

Curriculum vitae

Personal Details

Dr. Neha Choudhary

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Citizenship India

Professional Qualifications

- PhD Computational Biology and Bioinformatics, CUHP, Himachal Pradesh
- MSc Computational Biology and Bioinformatics, CUHP, Himachal Pradesh
- BSc(H) Biomedical Sciences, Delhi University

Employment History

- Assistant Professor, Centre for Computational Biology and Bioinformatics, Central University of Himachal Pradesh, Dharamshala (June, 2022 – till date)

Specialisation

Aayurinformatics, Biological sequence analysis, Structure analysis

Research Interests

- Exploring systems level effects of Ayurvedic herbs towards human diseases
- Understanding the properties of chemical space of natural products.

Teaching

- Biomolecular Structure Analysis
- Statistical Methods
- Programming language

Awards/ Fellowships/ Membership Professional Bodies

- Selected for 'General Management Programme for Women Scientists' (Sponsored by Department of Science and Technology, Govt. of India, New Delhi), held at ASCI (Hyderabad) from December 12-23, 2022.
- AWSAR award 2021 by Department of Science and Technology (DST), India.
- Young Researcher Award 2019 at NBRCom-2019 organized by PGIMER Chandigarh.
- First prize for the poster presentation on the topic "Anti-epileptic neuromodulators from Ayurvedic herbs: integrated computational studies on drug-target and protein-protein interaction networks" at NBRCom-2019 organized by PGIMER Chandigarh.

- Awarded ICMR-SRF, 2017 for the project entitled “To develop Systems pharmacology database of Ayurvedic herbs (SPDAM)”.
- VIBHA, Vigyan Bharti Lifetime membership

Publications

1. Sharma, R., Jadhav, M., **Choudhary, N.**, Kumar, A., Rauf, A., Gundamaraju, R., AlAsmari, A.F., Ali, N., Singla, R.K., Sharma, R. and Shen, B., 2022. Deciphering the impact and mechanism of Trikatu, a spices-based formulation on alcoholic liver disease employing network pharmacology analysis and in vivo validation. **Frontiers in Nutrition**, 9.
2. Kumar, A., Prajapati, S., Sharma, M., Singh, T., **Choudhary, N.**, Bharti, A.C., Sharma, R. and Gupta, P., 2022. Quantitative assessment of antioxidant potential of selected homeopathic preparations in clinical practice. **Drug Metabolism and Personalized Therapy**.
3. **Choudhary, N.** and Singh, V., 2022. Multi-scale mechanism of antiviral drug-alike phytoligands from Ayurveda in managing COVID-19 and associated metabolic comorbidities: insights from network pharmacology. **Molecular Diversity**, 7, 1-20.
4. Yadav, R., Hasan, S., Mahato, S., Celik, I., Mary, Y.S., Kumar, A., Dhamija, P., Sharma, A., **Choudhary, N.**, Choudhary, P.K. and Kushwah, A.S., 2021. Molecular docking, DFT analysis, and dynamics simulation of natural bioactive compounds targeting ACE2 and TMPRSS2 dual binding sites of spike protein of SARS CoV-2. **Journal of molecular liquids**, 342, p.116942.
5. **Choudhary, N.**, Choudhary, S., Kumar, A. and Singh, V., 2020. Deciphering the multi-scale mechanisms of *Tephrosia purpurea* against polycystic ovarian syndrome (PCOS) and its major psychiatric comorbidities: studies from network-pharmacological perspective. **Gene**, 773, p.145385.
6. **Choudhary, N.** and Singh, V., 2019. Insights about multi-targeting and synergistic neuromodulators in Ayurvedic herbs against epilepsy: integrated computational studies on drug-target and protein-protein interaction networks. **Scientific reports**, 9(1), p.10565.
7. **Choudhary, N.** and Singh, V., 2018. A census of *P. longum*'s phytochemicals and their network pharmacological evaluation for identifying novel drug-like molecules against various diseases, with a special focus on neurological disorders. **PloS one**, 13(1), p.e0191006.
8. Verma, S.K., Sharma, A., Sandhu, P., **Choudhary, N.**, Sharma, S., Acharya, V. and Akhter, Y., 2017. Proteome scale identification, classification and structural analysis of iron-binding proteins in bread wheat. **Journal of Inorganic Biochemistry**, 170, 63-74.

Workshop/ Conferences

- Workshop (31 Jan 2022 to 04 Feb 2022) on “Scientific Research Writing Using Latex and Descriptive Data Analysis through R/Python” organized by Rajiv Gandhi South Campus, BHU.
- Attended 2nd-NBRCCom-2019 Society of Young Biomedical Scientists (SYBS), India organised by PGIMER-Chandigarh, India.
- Participated in NSMPH-2019 organised by National Medicinal Plants Board (Central Council for Research in Homoeopathy, Ministry of AYUSH, Govt. of India) at the Nilgiris District, Tamil Nadu on 23rd and 24th March 2019.

- Participated in the “National Symposium on Bioinformatics and Computational Systems Biology” held at Central University of Himachal Pradesh, TAB-Shahpur, Kangra during November 12-14, 2016.
- Attended National Symposium on “Computational Systems Biology (NSCSB-2016)” organized by JUIT, Wagnaghat, H.P, Shimla and NNMCB (Mohali Node), SERB on March 18-20, 2016.
- Attended National Symposium on “Advances in Biotechnology for Crop Improvement” organized by Eternal University, Baru Sahib (H.P) and Department of Biotechnology, Gov. of India on July 12, 2014.