# CURRICULUM VITAE

**Divya Mishra, Ph.D.**

# Current Contact Information

105, Makari Khoh, Malviya Nagar

Mirzapur, Uttar Pradesh, 231001 India

Contact: +91-7860537207

Email: mishra.divya76@gmail.com

# Education

|  |  |  |
| --- | --- | --- |
| 2022 | Ph.D. Bioinformatics, Percentage: 84% | Centre of Bio-informatics  University of Allahabad  Dissertation: *In-Silico* approaches for interrogating the role of medicinal mushrooms in human diseases  **Advisor: Prof. M.P. Singh, Ph.D.** |
| 2017 | M.Sc. Bioinformatics, Percentage: 69.32% | Centre of Bio-informatics  University of Allahabad  Thesis: Effects of Multiple-Sequence Alignment in Phylogenetic Analysis  **Advisor: Dr. Anup Som, Ph.D.** |
| 2013 | B.Sc. (Hons.) Biological Techniques  Specimen and Preparation, Percentage: 60.23% | Ewing Christian College (ECC) , Prayagraj. |

**Professional Academic Experience**

2022-Present **Postdoctoral Research Fellow, Hadassah Academic College, Jerusalem, Israel**

**Project Name:** Efficient Phasing of low-coverage sequencing data using stLFR reference panels

**Project Advisor:** Dr. Danny Zeevi

# Publications

# Dubey S, Chaturvedi VK, Mishra D, Singh MP. “Role of edible mushroom as potent therapeutics for the diabetes and obesity”. December 2019,3 Biotech 9(12). 10.1007/s13205-019-1982-3

# Mishra D, Chaturvedi VK, Singh MP Rai SN. “Effect of COVID19 Pandemic on the Vital Function of the Central Nervous System: A Literature-based Prospective”. EC Neurology 12.8 (2020): 163-16

# Chaturvedi VK, Mishra D, Singh MP, Rai SN. “Mobile Phone and Mental Health: Iron Cut the Iron”. EC Neurology 12.9 (2020): 50-60.

* Mishra D, Chaturvedi VK, Snijesh VP, Shaik NA, Singh MP. “Other Biological Databases”. Essentials of Bioinformatics, Volume I, [https://doi.org/10.1007/978-3-030-02634-9\_5.](https://doi.org/10.1007/978-3-030-02634-9_5)
* Mishra D, Chaturvedi VK, Snijesh VP, Shaik NA, Singh MP. “Sequence Databases”. Biological Databases”. Essentials of Bioinformatics, Volume I, [https://doi.org/10.1007/978-3-030-02634-9\_5.](https://doi.org/10.1007/978-3-030-02634-9_5)
* Mishra D, Singh MP. “In-silico insights to identify the bioactive compounds of edible mushrooms as potential MMP9 inhibitor for Hepatitis-B” . Research Journal of Biotechnology. Vol. 15(9)**.**
* Mishra D, Mishra A, Chaturvedi VK, Singh MP. “An overview of COVID19 with an emphasis on computational approach for its preventive intervention” 3 Biotech. Springer.
* Rai SN, Mishra D, Singh P, Vamanu E, Singh MP. Therapeutic applications of mushrooms and their biomolecules along with a glimpse of in silico approach in neurodegenerative diseases. Biomed Pharmacother. 2021 Feb 15;137:111377. doi: 10.1016/j.biopha.2021.111377
* Rai SN, Tiwari N, Singh P, Mishra D, Singh AK, Hooshmandi E, Vamanu E, Singh MP. Therapeutic Potential of Vital Transcription Factors in Alzheimer's and Parkinson's Disease With Particular Emphasis on Transcription Factor EB Mediated Autophagy. Front Neurosci. 2021 Dec 14;15:777347. doi: 10.3389/fnins.2021.777347.
* Mishra, D., Mishra, A., Katara, P. *et al.* In silico identification of potential inhibitors of MPS1 from edible mushroom (*Pleurotus ostreatus)* to prevent aneuploidy and tumorigenesis. *J Proteins Proteom* (2022). <https://doi.org/10.1007/s42485-022-00091-4>
* Mishra D, Mishra A, Singh MP. “Demystifying the role of prognostic biomarkers in breast cancer through integrated transcriptome and pathway enrichment analyses” https://doi.org/10.1101/2022.06.20.496785
* Mishra D, Mishra A, Singh MP .” *In silico* insight to identify potential inhibitors of BUB1B From mushroom bioactive compounds to prevent breast cancer metastasis”. <https://doi.org/10.1101/2022.06.14.496027>
* Mishra D, Mishra A, Singh MP, “Identification of prognostic biomarkers for suppressing tumorigenesis and metastasis of Hepatocellular carcinoma through transcriptome analysis”. <https://doi.org/10.1101/2022.07.20.500640>

## 

## Presentations

* Divya Mishra, Ashish Mishra, Prof. M.P. Singh (2020). “A computational study for the identification of partial PPAR-gamma modulator from *P.ostreatus*.” Paper presented at theBioSangam International Conference at Motilal Nehru National Institute of Technology,Prayagraj,India.
* Divya Mishra, Ashish Mishra, Rohini kumara, Dr. Pramod Katara(2019). “Subtractive Genomics Approach:” Paper presented at National Conference on Recent Advances in Agriculture, Food Tech and Human Health, BioMilaap 2019, SHUATS, Prayagraj.
* Divya Mishra, Prof. M.P. Singh (2018). “*In silico* approach for mycoremediation of environmental toxicity”. Oral presentation at the NCECM (National conference) Dr Rammanohar lohia avadh university, Faizabad, U.P. (INDIA).

## Certiﬁcations

* Proficiency certificate in “Python and Machine Learning” from DUCAT,Noida. (2019)
* Certificate of participation, RTG Big Data Research, Allahabad Summer School. University of Heidelberg.
* Short term training on “Python programming” from UPTEC. Prayagraj. INDIA. (2019)
* Introduction to AWS Machine learning services
* AWS foundation: Machine learning Basics
* Understanding Neural Network

# Skills learned

# Cloud computing (DNAnexus)

# Scripting Language: Bash/Shell Script, BioPython,

# R (Bioconductor): Ggplot2, Plotly, ComplexHeatmap, tidyr, dplyr, **pdlyr, tidy, knitr, base, EdgeR, Deseq2**

# Linux OS and Excel Spreadsheet

# Workflows: RNA-Seq, Whole Genome/Exome Sequencing, GWAS, Snakemake

# Sequence Analysis (Mapping, Assembly), Variant Analysis

# Structural Analysis (Autodock, GROMACS, DESMOND, MODELLER)

# Network Analysis (Cytoscape, Cytohubba)

# Databases: TCGA, UK BioBank, SRA

# Visualization Tools: IGV