

Special Activities:

Reviewer in Journals

◆ Biomedical and Pharmacology Journal

➤ Reviewed Articles:

- 1) TCF7L2 Gene Polymorphisms and Susceptibility to Type 2 Diabetes Mellitus in a cohort of Egyptian diabetic patients, a pilot study.
- 2) In vitro and in vivo evaluation of potential anti diabetic efficacy on cassia auriculata flowers.
- 3) Biochemical Changes Followed Experimental Respiratory Distress by Benzene Vapours.
- 4) Role of cytokines (IL-1, IL-6 &TNF-A) in the pathogenesis of diabetic nephropathy.
- 5) Effect of Relaxation Therapy and Vitamin C Supplementation on Stress and CD4 Levels of Mental Illness Patients
- 6) Biofilm forming abilities of microorganisms associated with diabetic wound infection: A study from a tertiary care hospital.
- 7) Lung Cancers and the Roles of Natural Compounds as Potential Chemotherapeutic and Chemopreventive Agents.
- 8) Assessment of Hepatoprotective Activity of Rajata Bhasma in CCl₄ Induced Hepatotoxicity in Rats.
- 9) Biogenic synthesis of bi-metallic (Zn-Cu) nanoparticles by leaf extract of Citrus limon and evaluation of its antibiofilm activity against E.coli.

◆ Journal of Traditional and Complementary Medicine

➤ Reviewed Articles:

- 1) Pharmacological validation of the cardiovascular activity of the hydro alcoholic extract of Campomanesia phaea fruits in rats.
- 2) Endothelium-independent cerebral vasorelaxation induced by different species and strains of turmeric with underlying mechanism.
- 3) A randomized double blind placebo controlled study to evaluate the effect of snakehead fish (channa striatus) extract supplementation in allergic rhinitis patients.
- 4) Antidiabetic activity of phenolic rich fraction from Geranium collinum, Glycyrrhiza glabra, Rhus coriaria and the determination of major phytoconstituents using LC-ESI/MS/MS.

- 5) Correlative Metabolomic Fingerprinting And Molecular Docking Studies Of Dermatological Phytotherapeutics of South-Eastern Himalaya.
- 6) Inhibitory effect of *Artocarpus lakoocha* Roxb and oxyresveratrol on alpha-glucosidase and sugar digestion in Caco-2 cells.
- 7) Immunomodulatory Potential of Polyherbal formulation (VT 10): An Evidence Based Study.
- 8) Vasorelaxation effects of *Lignosus rhinocerotis* water-soluble sclerotial extract in isolated aorta and coronary artery.
- 9) Herbal Combination for Improvement of Hypothalamic-pituitarygonadal Axis Function and Reproductive Activities.
- 10) The Chinese Black Box - A Scientific Model of Chinese Medicine.
- 11) Effects of tai chi qigong programme on functional capacity, lung function in chronic obstructive pulmonary disease patients: a randomised controlled trial.
- 12) Antidote activity and protective effects of *Lysiphyllum strychnifolium* (Craib) A. Schmitz extract against organophosphate pesticide in omethoate-treated rats.
- 13) Effect of Aloe vera extract on hematological, biochemical, and enzymatic activities in streptozotocin induced diabetic rats.

◆ **Asia Pacific Journal of Cancer Prevention**

➤ Reviewed Articles:

- 1) Wnt Signaling: A Potential Therapeutic Target in Head and Neck Squamous Cell Carcinoma.

◆ **Cancer Investigation**

➤ Reviewed Articles:

Research on the antitumor mechanism of plumbagin to treat differentiated thyroid cancer.

◆ **Cell Cycle**

➤ Reviewed Articles:

SOX12 promotes cell proliferation and invasion of thyroid cancer cells through regulating POU family.

◆ **Frontiers in Pharmacology**

➤ Reviewed Articles:

Type IV collagen reduces MUC5AC secretion in lungs of ovalbuminsensitized mice.

◆ **Journal of Herbal Medicine**

➤ Reviewed Articles:

Teramune Bronchus Throat Spray Promotes Healthy Lung Function Among Women: A Randomized, Double Blinded, Placebo Controlled Clinical Trial.

◆ **Research Journal of Pharmacognosy**

➤ Reviewed Articles:

- 1) Effects of *Clinacanthus nutans* ethanolic and aqueous extracts on PMA-induced U937 macrophage cells.
- 2) Compositions of essential oils and some biological properties of *S. laxa* Boiss. & Buhse and *S. byzantina* K. Koch.
- 3) In Vitro Evaluation the Anti-melanogenic Effects of Various Extracts of Oat Seeds.
- 4) Cytotoxicity of *Eupatorium cannabinum* L. Extracts against human breast cancer cell (MCF-7).
- 5) Cytotoxic, Anti-inflammatory and anti-arthritic activity of *Oxystelma esculentum*.
- 6) The Fractions of *Eryngium thyrsoideum* Extract Sensitize Breast Cancer Cells to Apoptosis with a Minimum Toxic Effect on Normal Cells.
- 7) Studies on anti-inflammatory cellular mechanisms and antioxidative potentials of fatty acids and terpenoids isolated from aerial parts of *Schwenckia americana* L. (Solanaceae).
- 8) Cytotoxic and Apoptotic Effects of Flavones and Dichloromethane: Acetone Extract Fractions of *Artemisia Kermanensis* Pold. on Breast Cancer Cell Lines.
- 9) The effects of licorice mucoadhesive patches (Aftogel®) on the results of nasopharyngeal swab real-time PCR test of SARS-CoV-2: a randomized triple-blind placebo-controlled clinical trial.
- 10) Oral wound healing and antimicrobial activities of *Pistacia vera* seed (pistachio) hydroalcoholic extract.
- 11) Auraptene induces apoptosis in HT-29 cells co-cultured with THP-1 cells by promoting THP-1 polarization to M1 macrophage, increasing M1 macrophage functionality while decreasing M2 macrophage functionality.
- 12) Acute and subchronic toxicity and cytotoxicity of saffron corm extract.
- 13) Apoptosis effects of *oxalis corniculata* l. Extract on human breast cancer cell line.
- 14) Potential cytotoxic activity of galegine on human melanoma cells.
- 15) Synergistic activity of some Iranian folk medicinal plants with ceftazidime and neomycin against some bacterial strains causing nosocomial infections.
- 16) Investigation of in vitro effects of *inula viscosa* and curcumin on alzheimer's disease.
- 17) Antibacterial, cellular mechanism, and cytotoxicity of chitosan nanocomposite loaded with thymol against some cariogenic bacteria.
- 18) Anti-inflammatory potential of *syzygium cumini* fruits: An in-vitro and in-silico approach to find selective COX-2 inhibitors.
- 19) Potent anticancer effects of vitamin c and vitamin c-rich fruit extract (*citrus sinensis* l.) On human small cell lung cancer cell line (h69pr).

- 20) Acacetin ameliorates renal ischemia-reperfusion injury via inhibiting the oxidative stress.
- 21) In silico and In vitro Evaluation of Selected Herbal Compounds as Robust HER-2 Inhibitors for Effective Treatment of Breast Cancer.
- 22) Evaluating the role of Biochanin A in acetic-acid-induced colitis in rats: involvement of nitric oxide pathway.
- 23) Hesperidin plays neuroprotective Effects against quinolinic acid in Human SH-SY5Y Cells: focusing on ROS level and cell cycle arrest.
- 24) Inhibition of EGF and CoCl₂-Induced HIF-1 α and VEGF Production in Triple Negative MDA-MB-468 Cells by Umbelliprenin: Unveiling the Role of PI3K/AKT/mTOR and MAPK Pathways.
- 25) *Holothuria scabra* Extract Improves Histopathological Features and Inhibits Cancer Growth Through IL-6 and NF κ B Signaling Pathways in Carcinoma Mammariae Mice Model.

Skills and Techniques

- ◆ Cell culture
- ◆ Animal studies
- ◆ Polymerase Chain Reaction (PCR)
- ◆ Real-Time Polymerase Chain Reaction (Real Time PCR)
- ◆ Primer designing
- ◆ SDS-PAGE
- ◆ Western Blotting
- ◆ ELISA Method
- ◆ MTT Assay
- ◆ Apoptosis Assay
- ◆ Invasion Assay
- ◆ Next generation sequencing analysis
- ◆ Microsoft Word, Microsoft Excel, Microsoft Power Point
- ◆ Statistical Package for the Social Sciences (SPSS)
- ◆ Prism GraphPad5
- ◆ EndNote X8

Publications

❖ Paper

1. F Zal, R Taheri, F Khademi, E Keshavarz, S Rajabi, Z Mostafavi-Pour. The combined effect of furosemide and propranolol on GSH homeostasis in ACHN renal cells. *Toxicology mechanisms and methods*, 2014: 24 (6), 412-416.

2. **S Rajabi**, F Zal, Z Mostafavi-Pour. Effect of Nitroglycerin treatment on the number of pups in female rats. *Iranian Journal of Reproductive Medicine*, 2014: 12 (6), 93.
3. **S Rajabi**, S Noori, F Zal, A Jahanbazi Jahan-Abad. Oxidative Stress and its Different Roles in Neurodegenerative Diseases (In Persian). *The Neuroscience Journal of Shefaye Khatam*, 2017: 5 (1), 73-86.
4. A Bastani, **S Rajabi**, F Kianimarkani. The effects of fasting during Ramadan on the concentration of serotonin, dopamine, brain-derived neurotrophic factor and nerve growth factor. *Neurology international*, 2017: 9 (2) , 7043.
5. **S Rajabi**, M Hedayati. Medullary thyroid cancer: clinical characteristics and new insights into therapeutic strategies targeting tyrosine kinases. *Molecular diagnosis & therapy*, 2017: 21 (6), 607-620.
6. A.P Mishra, S Saklani, M Sharifi-Rad, M Iriti, B Salehi, V Kumar Maurya, A Rauf, L Milella, **S Rajabi**, N Baghalpour, J Sharifi-Rad. Antibacterial potential of *Saussurea obvallata* petroleum ether extract: A spiritually revered medicinal plant. *Cellular and Molecular Biology*, 2018: 64 (8), 65-70.
7. B Salehi, P Zucca, M Sharifi-Rad, R Pezzani, **S Rajabi**, W.N Setzer, E.M Varoni, M Iriti, F Kobarfard, J Sharifi-Rad. Phytotherapeutics in cancer invasion and metastasis. *Phytotherapy Research*, 2018: 32 (8), 1425-1449.
8. A Bastani, **S Rajabi**, A Daliran, H Saadat, F Karimi-Busheri. Oxidant and antioxidant status in coronary artery disease. *Biomedical Reports*, 2018: 9, 327-332.
9. M Sharifi-Rad, E.M Varoni, M Iriti, M Martorell, W.N Setzer, M.D Contreras, B Salehi, A Soltani-Nejad, **S Rajabi**, M Tajbakhsh, J Sharifi-Rad. Carvacrol and human health: A comprehensive review. *Phytotherapy Research*, 2018: 32 (9), 1675-1687.

10. S. Salehi, MR. Bayatiani, P. Yaghmaei, S. Rajabi, MT. Goodarzi. Protective effects of resveratrol against X-ray irradiation by regulating antioxidant defense system. *Radioprotection*, 2018: 53 (4), 293 - 298.
11. Z Mostafavi-Pour , S Rajabi , F Zal , R Zare. Redox Imbalance and Reproductive Side Effects of Long and Short Term Nitroglycerin Treatment in Rat Uterus. *Novelty in Biomedicine*, 2019: 7 (1), 24-29.
12. B Salehi, M.S Abu-Darwish, A.H Tarawneh, C Cabral, A.V Gadetskaya, L Salgueiro, T Hosseinabadi, S Rajabi, W Chanda, M Sharifi-Rad, R Bridget Mulaudzi, S. A Ayatollahi, F Kobarfard, D.K Arserim-Uçar, J Sharifi-Rad, A Ata, N Baghalpour, M.D.M Contreras. Thymus spp. plants-Food applications and phytopharmacy properties. *Trends in Food Science & Technology*, 2019: 85, 287-306.
13. B Salehi, E.M Varoni, M Sharifi-Rad, S Rajabi, P Zucca, M Iriti, J Sharifi-Rad. Epithelial-mesenchymal transition as a target for botanicals in cancer metastasis. *Phytomedicine*, 2019: 55, 125-136.
14. S Rajabi, M.H Dehghan, R Dastmalchi, F Mashayekhi, S Salami, M Hedayati. The roles and role-players in thyroid cancer angiogenesis. *Endocrine Journal*, 2019: 66(4), 277-293.
15. H Shakib, S Rajabi, M.H Dehghan, F Mashayekhi, N Alighiarloo, M Hedayati. Epithelial-to-mesenchymal transition in thyroid cancer: a comprehensive review. *Endocrine*, 2019: 66(3), 435–455.
16. F Samimi, M Baazm, E Eftekhari, S Rajabi, M.T Goodarzi, F Mashayekhi. Possible Antioxidant Mechanism of Coenzyme Q10 in Diabetic Rat: Impact on Sirt1/Nrf2 signaling pathways. *Research in Pharmaceutical Sciences*, 2019; 14(6): 524-533.
17. S Rajabi, R Dastmalchi, M H Dehghan A Eftekharian, E Aghazadeh, S M H Ghaderian. TJP2 gene mutation c.G1012A may responsible for congenital hearing loss with incomplete penetrance in an Iranian pedigree. *Journal of Genetic Resources*, 2019; 5(2): 143-148.
18. B Salehi, Z Selamoglu, K.S Mileski, R Pezzani, M Redaelli , W.C Cho, F Kobarfard, S Rajabi, M Martorell, P Kumar, N Martins, T.S Santra, J Sharifi-Rad.

- Liposomal Cytarabine as Cancer Therapy: From Chemistry to Medicine. *Biomolecules*, 2019; 9(12): 773.
19. Z Javed, F.A Shah, S Rajabi, Q Raza, Z Iqbal, M Ullah, T Ahmad, B Salehi, M Sharifi-Rad, R Pezzani, F Yaqoob, H Sadia, M Iriti, J Sharifi-Rad, W.C Cho. LncRNAs as Potential Therapeutic Targets in Thyroid Cancer. *Asian Pacific Journal of Cancer Prevention*, 2020; 21(2); 281-287.
 20. S Rajabi, M Shojaee, A Malmir, M Tavirani, S Noori. Anti-breast cancer activities of 8-hydroxydaidzein by targeting breast cancer stem-like cells. *Journal of Pharmacy and Pharmaceutical Sciences*, 2020; 23(1): 47 – 57.
 21. M Hedayati, S Rajabi, A Nikzamir. Papillary thyroid cancer-promoting activities of combined oral contraceptive components. *Galen Medical Journal*, 2020; 9: 1-10.
 22. S Rajabi, H Shakib, R Dastmalchi, A D.Afrooz, S Karima1, M Hedayati. Metastatic propagation of thyroid cancer; organ tropism and major modulators. *Future oncology*, 2020; 16(18):1301-1319.
 23. J Sharifi-Rad, S Rajabi, M Martorell, M D. López, M T. Toro, S Barollo, D Armanini, P V. T Fokou, G Zagotto, G Ribaudó, R Pezzani. Plant natural products with anti-thyroid cancer activity. *Fitoterapia*, 2020; 146:104640.
 24. B Salehi, A Mishra, M Nigam, F Kobarfard, Z Javed, S Rajabi, K Khan, H Ashfaq, T Ahmad, R Pezzani, K R. Alarcón, M Martorell, W Cho, J Sharifi-Rad. Multivesicular liposome (DepoFoam) in human diseases. *Iranian Journal of Pharmaceutical Research*, 2020; 19(2):9-21.
 25. S Noori, S Rajabi, MR Tavirani, B Shokri, A Zarghi. Anti-Breast Cancer Activities of Ketoprofen-RGD Conjugate by Targeting Breast Cancer Stem-Like Cells and Parental Cells. *Anti-cancer Agents in Medicinal Chemistry*, 2021; 21(8):1027-1036.
 26. M Khodadoost, S Rajabi, M Tebianian, Z Ghahremani, S S Athari, M Irani, T Dargahi, R Choopani. Alleviating effects of Lavandula aqueous extract on asthmatic complications in a mouse model. *Comparative Clinical Pathology*, 2021; 30:199–206.
 27. S Rajabi, M Maresca, A V Yumashev, R Choopani, H Hajimehdipoor. The Most Competent Plant-Derived Natural Products for Targeting Apoptosis in Cancer Therapy. *Biomolecules*, 2021; 11(4):534.
 28. M S Hosseini, N M Samaei, S M H Ghaderian, R Dastmalchi, S Rajabi. The oncogenic role of both lncRNA PANDA and BCL2 gene in glioblastoma. *Gene Reports*, 2021. <https://doi.org/10.1016/j.genrep.2021.101160>.

29. F Niazi, K, Hedayatyanfard, M Soroush, B Habibi, N Haddadi, K Rostami, **S Rajabi**, A Khalili, S Niazi. Increased level of Histamine in keloid Tissue. *Novelty in Biomedicine*, 2021; 9(1):1-4.
30. M H Dehghan, M Hedayati, S Shivaee, H Shakib, **S Rajabi**. Tamoxifen triggers apoptosis of papillary thyroid cancer cells by two different mechanisms. *Gene Reports*, 2021. <https://doi.org/10.1016/j.genrep.2021.101266>.
31. Z Fakhroueian, **S Rajabi**, Niloufar Salehi, M R Tavirani, Mi Nourbakhsh. Anticancer properties of novel zinc oxide quantum dot nanoparticles against breast cancer stem-like cells, *Anti-cancer drugs*, 2021; 33(1): 311-326.
32. M H Dehghan, M R Ashrafi, M Hedayati, S Shivaee, **S Rajabi**. Oral contraceptive steroids promote papillary thyroid cancer metastasis by targeting angiogenesis and epithelial-mesenchymal transition, *International Journal of Molecular and Cellular Medicine*, 2021; 10(3): 219–226.
33. A Joushan, **S Rajabi**, K Agin, M H Ayati, F Jafari, B Daneshfard, S S Athari, Z Ghahremani, RI Choopani. Wet cupping therapy ameliorates the inflammatory responses in allergic asthma. *Traditional and Integrative Medicine*, 2022; 7(1): 40-51.
34. **S Rajabi**, S Noori, MR Ashrafi, MA Movahed, S Farzaneh, A Zarghi. Naringenin enhances anti-proliferation effect of 1-ferrocenyl-3-(4-methylsulfonylphenyl) propen-1-one on two different cells via targeting calmodulin signaling pathway. *Molecular Biology Reports*, 2022; 49: 1027–1036.
35. **S Rajabi**, C Alix-Panabières, A Sr Alaei, R Abooshahab, H Shakib, M R Ashrafi. Looking at Thyroid Cancer from the Tumor-Suppressor Genes Point of View. *Cancers*, 2022; 14(10): 2461.
36. F Babak, **S Rajabi**, MH Sakhaie, F Jalali-Mashayekhi. Carvacrol Ameliorating Effects on Trimethyltin Chloride-Induced Neurotoxicity by Modulating the Interplay between Nrf2/Keap1/ARE Pathway and Sirt1. *Research Journal of Pharmacognosy*, 2022; 9(2): 53–61.
37. A Derhami, **S Rajabi**, GH Rad, F Jafari. The Effect of Shilajit on Carboplatin-induced Thrombocytopenia and Oxidative Stress in Rats. *Journal of Pharmaceutical Negative Results*, 2022; 13(7): 621-625.
38. **S Rajabi**, H F Rajani, N Mohammadkhani, A A Ramírez-Coronel, M Maleki, M Maresca, H Hajimehdipour. Long Non-Coding RNAs as Novel Targets for Phytochemicals to Cease Cancer Metastasis. *Molecules*, 2023; 28(3): 987.
39. H Hajimehdipour, Z Tahmasvand, F Ghorban Nejad, M Maresca, **S Rajabi**. Rutin Promotes Proliferation and Orchestrates Epithelial–Mesenchymal Transition and

- Angiogenesis in MCF-7 and MDA-MB-231 Breast Cancer Cells. *Nutrients*, 2023; 15(13): 2884.
40. **S Rajabi**. Editorial: Targeting different programmed cell death processes as therapeutic modalities for thyroid cancer. *Frontiers in Endocrinology*, 2023; 14(1): 1255259.
 41. S Sadr, S Dehghan, M Mosaddegh, S S Athari, **S Rajabi**, R Choopani. The effect of an Iranian polyherbal formulation on the management of allergic asthma in mice. *Journal of Medicinal Plants*, 2023; 22(86): 76-87.
 42. **S Rajabi**, M Irani, M Moeinifard, M Hamzeloo-Moghadam. Britannin suppresses MCF-7 breast cancer cell growth by inducing apoptosis and inhibiting autophagy. *Avicenna Journal of Phytomedicine*, 2023. 10.22038/AJP.2023.22995.
 43. **S Rajabi**, M Soodi, F Jafari, F Ghorbannejad. Evaluation of Acute and Subacute Toxicity of Coriander Triphala Tablet in Wistar Rats. *Research Journal of Pharmacognosy*, 2023; 10 (4): 51-61.

❖ **Book**

- 1) Comprehensive genetic book (In Persian).
- 2) Philosophical applications in science (In Persian).

Research projects

- 1) Evaluation of phytochemical constituents and antibacterial potential of *Saussurea obvallata* petroleum ether extract.
- 2) Assessment of levonorgestrel and ethinyl estradiol effects on some apoptotic and growth factors in human papillary thyroid cancer cell line BCPAP.
- 3) Assessment of tamoxifen effect on apoptosis pathway in human papillary thyroid cancer cell line BCPAP.
- 4) Assessment of levonorgestrel and ethinyl estradiol effects on the expression of vascular- endothelial growth factor (VEGF) and long non-coding RNAs associated with angiogenesis in human papillary thyroid cancer cell line BCPAP.
- 5) Study of the neuroprotective effect of carvacrol against Trimethyltin chloride (TMT)-induced damage in hippocampus of rats: Impact on Sirt1/Nrf2/Keap-1/ARE signaling pathway.
- 6) Evaluation of the effects of rutin on metastatic and angiogenic factors in breast cancer cells.
- 7) Effect of aqueous extract Lavender on airway inflammation and histopathological changes in Balb/c mouse model of ovalbumin-induced allergic asthma.
- 8) Formulation and quality control of an herbal product retrieved from Iranian traditional medicine to improve asthma and evaluation of its effect on BALB/c mice.

- 9) Evaluating the effects of two selected plants from Iranian traditional medicine on animal model of diminished ovarian reserve (DOR) and preparing an oral dosage form from the effective species.
- 10) Evaluation of the effects of Gaillardin on some autophagy-related factors and JAK/STAT signaling pathway in human breast cancer cell line MCF7.
- 11) Evaluation of acute and subacute toxicity of Coriander Triphala tablet in rat.
- 12) Evaluation of the effects of Momiai (Shilajit) on Carboplatin-induced thrombocytopenia and oxidative stress in rats.
- 13) Evaluation of the effects of Britannin on some autophagy-related factors and JAK/STAT signaling pathway in human breast cancer cell line MCF7.

Congress and conference Presentations

- 1) Poster presentation at 20th Iranian society for reproductive medicine, June 2104.
- 2) Poster presentation at international congress on reproduction, June 2105.
- 3) Oral presentation at 10th APOCP General Assembly and Conferences Tehran, Iran, November, 2020.
- 4) 16th National Congress of Biochemistry and 7th International Congress of Biochemistry and Molecular Biology, 2020.
- 5) Participation in 1st International Electronic Conference on Biomolecules, 01–13 December 2020.

Teaching experiences

- 1) Biochemistry lab course for medical students at Shiraz University of medical sciences.
- 2) Biochemistry lab course for dentistry students at Shiraz University of medical sciences.
- 3) Biochemistry lab course for Midwifery students at Shiraz University of medical sciences.
- 4) Biochemistry lab course for Midwifery students at Shiraz University of medical sciences.
- 5) Biochemistry lab course for Microbiology students at Shahr-e Qods Branch, Islamic Azad University.
- 6) Biochemistry course for Microbiology and Biochemistry students at Shahr-e Qods Branch, Islamic Azad University.

Workshop teaching

- 1) A workshop on review article writing.
- 2) A workshop on EndNote software learning.

Certificates

- 1) Certificate for attending Western blotting and SDS-PAGE workshop at Shiraz University of Medical Sciences.
- 2) Certificate for attending PCR workshop at Shiraz University of Medical Sciences.
- 3) Certificate for attending Medical lab quality control workshop at Shiraz University of Medical Sciences.
- 4) Certificate for attending SPSS software workshop at Shiraz University of Medical Sciences.
- 5) Certificate for collaboration in organizing 2th summer school at Shiraz University of Medical Sciences.
- 6) Certificate for collaboration in organizing 20th Biochemistry congress at Shahid Beheshti University of Medical Sciences.