

## CURRICULUM VITAE

### **Personal information:**

Name: Jalal

Surname: Zaringhalam Moghadam

Date of birth: 11 Sep1974

Place of birth: Tabriz-Iran

#### *Personal Address:*

Tehran, Iran

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#### *Work place and affiliation:*

Professor of Physiology Department, Neurophysiology research center, Shahid Beheshti University of Medical sciences, Tehran, Iran



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### **Education:**

- 1) PhD of Physiology, Shahid Beheshti University of Medical Sciences (2004 - 2008)

*Title of thesis:* The correlation between spinal (Mu) opioid receptor expression and hyperalgesia variation during chronic inflammation due to Complete Freund's adjuvant (CFA)

- 2) Medical Doctor, Tabriz medical university. (1992-1999).

*Title of thesis:* Aphtosis, proposed etiology and treatment ways in 254 medical students

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### **Other advanced degrees:**

- 1) International certificate in "Acupuncture". Beijing International University of Traditional Chinese Medicine. (15Apr- Dec 2002)

- 2) International certificate in "Su jok acupuncture therapy". International Onnuri Foundation a Su jok Academy. (Sep- Oct.2001)

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**Professional licenses and Board Certification:**

- 1- Medical doctor, General practitioner
- 2- Physiologist, Faculty member of university

**Research Project and Thesis Supervisions:**

- 1- Assessment the role of microglial BDNF and Pro BDNF in spatial memory and hippocampal apoptosis variations in a model of Alzheimer; the effect of nootropic dipeptide, GK2, administration in these variations (PhD thesis 2020).
- 2- Investigating the effects of Carbamylated erythropoietin on alterations of recognition memory, apoptosis, autophagy and necroptosis markers and hippocampal microglial IL1B during persistent peripheral inflammatory pain (MSc thesis 2018).
- 3- Investigating the role of Bupivacaiene injection for sciatic nerve block in pregnant rats on neurotoxicity and apoptosis of neonates' brain cells (MD, Anesthesiology Resident thesis 2018).
- 4- Microglial dependent BDNF relation with spinal apoptosis and pain behavioral responses during persistent peripheral inflammation: the effect of Noopept in this pathway (MSc thesis 2017. funded by Cognitive Sciences & Tegnologies Council).
- 5- Evaluation of the effect of carbamylated erythropoietin (c-EPO) on behavioral alterations, and the markers of apoptosis, autophagy and necroptosis in the hippocampus of Alzheimeric rat. (PhD thesis 2016).
- 6- Assessment of the relation between microglial activity and hippocampus cell death variation with spatial memory during acute and chronic peripheral inflammatory pain: role of BDNF and pro BDNF signaling pathway in this relation (PhD thesis 2016. Iran National Science Foundation).

- 7- Assessment of changes in microglial activation and PTEN in relation to cell death in spinal cord During the various stages of Arthritis Caused By CFA injection (PhD thesis 2016)
- 8- Relation between spinal microglia activity with TNF- $\alpha$  and pain behavioral symptoms during adjuvant-induced inflammation; role of Thymulin administration in these variations (MSc thesis 2015).
- 9- Comparing the effect of *Boswellia serrata* and *Lavandula angustifolia* sextract administration with the placebo on improvement of premature ejaculation during methadone treatment of opioid dependence patients (MSc thesis 2015)
- 10- Role of the long term treatment by vitamin B1 in pro- inflammatory cytokines and hyperalgesia variations during different stages of CFA-induced arthritis in male Wistar rats. (Research project 2014).
- 11- Investigation the role of administration of Mesenchymal stem cells conditioned medium on hyperalgesia, edema, serumic TNF- $\alpha$  level and spinal P<sub>38</sub>MAPK enzyme activity during different stages of adjuvant-induced inflammation (MSc thesis 2013. Iran National Science Foundation).
- 12- Anti-hyperalgesic and anti-inflammatory effects of calcium long term administration during adjuvant-induced arthritis in rats (MD thesis 2013).
- 13- Study the role of C fibers in spinal microglia activity induction and their possible relation with spinal TRPV3 expression during chronic inflammatory arthritis in male rats. (PhD thesis 2012).

- 14- Role and relationship between serum TNF- $\alpha$ , IL-10 and p38MAPK enzyme in spinal  $\mu$  opioid receptor expression and hyperalgesia variation during different stages of CFA-induced inflammation in male wistar rats. (PhD thesis 2013)
- 15- Investigation of synovial fractalkine in induction of apoptosis process caused by inflammatory cytokines in arthritis model (PhD thesis 2011).
- 16- Variation of morphine anti-hyperalgesic dose during different phase of chronic inflammation due to CFA in male rats (MSc thesis 2010).
- 17- Evaluation of hyperalgesia and liver hepcidin expression level variations due to a synthetic iron chelator administration during acute and chronic phases of adjuvant-induced inflammation in male rats (MSc thesis 2010).
- 18- The role of hydroalcoholic and chloroformic extracts of *salvia candidissima* on hyperalgesia , edema and serum TNF - $\alpha$  level during adjuvant-induced arthritis. (MSc thesis 2011).
- 19- Relation between plasma IL-6, hyperalgesia and spinal Mu opioid receptors expression variation during chronic inflammation (Arthritis) due to CFA in (Granted Project 2009).
- 20- An investigating into the role of methanolic and defatted extracts of Achillea Santolina on IL-6 and hyperalgesia and edema variation during CFA mediated inflammation in male wistar rats. (MSc thesis 2008).

**Academic Appointments:**

- Professor and faculty member of Physiology Department, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

- Faculty Member of Neurophysiology Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
- Invited professor for medical students teaching in International Branch of Shahid Beheshti University of Medical Science.

**Research fields:**

- Neuroscience (Pain and Neurodegenerative disorders)
- Neural cell death circle; Apoptosis, Autophagy and Necroptosis relation with pain
- Alternative medicine treatment (Acupuncture and Herbal medicine)
- Clinical pain rehabilitation

**Research skills:**

- 1) Neurophysiology and Neurobiology of Pain
- 2) Animal models
- 3) Western Blotting
- 4) RT-PCR
- 5) Acupuncture treatment
- 6) Statistica (moderate)

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**University committees:**

- **Research Assistant of Department of Physiology** Shahid Beheshti University of Medical Sciences, Tehran, Iran, since 2013 till 2018.
- **Member of Research Committee of** International branch of Shahid Beheshti University of Medical Sciences, Tehran, Iran, since 2011 till 2016.
- **Member of Educational Committee (EDO)** of in Shahid Beheshti University of Medical Sciences, Tehran, Iran, since 2012 till 2014.

- **Director of Msc. Students in physiology department** in Shahid Beheshti University of Medical Sciences, Tehran, Iran, since 2010 till 2016.
  - **Member of Pain Educational Committee** in Shahid Beheshti University of Medical Sciences, Tehran, Iran, Sep 2009- 2012.
  - **Member of directory board of Iranian Cell Death Society**, ICDA chapter (in US) Neuroscience research Center, Tehran, Iran, since 2008 till present.
  - **Member of Research Committee of physiology** department in Shahid Beheshti University of Medical Sciences, Tehran, Iran, since 2008 till present.
  - **Executive manager of Journal of medicinal plants**, since 2007 till 2011.
  - **Member of directory board and Executive director of Iranian Pain Society**, Tehran, Iran, since 2013 till 2018.
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#### **Membership in Society:**

- **Member of International Association for the Study of Pain (IASP)**, since 2001 till Present
  - **Director of Iran Chapter of IASP** from 2012 till 2018.
  - **Member of Iranian Cell death society**, since 2007 till present
  - **Member of Iranian Physiology and Pharmacology society**, since 2010 till present.
  - **Member of International Brain Research Organization**, since 2010 till present
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### Article Publications in peer reviewed journals:

- 1) Alireza Mirkheshti<sup>1</sup>, Alireza Shakeri<sup>1</sup>, Elham Memary<sup>1</sup>, Mansoureh Baniyadi<sup>2</sup>, Jalal Zaringhalam<sup>2\*</sup>, Ardeshir Tajbakhsh<sup>1</sup>, Marzieh Mirzaei<sup>3</sup> and Elena Lak<sup>4</sup>. Maternal sciatic nerve administered bupivacaine induces hippocampal cell apoptosis in offspring. **BMC Anesthesiology** (2020) 20:228.
- 2) Sahar Golabi, Jalal Zaringhalam\* , Homa Manaheji. Synovial interleukin-6 affects apoptosis induction via nuclear factor kappa-B and fractalkine pathway during adjuvant arthritis. **Med J Islam Repub Iran.** 2020(25 Mar); 34:25.
- 3) Mola Mohammadi, Homa Manaheji, Nader Maghsoudi, Samira Danyali, Mansoureh Baniyadi, Jalal Zaringhalam\*. Microglia dependent BDNF and proBDNF can impair spatial memory performance during persistent inflammatory pain. **Behavioural Brain Research**; 390 (2020) 112683.
- 4) Neda Hakimihaa, Mohammad Mehdi Dehghanb,d, Homa Manaheji, Jalal Zaringhalamc,f, Saeed Farzad-Mohajerid, Reza Fekrazadg,h, Neda Moslemie\*. Recovery of inferior alveolar nerve by photobiomodulation therapy using two laser wavelengths: A behavioral and immunological study in rat. **Journal of Photochemistry & Photobiology, B: Biology**; 204 (2020) 111785.
- 5) Behzad Nasseria, Jalal Zaringhalam\*, Samira Daniali, Homa Manaheji, Zahra Abbasnejad, Vida Nazemian. Thymulin treatment attenuates inflammatory pain by modulating spinal cellular and molecular signaling pathways. **International Immunopharmacology**; 70 (2019) 225–234.
- 6) Vida Nazemian, Somayeh Kalanaky, Homa Manaheji, Etrat Houshmandi, Mola Mohammadi, Jalal Zaringhalam\*, Somayeh Mirjafai. Anti-hyperalgesia effect of nanchelating based nano particle, RAc1, can be mediated via liver hepcidin expression modulation during persistent Inflammation. **International Immunopharmacology**; 69 (2019) 337–346.

- 7) Mona Taghizadeh, Homa manaheji, Mansoureh Baniasadi, Mola Mohammadi, Jalal Zaringhalam\* .Immune and Opioid System Interaction in Pain Modulation. **J Cell Mol Anesth.** 2019; 4(1):24-30.
  
- 8) Etrat Hooshmandi, Fereshteh Motamedi, Maryam Moosavi, Hermann Katinger Zahra Zakeri, Jalal Zaringhalam, Amirhossein Maghsoudi, Rasoul Ghasemi and Nader Maghsoudi. CEPO-Fc (An EPO Derivative) Protects Hippocampus Against Ab-induced Memory Deterioration: A Behavioral and Molecular Study in a Rat Model of Ab Toxicity. **Neuroscience**; 388 (2018) 405–417.
  
- 9) Mahdi Shadnoush , Vida Nazemian , Homa Manaheji , Jalal Zaringhalam\* . The Effect of Orally Administered Probiotics on the Behavioral, Cellular, and Molecular Aspects of Adjuvant-Induced Arthritis. **BCN Journal**; September-October, 2018, Volume 9,
  - i. Number5.
  
- 10) Vida Nazemian<sup>1</sup>, Homa Manaheji<sup>1, 2</sup>, Ali Mohammad Sharifi<sup>3</sup>, Jalal Zaringhalam\* . Long term treatment by mesenchymal stem cells conditioned medium modulates cellular, molecular and behavioral aspects of adjuvant-induced arthritis. **Cell Mol Biol (Noisy le Grand)** 2018 | Volume 64 | Issue 1; 19-26.
  
- 11) Sahar Golabi, Jalal Zaringhalam\* , Homa Manaheji . The Impact of Synovial NF-κB Activation on Apoptosis Pattern Change During Adjuvant-induced Inflammation. **BCN Journal.** May, June 2017, Volume 8, Number 3; 173-182.
  
- 12) Mahdi Shadnoush, Vida Nazemian, Homa Manaheji and Jalal Zaringhalam\* . Effect of Probiotic Administration on Acute Inflammatory Pain. **Middle East J Rehabil Health.** 2017 January; 4(1):e42022.
  
- 13) Sahar Golabi, Jalal Zaringhalam\* , Homa Manaheji. Synovial fractalkine plays important role in cytokines' related knee edema variation in rat arthritis model. **Physiol Pharmacol**; 20 (2016), 179-188.



- 14) A. Eidi \*, Z. Nateghi , P. Mortazavi , J. Zaringhalam Moghadam. Effects of ethanol extracts in licorice root (*Glycyrrhiza glabra* L.) on activity of liver enzymes in normal and alloxan-induced diabetic rats. **Iran South Med J**, 2016; 19(4): 526-535
- 15) Behzad Nasser, Vida Nazemian, Homa Manaheji, Jalal Zaringhalam\*. Microglia are Involved in Pain Related Behaviors during the Acute and Chronic Phases of Arthritis Inflammation. **J Cell Mol Anesth**; 2016; 1(4):137-145.
- 16) Jalal Zaringhalam1\*, Ali Mohammad khanizadeh, Homa Manaheji1, Vida Nazemian1, Ali Sonboli and Mahdi Ayyari. Treatment by hydroalcoholic and chloroformic extracts of *salvia candidissima* reduced hyperalgesia, edema and serum TNF- $\alpha$  level in arthritis model. **EASL**; 2016, 3, 3S:13-22.
- 17) Jalal Zaringhalam\*, Akhtar Akbari, Alireza Zali, Homa Manaheji, Vida Nazemian, Mahdi Shadnoush, Somayeh Ezzatpanah. Long-Term Treatment by Vitamin B1 and Reduction of Serum Proinflammatory Cytokines, Hyperalgesia, and Paw Edema in Adjuvant-Induced Arthritis. **BCN Journal**. Octobr 2016; 7(4):331-40.
- 18) Sasan Gazerani , Jalal Zaringhalam \*, Homa Manaheji ,Sahar Golabi. The Role of C Fibers in Spinal Microglia Induction and Possible Relation with TRPV3 Expression During Chronic Inflammatory Arthritis in Rats. **BCN Journal**. July 2016; 7(3):231-40.
- 19) Hossein Zeinali, Homa Manaheji\*, Jalal Zaringhalam, Zahra Bahari, Samad Nazemi, Mehdi Sadeghi. Age-Related Differences in Neuropathic Pain Behavior and Spinal Microglial Activity after L5 Spinal Nerve Ligation in Male Rats. **BCN Journal**; July 2016; 7(3):203-12.

- 20) Farzad Asefifar, Jamal Shams, Jalal Zaringhalam\*, Shamsali Rezazadeh.  
Comparing the effect of *Boswellia serrata* and *Lavandula angustifolia* extract administration with the placebo on improvement of premature ejaculation during methadone treatment of opioid; **Journal of Medicinal Plants Research**, 2016, 58(2), 99-108.
- 21) Vida Nazemian, Mahdi Shadnoush, Homa Manaheji, and Jalal Zaringhalam\*.  
Probiotics and Inflammatory Pain: A Literature Review Study. **Middle East J Rehabil Health**. 2016; 3(2):e36087, 1-11.
- 22) Vida Nazemian<sup>1</sup>, Behzad Nasser, Homa Manaheji, Jalal Zaringhalam\*. Effects of Mesenchymal Stem Cells Conditioned Medium on Behavioral Aspects of Inflammatory Arthritic Pain Induced by Complete Freund's Adjuvant. **J Cell Mol Anesth.**; 2016;1(2):47-55.
- 23) Setareh Khashaee, Homa Manaheji, Nazanin Nikzad, Jalal Zaringhalam\*. Anti-hyperalgesic and Anti-Inflammatory Effects of Long Term Calcium Administration during Adjuvant-Induced Arthritis in Rats. **J Cell Mol Anesth.**; 2016;1(1):12-8.
- 24) Marzieh Molaei & Zahra Fatahi & Jalal Zaringhalam & Abbas Haghparast.  
CB1 Cannabinoid Agonist (WIN55,212-2) Within the Basolateral Amygdala Induced Sensitization to Morphine and Increased the Level of  $\mu$ -Opioid Receptor and c-fos in the Nucleus Accumbens. **J Mol Neurosci**; 57(4) 2015.
- 25) Samad Nazemi, Homa Manaheji, Syeed Mohammad Noorbakhsh, Jalal Zaringhalam, Mehdi Sadeghi, Mohammad Mohammad-Zadeh and Abbas

- Haghparast. Inhibition of microglial activity alters spinal wide dynamic range neuron discharge and reduces microglial Toll-like receptor 4 expression in neuropathic rats. **CEPP Journal**; (2015) 42, 772–779.
- 26) Hamed Malek , Mohammad Mehdi Ebadzadeh, Reza Safabakhsh ,Alireza Razavi, Jalal Zaringhalam. Dynamics of the HPA axis and inflammatory cytokines: Insights from mathematical modeling. **Computer in biology and medicine**; 2015, 67: 1–12.
- 27) Khajeh N, Eidi A\*, Zarringhalam J. The Effect of Ethanol Extract of Aerial Parts of the *Mentha piperita* in the Acquisition, Tolerance Expression and Dependence. **YUMSJ**, 2015; 20 (1): 53-65.
- 28) Z. Akhtari , J. Zaringhalam \*, A. Eidi , A. haeriRuhani , H. Manaheji , E. Tekieh. Relation cellular- molecular between serum IL10 levels and hyperalgesia variation in adjuvant- induced arthritis. **ISMJ**; 2015; 17(6): 1176-1187.
- 29) M. Sadeghi, H. Manaheji, A. Haghparast , J. Zaringhalam , S. Nazemi , Z. Bahari. Study of the effect of GABAA receptore and glial inhibition on behavioral responses in CCI model of neuropathic pain in rat. **ISMJ**; 2015; 17(6): 1120-1134.
- 30) Janet Moradi, Fatemeh Abbasipour\*, Jalal Zaringhalam, Bita Maleki, Narges Ziaee, Amin Khodadoustan and Mahyar Janahmadi. Anethole, a Medicinal Plant Compound, Decreases the Production of Pro-Inflammatory TNF- $\alpha$  and IL-1 $\beta$  in a Rat Model of LPS-Induced Periodontitis. **IJPR**; (2014), 13 (4): 1319-1325.
- 31) Ali mohammad khani zade, Jalal zarin ghalam\*, Ali sonboli, Mahdi ayyari, Homa Manaheji. Effects of hydroalcoholic and chloroformic extracts of *Salvia*

- Candidissima on hyperalgesia and edema during adjuvant-induced Arthritis. **Koomesh**; Winter 2014, 16 (2): 239-245.
- 32) Marzieh Molaei , Mohammad-Hossein Sanati , Jalal Zaringhalam , Abbas Haghparast. Microinjection of WIN55,212-2 as a Cannabinoid Agonist into the Basolateral Amygdala Induces Sensitization to Morphine in Rats. **Basic and Clinical Neuroscience**; Autumn 2014 . Volume 5. Number 4, 295-302.
- 33) Akram Eid, Pejman Mortazavi, Jalal Zaringhalam Moghadam, and Parisa Mousavi Mardani. Hepatoprotective effects of Portulaca oleracea extract against CCl4-induced damage in rats. **Pharm Biol**, 2014; DOI: 10.3109/13880209.2014.957783.
- 34) Jalal Zaringhalam & Asef Hormozi & Elaheh Tekieh & Jafar Razavi & Ramin Khanmohammad & Sahar Golabi. Serum IL-10 involved in morphine tolerance development during adjuvant-induced arthritis. **J Physiol Biochem**. 2014; 70:497–507.
- 35) Elaheh Tekieh , Jalal Zaringhalam\* and Zeinab Akhtari. Relationship between Cytokines and Spinal mu Opioid Receptor Expression during Adjuvant-induced Arthritis in Rats. **ARRB**. 2014;4(11): 1854-1866.
- 36) Jalal Zaringhalam\*, Zeinab Akhtari, Akram Eidi , Ali Haeri & Elaheh Tekieh. Relationship between serum IL10 level and p38MAPK enzyme activity on behavioral and cellular aspects of variation of hyperalgesia during different stages of arthritis in rats. **Inflammopharmacol**. (2014) 22:37–44.
- 37) Jalal Zaringhalam\*, Elaheh Tekieh, Homa Manaheji & Zeinab Akhtari. Cellular events during arthritis-induced hyperalgesia are mediated by Interleukin-6 and p38 MAPK and their effects on the expression of spinal mu-opioid receptors. **Rheumatol Int**. (2013) 33:2291–2299.
- 38) Akram Eidi, Jalal Zaringhalam Moghadam, Pejman Mortazavi, Shamsali Rezazadeh and Somayeh Olamafar. Hepatoprotective effects of Juglans regia

- extract against CCl<sub>4</sub>-induced oxidative damage in rats. **Pharm Biol**, 2013; 51(5): 558–565.
- 39) Maryam Zarringhalam, Jalal Zarringhalam\*, Mehdi Shadnoush, Firouzeh
- 40) Safaeyan and Elaheh Tekieh. Inhibitory Effect of Black and Red Pepper and Thyme Extracts and Essential Oils on Enterohemorrhagic Escherichia coli and DNase Activity of Staphylococcus aureus. **IJPR**. (2013), 12 (3): 363-369.
- 41) Mahdi Shadnoush, Rahebeh Shaker Hosseini<sup>a</sup>\*, Yadollah Mehrabi, Ali Delpisheh, Elham Alipoor, Zeinab Faghfoori, Nakisa Mohammadpour and Jalal Zarringhalam Moghadam. Probiotic yogurt Affects Pro- and Anti-inflammatory Factors in Patients with Inflammatory Bowel Disease. **IJPR**. (2013), 12 (4): 929-936.
- 42) Zeinab Akhtari , Jalal Zarringhalam \*, Akram Eidi , Ali haeri Ruhani, Elaheh Tekieh. Role of increasing serum tumor necrosis factor on hyperalgesia and edema variation during different stages of adjuvant- induced arthritis in male rats. **Koomesh**. Spring 2013, 14 (3): 357 – 366.
- 43) Zeinab Akhtari, Jalal Zarringhalam, Akram Eidi, Homa Manaheji, Elaheh Tekieh. Bidirectional effects of serum TNF alpha level and spinal p38mapk phosphorylation on hyperalgesia variation during CFA-induced arthritis. **EXCLI Journal**. 2012;11:373-385.
- 44) Samad Nazemi ,Homa Manaheji , Jalal Zarringhalam ,Mehdi Sadeghi Abbas Haghparast. Post-injury repeated administrations of minocycline improve the antinociceptive effect of morphine in chronic constriction injury model of neuropathic pain in rat. **Pharmacology Biochemistry and Behavior**. 2012.
- 45) Elaheh Tekieh, Jalal Zarringhalam\*, Homa manaheji, Elnaz Zeinalzadeh. Effects of serum interleukin-6 level on hyperalgesia and spinal mu opioid receptor expression during complete freund's adjuvant- induced chronic inflammation. **Feyz**, 2012;16(3):196-204.

- 46) E. Tekieh ,S. Moghadam kia, A. Eidi, R. Taghizad farid, R. Ferdosi, J. Zaringhalam \*. Investigation on the anti- inflammatory and analgesic effects of *Olea europaea* L. metanolic extract on male NMRI mouse. **Iranian South Med J.** 2012, 1: 220-9.
- 47) Akram Eidi, Sara Moghadam-kia, Jalal Zarringhalam Moghadam, Maryam Eidi, and Shamsali Rezazadeh. Antinociceptive and anti-inflammatory effects of olive oil (*Olea europaea* L.) in mice. **Pharmaceutical Biology**, 2011, 1–6.
- 48) Eidi A, Moghadam-Kia S, Zarringhalam Moghadam J, Rezazadeh S , Eidi M. Antinociceptive effect of olive oil (*Olea europaea* L.) on mice. **AMUJ.** 2011; 14(57): 52-59 .
- 49) Eidi A., Zarin Ghalam J., Rezazade Sh. A, Adeli R. Hepatoprotective effect of *Berberis vulgaris* L. extract on CCl<sub>4</sub>-induced toxicity in rats. **Kowsar Medical Journal** Vol. 16, No. 3, Fall 2011, 169-173.
- 50) Eidi Akram , Somayeh Olamafar, Jalal Zarringhalam, Shamsali Rezazadeh and Maryam Eidi. Protective effect of Walnut (*Juglans regia* L.) extract against CCl<sub>4</sub> – induced hepatotoxicity in rats, **Journal of the Faculty of Medicine**, 2011, 35(2): 87-92.
- 51) E. Tekieh, J. Zaringhalam\*, H. Manaheji, N. Maghsoudi, B. Alani, H. Zardooz. “Increased serum il-6 level time-dependently regulates hyperalgesia and spinal mu opioid receptor expression during CFA-induced arthritis”. **EXCLI Journal**, 2011 10: 23-33.
- 52) H. Manaheji , S. Jafari , J. Zaringhalam, Sh. Rezazadeh, R. Taghizad farid. “ Analgesic effects of methanolic extracts of leaf or root of *Moringa oleifera* on Complete Freund Adjuvant- induced arthritis in rat”. **JCIM**, 2010, 9(2); 216-22.

- 53) Jalal Zaringhalam\*, Akhtar Akbari, Elaheh Tekieh, Homa Manaheji, Shamsali Rezazadeh<sup>2</sup>, “*Achillea santolina* reduce serum interleukine-6 level and hyperalgesia during complete Freund’s adjuvant-induced inflammation in male Wistar rats. **JCIM**, 2010,8(12); 1180-89.
- 54) Elaheh Tekieh <sup>a</sup>, Akhtar Akbari <sup>a</sup>, Homa Manaheji <sup>a</sup>, Shamsali Rezazadeh <sup>b</sup>. Jalal Zaringhalam\* “Comparison of the anti-hyperalgesic and anti-inflammatory effects of *Achillea santolina* and *Stachys athorecalyx* extracts on CFA –induced short-term inflammation in male Wistar rats”. **Koomesh**, 2010.
- 55) J. Zaringhalam\*, J. Shams, Sh. Rezazadeh, H. Manaheji, S. Akhondzadeh and F. Asefifar . “Role of the methanolic extracts of *Boswellia serrata* and *Lavandula angustifolia* on apomorphine induced ejaculation in male Wistar rats”. **Journal of Medicinal Plants Research**, 2010, 4(11), 1073-80.
- 56) Zaringhalam J\*, Manaheji H, Rastqar A, Zaringhalam M. “Reduction of chronic lowback pain: A randomised controlled trial on acupuncture and baclofen”. **Chinese Medicine**, 2010,5: 15.
- 57) Homeira Zardooz, Fatemeh Rostamkhani, Jalal Zaringhalam, Farzaneh Faraji Shahrivar. Plasma corticosterone, insulin and glucose changes induced by brief exposure to isoflurane, diethyl ether and CO<sub>2</sub> in male rats. **Physiological Research**, 2010; 59: 973-978.
- 58) Elaheh Tekieh, Shamsali Rezazadeh, Homa Manaheji, Akhtar Akbari, Jalal Zaringhalam\*. “The effects of pretreatment with *Achillea santolina* and *Stachys Athorecalyx* extracts on CFA-induced acute inflammation in male rats”. **Journal of Medicinal Plants**, 2010; 9(34), 165- 76.

- 59) Hasanzadeh E, Rezazadeh Sh, Shamsa SF, Dolatabadi R, Zaringhalam J. Review on phytochemical and therapeutic properties of Fenugreek (*Trigonella foenum-graceum*). **Journal of Medicinal Plants**, 2010; 9(34), 1-18.
- 60) Mirzaie V, Manaheji H, Maghsoudi N, Zaringhalam J. “Comparison of changes in mRNA expression of spinal glutamate transporters following induction of two neuropathic pain models”. *Spinal Cord*, 2010 March.
- 61) Tavakkolifar B, Massoudi M, Zaringhalam J. Review on Pharmacological Activities of Gum olibanum. **Journal of Medicinal Plants**, 2009; 8(32), 1-13.
- 62) Haghparast A, Zaringhalam J, Khatibi A, Dianati E, Shams J. “The fruit essential oil of *Cuminum cyminum* L. reduced the acquisition but not expression of ineffective dose of morphine-induced conditioned place preference in morphine-sensitized mice”. **Journal of Medicinal Plants**, 2009; 8(31).
- 63) Rezazadeh Sh. Zaringhalam J\*. Manaheji H. Kebriayezadeh A. “Anti-inflammatory and anti-hyperalgesic activities of *Stachys athorecalyx* extracts on CFA-induced inflammation”. **Journal of Medicinal Plants Research**, 2009; 3(5), 368-76.
- 64) Zaringhalam J. Manaheji H. Maghsoudi N. Farokhi B. Mirzaee V. “Spinal mu-opioid receptor expression and hyperalgesia with dexamethasone in chronic adjuvant induced arthritis in rats.” **Clinical and Experimental Journal of Physiology and Pharmacology** 2008; 35(11), 1309-15.
- 65) Mirzaee V. Manaheji H. Keramati K. Maghsoudi N. Zaringhalam J. “Comparing the neuropathic pain behavioral responses between CCI and SNI neuropathy models in male rats”. **Journal of Physiology and Pharmacology** 2008; 11(4), 276-81.



- 66) Zaringhalam J. Manaheji H. Maghsoodi N. Farokhi B. Mirzaee V.  
“Investigation the relationship between hypothalamus-pituitary-adrenal (HPA) axis activity and hyperalgesia variation during chronic inflammation due to rheumatoid arthritis (RA) in male rats”. **Journal of Physiology and Pharmacology** 2007; 11(2), 130-36.
- 67) Zaringhalam M. Sttari M . Zaringhalam J. Rezazadeh Sh. “Effect of Red pepper, Black pepper and Thyme (Zataria Multiflora Boiss) alcoholic extracts on growth and DNase activity of Staphylococcus aureus”. **Journal of Medicinal Plants** 2008; 24, 17-22.
- 68) Fallah Huseini H. Zaree A. Heshmat R. Rezaii Sharifabadi R. Naderi G.A. Zaringhalam J. Sheikh Samani A.H. “The effect of Citrullus colocynthis (L) Schard. Fruit on oxidative stress parameters in type II diabetic patients”. **Journal of Medicinal Plants** 2006; 5 (2).

**Book Publications:**

- 1) Zaringhalam J. Rasteghar A. “**Blood Physiology**”. 2<sup>nd</sup> ed. Sina Teb Publication, Tehran, Iran 2009.
- 2) Zaringhalam J, Akhtari Z, Golabi S. ” **Pain Induction Ethics and Methods In Laboratory Animals**” Sina Teb Publication, Tehran, Iran, 2015.

**Other publications:**

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**Invited presentations:**

- 1) J. Zaringhalam. Relation between Spinal Microglia Activation TRPV3 Expression and Pain variations During Persistent Peripheral Inflammation. Cellular and molecular Anesthesiology panel, Tehran, Iran, 2017; (Oral Presentation).

- 2) J. Zaringhalam. Neuromodulation and Pain. 13<sup>th</sup> Congress of Iranian pain society (IASP chapter), Tehran, Iran, 2017 (Oral presentation).
- 3) J. Zaringhalam. Different Roles of cytokines in inflammatory pain induction. 3<sup>th</sup> International Basic and Clinical Neuroscience Congress. Tehran, Iran, 2015; (Oral Presentation).
- 4) J. Zaringhalam. Inflammatory pain behavioral models. 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> IBRO international school. Tehran, Iran 2013, 2014, 2015 and 2016 (English Oral Presentation).
- 5) J. Zaringhalam. Role of serum IL-10 in morphine tolerance during chronic adjuvant-induced arthritis. 21<sup>nd</sup> Pharmacology and Physiology Congress. Tabriz, Iran, 2013; (Oral Presentation).
- 6) J. Zaringhalam. Variation of Opioid effective dose during chronic inflammation. 2<sup>nd</sup> International Basic and Clinical Neuroscience Congress. Tehran, Iran, 2013; (Oral Presentaion).
- 7) J. Zaringhalam<sup>\*</sup>, E Tekieh, H. Manaheji. Cytokine related phosphorylation of spinal p38 mapk enzyme role on mu opioid receptor expression during adjuvant induced arthritis. 11<sup>th</sup> Iranian pain society congress. Tehran, Iran 2012 (Poster presentation).
- 8) J. Zaringhalam, E. Tekieh, H. Manaheji, B. Alani. "Increased serum IL-6 level time-dependently regulates hyperalgesia and spinal mu opioid receptor expression during CFA-induced arthritis. 8<sup>TH</sup> IBRO world congress of neuroscience. Italy, July 2011 (Poster presentation).
- 9) Jalal Zaringhalam moghadam<sup>1</sup>, Elahe Tekieh<sup>2</sup>, Homa Manaheji<sup>3</sup>, Behrang Alani<sup>4</sup>  
 "Increased level of serum IL-6 during chronic CFA-induced inflammation modulates Hyperalgesia " 20<sup>th</sup> Iranian Physiology and Pharmacology Congress, Hamedan, Iran 2011; ( Oral presentation).

- 10) Zaringhalam J. Chronic pain mechanism. First Chronic Pain Congress. Tehran, Iran 2011 (Oral Presentation).
- 11) Zaringhalam J\*, Hormozi A, Manaheji H, Tekieh E. "Morphine anti-hyperalgesic effective dose varies during different stages of CFA-induced chronic inflammation in male wistar rats". 1<sup>st</sup> IBRO middle east congress, AL Ain, UAE. 2011 (Poster presentation).
- 12) Rezazadeh Sh. Zaringhalam J\*. Manaheji H. Kebriayezadeh A. "Anti-inflammatory and anti-hyperalgesic activities of *Stachys athorecalyx* extracts on CFA-induced inflammation". 13<sup>th</sup> International Pain Congress in Montreal, Canada. 2010( Poster presentation).
- 13) Zaringhalam J. Manaheji H. Maghsoodi N. "Spinal mu-opioid receptor expression and hyperalgesia with dexamethasone in chronic adjuvant induced arthritis in rats" 19<sup>th</sup> Iranian Physiology and Pharmacology Congress, Tehran, Iran 2009; Nov ( Poster presentation).
- 14) Zaringhalam J. Manaheji H. N. Farokhi, B. " Hyperalgesia variations during different stages of CFA-induced arthritis". 8<sup>th</sup> International Iranian Pain Congress , 2008 (Oral presentation).
- 15) Zaringhalam J. Manaheji H. Maghsoodi N. Mazaheri EL. "Variation of spinal "mu" opioid receptor and hyperalgesia during adjuvant induced arthritis in male rats". 12<sup>th</sup> International Pain Congress, Glasgow, Scotland 2008; August (Poster presentation).
- 16) Zaringhalam J. Noroozi A. Rezazadeh SH. "Investigation the hypoglycemic effect of the *moringa oleifera* leaf extract on the gestational diabetes in Iranian pregnant women". 4<sup>th</sup> International Gestational Diabetes Congress, Istanbul, Turkey 2007(Poster presentation).

- 17) Zaringhalam J, Manaheji H, Maghsoodi, N, Farokhi, B. "Investigation the relationship between hypothalamus-pituitary-adrenal (HPA) axis activity and hyperalgesia variation during chronic inflammation due to rheumatoid arthritis (RA) in male rats". 7<sup>th</sup> International Iranian Pain Congress , 2007 (Oral presentation).
- 18) Zaringhalam J, Manaheji H, Rastqar A, Zaringhalam M. "Reduction of chronic lowback pain: A randomised controlled trial on acupuncture and baclofen". 4<sup>th</sup> International Iranian Pain Congress, 2004 (Poster presentation).
- 19) Zaringhalam J, Falah hoseini H. "Comparison the effect of hirudo medicinalis and piroxicam capsule on reduction of inflammation and pain in the primary stages of rheumatoid arthritis of the knee." 2<sup>nd</sup> International Traditional Medical Congress in Shahid Beheshti University of Medical Sciences, 2004 (Poster presentation).
- 20) Zaringhalam J, Sinafar A. "Apotheosis, proposed etiology and treatment ways". 6<sup>th</sup> International Medical Congress, Tabriz, Iran. 1998; May (Oral presentation).
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**Other seminars and congress:**

- 18<sup>th</sup>, 19<sup>th</sup>, 20 , 21<sup>st</sup> and 22<sup>nd</sup> Pharmacology and physiology international congress. Iranian Physiology and Pharmacology Society. 2002 till 2013
- Acute Pain Management congress, Tehran, Iran. 2011
- 1<sup>st</sup> International Patient Rights, Kish, Iran, 2011.
- 10<sup>th</sup> international congress of immunology and allergy of Iran, Tehran, Iran 2010.
- International Cell Death Symposium: Cell Death In Infectious Diseases and Cancer, Johannesburg, South Africa, 2009.

- Third International Symposium on Molecular Technology, Tehran, Iran 2009.
- “Scientific writing and thinking” Research Center for Gastrology and Liver Diseases. Tehran, Iran, 2009.
- “Basic of flow cytometry and its applications” The Research Center for Gastrology and Liver Diseases. Tehran, Iran, 2009.
- “Transgenic mice and its relation to disease”. Shahid Beheshti University of Medical Sciences, Tehran, Iran 2009.
- “Methods in detection of cell death”. Shahid Beheshti University of Medical Sciences, Tehran, Iran 2009.
- 13<sup>th</sup>, 12<sup>th</sup>, 11<sup>th</sup>, 10<sup>th</sup>, 8<sup>th</sup>, 7<sup>th</sup>, 6<sup>th</sup> and 4<sup>th</sup> International Iranian Pain Congresses, on 2016, 2015, 2012, 2010, 2008, 2007, 2006 and 2004.
- 1<sup>st</sup> and 2<sup>nd</sup> International Symposium on Molecular Technology, Tehran, Iran 2006 and 2007.
- 2<sup>nd</sup> federation of Asian – Oceania Neuroscience Societies (FAONS) symposium, Iran, Tehran 2004.
- Drug Addiction Rehabilitation Conference, Tabriz medical university 2002.

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**Peer reviewers for medical journals:**

- Editorial board of **J Cell Mol Anesth.** Tehran, Iran. Since 2015 till now.
  - Editorial board of **Journal of Clinical Neuroscience.** Tehran, Iran. Since 2013 till present.
  - Associated editor of **Maxwell science medical journal**, Birmingham, UK, since 2009 till present.
  - Reviewer of **Medicinal Plants Journal**, Academic Center for Education, Culture and Research (ACECR), Tehran, Iran, Since 2008 till 2011.
  - Reviewer of **physiology and pharmacology Journal**, Tehran, Iran, since 2009 till present.
  - Reviewer of many other International Journals.
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**University teaching roles:**

- Physiology of Pain for Pain fellowship students
  - Physiology of Respiratory system for PhD and MSc. students
  - Physiology of Blood, Respiratory system, Nervous system and Cell function for medical and nursing under graduate students
  - Pain Elective course for medical students
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**Workshops held:**

- Scientific director of 13<sup>th</sup> International congress of Iranian pain society, 2017 Tehran, Iran.
  - Supervision of Pain Behavioral Assessment Methods workshops, 2015 and 2016, Neurophysiology Research Center, Tehran , Iran.
  - Executive director 2<sup>nd</sup> , 3<sup>rd</sup> and 4<sup>th</sup> IBRO international school. Tehran, Iran 2012-2013.
  - Executive director of 11<sup>th</sup> International congress of Iranian pain society, 2012 Tehran, Iran.
  - Two weeks workshop held each year for pain fellowship students, since 2009 till present (Every year).
  - Executive director of 3<sup>rd</sup> International symposium on molecular technology, 2009 May, Tehran, Iran.
  - Scientific director and speaker of two days workshop about herbal medicines roles in human liver and gastro-intestinal disorders, 2009 Tehran, Iran.
  - Scientific director and speaker of two days workshop about herbal medicines in human cardiac and respiratory system disorders, 2009 Tehran, Iran.
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**Language skills:**

Turkish (Azary) (mother tongue)

Persian (national language)

English (writing and speaking good)

**Interests and activities:**

- Mountain climbing
- Swimming
- Volleyball