Zahra Sabahi

Personal Information

Nationality: Iranian

Date and place of Birth: 27/01/1982 Marriage status: married (one son)

Mailing address: Medicinal plants processing research center, Shiraz University of Medical

Sciences, Shiraz, Iran

Tel: +98-713-2424128; Fax: +98-713- 2426070 Email: sabahiz@sums.ac.ir; sabahiz@yahoo.com

Education

October 2013-January 2014: Visiting Researcher

School of Materials Science and Engineering, Nanyang Technological University, Singapore

2009-2014: Ph.D. in Pharmaceutical Biotechnology

Shiraz University of Medical Sciences, Shiraz, Iran

Cumulative GPA: Equivalent A⁺ and or/4.00

Dissertation advisor: Soleiman Mohammadi Samani, Ph.D. Department of pharmaceutics; Ali Dehshahri, Ph.D. Department of Pharmaceutical Biotechnology Title: conjugation of poly (amidoamine) dendrimers with various acrylates for improved

delivery of plasmid encoding interleukin-12 gene

2001-2007: Doctor of Pharmacy (Pharm. D.)

Faculty of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran

Cumulative GPA: Equivalent A⁺ and or/4.00

Thesis Advisor: Javad Behravan, Ph.D. Department of Pharmaceutical Biotechnology

Title: Association of gastric cancer incidence with MDR1 gene polymorphism in an ethnic

Iranian population

Research and Work Experience

Academic position

November 2015- present: Assistant Professor, Shiraz University of Medical Sciences, Shiraz, Iran.

Food and drug organization Specialist

2007-2009: Deputy of Food and Drug Affairs, Shiraz University of Medical Sciences, initiated a multifaceted in drug monitoring branch.

Technical Skills

Experimental design for cell and molecular biology, mammalian and bacterial cell culture and transformation/ transfection; DNA and RNA isolation from mammalian and bacteria; plasmid isolation; ELISA; PCR and real time PCR, fluorescence microscopy and fluorescence reading; Comet assay; antioxidant activity assay: DPPH, FRAP and Nitric oxide scavenging assay, ORAC, cellular antioxidant activity; toxicity assay

Teaching Experiences

- 1- Pharmacy Practice for undergraduate students, at Shiraz University of Medical Sciences
- 2- Molecular Biology and Genetics, School of Pharmacy, Shiraz, Iran. Pharm. D. course.
- 3- Pharmaceutical Biotechnology, School of Pharmacy, Shiraz, Iran, Pharm. D. course.
- 4- Special subject in pharmacognosy (drug discovery), School of Pharmacy, Shiraz, Iran, ph. D. course.

Research interests

- 1- Antioxidant assay
- 2- DNA damage assay
- 3- Oxidative stress
- 4- Biological assay of natural products
- 5- Development of polymer-based nanoparticles (non-viral vectors) for nucleic acid delivery

Publications

Article

- 1- M Rashedinia, MJ Khoshnoud, SS Hashemi, M Alimohammadi, <u>Z Sabahi</u>*, Syringic acid: a potential natural compound for the management of renal oxidative stress and mitochondrial biogenesis in diabetic rats. Current drug discovery technologies, 18 (3): 405-413,2021.
- 2- M Vaghari- Tabari, GA Ferns, D Qujeq, AN Andevari, <u>Z Sabahi</u>, S Moein. Signaling, metabolism, and cancer: An important relationship for therapeutic intervention Journal of Cellular Physiology, 236 (8):5512-5532, 2021.
- 3- R Sabet, M Sisakht, L Emami, <u>Z Sabahi</u>*. Comparison of COVID-19 Virus Main Protease Inhibition Activities of Phenolic Acids By Molecular Docking Trends in Pharmaceutical Sciences, 7 (2): 117-126, 2021.
- 4- S Alipour, S Kalari, MH Morowvat, <u>Z Sabahi</u>, A Dehshahri. Green Synthesis of Selenium Nanoparticles by Cyanobacterium Spirulina platensis (abdf2224):

- Cultivation Condition Quality Controls. BioMed Research International, Volume 2021, Article ID 6635297, https://doi.org/10.1155/2021/6635297,2021
- 5- M Rashedinia, M Alimohammadi, N Shalfroushan, MJ Khoshnoud, M Mansourian, N Azarpira, Z Sabahi*. Neuroprotective Effect of Syringic Acid by Modulation of Oxidative Stress and Mitochondrial Mass in Diabetic Rats, BioMed Research International, Volume 2020 | Article D 8297984 | https://doi.org/10.1155/2020/8297984, 2020.
- 6- Z Sabahi, M J Khoshnoud, B Khalvati, SS Hashemi. Syringic acid improves oxidative stress and mitochondrial biogenesis in the liver of streptozotocin-induced diabetic rats, Asian pacific journal of tropical biomedicine, 10 (3): 111-119,2020.
- 7- M Moein, Z Sabahi, H Salim A glance at Berberis integerimma pharmacological effects and its active constituents. Trends in Pharmaceutical Sciences 6 (1): 1-10, 2020.
- 8- Z Sabahi, F Farmani, E Mousavinoor, M Moein. Valorization of Waste Water of Rosa damascena Oil Distillation Process by Ion Exchange Chromatography. The Scientific World Journal. 2020:5409493. doi: 10.1155/2020/5409493,2020.
- 9- Z Sabahi, Z Zebarjad, MM Moein. The Effects of Ultrafiltration and Ultraviolet Radiation on Microbial Content and Chemical Composition of Rose Water. Journal of Reports in Pharmaceutical Sciences, 8 (1):102-105,2019.
- 10- MJ Khoshnoud, <u>Z Sabahi</u>*, M Moein, M Rashedinia, S Pourshahsavari. Attenuation of hyperlipidemia in diabetic and Triton x-100 induced hyperlipidemic rats by Thymus daenensis Celak extract. Trends in Pharmaceutical Sciences, 5 (1): 57-64, 2019.
- 11-F Farmani F, Z Sabahi *, Protective Effects of Anthocyanin Fraction of *Berberis integerrima* Bunge Fruits against H₂O₂ Induced Cytotoxicity in MCF7 and HepG2 Cells, Journal of young pharmacist, 10(3): 288-29,2018.
- 12-Z Sabahi, F Farmani, F Soltani, M Moein. DNA protection, antioxidant and xanthine oxidase inhibition activities of polyphenol-enriched fraction of Berberis integerrima Bunge fruits. Iranian Journal of Basic Medical Sciences, 21(4): 411-416, 2018.
- 13- Z Sabahi, F Soltani, M Moein. Insight into DNA protection ability of medicinal herbs and potential mechanisms in hydrogen peroxide damages model. Asian Pacific Journal of Tropical Biomedicine, 8 (2):120-129, 2018.
- 14-F Farmani, M Moein, MJ Khoshnood, <u>Z Sabahi</u>*. Anthocyanin Isolation from *Berberis integerrima* Bunge Fruits and Determination of their Antioxidant Activity. Free Radicals & Antioxidants, 8 (1):1-5, 2018.

- 15- K Zomorodian, M Moein, K Pakshir, F Karami, <u>Z Sabahi</u>*, Chemical composition and antimicrobial activities of the essential oil from *Salvia mirzayanii* leaves. Journal of evidence-based complementary & alternative medicine, 22 (4): 770-776, 2017.
- 16-M Moein, S Moein, TB Fard, <u>Z Sabahi</u>. Scavenging evaluation of different free radicals by three species of Ziziphus and their fractions. Iranian Journal of Science and Technology, Transactions A: Science, 13(1): 249-255, 2017.
- 17- S Moein, M Moein, F Farmani, <u>Z Sabahi</u>. Different methods evaluation of antioxidant properties of *Myrtus communis* extract and its fractions. Trends in Pharmaceutical Sciences, 1 (3): 153-158, 2015.
- 18-<u>Sabahi Z</u>, Samani SM, Dehshahri A. Conjugation of poly(amidoamine) dendrimers with various acrylates for improved delivery of plasmid encoding interleukin-12 gene. Journal of Biomaterials Applications, 29 (7): 941-953, 2015.
- 19- A Dehshahri, H Sadeghpour, R Kazemi Oskuee, M Fadaei, Z <u>Sabahi, S</u> Hossaini Alhashemi, E Mohazabieh. Interleukin-12 plasmid DNA delivery using L-thyroxine conjugated polyethylenimine nanocarriers. Journal of Nanoparticle Research, 16 (2423):1-14, 2014.
- 20- A Dehshahri, S Hossaini Alhashemi, A Jamshidzadeh, <u>Z Sabahi</u>. Mohammadi Samani S, Sadeghpour H, Mohazabieh E, Fadaei M. Comparison of the effectiveness of polyethylenimine, polyaidoamine and chitosan in transferring plasmid encoding IL-12 gene into hepatocytes. Macromolecular Research, 21(12): 1322-1330, 2013.
- 21- Z Sabahi, MM Zarshenas, F Farmani, P Faridi, S Moein, M Moein. Essential oil composition and in vitro antioxidant activity of ethanolic extract of *Thymus daenensis* Celak from Iran. Global Journal of Pharmacology, 7 (2): 153-158, 2013.
- 22-Z Sabahi, R Salek, RE Heravi, F Mosaffa, ZJ Avanaki, J Behravan, Association of gastric cancer incidence with MDR1 gene polymorphism in an ethnic Iranian population. Indian journal of cancer, 47(3):317-21, 2010.
- * Corresponding Author

Book

Iranian medical encyclopedia (first and second volume): 14 monograph about in herbal medicine section

Presentations at scientific meeting

- 1-Isolation and determination of antioxidant capacities of anthocyanin from *Berberis integerrima* Bunge fruits, 9th joint natural products conference 24-27th July, Denmark, 2016.
- 2- Protective effects of anthocyan fraction of *Berberis integerrima* Bunge fruits against

- oxidative damages by H_2O_2 in HepG2, 6^{th} National congress on medicinal plants, 9- 10^{th} May, Iran, 2017.
- 3-Protective effects anthocyanin fraction of *Berberis integerrima* Bunge fruits against oxidative damages by H₂O₂ in MCF7, 21th international congress phytopharm, 2-5th July, Austria, 2017.
- 4- Isolation and determination of antioxidant capacities of anthocyanin from *Rosa canina* fruits, 21th international congress phytopharm, 2-5th, July, Austria, 2017.
- 6- Effect of *Thymus daenensis* extract alone or with atorvastatin in diabetic and hyperlipidemic induced rats, 2nd international and 23th Iranian congress of physiology and pharmacology, 15-18th February, Iran, 2018.
- 7- Evaluation of Syringic acid effects on oxidative stress and mitochondrial mass in spinal cord and sciatic nerve in diabetic mice, 3th congress and exhibition of traditional and alternative medicine, 6-7 June, Germany, 2019.

Professional Development

Iranian Academy of Medical Sciences: since 2007 Iranian Society of Pharmaceutical Sciences: since 2007