**Somayyeh Karami-Mohajeri**

Assistant Professor, Department of Toxicology-Pharmacology, Faculty of Pharmacy, Kerman University of Medical Sciences

**Personal Data & Contact Information**

**First name:** Somayyeh

**Last name:** Karami-Mohajeri

**Date and Place of Birth:** 21, March, 1983, Kerman (Shahr-e-babak), Iran

**Marital Status:** Married

**Nationality:** Iranian

**Phone:** 03413205239

**E-mail:** s\_karami@kmu.ac.ir

[somayyehkarami@gmail.com](mailto:somayyehkarami@gmail.com)

**Academic Qualifications**

**Assistant professor in Toxicology-Pharmacology**

Department of Toxicology-Pharmacology, Faculty of Pharmacy, Kerman University of Medical Sciences, 2013 till now

**Doctor of Philosophy in** **Pharmacology & Toxicology (PhD)**

Tehran University of Medical Sciences, Tenran, Iran, 2008-2013

Dissertation title: Electrophysiological, mitochondrial, and apoptotic toxicity of malathion in rat muscle.

Dissertation advisor: Dr. Mohammad Abdollahi and Dr.Ebrahim Azizi

**Professional Doctorate in Pharmacy (Pharm D)**

Kerman University of Medical Sciences, Kerman, Iran, 2002-2008

Dissertation title: Effect of varius extracts of *Teucrium polium L.* Leaves on lung (A549), nervous system (PC12) and mouse fibrosarcoma (WEHI-164) tumors cell lines.

Dissertation advisor: Dr. Mitra Mehrabani and Dr. Noradin Nematollahi

**Honors and awards**

The first grade in Ph.D board exam of Toxicology & Pharmacology in 2011

The second grade in basic science test (Olum paye) in Iran in 2004

Membership in National nokhbegan foundation (BMN), Tehran, Iran

Membership of Iranian Society of Toxicology (IranTox)

Member of the Iranian Medical Council since 2008

Member of the Iranian Pharmacist Association

Membership in gifted talented, Kerman University of Medical Science, Iran

Membership in young research club, science and research center, Tehran, Iran

**Research Interests**

Mechanistic Toxicology and Pharmacology

* Cellular and molecular pathways (Apoptosis)
* Mitochondrial metabolism
* Metabolism of glucose
* Oxidative stress

Environmental & Occupational toxicology

* Pesticides
* Toxic metal
* Toxic gases

Epidemiology of poisonings

Clinical toxicology

* Evidence base medicine, systematic review and Meta-analysis
* Diabetic neuropathy
* Heart disease with super and double perfusion system
* Electromyography

**Skills**

Cell culture and tumor cell colony formation method

Determination of mitochondrial enzyme activity

Electromyography of rat, nerve conduction velocity of sciatic nerve

Real time and conventional PCR protocol, primer design

Western blot protocol

Electrophysiological properties of heart in Isolated Double-perfused Model

Powerlab® software

SPSS & prism software

End note software

**Teaching Experience**

Kerman University of Medical science, pharmacy school, 2013 till now

**Book (Edition and Compilation)**

7- Abdollahi M, Solgi R, Karami-Mohajeri S. N-Nitrosopyrrolidine. In: Wexler P, editor. Encyclopedia of Toxicology (Third Edition). Oxford: Academic Press; 2014. p. 601-2.

6- Abdollahi M, Karami-Mohajeri S, Gadagbui B. Oral/Dermal Reference Dose (RfD)/Inhalation Reference Concentration (RfC). In: Wexler P, editor. Encyclopedia of Toxicology (Third Edition). Oxford: Academic Press; 2014. p. 702-3.

5- Abdollahi M, Karami-Mohajeri S. Nitropyrene, 1. In: Wexler P, editor. Encyclopedia of Toxicology (Third Edition). Oxford: Academic Press; 2014. p. 581-3.

4- Abdollahi M, Karami-Mohajeri S. Chloroacetic Acid. In: Wexler P, editor. Encyclopedia of Toxicology (Third Edition). Oxford: Academic Press; 2014. p. 867-9.

3- Abdollahi M, Karami-Mohajeri S. Nitropropane, 2. In: Wexler P, editor. Encyclopedia of Toxicology (Third Edition). Oxford: Academic Press; 2014. p. 578-80.

2- Abdollahi M, Karami-Mohajeri S. Chloropropionitrile, 2. In: Wexler P, editor. Encyclopedia of Toxicology (Third Edition). Oxford: Academic Press; 2014. p. 911-2.

1- Abdollahi M, Nikfar S, Karami-mohajeri S and Barzegar E (2011). Poison Information Centers In: Management of Patients inTriage and Clinical Toxicology Ward Mashhad University of Medical Sciences Press, Mashhad [in Persian].

**Journal Publications**

1 Rashidipour N, Karami-Mohajeri S, Mandegary A, Mohammadinejad R, Wong A, Mohit M, Salehi J, Ashrafizadeh M, Najafi A, Abiri A. Where ferroptosis inhibitors and paraquat detoxification mechanisms intersect, exploring possible treatment strategies. *Toxicology* 2020; **433-434**: 152407 [DOI: https://doi.org/10.1016/j.tox.2020.152407]

2 Shahvali S, Shahesmaeili A, Karami-Mohajeri S. The correlation between blood oxidative stress and sialic acid content in diabetic patients with nephropathy, hypertension, and hyperlipidemia. *Diabetology International* 2019: 1-8 [DOI: 10.1007/s13340-019-00395-9]

3 Najafi A, Behnam B, Karami-Mohajeri S. Antioxidant and Pro-oxidant Effects of Aminoguanidine on HepG-2 Hepatocellular Carcinoma Cell Line. *Journal of Mazandaran University of Medical Sciences* 2019; **29**(172): 127-134

4 Farsipour B. Immune response and oxidative stress in workers of a copper concentration factory. *International Journal of Workplace Health Management* 2019; **12**(4): 258-266 [DOI: 10.1108/IJWHM-05-2018-0062]

5 Sinaei N, Zare Mirakabadi A, Behnam B, Aminzadeh A, Karami-Mohajeri S. Potential Anticancer Activity of Caspian Cobra Venom Through Induction of Oxidative Stress in Glioblastoma Cell Line. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences* 2018 [DOI: 10.1007/s40011-018-1030-9]

6 Shadnia S, Ebadollahi-Natanzi A, Ahmadzadeh S, Karami-Mohajeri S, Pourshojaei Y, Rahimi HR. Delayed death following paraquat poisoning: three case reports and a literature review. *Toxicol Res (Camb)* 2018; **7**(5): 745-753 [PMID: 30310653 PMCID: PMC6116805 DOI: 10.1039/c8tx00120k]

7 Nematolahi P, Mehrabani M, Karami-Mohajeri S, Dabaghzadeh F. Effects of Rosmarinus officinalis L. on memory performance, anxiety, depression, and sleep quality in university students: A randomized clinical trial. *Complement Ther Clin Pract* 2018; **30**: 24-28 [PMID: 29389474 DOI: 10.1016/j.ctcp.2017.11.004]

8 NASRPOUR F, SHARIFIFAR F, BARFE M, MEHDIPOUR M, KARAMI-MOHAJERI S. Inhibitory effect of concomitant administration of Zataria multiflora Boiss. against oxidative damage-induced by sub-acute exposure to arsenic in rats. *IRANIAN JOURNAL OF PHARMACOLOGY & THERAPEUTICS* 2018; **16**(1): 1-5

9 Karami-Mohajeri S, Farsipour B, Mozaffari A, Faghihi-Zarandi A. AIR VOLATILE ORGANIC COMPOUNDS (VOCS) CONCENTRATIONS, CLINICAL HEMATOLOGY AND BIOCHEMISTRY IN WORKERS OCCUPATIONALLY EXPOSED TO VOCS. *Journal of Fundamental and Applied Sciences* 2018; **10**(1): 11 [DOI: 10.4314/jfas.v10i1.32]

10 Ahmadi J, Joukar S, Anani H, Karami-Mohajeri S. Dihydroxyacetone as a definitive treatment for aluminium phosphide poisoning in rats. *Arh Hig Rada Toksikol* 2018; **69**(2): 169-177 [PMID: 29990298 DOI: 10.2478/aiht-2018-69-3106]

11 TORABI M, KARAMI-MOHAJERI S, MIRZALI R, NEMATIPOUR F, AHMADI J, AHMADI M. A promising method for the treatment of aluminum phosphide poisoning: An experimental study in rats. *IRANIAN JOURNAL OF PHARMACOLOGY & THERAPEUTICS* 2017; **15**(1): 1-6

12 Karami-Mohajeri S, Ahmadipour A, Rahimi H-R, Abdollahi M. Adverse effects of organophosphorus pesticides on the liver: a brief summary of four decades of research. *Archives of Industrial Hygiene and Toxicology* 2017; **68**(4) [DOI: 10.1515/aiht-2017-68-2989]

13 Ahmadipour A, Sharififar F, Pournamdari M, Mandegary A, Hosseini A, Afrapoli FM, Karami-Mohajeri S. Hepatoprotective effect of Zataria Multiflora Boiss against malathion-induced oxidative stress in male rats. *Orient Pharm Exp Med* 2016; **16**(4): 287-293 [DOI: 10.1007/s13596-016-0238-6]

14 Mohammad Abdollahi, Maryam Baeeri, Karami-Mohajeri S. Effects of Acute Malathion Exposure on Liver Mitochondrial Respiratory Chain Enzymes in Rats. *Toxicol Int* 2015; **22**(2 ): 52-57 [DOI: 10.22506/ti/2015/v22/i2/137656]

15 Ahmadipour A, Sharififar F, Nakhaipour F, Samanian M, Karami-Mohajeri S. Hepatoprotective effect of Zataria Multiflora Boisson cisplatin-induced oxidative stress in male rat. *J Med Life* 2015; **8**(Spec Iss 4): 275-281 [PMID: 28316744 PMCID: PMC5319274]

16 Ahmadipour A, Sharififar F, Najafi A, Atashbar J, Karami-Mohajeri S. Preventive effect of methanolic extract of Zataria Multiflora Boiss on liver toxicity of paracetamol in rats. *J Med Life* 2015; **8**(Spec Iss 4): 270-274 [PMID: 28316743 PMCID: PMC5319277]

17 Karami-Mohajeri S, Nikfar S, Abdollahi M. A systematic review on the nerve-muscle electrophysiology in human organophosphorus pesticide exposure. *Hum Exp Toxicol* 2014; **33**(1): 92-102 [PMID: 23703814 DOI: 10.1177/0960327113489047]

18 Karami-Mohajeri S, Hadian MR, Fouladdel S, Azizi E, Ghahramani MH, Hosseini R, Abdollahi M. Mechanisms of muscular electrophysiological and mitochondrial dysfunction following exposure to malathion, an organophosphorus pesticide. *Hum Exp Toxicol* 2014; **33**(3): 251-263 [PMID: 23774768 DOI: 10.1177/0960327113493300]

19 Mostafalou S, Karami-Mohajeri S, Abdollahi M. Environmental and population studies concerning exposure to pesticides in iran: a comprehensive review. *Iran Red Crescent Med J* 2013; **15**(12): e13896 [PMID: 24693394 PMCID: PMC3955509 DOI: 10.5812/ircmj.13896]

20 Karami-Mohajeri S, Abdollahi M. Mitochondrial dysfunction and organophosphorus compounds. *Toxicol Appl Pharmacol* 2013; **270**(1): 39-44 [PMID: 23578477 DOI: 10.1016/j.taap.2013.04.001]

21 Abdollahi M, Karami-Moh S, Jafari A. Comprehensive Review of the Mechanistic Approach and Related Therapies to Cardiovascular Effects of Aluminum Phosphide. *International Journal of Pharmacology* 2013; **9**(8): 493-500 [PMID: WOS:000343275400002 DOI: 10.3923/ijp.2013.493.500]

22 Abdollahi M, Karami-Mohajeri S. A comprehensive review on experimental and clinical findings in intermediate syndrome caused by organophosphate poisoning. *Toxicol Appl Pharmacol* 2012; **258**(3): 309-314 [PMID: 22177963 DOI: 10.1016/j.taap.2011.11.014]

23 Karami-Mohajeri S, Abdollahi M. Toxic influence of organophosphate, carbamate, and organochlorine pesticides on cellular metabolism of lipids, proteins, and carbohydrates: a systematic review. *Hum Exp Toxicol* 2011; **30**(9): 1119-1140 [PMID: 21071550 DOI: 10.1177/0960327110388959]

24 Abdollahi M, Nikfar S, Karami-mohajeri S, Barzegar E. Poison information centers. In: Management of patients in triage and clinical toxicology ward Mashhad: Mashhad University of Medical Sciences Press, 2011

**Projects**

1. The effectiveness of various formulations prepared from silver nanoparticles made by green synthesis method and almond root powder in the treatment of wounds caused by third degree burns on Syrian mice

2. Investigation of the effect of resveratrol on liver toxicity due to sodium valproate in rats

3. Production of horse serum inactivated by heat and sterile-filtered

4. Investigation of the anti-fibrotic effect of Everolimus and Pirfenidone alone and simultaneously on pulmonary fibrosis induced by bleomycin by examining the Epithelial-Mesenchymal Transition (EMT) process in intra-body and extracorporeal studies in rats and A549 cell

5. Investigating the anti-fibrous effect of Everolimus and Pirfenidone alone and in combination with paraquat-induced pulmonary fibrosis by examining the Epithelial-Mesenchymal Transition (EMT) process in intra-body and extracorporeal studies in rats and A549 cell

6. Production of F (ab ') 2 derived from anti-rabies horse antibodies

7. Investigating the effect of resveratrol on drug-induced hyperlipidemia in people with HIV

8. Investigation of histological changes, oxidative damage and anti-inflammatory effect of *Allium jesdianum* in the model of inflammation with carrageenan in the toe tissue of rats

9. Protective effects of *Zataria multiflora* boiss extract. against oxidative stress caused by sub-acute exposure to arsenic in the liver and blood of male rats

10. The aim of this study was to investigate the effect of *Dracocephalum kotschyi* plant with ionizing radiation on glioma brain cancer cells.

11. Evaluation of diazinon toxicity in male rats diagnosed with streptozotocin

12. Evaluation of the effect of aminoguanidine on liver toxicity caused by malathion in rats

13. Investigation of the effect of dihydroxystone on oxidative stress and histopathological factors of liver, lung and heart in acute contact with aluminum phosphide in rats

14. Investigation of the effects of common barberry (*Berberis vulgaris* L) on the treatment of opioid withdrawal syndrome

15. Evaluation of the neuroprotective effect of cyclosporine on neurotoxicity caused by oxidative stress in PC12 cells

16. Evaluation of the effect of isoflurane anesthesia on biological indicators and enzymes effective in oxidative stress in operating room staff of one of the hospitals of Kerman University of Medical Sciences

17. Investigating the effectiveness of dihydroxystone in acute poisoning with phosphide aluminum in humans

18. Investigation of blood biochemical factors, hepatic enzymes and cholinesterase enzyme in workers of pesticide production factory

19. Investigating the relationship between oxidative stress and plasma sialic in type 2 diabetics and the relationship between these factors and other complications of diabetes

20. Evaluation of the effect of aminoguuanidine in acute poisoning with aluminum phosphide in rats

21. Evaluation of the effect of aminoguvanidine on oxidative, nitrostatic and apoptotic stress pathways in HepG2 cell line

22. Investigation of the effect of Persian cobra venom (Naja naja oxiana) on induction of apoptosis and inhibition of cell growth on Glioblastoma cell line (U87-MG)

23. Investigating the protective effects of intravenous fat emulsion (ILE) against oxidative stress caused by acute contact with aluminum phosphide in rat

24. Investigation of red blood cells aging in hemodialysis patients

25. Investigating the effects of *Rosmarinus officinalis* on memory efficiency, mental health, sleep quality and oxidative stress in students

26. Investigating the effect of exercise activity on oxidative stress factors in hemodialysis patients

27. The effect of vitamin D supplementation on anxiety, depression, sleep quality, physical illness and oxidative stress factors in students

28. Prevention of liver toxicity caused by paracetamol in male rats by methanolic extract of *Zataria multiflora*

29. Hepatoprotective effects of methanolic extract of *Zataria multiflora* in hepatotoxicity caused by cisplatin in male rats

30. Identifying the microbial coexistence of Paederus beetles and study their parental metabolites.

31. Evaluation of the effect of *Crataegus Meyeri* fruit and branch methanolic extract on cardiac toxicity caused by doxorubicin in rat

32. The protective effect of *Zataria multiflora* extract on the toxicity of malathion in the HEPG-2 cell line with emphasis on oxidative stress and apoptosis biomarkers.

33. Evaluation of the antioxidant effect of *Zataria multiflora* methanolic extract on oxidative stress caused by malathion in male rats

34. Evaluation of malathion toxicity in diabetic rats

35. Investigating the effect of chronic benzene toxicity on RBCs aging and oxidative stress biomarkers in mice.

36. Mitochondrial disorders and organophosphorus pesticides

**Presentation**

**Oral presentations**

One day scientific conference on “Rational prescribing of antibiotics” In: Antibiotic use in pregnancy and lactation, 23 November 2013, Continuous Medical Education, Kerman, Iran

Seminar on “Practical information for pharmacist” In: Drug therapy during pregnancy and lactation, 5 December 2013, Continuous Medical Education, Kerman, Iran

**Presentation referee** in 15th seminar of pharmaceutical students (SIPS 2010), Kerman, Iran, 13-15, October, 2010

**Poster presentation**

Effect of various extracts of Teucrium polium L. leaves on lung (A549), nervous system (PC12) and mouse fibrosarcoma (WEHI-164) tumors cell lines. The 15th seminar of Iranian pharmacy student, tabriz School of Pharmacy, Tabriz, Iran. 23-27, October, 2007.

**Self-Development Education Certifications:**

37- Fellowship course in medical teaching. Kerman University of Medical Sciences, from September 2014 to September 2015, Kerman Iran.

36- Workshop on security and anti-hack. Education Development Centre of Kerman University of Medical Sciences, 10 June 2015, Kerman Iran.

35- Experimental design, Pharmaceutics Research Centre, Kerman University of Medical Sciences, 12-14 May 2015, Kerman Iran.

34- Workshop on educational rules. Education Development Centre of Kerman University of Medical Sciences, 6 May 2015, Kerman Iran.

33- Workshop on promotion regulations of faculty member. Education Development Centre of Kerman University of Medical Sciences, 22 April 2015, Kerman Iran.

32- Biorisk Management Workshop, Kerman University of Medical Sciences, 4-5 February 2015, Kerman Iran

31- Workshop on how to make a powerful power point presentation? (Part1). Education Development Centre of Kerman University of Medical Sciences, 22 January 2015, Kerman Iran.

30- Workshop on professionalism. Education Development Centre of Kerman University of Medical Sciences, 8 January 2015, Kerman Iran.

29- Workshop on professional ethics. Education Development Centre of Kerman University of Medical Sciences, 4 February 2015, Kerman Iran.

28- Workshop on an introduction to Moodle software. Education Development Centre of Kerman University of Medical Sciences, 30 nowember 2014, Kerman Iran.

27- Workshop on Educational process. Education Development Centre of Kerman University of Medical Sciences, 22 October 2014, Kerman Iran.

26- Workshop on how to work with office automation? Education Development Centre of Kerman University of Medical Sciences, 1 October 2014, Kerman Iran.

25- Workshop on preparation of electronic questionnaire with Google Drive. Education Development Centre of Kerman University of Medical Sciences, 21 August 2014, Kerman Iran.

24- Workshop on virtual learning. Education Development Centre of Kerman University of Medical Sciences, 16 July 2014, Kerman Iran.

23- Basic principle of real-time PCR, Central Lab., Deputy of Research, Kerman University of Medical Sciences, 13-14 July 2014, Kerman Iran

22- Workshop on curriculum planning. Education Development Centre of Kerman University of Medical Sciences, 8 June 2014, Kerman Iran.

21- Workshop on professional and organizational ethics 1. Education Development Centre of Kerman University of Medical Sciences, 22 May 2014, Kerman Iran.

20- Workshop on mental disorders affecting students' progress. Education Development Centre of Kerman University of Medical Sciences, 7 May 2014, Kerman Iran.

19- Tumor immunology and cancer symposium, Kerman University of Medical Sciences, 27 April 2014, Kerman Iran

18- Workshop on qualitative research methods in medical education. Education Development Centre of Kerman University of Medical Sciences, 24 April 2014, Kerman Iran.

17- Powerlab® signal recording system (Isolated tissue) workshop, Kerman University of Medical Sciences, 5 March 2014, Kerman Iran

16- Workshop on research in education. Education Development Centre of Kerman University of Medical Sciences, 5 February 2014, Kerman Iran.

15- Workshop on research, education, and thesis process. Education Development Centre of Kerman University of Medical Sciences, 26 January 2014, Kerman Iran.

14- Workshop on journal club. Education Development Centre of Kerman University of Medical Sciences, 22 January 2014, Kerman Iran.

13- Workshop on MCQ. Education Development Centre of Kerman University of Medical Sciences, 20 January 2014, Kerman Iran.

12- Workshop on how to write an educational process. Education Development Centre of Kerman University of Medical Sciences, 25 December 2013, Kerman Iran.

11- Workshop on lesson plan. Education Development Centre of Kerman University of Medical Sciences, 18 December 2013, Kerman Iran.

10- Electromyography workshop, Tehran University of Medical Sciences, 26 October 2011, Tehran, Iran

9- One day scientific conference on “Rational prescribing of drugs”, Iranian society of clinical pharmacists, 28 May 2010, Tehran, Iran

8- Tow day workshop on “current problem in medical writing and editing” by Dr. armen gasparyan, June 13-14, 2010, Tehran, Iran

7- Participation in “Scientific index valuation of toxicological practice in Iran” project, 2010, Iranian Society of Toxicology (Iran Tox®) [in Persian]

6- Participation in Third National Conference of elite young, The hall of Summit, 28-29 October 2009, Tehran – Iran.

5- Scientific writing workshop, Tehran University of Medical Sciences, 12 November 2009, Tehran, Iran

4- End note workshop, Tehran University of Medical Sciences. 18 October 2008, Tehran, Iran

3- Drug and Poison Information workshop, Iran Drug and Poison Information Centre (Iran DPIC), September 2008, Tehran, Iran

2- Visit of Amin, Farabi, Goldaru Pharmaceutical Factories, 20-22 May 2007, Isfahan – Iran

1- Research methodology for Pharmacy students, Kerman University of Medical Sciences, 14-16 October 2004, Kerman, Iran