

Masoumeh Emamghoreishi, Pharm.D., Ph.D.
Associate professor
Department of Pharmacology, Shiraz University of Medical Sciences
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Education

May-Nov. 2009

Sabbatical

Centre for Addiction and Mental Health, University of Toronto,
Toronto, Ontario, Canada

Research project focused on the effect of lithium treatment on TRPM2
and TRPC3 mRNA and protein levels in primary rat cortical neuronal
and astrocyte cultures under oxidative stress condition

1998-1999

Postdoctoral Fellowship

Sunnybrook and Women's College Health Science Centre, University
of Toronto, Toronto, Ontario, Canada.

Research projects focused on the study of gender differences in
response to opioid analgesics; and the effect of CYP2A6 inhibition on
smoking behaviour.

1994-1998

Completion of Doctor of Philosophy degree (PhD)

Ontario.

Department of Pharmacology, University of Toronto, Toronto,

Research is being conducted at the Clarke Institute of Psychiatry,
Toronto, Ontario. Research project focused on the study of the link
between calcium and G protein disturbances in bipolar affective
disorder

1991-1994

Master of Science degree (M.Sc.)

Ontario.

Department of Pharmacology, University of Toronto, Toronto,

Ontario.
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Research conducted at the Clarke Institute of Psychiatry, Toronto,
Research project focused on elucidating molecular mechanism
antidepressants.

1978-1985

Doctor of Pharmacy (Pharm. D)

Tehran University of Medical Sciences, School of Pharmacy, Tehran,
Iran

Research conducted at the School of Pharmacy, Tehran University of
Medical Sciences, Tehran, Iran. Research project involved chemical
synthesis of drugs and the study of their structure-activity relationship
(Pharmaceutical chemistry)

Awards

- Poster presentation award at the 3rd FAONS congress, South Korea
September 2002
- Canadian Society for Clinical Pharmacology Postdoctoral Fellowship
March 1999
- Wyeth-Ayerst Inc. Postdoctoral Fellowship in Women's Mental Health
September 1998
- University of Toronto Open Fellowship
May 1998
- Clark Institute of Psychiatry Postdoctoral Fellowship
March 1998
- National Institute of Mental Health (NIMH) New Investigator Award
May 1997
- Ontario Graduate Scholarship (OGS)
1997-1998
- Ontario Graduate Scholarship (OGS)
1996-1997
- Iranian Ministry of Health and Medical Education Scholarship
1991-1995

Publications

1. Emamghoreishi M, Keshavarz M, Nekooeian AA. Acute and chronic effects of lithium on BDNF and GDNF mRNA and protein levels in rat primary neuronal, astroglial and neuroastroglia cultures. Iranian Journal of basic Medical Sciences, in press
2. Zaeri S, Emamghoreishi M. Acute and chronic effects of N-acetylcysteine on pentylenetetrazole-induced seizure and muscle relaxation. Iranian Journal of Medical Sciences, in press
3. Janahmadi Z, Nekooeian A, Moaref AR, Emamghoreishi M. Oleuropein offers cardioprotection in rats with acute myocardial infarction. Cardiovas Toxicol, Epub August 2014 DOI 10.1007/s12012-014-9271-1
4. Ashjzadeh N, Boostani R, Ekhtiari H, Emamghoreishi M, Farrokhi M, Ghanizadeh A. et al. Operationalizing cognitive science and technologies' research and development: the "brain and cognition study group (BCSG)" initiative from Shiraz, Iran. Basic and Clinical Neuroscience 5(2):104-116, 2014
5. Kaviani M, Rahnavard T, Azima S, Emamghoreishi M., Asadi N, Sayadi M. The

effect of education on sexual disorder: a randomized controlled trial. *International Journal of Community Based Nursing And Midwifery* 2(2):94-102, 2014

6. Keshavarz M., Emamghoreishi M., Nekooeian A.A., Warsh J.J., Zare H.R. Increased bcl-2 protein levels in rat primary astrocyte culture following chronic lithium treatment. *Iranian Journal of Medical Sciences*, 38 (3):255-262, 2013
7. Keshavarz M., Showraki, A.R., Emamghoreishi M. Anticonvulsant effect of guaifensin against pentylentetrazole-induced seizure in mice. *Iranian Journal of Medical sciences* 38(2):116-121, 2013
8. Emamghoreishi M., Ghasemi F. Effect of subchronic administration of the aqueous and hydro-alcoholic extracts of saffron from Estahbanat, Fars, in forced swimming test in mice. *Armaghan Danesh* 16(6):527-536, 2012
9. Emamghoreishi M, Javidnia K ,Taghavi A. The effects of aqueous and methanolic extracts of *Pragnos ferulacea* on formalin-induced pain in mice. *Journal of Jahrome University of Medical Sciences*, 9(4):1-7; 2012
10. Emamghoreishi, M., Talebianpour, M.S. Antidepressant effect of *Melissa officinalis* in the forced swimming test. *DARU* 17(1):42-47 2009
11. Emamghoreishi, M., Bokae, H.R., Keshavarz, M. CYP2A6 genetic polymorphism and its relation to risk of smoking dependence in Iranian men. *Journal of Physiology & Pharmacology*, 2009 12(4):296-306
12. Emamghoreishi, M., Bokae, H.R, Keshavarz, M., Khaderi, A., Tyndale, R.F., CYP2A6 allele frequencies in an Iranian population. *Arch Iranian Med* 2008; 11 (6):613 – 617
13. Emamghoreishi, M., Heidari-Hamadani, G. Effect of extract and essential oil of *Coriandrum sativum* seed against pentylentetrazole-induced seizure. *Pharmaceutical Sciences*, Autumn 2008, 1-10
14. Emamghoreishi, M., Heidari-Hamadani, G. Sedative-hypnotic activity of extracts and essential oil of coriander seeds. *Iranian Journal of Medical Sciences*, 2006; 31(1):22-27
15. Emamghoreishi, M., Noorozi, S. Sex-related differences in response to analgesic effect of ibuprofen in mice. *Physiology & Pharmacology*, 2005, 9(1):17-24
16. Emamghoreishi, M., Salmanpour, R., Panjeshahin, M.R. Clinical trial of a herbal ointment in reduction of hair density in hirsutism. *Iranian Journal of Dermatology*,

2005, 8(3):218-223

17. Emamghoreishi, M., Khasaki, M., Fath Aazam, M. *Coriandrum sativum*: Evaluation of its anxiolytic effect in the elevated plus maze. *Journal of Ethnopharmacology*, 2005, 96(3):365-70
18. Emamghoreishi, M., Li, P.P., Schlichter, L., Parikh, S., Cooke, R., Warsh, J.J. Associated disturbances in calcium homeostasis and G protein-mediated cAMP signaling in bipolar I disorder. *Biological Psychiatry* 2000, 48(7): 665-73
19. Emamghoreishi, M., Schlichter, L., Li, P.P., Parikh, S., Sen, J., Kamble, A., Warsh, J.J. High intracellular calcium concentrations in transformed lymphoblasts from subjects with bipolar I disorder. *Am J Psychiatry* 1997, 154:976-982
20. Emamghoreishi, M., Warsh, J.J., Siboby, D., Li, P.P. Lack of effect of chronic antidepressant treatment on Gs and Gi α -subunit protein and mRNA levels in the rat cerebral cortex. *Neuropsychopharmacology* 1996, 15(3): 281-287

Abstracts and Presentations

Emamghoreishi M. Pharmacological approaches in treating insomnia: merits and demerits. Oral presentation, Basic and Clinical Neuroscience Congress, Tehran, Iran 18-20 Dec. 2013

Emamghoreishi M., Javidnia K, Taghavi A. Effect of *Salvia Mirzayanii* extracts on formalin-induced pain in mice. Presented in 21th International Iranian Congress of Physiology and Pharmacology, to be held in Tabriz University of Medical Sciences, Tabriz, Iran 23-27 August 2013.

Emamghoreishi M., Chronic lithium treatment increased S100 β protein levels in rat primary neuronal and neuro-astroglia cultures. **Oral presentation.** Presented in Basic and Clinical Neuroscience Congress, Tehran, Iran 7-9 Nov. 2012

Emamghoreishi M, Ghassemi F. Antidepressant effect of aqueous and Hydroalcoholic extracts of *Cinnamon zeylanicum* in the forced swimming test. Presented in 3rd World Congress of Asian Psychiatry, Melbourne, Australia 31 July - 4 August, 2011

Emamghoreishi M, Javidnia K, Taghavi A. Analgesic effect of aqueous and methanolic extracts of *Marrubium astracanicum* in mice. Presented in 20th Iranian congress of physiology and pharmacology. Hamadan, Iran, November 2011

Mojtaba Keshavar, Alireza Showarki, Masoumeh Emamghoreishi. Anticonvulsant effect of guaifensine against pentylenetetrazole-induced seizure in mice. Presented at the 19th Iranian congress of physiology and pharmacology. Tehran, Iran, November 3-6, 2009

Alireza Showraki, Masoumeh Emamghoreishi. Evaluation of anticonvulsant effect of caraway extract in mice. Presented at the 19th Iranian congress of physiology and pharmacology, Tehran, Iran, Nov 3-6, 2009

Masoumeh emamghoreishi, Ramin Miri, Mohammad Reza veisian. Analgesic effect of new nitroimidazolil 1,4 dihyropyridine derivatives in mice. *8th Annual forum of pain, Tehran, Iran, May 2008.

Masoumeh Emamghoreishi, Katayon Javidnia, Ali Taghavi. Analgesic effect of the aqueous and methanolic extracts of nepeta glumerulosa in mice. 18th Iranian congress of physiology & pharmacology, Mashhad, Iran, August 2007-10-17

Malihe Monsefi, Aminollah Bahaadini, Masoumeh Emamghoreishi. Sara Pahlavan. Evaluation of Anethum graveolens seeds on plasma levels of testosterone and spermatogenesis in rats. 17th Congress of Physiology and Pharmacology, Kerman, Iran, October 2005

Masoumeh Emamghoreishi, Shima noorozi. Sex differences in analgesic responses to ibuprofen in mice. 17th Congress of Physiology and Pharmacology, Kerman, Iran, October 2005

Masoumeh Emamghoreishi, Mohammad Khasaki, Maryam Fath Aazam. Anxiolytic effect of Coriandrum sativum in the elevated plus-maze test of anxiety in mice. Presented at the 3rd FAONS Congress. Seoul, Korea, September 2002

Masoumeh Emamghoreishi, Lyanne Schlicter, Peter P. Li, Sagar Parikh, and Jerry J. Warsh. Signal transduction disturbances in bipolar disorder: Implications for pathophysiology and treatment. **Plenary lecture** at 14th International Congress of Geographic Medicine and 15th Iranian Congress of Physiology and Pharmacology. Shiraz, Iran, November 2001.

Masoumeh Emamghoreishi, Myroslava K. Romach, Edward M. Sellers, Howard H. Kaplan. Comparative effects of opioid analgesics in females and males. **Oral Presentation** at 25th Harvy Stancer Research Day, Toronto, June 1999.

Masoumeh Emamghoreishi, Peter P. Li, Lyanne Schlicter, Sagar Parikh, Robert Cooke, David Sibony, and Jerry J. Warsh. Elevated G α s immunolabeling in lymphoblasts from bipolar II subjects. Presented at the 53th annual meeting of **Biological Psychiatry**, Toronto, 1998.

Masoumeh Emamghoreishi, Lyanne Schlicter, Peter P. Li, Sagar Parikh, Julia Sen, Arvind Kamble, and Jerry J. Warsh. Abnormal intracellular calcium signaling in bipolar affective disorder: Pathophysiological and therapeutic implications. Presented at the 37th annual meeting **New Clinical Drug Evaluation Unit**, Boca Raton, Florida. May 1997.

Masoumeh Emamghoreishi, Roula Andreopoulos, Peter P. Li, and Jerry J. Warsh. Bipolar

Affective Disorder: Unraveling the Cellular Pathophysiology. **Oral Presentation** at the Mood and Anxiety Division Research Seminar. Clarke Institute of Psychiatry, Toronto, Ontario. 1997.

Masoumeh Emamghoreishi, Lyanne Schlicter, Peter Li, Sagar Parikh, Julia Sen, Arvind Kamble, and Jerry J. Warsh. Elevated intracellular calcium in immortalized B-lymphoblasts in bipolar-I disorder. Presented at the 26th annual meeting **Society for Neuroscience**, Washington DC, 1996.

Masoumeh Emamghoreishi, Lyanne Schlicter, Peter P. Li, Sagar Parikh, Julia Sen, Arvind Kamble, and Jerry J. Warsh. Intracellular calcium signaling in mood disorders. **Oral presentation** at the 22nd Annual **Harvey Stancer Research Day**, Toronto, June 1996.

Masoumeh Emamghoreishi, Lyanne Schlicter, Peter P. Li, Sagar Parikh, Julia Sen, Arvind Kamble, and Jerry J. Warsh. Elevated intracellular calcium in transformed lymphoblasts in bipolar-I disorder. Presented at the 51st annual meeting of **Biological Psychiatry**, New York, May 1996.

Masoumeh Emamghoreishi, L.Schlicter, P. P. Li, S. Parikh, J. Sen, A. Kamble, and J. J. Warsh. Elevated intracellular calcium in immortalized B lymphoblasts and T lymphocytes from patients with bipolar-I disorder. Presented at the 19th annual meeting of **Canadian College of Neuropsychopharmacology (CCNP)**, Toronto, June 1996.

Masoumeh Emamghoreishi, Jerry J. Warsh, David Siboby, and Peter P. Li. Effect of chronic antidepressant treatment on G protein levels and gene expression, presented at the 19th Annual **Harvey Stancer Research Day**, Toronto, 1993.

Masoumeh Emamghoreishi and Ali Khalaj. Structure-Activity Relationship of Nifedipine, presented at the Second **International Congress of Geographical and Medicine**, Shiraz, Iran, 1987.

Current Research Interests:

- Unraveling the mechanism of action of lithium in the treatment of bipolar affective disorders applying cellular and molecular approach
- Pharmacogenetics: evaluation of the role of genetic variation in inter-individual differences in drug responsiveness specially drugs used in psychiatric disorders including antidepressants
- Screening herbal medicine for anxiolytic, antidepressant, anticonvulsant and/or analgesic effects and isolation of their active compounds

Skills

- Cell culturing: Primary rat cortical neurons and astrocyte; T lymphocyte, B lymphoblasts (immortalized B lymphocytes)
- Embryonic and adult rat brain dissection

- Real time PCR and allele-specific nested PCR
- Northern Blot Analysis
- Western Immunoblotting
- Immunocytochemistry
- Phase-contrast microscopy
- Measurement of intracellular calcium concentration using fura2 (Spectrofluorometry)
- RNA and DNA extractions from cells and tissues
- Isolation and purification of cDNA from plasmid DNA
- Gel electrophoresis
- Receptor binding assay
- cAMP assay
- Conducting research in clinical pharmacology
- Techniques and methods involved in developing new drugs (pharmaceutical chemistry)