S. Sajad Hosseini Balef

Curriculum Vitae

Education

2007--2011	**High School Diploma**, *National Organization for Development of Exceptional Talen*, Qaemshahr, Iran, *GPA: 9.03*.
2010--2017	**Professional Doctorate in Pharmacy**, *Mazandaran University of Medical Sciences*, Sari, Iran, *GPA: 7.06*.
2017--present	**PhD candidate in Bioinformatics**, *University of Tehran*, Tehran, Iran, *GPA: 9.1*.

Professional Pharmacy Doctorate Thesis

Title	*In vitro and in silico evaluation of P-glycoprotein inhibition through 99mTc-MIBI uptake*
Supervisors	Professor Seyed Jalal Hosseinimehr & Associate Professor Hamid Irannejad

Publications

2018 **Hosseini Balef, S. S.**, Piramoon, M., Hosseinimehr, S. J., & Irannejad, H. (2019). ***In vitro and in silico evaluation of P-glycoprotein inhibition through 99mTc-methoxyisobutylisonitrile uptake***. Chemical Biology & Drug Design, 93(3), 283--289.

2018 Hosseini Balef, S. S., Chippindale, A. M., & Irannejad, H. (2019). ***A crystallographic and theoretical study of an (E)-2-Hydroxyiminoethanone derivative: prediction of cyclooxygenase inhibition selectivity of stilbenoids by MM-PBSA and the role of atomic charge***. Journal of Biomolecular Structure and Dynamics, 37(6), 1555--1566.

2022 Hosseini Balef, S. S., Hosseini Balef, S. S., Karimi, Zohreh; Azari, Aala; Sadraei, Seyed S.; Hasanjani, Parisa; Sadeghi, Yasaman; Ahmadi, Samin; Qorbannejad, Fateme; Farmoudeh, Ali; Irannejad, Hamid. ***A Recent Update on the Clinical Trials and Effectiveness of Drugs Used in COVID-19, MERS and SARS Coronaviruses***. Anti-Infect. Agents, vol. 20, no. 2, 1 June 2022, pp. 1-27, doi:10.2174/2211352519666210217100423.

2022 Azari, A., Goodarzi, A., Jafarkhani, B., Eghbali, M., Karimi, Z., **Hosseini Balef, S. S.**, & Irannejad, H. (2022). ***Novel molecular targets and mechanisms for neuroprotective modulation in neurodegenerative disorders***. Central Nervous System Agents in Medicinal Chemistry.

Experience

Vocational

2017--2018 **Pharmaceutical Consultant Doctor**, Multiple Pharmacies, Tehran, Sari, Juybar, Babol, **Iran**.

2018--2019 **Lecturer**, Academic Center for Education, Culture and Research, Tehran, **Iran**.

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Awards

2011 Ranked 0.4% in the National University Competitive Examinations among more than 460,000 participants

2017 Rank first in the Ph.D. Competitive Examination

Computer skills

Basic

- **Object-oriented languages**: Rust
- **Functional languages**: OCaml, Haskell, Emacs Lisp, Common Lisp

Intermediate

- **Python**: PyTorch, NumPy, matplotlib, Regular expression parsing
- **R**: Biostatical Analysis, Bioconductor, ggplot2
- **GNU command line tools**: Bash scripting, awk, sed, grep, etc.
- **Office**: LaTeX, LibreOffice, Inkscape
- **Web Design**: HTML, CSS

Advanced

- **Linux**: Command line, REPLs, Build Systems, Window Managers (i3wm), Desktop Environment (KDE Plasma)
- **Emacs**: Daily driving packages (Org-mode, Evil-mode, Mu4e, etc.), Language Server Protocols, Tinkering with Elisp

Scientific Skills

Intermediate Academic tutoring

Advanced Cell Culture, Radiopharmacy, Molecular Docking (Autodock , Vina, and DOCK6), Molecular Visualization and Pre-processing (VMD), Homology Modeling (Modeller), Molecular Dynamics (GROMACS, NAMD), API Utilizing (KEGG, NCBI databases, etc.)

Languages

Persian	***Mother-tongue***
English	***Conversationally fluent***

Interests

Scientific Interests

- Computational Drug Delivery
- Computational Medicinal Chemistry
- Systems Biology
- Immunotherapeutics and Immunoinformatics
- Cancer Microenvironments
- Neuro-Symbolic AI and Functional Programming
- Micro-connectomics, Synaptic Transmission, and Plasticity

Miscellaneous

- **Arts**: Poetry, Fusion and Noise Music, Contemporary arts
- **Sports and Games**: Running, Work out, FIFA 16