

Curriculum Vitae



Adel Ghorani-Azam, B.Sc., M.Sc., and Ph.D.

Contact information:

Department of Forensic Medicine and Toxicology, School of Medicine, Urmia University of Medical Sciences, Urmia, Iran **Cell phone:** +989352114584 **E-mail:** adelbiochem@gmail.com

Home page: <http://faculty.umsu.ac.ir/site/cv.aspx?stid=414&Ln=en>

Google scholar: <https://scholar.google.com/citations?user=kvaZJTYAAAAJ&hl=en&oi=ao>

LinkedIn: <https://www.linkedin.com/in/adel-ghorani-azam-7144a75a>

Education

Course	University	Thesis title
B.Sc. (Biology) 2002-2006	Razi University of Kermanshah	-
M.Sc. (Biochemistry) 2008-2011	Ferdowsi University of Mashhad	Extraction, purification and biochemical characterization of antimicrobial peptides from skin secretion of amphibian
Ph.D. (Toxicology) 2014-2019	Mashhad University of Medical sciences	Design and construction of new solid phase micro-extraction fiber based on carbon nanotube for extraction and measurement of morphine in urine sample by HPLC

Current position

1. Director of Food and Drug Quality Control Laboratory, the Food and Drug Deputy, Urmia University of Medical Sciences, Urmia, Iran **2024- present**
2. Director of Research and Development (R&D), the Food and Drug Deputy, Urmia University of Medical Sciences, Urmia, Iran **2024- present**
3. Researcher at Urmia University of Medical Sciences, Urmia, Iran **2020- present**

Deputy Editor-in-Chief

Journal of Research in Applied and Basic Medical Sciences

2022- present

Journal Editor/ English editor

EC Pharmacology and Toxicology

2021- present

Health Science Monitor

2021- present

Iranian Journal of Basic Medical Sciences

2014- 2020

Reviews in Clinical Medicine

2015-2020

The Iranian Journal of Pediatric Hematology Oncology

2013- 2015

Professional membership

1. Iranian society of toxicology: http://irantox.net/Fa_pages_details.aspx?PageID=25
 2. Member of the publication council at UMSU: <https://pub.umsu.ac.ir/index.aspx?pageid=26308>
 3. Member of the systematic review committee at Ministry of Health and Medical Education
-

Registered patents (Iran)

Fabrication of a solid-phase microextraction fiber using a peptide with semi-selective functionality for morphine adsorption (No: 99702)

Full Length Manuscripts in Refereed Journals (from recent to past)

1. H Zare-Zardini, R Nafisi-Moghadam, SM Rajaei, FS Eshaghi, H Soltaninejad, A **Ghorani-Azam**, M Ansari. Application of nanoliposome as contrast agents for magnetic resonance imaging technique. Vietnam J Chem. (2024).

2. S Sepahi, A Aghaei, I Roshanzamir, **A Ghorani-Azam**, S Erfani, L Mashhadi, K Khazaeni. Evaluation of Salivary Function Post-Partial Superficial Parotidectomy. *Iran J Otorhinolaryngol*, (2024).
3. H Mashayekhi-Sardoo, S Sepahi, **A Ghorani-Azam**, H Askarpour, TP Johnston, A Sahebkar. Protective effect of curcumin against microplastic and nanoplastics toxicity. *Int J Env Health Res* (2024).
4. H Zare-Zardini, F Yazdi, H Soltaninejad, E Aghaei, M Momayezolashjar, A Alemi, **A Ghorani-Azam**, M Movahhed, S Sadeghi, E Zare-Zardini, SA Mohammadi, F Ghadiri. A Review of the Toxicity and Side Effects of Nucleic Acid-based Bio/Nanomaterials. *J Clust Sci* 35, (2024).
5. Ranjkeshzadeh, Haniye, Samaneh Sepahi, Hadi Zare-Zardini, Taghavizadeh Yazdi ME, **A Ghorani-Azam***, and Abbas Jafari. "A Review of Drug Abuse, Misuse, and Related Laboratory Challenges." *Current Drug Safety* (2024).
6. E Rahimi, F Asefi, A Afzalnia, S Khezri, H Zare-Zardini, **A Ghorani-Azam**, A Es-haghi, E Taghavizadeh Yazdi. Chitosan coated copper/silver oxide nanoparticles as carriers of breast anticancer drug: Cyclin D1/P53 expressions and cytotoxicity studies. *J Inorg Chem*, (2023).
7. Sepahi S, Kiaei L, Kiaei M, **Ghorani-Azam A***. A systematic review of emerging technologies to enhance the treatment of ovarian cancer. *Pharm Develop Technol*, (2023).
8. Sepahi, S., Gerayli, S., Delirrad, M., Taghavizadeh Yazdi, M. E., Zare-Zardini, H., Bushehri, B., **Ghorani-Azam, A***. Biochemical responses as early and reliable biomarkers of organophosphate and carbamate pesticides intoxication: A systematic literature review. *J Biochem Mol Toxicol*, (2023).
9. Farhangfar SD, Fesahat F, Zare-Zardini H, Dehghan-Manshadi M, Zare F, Miresmaeili SM, Vajihinejad M, Soltaninejad H, **Ghorani-Azam A**. Behavioral studies of mice with breast cancer after treatment with new anticancer agent, Rh2-containing arginine-graphene. *Academic Journal*, (2023).

10. Bushehri B, Mokhtarpoor A, Bahrami E, **Ghorani-Azam, A***. Cutaneous Adverse Drug Reactions: Regional Experience of a Global Challenge. *Current Drug Safety*, (2023).
11. **A Ghorani-Azam**, J Mottaghipisheh, MS Amiri, M Mashreghi, A Hashemzadeh, A Haddad-Mashadrizeh, F Nourbakhsh, M Nadaf, M Qayoomian, ME Taghavizadeh Yazdi, S Vitalini, M Iriti. Resveratrol-Mediated Gold-Nanoceria Synthesis as Green Nanomedicine for Phytotherapy of Hepatocellular Carcinoma. *Front Biosci-Landmark*, (2022).
12. H Zare-Zardini, H Soltaninejad, **A Ghorani-Azam**, R Nafisi-Moghadam, N Haddadzadegan, M Ansari, SH Saeed-Banadaki, MR Sobhan, S Mozafari, M Zahedi. Slow release curcumin-containing soy protein nanoparticles as anticancer agents for osteosarcoma: synthesis and characterization. *Progress in Biomaterials*, (2022).
13. H Zare-Zardini, H Soltaninejad, **A Ghorani-Azam**, MJ Forouzani-Moghaddam, S Mozafri, Z Akhouni-Meybodi, F Ferdosian, F Jabinian. Investigating the Antimicrobial Activity of Vancomycin-Loaded Soy Protein Nanoparticles. *Interdiscip Perspect Infect Dis*, (2022).
14. N Ansari-Mohseni, **A Ghorani-Azam**, SA Mohajeri. Therapeutic effects of herbal medicines in different types of retinopathies: A systematic review. *Avicenna J Phytomed*, (2022).
15. MH Nematollahi, MA Ahmadianmoghadam, M Mehrabani, M Moghadari, **A Ghorani-Azam**, M Mehrbani. Herbal therapy in opioid withdrawal syndrome: A systematic review of randomized clinical trials. *Addic & Health*, (2022).
16. S Gerayli, M Delirrad, M Majidi, **A Ghorani-Azam***. Antimicrobial peptides: importance in biomedicine, and future directions. *EC Pharmacology Toxicology*, (2022).
17. S Balarastaghi, M Delirrad, A Jafari, M Majidi, M Sadeghi, H Zare-Zardini, G Karimi, **A Ghorani-Azam***. Potential benefits versus hazards of herbal therapy during pregnancy; a systematic review of available literature. *Phytotherapy Research*, (2022).

18. B Riahi-Zanjani, M Delirrad, R Fazeli-Bakhtiyari, M Sadeghi, H Zare-Zardini, A Jafari, **A Ghorani-Azam***. Hematological Consequences of Valproic Acid in Pediatric Patients: A Systematic Review with a Mechanistic Approach. *CNS & Neurol Disord Drug Targets*, (2022).
19. H Soltaninejad, H Zare-Zardini, MA Amirkhani, M Mohammadzadeh, A Ghadiri-Anari, M Ordouei, A Alemi, **A Ghorani-Azam**. Effect of Nanoalumina on Sex Hormones and Fetuses in Pregnant Rats. *JBRA assisted reproduction*, (2021).
20. **A Ghorani-Azam**, M Balali-Mood, B Riahi-Zanjani, E Darchini-Maragheh, M Sadeghi, Acute phenobarbital poisoning for the management of seizures in new-borns and children; A systematic literature review. *CNS & Neurol Disord Drug Targets*, (2021).
21. **A Ghorani-Azam**, M Balali-Mood, SM Khatami, A Asoodeh, Z Es'haghi, B Riahi-Zanjani. Plant Extract and Herbal Products as Potential Source of Sorbent for Analytical Purpose: An Experimental Study of Morphine and Codeine Determination Using HPLC and LC-MSMS. *J Chrom Sci*, (2021).
22. S Sepahi, **A Ghorani-Azam**, SM Hossieni, SA Mohajeri, E Khodavardi. Pharmacological effects of saffron and its constituents in ocular disorders from in vitro studies to clinical trials; a systematic review. *Curr Neuropharmacol*, (2021).
23. S Ghafoorianfar, **A Ghorani-Azam**, D Farzin, SA Mohajeri. Efficiency of nanoparticles for treatment of ocular infections: systematic literature review. *J Drug Deliv Sci Tec*, (2020).
24. B Riahi-Zanjani, M Balali-Mood, Z Es'haghi, A Asoodeh, **A Ghorani-Azam***. Preconcentration of morphine in urine sample using a green and solvent-free microextraction method. *Green Process Synth*, (2019).
25. B Riahi-Zanjani, M Balali-Mood, Z Es'haghi, A Asoodeh, **A Ghorani-Azam***. Molecular modeling and experimental study of a new peptide-based microextraction fiber for preconcentration of morphine in urine sample. *J Mol Model*, (2019).

26. B Riahi-Zanjani, M Balali-Mood, A Asoodeh, Z Es'haghi, **A Ghorani-Azam***. Potential application of amino acids in analytical toxicology. *Talanta*, (2019).
27. B Riahi-Zanjani, M Balali-Mood, A Asoodeh, Z Es'haghi, **A Ghorani-Azam***. Developing a new sensitive solid-phase microextraction fiber based on carbon nanotubes for preconcentration of morphine. *Applied Nanoscience*, (2018).
28. **A Ghorani-Azam**, S Sepahi, M Hassanpour Moghadam, SA Mohajeri. Herbal medicine as a promising therapeutic approach for the management of vascular dementia: a systematic literature review. *Phytother Res*, (2018).
29. **A Ghorani-Azam**, S Sepahi, B Riahi-Zanjani, A Alizadeh Ghamsari, SA Mohajeri, M Balali-Mood. Plant toxins and medicinal plant poisoning in children: a systematic literature review. *J Res in Med Sci*, (2018).
30. **A Ghorani-Azam**, M Balali-Mood, E Aryan, B Riahi-Zanjani. Effect of amino acid substitution on biological activity of Cyanophlyctin- β and Brevinin-2R. *J Mol Struct*, (2018).
31. G Karimi, M Balali-Mood, SA Alamdaran, H Badie-Bostan, E Mohammadi, **A Ghorani-Azam**, M Sadeghi, B Riahi-Zanjani. Increase in the Th1-Cell-Based Immune Response in Healthy Workers Exposed to Low-Dose Radiation-Immune System Status of Radiology Staff. *J Pharmacopunct*, (2017).
32. S Sepahi, B Riahi-Zanjani, **A Ghorani-Azam***. Effect of valproic acid on metabolic and endocrine system in pediatric patients: Systematic literature review. *Rev in Clin Med*, (2017).
33. **A Ghorani-Azam**, SA Mohajeri, B Riahi-Zanjani, S Sepahi, S Sepahi. Human and Bacterial Amylases: Computational Analysis of Sequence Homology. *J Genes Cells*, (2016).
34. **A Ghorani-Azam**, B Riahi-Zanjani, M Balali-Mood. Effects of Air Pollution on Human Health and Practical Measures for Prevention. *J Res in Med Sci*, (2016).
35. S Sepahi, B Riahi-Zanjani, **A Ghorani-Azam***. Prevalence of Candida in saliva and skin lesions of patients with Psoriasis Vulgaris: systematic review of the literatures. *Rev in Clin Med*, (2016).

36. H Zare-Zardini, F Ferdowsian, H Soltaninejad, **A Ghorani Azam**, S Soleymani, Zare-Shehneh M, et al. Application of Nanotechnology in Biomedicine: A Major Focus on Cancer Therapy. *J Nano Research*, (2015).
37. M Salehpour, NT Meibodi, R Teimourpour, **A Ghorani-Azam**, S Sepahi, S Rostami, Z Meshkat. Frequency of Human Papillomavirus Genotypes 6, 11, 16, 18 and 31 in Paraffin-Embedded Tissue Samples of Invasive Breast Carcinoma, North-East of Iran. *Iran J Pathol*, (2015).
38. S Mohseni, M Aghayan, **A Ghorani-Azam***, M Behdani, A Asoodeh. Evaluation of antibacterial properties of Barium Zirconate Titanate (BZT) nanoparticle. *Brazil J Microbiol*, (2014).
39. S Sepahi, **A Ghorani-Azam***, A Asoodeh, and S Rostami. In vitro study to evaluate antibacterial and non-hemolytic activities of four Iranian medicinal plants. *West Ind Med J*, (2014).
40. A Asoodeh, S Sepahi, **A Ghorani-Azam***. Purification and modeling amphipathic alpha helical antimicrobial peptides from skin secretions of *Euphlyctis cyanophlyctis*. *Chem Biol Drug Des* (2014).
41. A Asoodeh, **A Ghorani-Azam**, H Zare-Zardini. Characterization of a novel thermophilic esterase from *Shewanella* sp F88". *J Sci I. R Iran*, (2014).
42. S Soleymani, H Zare-Zardini, **A Ghorani Azam**, A Hashemi, L Ebrahimi, Z Esfahanian, F Zolfaghari. A review of toxicity of some conventional nanomaterials. *J Pharmaceutical Health Sci*, (2013).
43. H Zare-Zardini, L Ebrahimi, M. M Ejtehad, A Hashemi, **A Ghorani Azam**, A Atefi, M Soleimanizadeh. Purification and characterization of one novel cationic antimicrobial peptide from skin secretion of *Bufo kavirensis*. *Turk J Biochem*, (2013).
44. A Asoodeh, **A Ghorani-Azam**, J.Kh Chamani. Identification and characterization of novel antibacterial peptides from skin secretions of *Euphlyctis cyanophlyctis*. *Int J Pep Res Ther*, (2012).

Selected Abstracts in International Congress

1. Poster presentation at the 20th Annual Conference on Common Gastrointestinal and Liver Diseases in Iranian Children and the 2nd International Conference on Childhood Obesity, Evaluation of Insulin Resistance indexes in Children with Non-Alcoholic Fatty Liver Disease, 2025, Iran.
2. Invited speaker on “*Antimicrobial peptides and their place among the new generation of drugs*” at the 1st National Congress of Food and Drug Safety, October 2023, Held in Urmia, Iran.
3. Invited speaker on “*New narcotics: challenges and possible approaches*” at the 14th International Congress of Medical Lab. and Clinic, February 2023, Held in Tehran, Iran.
4. Poster presentation at 8th international E-congress on nanoscience and nanotechnology. An experimental study of a new sensitive SPME fiber for extraction of morphine, 2021. Code: GP-24597
5. Poster presentation at 13th International Congress of Toxicology. Safranal considered as a safe compound to mice immune system, 2015, Urmia, Iran.
6. Oral presentation at 16th National and 4th International Conference of Biology: Isolation, Purification and Biochemical Characterization of Antimicrobial Peptides from Skin Secretions of *Euphilictis cyanophlyctis*, 2010, Iran.
7. Poster presentation at 16th National and 4th International Conference of Biology, Purification and characterization studies over antimicrobial peptides as basic constituents of immune system in *Rana Ridibunda*, 2010, Iran.
8. Oral presentation at 16th National and 4th International Conference of Biology, A novel lipase extracted from a thermostable *Bacillus ferdowsicus*, 2010, Iran.

Workshop Organizing

1. Department of Biotechnology, “Gel-Electrophoresis Technique and Zymography of Enzymes”, 21 and 22 December 2010, Ferdowsi University of Mashhad, Iran.

Registration of new peptide sequences at UniProtKB/Swiss-Prot and NCBI

- | | |
|--|--------------------|
| 1. https://www.uniprot.org/uniprotkb/C0HJB7/publications | Buforin-EC |
| 2. https://www.uniprot.org/uniprotkb/C0HKQ2/publications | Brevinin-Eu |
| 3. https://www.uniprot.org/uniprotkb/C0HJB8/publications | Cyanophlyctin |
| 4. https://www.uniprot.org/uniprotkb/C0HKQ1/publications | Cyanophlyctin-beta |
| 5. https://www.uniprot.org/uniprotkb/C0HJB9/publications | Temporin-ECa |

Media and news:

1. Link of news on national TV and newspapers: “discovering a nanoparticle with medical applications”:

<https://www.irna.ir/news/81576342>

<https://news.nano.ir/48877>

<https://kayhan.ir/fa/news/45712>

2. A short interview with journal of Current Drug Safety for their YouTube channel:

<https://www.youtube.com/watch?v=fQn0uwI6M6E>

3. Global trend of a first-authored article about air pollution on YouTube channel:

https://www.youtube.com/watch?v=Mc2l_phisIk

Book:

1. RNA structure and motifs and their role in regulation of gene expression, 2012. (In Persian)
2. Springer book: **Ghorani-Azam A**, Balali-Mood M. *Clinical Pharmacology and Toxicology of Mustard Compounds*. In “Basic and Clinical Toxicology of Mustard Compounds” 2015 (pp. 63-99). Springer International Publishing.
3. Elsevier book: Mohajeri SA, Sepahi S, Ghorani-Azam A. *Antidepressant and antianxiety properties of Saffron* in “Saffron: Science, Technology, and Health” 2020. Elsevier.