

## Kobra Shirani

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<b>Gender</b>	<b>Female</b>		
<b>Date of Birth</b>	<b>4 January 1986</b>		
<b>Nationality</b>	<b>Iranian</b>		
<b>Language</b>	<b>Persian and English</b>		
<b>Marital Status</b>	<b>Married, with 2 children</b>		

<b>Education</b>	<b>2016 (6 months)</b>	<b>Visiting scientist</b> <b>Research Field</b>	<b>Ludwig-Maximilians-Universität München</b> miRNAs
	<b>2012- 2018</b>	<b>Ph.D. of Toxicology</b> <b>Title of thesis:</b>	<b>Mashhad University of Medical Sciences, Iran</b> Evaluation of immunotoxicity induced by aflatoxin M1 and its relation to microRNA 155 expression in mice
	<b>2010 – 2012</b>	<b>MSc of Toxicology</b> <b>Title of thesis:</b>	<b>University of Medical Sciences, Isfahan, Iran</b> Cytotoxicity of different extracts of Ziziphus spina-christi and Securigera securidaca on Hela and MDA-MB-468 tumor cells
	<b>2005-2009</b>	<b>BSc of Cellular and Molecular Biology</b>	<b>Alzahra University, Tehran, Iran</b>
<b>Professional appointments</b>	<b>2019- present</b>	<b>Assistant Professor</b> Department of Toxicology, Faculty of Medical Sciences, Tarbiat Modares University	
		<b>Maternity leave</b>	(12 month)
<b>Awards</b>	<ul style="list-style-type: none"> <li>Ranked among <b>top 1%</b> Iran's National University Entrance Exam, 2005.</li> <li>Ranked <b>five</b> in national university entrance exam for M.Sc degree, 2010.</li> <li>Ranked <b>first</b> in Comprehensive PhD Examination, 2013.</li> <li>Sabbatical Award Scholarship Mashhad University of Medical Sciences, Iran, 2016</li> </ul>		
	<b>Industrial sabbatical</b>	Water Research Institute (6 month)	

	<ul style="list-style-type: none"> <li>• Top Talent National Elites Foundation of Iran, 2017.</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>• Cell isolation</li> <li>• DNA, RNA isolation</li> <li>• PCR, q-pcr.</li> <li>• Western blot.</li> <li>• Cell culture and primary cell culture</li> <li>• Immunotoxicity test (HA, DTH, Phagotest,...)</li> <li>• Animal handling</li> <li>• Working with different apparatus such as HPLC, GC, AAS, etc.</li> <li>• Risk assessment</li> <li>• General software: Microsoft Office, EndNote,..</li> <li>• Statistical software: SPSS Sigma Plot, GraphPad Instat, GraphPad Prism.</li> </ul>
<b>Publications</b>	<ol style="list-style-type: none"> <li>1. <b>K Shirani</b>, B Riahi-Zanjani, S.N Omidkhoda, S Barangi, G Karimi, The hematopoietic potential of methanolic and aqueous extracts of <i>Portulaca oleracea</i> in a phenylhydrazine model of anemia, <i>Avicenna Journal of Phytomedicine</i> (2023).</li> <li>2. F Kamranfar, R Pourahmad Jaktaji, <b>K Shirani</b>, A Jamshidi, F Samiei. A Arjmand, M Khoramjouy, M Faizi, J Pourahmad. Protective effect of a standardized <i>Allium jesdianum</i> extract in an Alzheimer's disease induced rat mode. <i>Neuroscience Letters</i></li> <li>3. Bahareh SY, Kamyar M, Ali Qi, Elahe A, <b>K Shirani*</b>, Jalal P. The selective cytotoxicity of <i>Quercus brantii</i> Lindl. galls on A375 and SK-MEL-3 Human Malignant Melanoma cell lines <i>Asian Pacific Journal of Cancer prevention (APJCP)</i></li> <li>4. Farideh Shiehzadeh, P Vakili, <b>K Shirani*</b>. Evaluation of immune responses induced by hydroalcoholic extract of <i>Allium ampeloprasum</i>. L subsp <i>iranicum</i> in mice. <i>Iranian Journal of Pharmaceutical Sciences</i></li> <li>5. BS Yousefsani, A Jamshidi, <b>K Shirani*</b>, J Pourahmad. The Selective Cytotoxicity of The Hydroalcoholic Extract of <i>Santalum Album</i> Linn Wood on A375 and SK-MEL-3 Human Malignant Melanoma Cells. <i>Iranian Journal of Pharmaceutical Sciences</i> (2022).</li> <li>6. BS Yousefsani, A Salimi, F Imani, M Ramezani, <b>K Shirani</b>, E Seydi, J Pourahmad. Risperidone Toxicity on Human Blood Lymphocytes in Nano molar Concentrations. <i>Drug Research</i> (2022).</li> <li>7. <b>K Shirani</b>, M Iranshahi, VR Askari, Z Gholizadeh, AA Zadeh, M Zeinali, ...Comparative evaluation of the protective effects of oral administration of auraptene and umbelliprenin against CFA-induced chronic inflammation with polyarthritis in rats. <i>Biomedicine &amp; Pharmacotherapy</i> (2021).</li> <li>8. BS Yousefsani, M Boozari, <b>K Shirani</b>, A Jamshidi, M Dadmehr. A review on phytochemical and therapeutic potential of <i>Iris germanica</i>. <i>Journal of Pharmacy and Pharmacology</i> (2021).</li> <li>9. E Nikkhah, <b>K Shirani</b>, R Rezaee, G Karimi. Protective effects of taurine against hepatotoxicity induced by pharmaceuticals and environmental chemicals. <i>Toxicological &amp; Environmental Chemistry</i> (2021).</li> <li>10. <b>K Shirani</b>, B Riahi Zanjani, S Mehri, K Razavi-Azarkhiavi, A Badiiee,... miR-155 influences cell-mediated immunity in Balb/c mice treated with aflatoxin M1. <i>Drug and chemical toxicology</i> (2021).</li> <li>11. H Kalantari, MJ Khodayar, <b>K Shirani*</b>, M Shirani. Mycotoxin Contamination of Consumed Rice in Iran: A Review. <i>Jundishapur Journal of Natural Pharmaceutical Products</i> (2020).</li> <li>12. <b>K Shirani</b>, BS Yousefsani, M Shirani, G Karimi. Protective effects of naringin against drugs and chemical toxins induced hepatotoxicity: a review. <i>Phytotherapy Research</i> (2020).</li> <li>13. <b>K Shirani</b>, BR Zanjani, M Mahmoudi, AH Jafarian, FV Hassani, JP Giesy, ... Immunotoxicity of aflatoxin M1: as a potent suppressor of innate and acquired immune systems in a subacute study. <i>Journal of the Science of Food and Agriculture</i> (2018).</li> <li>14. <b>K Shirani</b>, HB Bostan, A Baroti, M Hassanzadeh, Z Khashyarmansh, ... Ethanol and methanol concentration in commonly used brands of Ma-al-shaeer in Iran: Estimation of dietary intakes and risk assessment. <i>Journal of pharmacopuncture</i> (2018).</li> <li>15. SF Taghizadeh, R Rezaee, G Davarynejad, J Asili, SH Nemat, ... <b>K Shirani</b>, G Karimi. Risk assessment of exposure to aflatoxin B1 and ochratoxin A through consumption of different Pistachio (<i>Pistacia vera</i> L.) cultivars collected from four geographical regions of ...<i>Environmental toxicology and pharmacology</i> (2018).</li> </ol>

16. S Balarastaghi, Z Khashaiarmanesh, P Makhdoumi SH Alavizadeh, Z Sameie Moghadam, **K Shirani**, G Karimi. Determination of toxic element levels (lead and cadmium) in commonly used cosmetic products in Iran. *Toxin Reviews* (2018).
17. K Razavi-Azarkhiavi, MR Jaafari, K Abnous, BM Razavi, AH Jafarian, **K Shirani**, G Karimi. The cardiotoxic mechanism of doxorubicin (DOX) and pegylated liposomal DOX in mice bearing C-26 colon carcinoma: a study focused on microRNA role for toxicity assessment of new ...*Pharmaceutical research* (2017).
18. M Nejabat, H Kahe, K Shirani, P Ghorbannejad, F Hadizadeh, G Karimi. Health risk assessment of heavy metals via dietary intake of wheat in Golestan Province, Iran. *Human and Ecological Risk Assessment: An International Journal* (2017).
19. **K Shirani**, N Shahbazi, MH Khayat, Z Khashayarmanesh, FV Hassani,... Concentration of heavy metals in Iranian market rice and associated population health risk. *Quality Assurance and Safety of Crops & Foods* (2017).
20. A Roohbakhsh, **K Shirani**, G Karimi. Methamphetamine-induced toxicity: the role of autophagy? *Chemico-biological interactions* (2016).
21. FV Hassani, **K Shirani**, H Hosseinzadeh. Rosemary (*Rosmarinus officinalis*) as a potential therapeutic plant in metabolic syndrome: a review. *Naunyn-Schmiedeberg's archives of pharmacology* (2016).
22. K Razavi-Azarkhiavi, M Iranshahy, A Sahebkar, **K Shirani**, G Karimi. The protective role of phenolic compounds against doxorubicin-induced cardiotoxicity: a comprehensive review. *Nutrition and cancer* (2016).
23. **K Shirani**, FV Hassani, KR Azar-Khiavi, ZS Moghaddam, G Karimi. Determination of methanol in Iranian herbal distillates. *Journal of Complementary and Integrative Medicine* (2016).
24. K Razavi-Azarkhiavi, AH Jafarian, K Abnous, BM Razavi, **K Shirani**, ... The comparison of biodistribution, efficacy and toxicity of two PEGylated liposomal doxorubicin formulations in mice bearing C-26 Colon carcinoma: a preclinical study. *Drug research* (2016).
25. S Sepahi, A Jafarian-Dehkordi, M Mirlohi, **K Shirani**, M Etebari. Protective role of *Lactobacillus plantarum* A7 against irinotecan-induced genotoxicity. *Avicenna journal of phytomedicine* (2016).
26. NS Alamolhodaei, **K Shirani**, G Karimi. Arsenic cardiotoxicity: An overview. *Environmental toxicology and pharmacology* (2015).
27. FV Hassani, R Rezaee, H Sazegara, M Hashemzaei, **K Shirani**, G Karimi. Effects of silymarin on neuropathic pain and formalin-induced nociception in mice. *Iranian journal of basic medical sciences* (2015).
28. **K Shirani**, FV Hassani, K Razavi-Azarkhiavi, S Heidari, BR Zanjani, ... Phytotrapy of cyclophosphamide-induced immunosuppression. *Environmental toxicology and pharmacology* (2015).
29. V Yousefi Babadi, L Sadeghi, **K Shirani**, AA Malekirad, M Rezaei The toxic effect of manganese on the acetylcholinesterase activity in rat brains. *Journal of toxicology* (2014).
30. **K Shirani**, J Behravan, F Mosaffa, M Iranshahi, B Mehmankhah, ... Evaluating the effects of galbanic acid on hydrogen peroxide-induced oxidative DNA damage in human lymphocytes. *Avicenna journal of phytomedicine* (2014).
31. K Razavi-Azarkhiavi, J Behravan, F Mosaffa, S Sehatbakhsh, **K Shirani**, ... Protective effects of aqueous and ethanol extracts of rosemary on H<sub>2</sub>O<sub>2</sub>-induced oxidative DNA damage in human lymphocytes by comet assay. *Journal of Complementary and Integrative Medicine* (2014).
32. EH Reza, **S Kobra**, S Leila, YB Vahid, A Esmiae. Investigation of the zinc oxide nanoparticles effect on testosterone, cholesterol and cortisol in rats. *Research Journal of Recent Sciences* (2014).
33. A Jafarian, B Zolfaghari, **K Shirani**. Cytotoxicity of different extracts of arial parts of *Ziziphus spina-christi* on Hela and MDA-MB-468 tumor cells. *Advanced biomedical research* (2014).
34. F Mohammadi Fartkhoooni, A Noori, M Momayez, L Sadeghi, **K Shirani**, ... The effects of nano titanium dioxide (TiO<sub>2</sub>) in spermatogenesis in wistar rat. *Euro J Exp* (2013).
35. HR Espanani, K Shirani, L Sadeghi, V Yousefi Babadi and E Amraei. Investigation of the Zinc Oxide Nanoparticles Effect on Testosterone, Cholesterol and Cortisol in Rats.

**Accepted**

	<p>36. Anticancer Activity of Allium jesdianum Extract: A Potential Therapeutic Approach for Melanomanti</p> <p>37. Investigating the Factors Involved in the Development of Attention Deficit Hyperactivity Disorder from a Toxicological Perspective: A Narrative Review Study.</p> <p>38. The Protective Effects of Allium ampeloprasum. L subsp iranicum on Cyclophosphamide-Induced Immunosuppression in NMRI Mice: A promise natural immunomodulator</p> <p>39. Investigating the effect of hydroalcoholic extract of the Allium jesdianum on humoral and cellular indicators of the immune system in a mouse model stimulated with sheep erythrocyte immunogen compared to levamisole</p> <p><b>Undre review</b></p> <p>40. The Gut Microbiota: A Key Player in Cadmium Toxicity - Implications for Disease, Interventions, and Combined Toxicant Exposures.</p> <p>41. Possible Neuroprotective Effects of Castor Oil against Malathion-Induced Parkinson Disease in Rats.</p> <p>42. Epicatechin: A Promising Agent Against Arsenic-Induced Neurobehavioral Toxicity in NMRI Mice: Behavioral and Biochemical Alterations.</p> <p>43. Exploring the Immune-Boosting and Hepatoprotective Potential of Allium Jesdianum against Cyclophosphamide-Induced Toxicity in Mice: A Promising Approach for Immunomodulation.</p> <p>44. Investigating the Role of Food Pollutants in Autism Spectrum Disorder: A Comprehensive Analysis of Heavy Metals, Pesticides, and Fungal Toxins</p> <p><b>Chapter Book</b></p> <p>45. Yousefsani, M Dadmehr, <b>K Shirani</b>, A Jamshidi, T Sathyapalan, ...Health Benefits of Turmeric and Curcumin Against Food Contaminants. Natural Products and Human Diseases: Pharmacology, Molecular Targets, and Therapeutic Benefits (2021).</p>
<b>Supervision and counseling Experience</b>	<ol style="list-style-type: none"> <li>1. Determination of lead and Cadmium in commonly used brands of cosmetics and sunscreen creams in Mashhad (<b>MSc of Toxicology</b>).</li> <li>2. Evaluation of the inhibitory effect of fenofibrate on the acquisition and reinstatement of ethanol-induced conditioned place preference in mice (<b>Pharm. D</b>).</li> <li>3. Determination of ethanol and methanol in commonly used brands of maalshaeer in Iran (<b>Pharm. D</b>).</li> <li>4. Searching for the relationship between the concentration of heavy metals in fresh tea leaves (Camellia Sinensis) and Multiple Sclerosis in some cities of Guilan using Geographic Information System software (<b>MSc of Toxicology</b>).</li> <li>5. Evaluation of immune responses induced by hydroalcoholic extract of Allium iranicum in mice (<b>Pharm. D</b>).</li> <li>6. Evaluation of immune responses induced by hydroalcoholic extract of Allium jesdianum in mice (<b>MSc of Toxicology</b>).</li> <li>7. Evaluation of Allium ampeloprasum Var Iranicum protective effect on cyclophosphamide induced immunosuppression in NMRI mouse model (<b>MSc of Toxicology</b>).</li> <li>8. Evaluation of Allium jesdianum protective effect on cyclophosphamide induced immunosuppression in NMRI mouse model (<b>MSc of Toxicology</b>).</li> <li>9. The protective risk of the standardized hydroalcoholic extract of Allium jesdianumplant in the streptozotocin-induced sporadic disease model in rats: focusing on behavioral behaviors, mitochondrial function, oxidative stress indices, acetylcholine and choline activity (<b>Ph.D. of Toxicology</b>).</li> <li>10. Evaluation of anticancer and cytotoxic effects of Quercus brantii Lindl. galls ethanolic extract on SK-MEL3 human melanoma cells (<b>Pharm. D</b>).</li> <li>11. Effects of 10-Hydroxy-2-decanic acid diet on gut-brain axis in a cuprizone-induced chronic demyelination mouse model (<b>Ph.D. of Anatomi</b>)</li> <li>12. Investigating anticancer and cytotoxic effects of white sandalwood ethanolic extract on human melanoma cancer cell line -3MEL-SK (<b>Pharm. D</b>).</li> </ol>
<b>Teaching</b>	<ol style="list-style-type: none"> <li>1. Environmental toxicology (Practical)</li> <li>2. Environmental toxicology (Theoretical)</li> <li>3. Toxicology (Theoretical)</li> <li>4. Toxicology (Practical)</li> <li>5. Forensic toxicology</li> </ol>

	<ol style="list-style-type: none"> <li>6. Biochemistry</li> <li>7. Environmental health and pollutants</li> <li>8. Medical information systems in toxicology</li> <li>9. Toxicology of natural toxins</li> <li>10. Anatical toxicology (Practical)</li> <li>11. Anatical toxicology (Theoretical)</li> </ol>
<b>Membership</b>	<ul style="list-style-type: none"> <li>• Asia Pacific Association of Medical Toxicology</li> <li>• Member of the Student Research Committee of the Faculty of Medical Sciences, Tarbiat Modares University</li> </ul>
<b>Reviewer</b>	<ol style="list-style-type: none"> <li>1. Science of the Total Environment</li> <li>2. Environmental Science and Pollution Research</li> <li>3. Toxicology</li> <li>4. Biomedicine &amp; Pharmacotherapy</li> <li>5. Cellular Signaling</li> <li>6. Environmental Toxicology and Pharmacology</li> <li>7. Journal of Food Composition and Analysis</li> <li>8. Life Sciences, Pesticide Biochemistry and Physiology</li> <li>9. Phytomedicine</li> <li>10. Food &amp; Function</li> <li>11. Critical Reviews in Food Science and Nutrition</li> <li>12. Cardiovascular Drug and Therapy</li> <li>13. BioFactors</li> <li>14. Iranian Journal of Basic Medical Sciences</li> <li>15. Jundishapur Journal of Natural Pharmaceutical Products</li> <li>16. Cancer Chemotherapy and Pharmacology</li> <li>17. Military Medical Research</li> <li>18. Food Science &amp; Nutrition</li> <li>19. Journal of Pharmacy and Pharmacology</li> <li>20. Avicenna Journal of Phytomedicine</li> <li>21. ....</li> </ol>
<b>REFEREES</b>	<ol style="list-style-type: none"> <li>1. Dr Gholamreza Karimi</li> <li>2. Dr Bamdad Riahi Zanjani</li> <li>3. Dr Afshin Takdastan</li> </ol>