



Personal Information

First Name: Behzad

Last Name: Shahbazi

Date of Birth: 1989

Nationality: Iranian

Marital status: Married

Address: Faculty of Pharmacy, Semnan University of Medical Science

Email address: b.shahbazii@gmail.com

Educational History

PharmD course: Pharmacy Doctorate (PharmD), Faculty of Pharmacy, Kermanshah University of Medical Sciences. 2014.

PharmD thesis topic: Design, preparation and characterization of siRNA- Lipofectamin loaded PLGA nanoparticles: Evaluation of EGFR expression in A431 cell line

PhD course: PhD of Pharmaceutical biotechnology, Pasteur Institute of Iran, 2022.

PhD thesis topic: Discovery small molecules candidates against LRP6 receptor based on the interaction of this receptor with serine protease inhibitor

Research Interests

Molecular dynamics simulations of molecules

Protein engineering

Virtual Screening

Drug delivery

Gene delivery

Publications:

Articles:

- 1- Ahmadi E, **Shahbazi B**, Fattahi A. Sustained release of 5-fluorouracil from chitosan oligosaccharide-deesterified tragacanth core-shell nanoparticles. *Journal of Reports in Pharmaceutical Sciences*. 2014;3(2):169.
- 2- Sajjadi S-E, Jamali M, Shokoohinia Y, Abdi G, **Shahbazi B**, Fattahi A. Antiproliferative evaluation of terpenoids and terpenoid coumarins from *Ferulago macrocarpa* (Fenzl) Boiss. fruits. *Pharmacognosy research*. 2015;7(4):322.
- 3- **Shahbazi B**, Taghipour M, Rahmani H, Sadrjavadi K, Fattahi A. Preparation and characterization of silk fibroin/oligochitosan nanoparticles for siRNA delivery. *Colloids and Surfaces B: Biointerfaces*. 2015;136:867-77.
- 4- Fattahi A, Sakvand T, Hajjalyani M, **Shahbazi B**, Shakiba M, Tajhmiri A, et al. Preparation and characterization of Pistacia khinjuk gum nanoparticles using response surface method: Evaluation of its anti-bacterial performance and cytotoxicity. *Advanced Pharmaceutical Bulletin*. 2017;7(1):159.
- 5- Abdolmaleki S, Ghadermazi M, Fattahi A, Shokraei S, Alimoradi M, **Shahbazi B**, et al. Synthesis, crystallographic and spectroscopic studies, evaluation as antimicrobial and cytotoxic agents of a novel mixed-ligand nickel (II) complex. *Journal of Coordination Chemistry*. 2017;70(8):1406-23.
- 6- Feyzmand S, **Shahbazi B**, Marami M, Bahrami G, Fattahi A, Shokoohinia Y. Mechanistic in vitro evaluation of *Prosopis farcta* roots potential as an antidiabetic folk medicinal plant. *Pharmacognosy Magazine*. 2017;13(Suppl 4):S852.
- 7- Fattahi A, Niyazi F, **Shahbazi B**, Farzaei MH, Bahrami G. Antidiabetic mechanisms of *Rosa canina* fruits: an in vitro evaluation. *Journal of evidence-based complementary & alternative medicine*. 2017;22(1):127-33.
- 8- Fattahi A, **Shahbazi B**, Hosseinzadeh L, Mohammadi G. Optimization of lipofectamine-2000/siRNA Lipoplex Loaded PLGA Nanoparticles for efficient EGFR gene silencing: An in Vitro study. *Journal of Reports in Pharmaceutical Sciences*. 2018;7(1):64-78.
- 9- Sadrjavadi K, **Shahbazi B**, Fattahi A. De-esterified tragacanth-chitosan nano-hydrogel for methotrexate delivery; optimization of the formulation by Taguchi design. *Artificial cells, nanomedicine, and biotechnology*. 2018;46(sup2):883-93.
- 10- **Shahbazi B**, Feyzmand S, Jafari F, Ghiasvand N, Bahrami G, Fattahi A, et al. Antidiabetic Potential of *Prosopis farcta* Roots: In Vitro Pancreatic Beta Cell Protection, Enhancement of Glucose Consumption, and Bioassay-Guided Fractionation. *Evidence-Based Complementary and Alternative Medicine*. 2020;2020.
- 11- Jahantigh HR, Ahmadi N, **Shahbazi B**, Lovreglio P, Habibi M, Stufano A, et al. Evaluation of the dual effects of antiviral drugs on SARS-CoV-2 receptors and the ACE2 receptor using structure-based

virtual screening and molecular dynamics simulation. *Journal of Biomolecular Structure and Dynamics*. 2022;1-23.

12- **Shahbazi B**, Mafakher L, Teimoori-Toolabi L. Different compounds against Angiotensin-Converting Enzyme 2 (ACE2) receptor potentially containing the infectivity of SARS-CoV-2: an in silico study. *Journal of molecular modeling*. 2022;28(4):1-18.

13- Farshidi N, Ghaedi T, Hassaniazad M, Eftekhari E, Gouklani H, Farshidi H, **Shahbazi B**, Ahmadi KH. Preparation and pre-clinical evaluation of flagellin-adjuvanted NOM vaccine candidate formulated with Spike protein against SARS-CoV-2 in mouse model. *Microbial Pathogenesis*. 2022;171:105736.(1)

14- **Shahbazi B**, Arab SS, Mafakher L, Azadmansh K, Teimoori-Toolabi L. Computational assessment of pigment epithelium-derived factor as an anti-cancer protein during its interaction with the receptors. *Journal of Biomolecular Structure and Dynamics*. 2022:1-17.

15- Jahantigh H, Ahmadi N, Lovreglio P, Stufano A, Enayatkhani M, **Shahbazi B**, et al. Repurposing antiviral drugs against HTLV-1 protease by molecular docking and molecular dynamics simulation. *Journal of Biomolecular Structure and Dynamics*. 2022:1-10. (**Corresponding author**)

16- Poorebrahim M, Abazari MF, Moradi L, **Shahbazi B**, Mahmoudi R, Kalhor H, et al. Multi-targeting of K-Ras domains and mutations by peptide and small molecule inhibitors. *PLoS computational biology*. 2022;18(4):e1009962.

17- **Shahbazi B**, Ahmadi K, Zakeri A-J, Gouklani H. Characterization of SARS-CoV-2 omicron variants from Iran and evaluation of the effect of mutations on the spike, nucleocapsid, ORF8, and ORF9b proteins function. *Journal of Biomolecular Structure and Dynamics*. 2022:1-16.

18- Gharibi Z, **Shahbazi B**, Gouklani H, Nassira H, Rezaei Z, Ahmadi K. Computational screening of FDA-approved drugs to identify potential TgDHFR, TgPRS, and TgCDPK1 proteins inhibitors against *Toxoplasma gondii*. *Scientific Reports*. 2023;13(1):5396.

19- Design peptide and protein vaccine candidates against Monkeypox virus using reverse vaccinology approach: an insilico study. **Behzad Shahbazi**, Hamid Reza Jahantigh, Hamed Gouklai, Hans Van der Weken, Zahra Gharibi, Mehri Habibi, Khadijeh Ahmadi, *Journal of Biomolecular Structure and Dynamics*. 2023

20- Kallistatin as an inhibitory protein against colorectal cancer cells through binding to LRP6. **Behzad Shahbazi**, Seyed Shahriar Arab, Ladan Teimoori-Toolabi, *Journal of Biomolecular Structure and Dynamics*. 2023

21- In silico designing a novel TLR4-mediating Multi-epitope vaccine against monkeypox via advanced immunoinformatics and bioinformatics approaches. Mohammad Reza Lahimchi, Hamid Madanchi, Khadijeh Ahmadi, **Behzad Shahbazi**, Bahman Yousefi *Journal of Biomolecular Structure and Dynamics*. 2023

Book chapters:

Insights into the Wnt Signaling Pathway Evolution

Skills Laboratory and Expertise:

Molecular biology techniques:

PCR, RT-PCR, Mammalian cell techniques, Flow cytometry, Western blot, Transfection.

Software:

Gromacs, Autodock, Smina, Biovia Discovery Studio, Rosetta macromolecular modeling

Committees and Councils Membership:

Member of the Medical Council of Iran.

Iranian Association of Pharmaceutical Scientists (IAPS)