEN, Wako, Saitama, Japan, October 30, 2012.
31. ***The 35th Annual Meeting of the Japan Neuroscience Society***, 18-21 September 2012, Nagoya, Japan.
32. ***RIKEN BSI Summer Program 2012,*** "The Collective Brain: How does the dynamics of collective interaction of neurons make our mind work?", July 3 - July 11, 2012, RIKEN, Japan.
33. International Brain Research Organization (IBRO) ***Young Investigator Training Program*** Fellowship in ***Prof. Marco Pistis and Prof. Marco Diana*** laboratories in Cagliari and Sassari Universities, respectively, June-July 2011, Sardegna, Italy.
34. ***8th world congress of IBRO***, July 14-19, 2011, Florence, Italy.
35. ***7th FENS*** forum of European Neuroscience, July 3-7, 2010, Amsterdam, the Netherlands.
36. Workshop on ***Strategic Management in Public Relations Affair***, June, July and Aug 2010, SBMU, Tehran.
37. Workshop on ***Electronic Bases of Electrophysiology***, Jan 2010, SBMU, Tehran.
38. Workshop on ***Strategic Planning in Public Relations Affair***, Jan 2010, SBMU, Tehran.
39. Advance Workshop on ***Creativity and Innovation,*** March 2009, SBMU, Tehran.
40. ***IBRO School*** of Neuroscience, January 6-17, 2009, Hong Kong.
41. 6th Symposium of the ***Asian Biophysics*** Association & 27th Annual Meeting of the ***Hong Kong Society of Neurosciences,*** January 11-15, 2009, Hong Kong.
42. Workshop on ***Strategic and Operational Planning***, July 2007, SBMU, Tehran
43. ***6th*** Congress of Federation of Asian and Oceanic Physiological Societies (***FAOPS***) Seoul, South Korea, October 16-18, 2006.
44. 6th IBRO Associate ***School of Neuroscience*** 26th – 30th August 2006, Tehran, Iran.
45. Workshop on ***Ethics in Using Lab Animals for Scientific Research***, June 2006, TMU, Tehran.
46. Workshop on ***Public Relations Affair Skills***, Feb 2006, May 2008, SBMU, Tehran.
47. Workshop on ***How to Write CV, Official and Recommendation Letters,*** Feb 2006, SBMU, Tehran.
48. ***Advanced Research Methodology*** course in experimental and clinical studies, Jan 2006, Endocrinology and Metabolism Research Institute, SBMU.
49. The 14th (1999), the 16th (2003), the 17th (2005), the 18th (2007) and 19th (2009) Congress of ***Physiology and Pharmacology***, Iran.
50. First (July 2005), Second (June 2007) and Third (May 2009) International Symposium of Molecular Technology ***(ISMT)***, Tehran, Iran.
51. ***PCR and Molecular Biology***, 2004 & 2005, Molecular Biology research centre of SBMU and TMU.
52. ***International Computer Driving Licence (ICDL)***, 2005.
53. IBRO Fellowship of 3rd ***Associate School of Neuroscience***, Asia-Pacific Region, 12 -17 Sep 2004, Cochin, India.
54. ***2th*** Federation of Asian- Oceanic Neuroscience Societies (***FANOS***) Symposium and 3th Iranian Neuroscience Congress, May 16-19, 2004, Tehran-Iran.
55. ***Advanced Neuroscience Workshop*** on Vision, Epilepsy, Ion Channels, Neuroinflammation, Pain, Learning and Memory, Feb 2004, TMU.
56. Workshop on ***Strategic Planning***, Jan 2004, Research and Technology Deputy of Iranian Health and Medical education Ministry.
57. ***Internet Search Skills*** in DLN centre, 2004, SBMU.
58. Pre congress workshop of ***Developmental Neuroscience*** at Tarbiat Modares University (TMU) By ***Prof. John Nicholls***. May, 2003, Tehran-Iran.
59. ***Patch Clamp*** training course in pre congress workshop by ***Prof. Alasdair Gibb***, TMU, May, 9-13, 2003 Tehran-Iran.
60. Workshop on ***Using Lab Animals for Behavioral Research*** in Institute Pasteur Iran. May 5-7, 2003, Tehran-Iran.
61. Workshop of Electrophysiology (***Field Potential, Intracellular and Single Unit Recording***) Nov 2003, Tehran, Iran.
62. Workshop on ***Teaching Physiology***, 2003, TMU.
63. ***Several*** *Neuroscience courses* given by the ***Internationally Well Known Neuroscientists*** from SISSA (Italy), Riken institute (Japan) and USA Universities at Institute for Studies in Theoretical Physics and Mathematics (IPM), 2003 – 2010.
64. IBRO ***Advanced Workshop in Neuroscience*** by Visiting Lecturer Team Program (VLTP), Feb 2002,

TMU.

65. ***Research Methodology*** course in experimental and clinical studies, 2003, Research Deputy of Shahid Beheshti University of Medical Sciences (SBMU).
66. TMU MOHMET (2002) and Ministry of Health and Medical Education MCHE (2003) ***English Language Proficiency Exams***.
67. ***Laboratory Methods in Biomedical Sciences***, 2001, TMU.
68. Statistical data analysis with ***SPSS***, 2000, TUMS.
69. Certified course in ***Hemodialysis***, Oct 2000 – Jan 2001, SBMU.
70. ***Cardiovascular Physical Examination*** and ***CPR*** workshops, 1999 & 2000, SBMU.
71. Several annual congress of Iranian society of ***Pain***.

FULL TIME POSITIONS

Dec 2018-present	***Assistant Professor and Principal Investigator***, Neuroscience Research Center, SBMU, Tehran, Iran.
Sep 2015–Dec 2018	***Lab Leader***, Neuroscience Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
Dec 2011–Sep 2015	***Research Scientist*** in Laboratory for Cortical Circuit Plasticity, Brain Science Institute (BSI), RIKEN, Wako, Japan.
2003 – Dec 2011	***Senior expert and researcher*** in Neuroscience Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

EDITORIAL

1. Associate *Section Editor* in Basic and Clinical Neuroscience, 2013-present.
2. Member of ***editorial board*** of Frontiers in Integrative Neuroscience as Guest Associate Editor, 2011-present.
3. ***Scientific News Manager*** of Iranian Neuroscience Network Website, 2008-2009.
4. Organizer of NRC Weekly ***Journal Clubs***, 2006 – 2012.
5. Member of ***SBMU Journals Council,*** 2005-2006.
6. Executive member of ***Editorial Board*** of Journal of Physiology and Pharmacology, 2005-2006.
7. Member of Editorial Board of SBMU ***International Newsletter***, 2005 – 2010.
8. Member of ***Editorial Board*** of ***FAOPS Newsletter***, 2005.
9. Representative of ***Knowledge Diffusion Network*** in Iran (Biomedical Sciences Branch) for organizing lectures in Tehran Universities for Iranian scientists abroad, 2004 – present.
10. Member of ***Editorial Committee*** of 2nd FAONS Symposium Proceeding, 2004.
11. ***Reviewer*** of 2nd FAONS Symposium Proceeding, 2004.

IN SOCIAL MEDIA

1. Owner and Editor-in-Chief of www.neurosafari.com , First and The Most Popular Neuroscience Website in Persian Language.
2. Interview about "Relation of smart phones usage with quality of sleep" and "Depression from Cognitive Neuroscience Perspective", "Circadian Rhythms and Nobel prize in Physiology and Medicine 2017" in ***"Charkh Program",*** Iranian Public Television Channel 4, Dec 27 2016, April 24 2017, Oct 7 2017

Workshops & Symposiums Organized

1. 1st ***"International Neural Microcircuit Symposium",*** NRC-SBMU, Dec 11-12 2018, Tehran, Iran.
2. 1st workshop on "***In vivo Whole-cell Patch Clamp Data Analysis in MATLAB"***, NRC-SBMU, Dec 10 2018, Tehran, Iran.
3. 1st workshop on "***In vivo Whole-cell Patch Clamp"*** in Iran, NRC-SBMU, Nov 12 2018, Tehran, Iran.
4. 3 days' workshop on ***"Conceptual Foundations of High Impact Research",*** 30 Oct, 6, 13 Nov2017 NRC, SBMU, Tehran, Iran.
5. Member of Organizing Committee of "***1th Iranian IBRO Advanced School of Neuroscience***," May 7-21 2017
6. General Secretary of 1 day workshop on ***"Analysis of Spiking Data"*** by Dr. Amin Mirzaei, Dec 28 2016, Neuroscience Research Center, SBMU, Tehran, Iran
7. Head of International Affairs of ***5th Tehran IBRO School of Neuroscience***, Basic Approaches in Neurological Disease, April 30 – May 11, 2016, Tehran, Iran
8. General Secretary of 2 day workshop on ***"Advanced Neurostereology"*** by Prof. Mark J. West and Prof. Bente Pakkenberg, 17-18 May 2016, NRC-SBMU, Tehran, Iran
9. Head of ***Public Relation Affairs***, 19th Congress of ***Physiology and Pharmacology***, 2009, Tehran, Iran.

10. ***Member of Organizing Committee*** of Second (June 2007) and Third (May 2009) International Symposium of Molecular Technology ***(ISMT)***, Tehran, Iran.
11. Member of Organizing Committee of 6th IBRO Associate School of Neuroscience and the 1st Neuroscience Orientation Summer Program, 26th August - 21th September 2006, Tehran, Iran.
12. Executive Secretary of First International Symposium of Molecular Technology (ISMT), July 2005, Tehran, Iran.
13. Executive Secretary of 2nd FAONS symposium, 16-19 May 2004, Tehran, Iran.

EXECUTIVE

1. Member of NRC ***Website Design Committee,*** 2009.
2. Head of International Affair of ***Farzan Institute***, 2008, Tehran.
3. Director of ***NRC Library,*** 2007 - 2012.
4. Member of ***Annual Evaluation*** Committee of NRC, 2006 –2010.
5. ***Webmaster*** of Neuroscience Research Center Website on HBI domain: http://www.nrciran.hbi.ir, 2004 – 2006.
6. ***Executive Manager*** of ***IT*** Infrastructures in Neuroscience Research Center, 2003 – 2012.
7. ***Head of International Affairs*** in Neuroscience Research Center, 2002 – 2012.
8. ***Head of public relation affairs*** in Neuroscience Research Center, 2003 – 2012.
9. ***Representative*** of Neuroscience Research Center in Extramural Organizations and Research Ceremonies. ***Executive Manager*** of NRC Representative Programs, 2003 – 2009.
10. Executive secretary of ***Strategic Planning*** of Neuroscience Research Center, 2003 – 2010.

LABORATORY SKILLS

1. Small animal ***brain microsurgery***
2. ***Chronic cranial window***
3. In vivo ***Calcium Imaging***.
4. ***Optogenetics***.
5. *In vivo* ***Two-photon*** laser scanning microscopy.
6. ***EEG*** and **LFP** recording.
7. *In vivo* ***Blind, two-photon targeted*** and ***shadow*** Patch-clamp recording (single and paired whole-cell).
8. In vitro ***Patch-clamp*** recording (single and paired patch).
9. In vivo ***Single Unit*** extracellular recording.
10. In vivo ***Field Potential*** recording.
11. ***Microinjection*** in Brain Nuclei.
12. Animal Models of ***Behavioral Study*** of Learning and Memory: Passive and active avoidance learning.
13. Animal Models of ***Pain Study:*** Tail Flick Test; Hot Plate Test; Formalin Test.
14. ***Conditioned Place Preference (CPP).***
15. ***Western blot.***
16. ***Electrochemical Detection (ECD)*** of reactive oxygen species (ROS).
17. High Performance Liquid Chromatography (***HPLC***) with UV and ECD detectors.
18. ***Atomic absorption*** Spectrophotometery.
19. ***Software:*** MATLAB, Labview, SPSS, PRISM, InStat, Microsoft office …

TECHNICAL ACHIVEMENTS

1. Establishing the first ***in vivo blind patch-clamp set up*** in Iran, NRC-SBMU, 2016
2. Establishing the ***two-photon guided in vivo patch-clamp and optogenetics*** in Lab for Cortical Circuit Plasticity, RIKEN-BSI, 2014
3. Establishing HPLC-ECD set up in department of physiology, TUMS, 2002

PATENTS

1. ***Neurosafari brand***, registration number: 297356, April 2018.
2. ***"Neurosafari" Android Application*** for Spreading Neuroscience News in Persian Language.
3. Integrated ***8-channel in vivo electrophysiological recording and optogenetic manipulation system*** on the base of LabView, NRC-SBMU, 2016
4. ***Vision Laboratory*** on the base of MATLAB, NRC-SBMU, 2016
5. Rodent ***Head Chambers for in vivo patch-clamp and Imaging,*** NRC-SBMU, 2016
6. Improving ***in vivo patch-clamp technique*** for very high success ratio in whole-cell patching and long last recording

DISSERTATIONS

Ph.D. Thesis

2007-2010 The interaction between orexin and cannabinoid systems in locus coeruleus on pain modulation.
(GPA= 19.80/20)
Supervisor: Prof. Saeed Semnanian
Email : ssemnan@modares.ac.ir
Advisors: Prof. Abolhassan Ahmadiani
Email : aahmadiani@yahoo.com
Dr. Abbas Haghparast
Email : haghparast@yahoo.com

M.Sc. Thesis

2001-2002 Deferrioxamine and Neocuproine effects on Hydroxyl radical formation and plasma Zn and Cu concentration in rat renal ischemia reperfusion, In vivo.
(GPA= 19/00)
Supervisor: Prof. Mahdieh Faghihi
Email:
Advisor: Prof. Mehri Kadkhodayi
Email:

THESIS DIRECTED, SUPERVISED or CONSULTED

"Mathematical modeling and analysis of rat neocortical microcircuits"
Student: Farzin Tahvili (MSc Thesis in Mathematics, Sharif Uni)
Supervisors: Mohammad Reza Razvan – Mir Shahram Safari

"Effect of exercise and opium tincture on the electroencephalographic changes and circulating Anandamide and BDNF levels before and after abstinence in opiate addicts"
Student: Mahyar Baveisi (PhD Thesis in Physiology, Semnan Uni Med Sci)
Supervisors: Hossein Miladi Gorji- Roshanak Tirdad
Advisor: Mir-Shahram Safari

"Using neuro web design and analysis of EEG signals in creating a web site"
Student: Parnaz Golnar Nik (MSc Thesis in IT Engineering (E-Commerce), Qazvin Islamic Azad Uni)
Supervisors: Omid Sojoudi Sheyjani
Advisor: Mir-Shahram Safari

"Inhibitory Control Enhancement in healthy Individuals by Transcranial direct-current stimulation (tDCS)"
Student: Sabah Farshad (MSc Thesis in Cognitive Sciences, ICSS)
Supervisors: Peyman Hasani Abharian
Advisor: Mir-Shahram Safari

"Optogenetically induced spatiotemporal gamma oscillations and neuronal spiking activity in visual cortex", 2017-present
Student: Fereshteh Arab (MSc Thesis in Physic, Isfahan University)
Supervisors: Vahid Salari - Mir-Shahram Safari

Modulatory role of serotonergic system on visual responses of excitatory and inhibitory neurons in layers I and II/III of primary visual cortex: an optogenetics and in vivo whole-cell patch-clamp study, 2016-present
Student: Sareh Rostami (PhD Thesis in Neuroscience, NRC-SBMU)
Supervisors: Mir-Shahram Safari – Leila Dargahi

Primary Auditory Cortex Local Field Potentials and Simultaneously Behavioral Data Processing in an Animal Model for Investing Phantom Auditory Perception
Student: Shahriar Hosseinjani (MSc Thesis in Medical Engineering, Trabiat Modares University)
Supervisors: Babak Mohammadzadeh- Mir-Shahram Safari

The relation between heart rate variability (HRV) and the performance of female swimmers of University swimming team in season workout.
Student: Fatemeh Barzegar Shangol (MSc Thesis in Sport Physiology, Alzahra University)

Supervisors: Parvaneh Nazarali- Mir-Shahram Safari

Role of orexinergic projection of the lateral hypothalamic area to the ventral tegmental area (VTA) and their interaction with intra-VTA CB1 cannabinoid receptor in development of reward related behaviors in rat.
Student: Zahra Taslimi (M.Sc. Thesis in Medical Physiology, Shahed University, Tehran, Iran)
Supervisors: Abbas Hghparast, Majid Hassanpour Ezzati
Consulted by: Mir-Shahram Safari

RESEARCH PROJECTS & PROPOSALS

1. PI: Processing of Primary Auditory Cortex Local Field Potentials and Simultaneously Recorded Behavioral Data in an Animal Model for Investing Phantom Auditory Perception in Auditory Cortex, NRC-SBMU, 2017-present.
2. Co-Investigator:: Design, construction and validation of viral vectors harboring Opto-mGluR6, as a new generation optogenetic tool for dystrophic retinal diseases, NRC-SBMU in collaboration with, Ophtalmic Research Center of SBMU and Institute of Genetic Engineering and Biotechnology (NIGEB), 2017-present
3. PI: Modulatory role of serotonergic system on orientation selectivity and contrast response function of excitatory and inhibitory neurons in layers I and II/III of primary visual cortex, an optogenetics and in vivo whole-cell optopatch-clamp study, NRC-SBMU, granted by Iranian Cognitive Science and Technology Council (CSTC), 2016-present.
4. PI: Modulatory role of cholinergic system in superficial layers of superior colliculus on orientation tuning and contrast response function and of neurons in primary visual cortex, 2016- present, NRC-SBMU
5. PI: Modulatory role of cholinergic system on contrast response function of excitatory and inhibitory neurons in layers I and II/III of primary visual cortex, an optogenetics and in vivo whole-cell optopatch-clamp study, 2016-present, NRC-SBMU
6. Co-Investigator: Making Wireless Deep Brain Stimulator and SUR-LFP Recorder for Rat, 2011. NRC-SBMU in collaboration with Khajehnasir Tousi University
7. Co-Investigator: Effect of Prenatal Morphine Exposure on Learning and Memory of Male and Female Offsprings of Rats before and after Puberty, 2010- 2011, NRC-SBMU
8. Principal Co-Investigator: The Electrophysiologic Assessment of Crosstalk between Orexin and Cannabinoid Systems in the Modulation of Pain by Locus Coeruleus, 2008 – 2010, NRC, SBMU, Iran.
9. Principal Co-Investigator: The Behavioral and Molecular Assessment of Crosstalk between Orexin and Cannabinoid Systems in the Modulation of Pain by Locus Coeruleus, 2008 – 2010, NRC, SBMU, Iran.
10. Co-PI: Establishing Data Bank of Iranian Neuroscientists, 2009, NRC, SBMU, Iran.
11. PI: Strategic Planning of Iranian Neuroscience Network (INN), 2007, NRC, SBMU, Iran.
12. Co-PI: Effects of Various Prenatal Stress on Hippocampus Morphology, Spatial Memory, Passive Avoidance Learning and Long Term Potentation (LTP) on F1, F2 and F3 Generations in Wistar Rats, 2007, Neuroscience Research Center, SBMU, Iran.
13. Co-Investigator: Effects of Various Prenatal Stress on Hippocampal Morphology and Pkcβ1 and NMDA Receptor NR2B Subunit Expression on F1, F2 and F3 Generations in Wistar Rats, 2007, Neuroscience Research Center, SBMU, Iran.
14. Principal Co-Investigator: Electrophysiological Changes in the Hippocampus Perforant Path-Dentate Gyrus Synaptic Transmission in Morphine Addicted and Withdrawn Rats, 2004-2005, Neuroscience Research Center, SBMU, Iran.
15. Principal Co-Investigator: Strategic Planning of Neuroscience Research Center, 2004-2005, SBMU, Iran.
16. Principal Co-Investigator: Effect of Defferioxamine and Neocuproine on Hydroxyl Radical Production and Plasma Zn and Cu Concentration at Ischemic Reperfusion Injury of Rat Kidney, 2002-2003, TUMS, Iran.

HONORS

1. Published an article ranked as the **4**th most popular scientific press release in Japan in July 2014.
2. Published 2 articles ranked as top publications of Tarbiat Modares University, 2012 and 2014.
3. Ranked as the ***Distinguished Expert*** of SBMU and Tehran Province in 11th Shahid Rajaee Memorial, 2009.
4. Ranked as the ***National Distinguished Expert***, SBMU, 2008.
5. Ranked as the ***Distinguished Head of Public Relation Affairs***, SBMU, 2008.
6. ***Letter of Commendation*** for Activities as Head of Neuroscience Research Center (NRC) Public Relation Affairs, 2006-2010 SBMU, Tehran.
7. Ranked ***4***th in the Nationwide M.Sc. Entrance Examination of IRAN Universities among 1887 participants, 1999.
8. Ranked ***1***th in GPA of B.Sc. in Nursing among all of graduated students of OUMS, 1996.
9. Ranked ***3***th in chemistry Olympiad of West Azerbaijan province, 1991.

10. Ranked ***1***th and being top ***student*** in almost all high school class.
11. Ranked ***Excellent*** among Kung Fu trainers in West Azerbaijan province, 1991- 1996.

RESEARCH INTERESTS

1. Visual system
2. Sensory processing
3. Plasticity
4. Cognitive Neuroscience
5. Electrophysiology
6. Pain
7. Addiction and Reward
8. Neuropsychology
9. Learning and Memory

LANGUAGES

1. Azeri native
2. Persian native
3. Turkish excellent
4. English excellent
5. Japanese fair
6. Arabic fair

HOBBIES

1. Playing Guitar
2. Philosophy
3. Kung Fu
4. Mountain Climbing
5. Swimming

REFEREES

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