Curriculum Vitae

Dr. Pratichi Singh

Basic Information

Date of Birth: **29.10.1990**

Gender: **Female**

Nationality: **Indian**

Marital Status: **Married**

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ResearchGate:https://www.researchgate.net/profile/Pratichi_Singh2

Research Overview

No. of Publications: 21

Citations: 59 h - index: 5

Technical Skills

- Expert in structure-based drug design, MD simulations, Various Bioinformatics Tools and Packages
- Proficiency in MS Office applications, Linux (Ubuntu) Operating system
- Schrodinger Maestro software, Gromacs software, Auto dock Tools

Education

- **Ph.D.** Bioinformatics **2014-2018,** Vellore Institute of Technology, Vellore, Tamil Nadu, India
- **M.Sc.** Biomedical Genetics **2011-2013,** Vellore Institute of Technology, Vellore, Tamil Nadu, India
- **B.Sc.** Biotechnology **2008-2011,** Devi Ahilya Vishwavidyalaya, Indore, Madhya Pradesh, India

Professional Experience

- **Assistant Professor,** Department of Biosciences, Division of Life Sciences, **Galgotias University,** Greater Noida**, India** (2019- till present)
- **Sr. Lecturer,** Subharti University, Meerut (2018)
- Supervisor, **Exam Coordinator, Lab-In-Charge**
- **Teaching cum Research Associate,** VIT Vellore, **India**
- Full time **Research Scholar** (PhD) in VIT, Vellore
- **Research Intern**, SGPGIMS, Lucknow
- **Biology Teacher** in an Inter College, CBSE Board

Research Interests

- Molecular modelling, Genomics, and Proteomics, Systems biology
- Structural Bioinformatics, Molecular dynamics
- Networking of proteins/genes, Codon variation study
- Structural and sequence mutations in genes/proteins, Evolutionary analysis

Awards and Fellowships

- Received **Research & Innovation Award** in 2020
- Received **Young Scientist Award** in 2020
- Received **Research Award** in 2017 and 2018
- Received **Research Associateship** in 2014

Supervising, Mentoring Activities

- Ph.D. Supervisor
- Demonstrated and assisted Bioinformatics/Biotechnology lab experiments
- Guided more than 35 projects for B.Tech, B.Sc., and MSc. Students.

Patent

1. **Title of the Invention:** Covid19 Protected Room: Disinfecting Room Air Using Machine Learning System

   Application No: 202031024066

   Application Filing Date: 09/06/2020

   Publication Date: 17/07/2020

2. **Title of the Invention:** Stomach Pain Detector Kit: With Medicine Dose Using Deep Learning Programming

   Application No: 202111008830

   Application Filing Date: 03/03/2021

   Publication Date: 29/03/2021

3. **Title of the Invention:** Multivitamin Tablet Using Food Waste Material

   Application No: 202211018221

   Application Filing Date: 29/03/2022

4. **Title of the Invention:** Method for Synthetically Producing Chitin

   Application No: 202211025588

   Application Filing Date: 02/05/2022

5. **Title of the Invention:** Method for Synthetically Producing Honey

   Application No: 202211025587

   Application Filing Date: 02/05/2022

Projects & Trainings

- Submitted Project in DBT, BIRAC, and UPCST.
- Attended more than 50 FDPs and Conferences/Symposium.
- **Keynote speaker** in FDP conducted by Sharda University, Greater Noida.
- **Accreditation and Outcome-Based Learning (OBE)** Course from **NPTEL**, IIT Kharagpur along with FDP
- Completed online courses from **Coursera** from various foreign Universities.
- Permanent **Membership** in the **Asia Society of Researchers** (ASR) and **Hong Kong Chemical, Biological & Environmental Engineering Society** (HKCBEES)
- **Editorial Board Member** of **Computational Biology and Bioinformatics, Current Research in Public Health, Life Research**
- **Reviewer** of various reputed international journals
- Research intern at "**Sanjay Gandhi Postgraduate Institute of Medical Sciences** (SGPGIMS), Lucknow, in the Department of Medical Genetics from December 2012 to May 2013.
- Presented Paper/Poster/Abstract at Various International Conferences in Postgraduation & Ph.D.

- Internship from "Endo Labs Limited, Indore" in production and marketing management of tablets at the Graduation level.

- Project on "Hospital Management" at Graduation level

List of Publications

1. Mishra, A.P.; Swetanshu; **Singh, P***.; Yadav, S.; Nigam, M.; Seidel, V.; Rodrigues, C.F. Role of the Dietary Phytochemical Curcumin in Targeting Cancer Cell Signalling Pathways. Plants 2023, 12, 1782. https://doi.org/10.3390/ plants12091782 **(I.F. 4.8)**

2. **Singh, P***., Ahmed, S., Ahmad, I. & Alam, M. (2023). SNP based analysis depicts phenotypic variability in heme oxygenase-1 protein. Turkish Journal of Biochemistry. https://doi.org/10.1515/tjb-2021-0250 **(I.F. 0.5)**

3. Yadav, S., **Singh, P**. Advancement and Application of Novel Cell-Penetrating Peptide in Cancer Management. 3 Biotech 2023 (Under Revision)

4. Swetanshu, Imran Khan, **Pratichi Singh***, E. Srinivasan, A Systematic Overview on Treatment towards Endocrine Disruptors, Sustainable Energy Technologies and Assessments, Volume 53, Part C, October 2022, 102688, https://doi.org/10.1016/j.seta.2022.102688 **(I.F. 7.63)**

5. Swetanshu, **Singh, P.** (2022). Gut Microbiome and Neurodegeneration: A Bioinformatics Approach. In: Tripathi, A.K., Kotak, M. (eds) Gut Microbiome in Neurological Health and Disorders. Nutritional Neurosciences. Springer, Singapore. https://doi.org/10.1007/978-981-19-4530-4_17

6. **Singh, P.,** Swetanshu, Yadav, R. et al. Revisiting the modern approach to manage agricultural solid waste: an innovative solution. Environ Dev Sustain (2023). https://doi.org/10.1007/s10668-023-03309-7 **(I.F. 4.1)**

7. Pallavi Khandelia, Shikha Yadav, **Pratichi Singh**,An Overview of the BCG Vaccine and its Future Scope, Indian Journal of Tuberculosis, 2023, https://doi.org/10.1016/j.ijtb.2023.05.012

8. Swetanshu, **Pratichi Singh***, Ecopreneurship: An Emerging Concept in India, Research Journal of Chemistry and Environment, 2023 (Under Review)

9. Mohit Shakya, Shivani Raizada, Rajesh Yadav, **Pratichi Singh***, Computational Fine-Tuning of Functional Single Nucleotide Polymorphisms Associated with ACP5 Gene to Characterize Missense Mutations, Advances in Pharmacology and Pharmacy, Vol. 9, No. 2, pp. 17 - 25, 2021. DOI: 10.13189/app.2021.090201

10. **Pratichi Singh***, Network and Pathway enrichment analysis of ADHD candidate genes, Indian J Psychiatry 2020;62:400-6.

10.4103/psychiatry.IndianJPsychiatry_105_17 **(I.F. 2.98)**

11. **Pratichi Singh**, Diagnosis of Hepatitis Disease Using a Decision Tree Classification Algorithm, Journal of SeyBold Report, 2020.

12. **Pratichi Singh**, J. Febin Prabhu Dass: Codon usage of human Hepatitis C virus (HCV) clearance genes in relation to its expression. Journal of Cellular Biochemistry (2019) 1-11. DOI: 10.1002/jcb.29290 **(I.F. 4.48)**

13. **Pratichi Singh**, J. Febin Prabhu Dass: Nearly neutral evolution in IFNL3 gene retains the immune function to detect and clear the viral infection in HCV. Progress in Biophysics and Molecular Biology (Dec 2018) 140:107-116. DOI: 10.1016/j.pbiomolbio.2018.05.004 **(I.F. 4.8)**

14. **Pratichi Singh**, J. Febin Prabhu Dass: A Biomolecular Network Driven Proteinic Interaction in HCV Clearance. Cell Biochemistry and Biophysics (2018). DOI:10.1007/s12013-017-0837-y **(I.F. 2.98)**

15. **Pratichi Singh**, J. Febin Prabhu Dass: A multifaceted computational report on the variants effect on KIR2DL3 and IFNL3 candidate gene in HCV clearance. Molecular Biology Reports (2016) 43:1101–1117; DOI:10.1007/s11033-016-4044-5 **(I.F. 2.7)**

16. Imran Khan, Irfan A. Ansari, **Pratichi Singh**, Febin Prabhu Dass J, Fahad Khan: Identification and characterization of functional single nucleotide polymorphisms (SNPs) in Axin 1 gene: a molecular dynamics approach. Cell Biochemistry and Biophysics (2018). https://doi.org/10.1007/s12013-017-0818-1 **(I.F. 2.98)**

17. Imran Khan, Irfan A. Ansari, **Pratichi Singh**, Febin Prabhu Dass J: Prediction of functionally significant single nucleotide polymorphisms [SNPs] in PTEN tumor suppressor gene: An in silico approach. Biotechnology and Applied Biochemistry 01/2016; DOI:10.1002/bab.1483 **(I.F. 2.7)**

18. Imran Khan, Mohd. Farhan, **Pratichi Singh**, K. Mahalingam: A Study on DNA binding affinity of chemicals present in cosmetic products using Bioinformatics tools. IJPRBS, 2013; Volume 2(6): 407-421.

19. Imran Khan, Mohd. Farhan, **Pratichi Singh**, Padma Thiagarajan: Nanotechnology for Environmental Remediation. RJPBCS, 2014; Volume 5(3): 1916-1927

20. **Pratichi Singh**, Rashi Nagotra, Arthi Venkatesan, J. Febin Prabhu Dass: A computational report on the variants of ZSCAN4 gene in treating down syndrome. DOI:10.12692/ijb/10.4.41-48

21. **Pratichi Singh**, J. Febin Prabhu Dass. Logical modeling and steady state analysis of serotonin signaling pathway. Int. J. Biosci. 10(4), 27-40, April 2017

Declaration

I hereby declare that the above information is true to the best of my knowledge.

(Pratichi Singh)

Place: Greater Noida