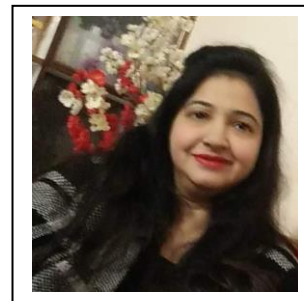


RUCHI SACHDEVA
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Educational Qualifications

Ph.D. in Bioinformatics

Bioinformatics Center, Institute of microbial technology, Chandigarh, India (2012) PhD Thesis: *Molecular Modeling studies on Aqua(glycero)porin(s)*, Ph.D. Supervisor: Dr. Balvinder Singh
Qualified **CSIR-JRF** in Life Sciences (2005)

M.Sc. Biotechnology - Department of Biotechnology, Panjab University Chandigarh, India (2002-2004)

B.Sc. (Hons.) Biochemistry Daulat Ram College, Delhi University, New Delhi, India (1999-2002)

Teaching/Research Experience

- 15 July 2015- till date
Assistant Professor (ad hoc) in Department of Bioinformatics, GGSDS College, Chandigarh
Teaching subjects- systems biology, drug designing, bioinformatics at postgraduate level and molecular modeling, genomics & proteomics at under-graduate level
- 11 July 2013- 20 February 2015
Assistant Professor (contractual basis) in MCM DAV College for Women, Chandigarh
Taught Bioinformatics, Biochemistry and Bioanalytical techniques at Undergraduate level to the students of B.Sc. microbial and food technology.
- 16 August 2005 to 14 August 2010
CSIR-Junior/Senior Research Fellow in Bioinformatics Center, Institute of microbial technology, Chandigarh

Areas of Interest

Publications (Journal/Book Chapters)

- Computational biology and systems biology

Journal Publications:

Dange S, Aggarwal N, Verma R, Sinha Y, Dadhiya S, Mittal G, **Sachdeva R**. Computational analysis of Ayurvedic herbs to explore their potential role as anti-cervical cancer agents. Accepted in *Molecular Biology Research Communications* **2024**.

Agrawal D, Sharma M, **Sachdeva R**, Priyadarshini P, Minhas AP. *In silico* B-cell epitope prediction and molecular docking of *Aspergillus* allergens targeting improved ABPA diagnosis. *J Asthma*. Published online November 5, 2024. doi:10.1080/02770903.2024.2419452

Sharma A, Singh R, Kumari A, Puri S, Arya SK, **Sachdeva R**, Minhas AP. Characterization of DhHal3p: A moderately thermostable FMN-Binding Flavoprotein with biomedical potential from halotolerant yeast, *Debaryomyces hansenii* using partial structure prediction. *Indian Journal of Biochemistry and Biophysics*. **2024**;61(7). <https://doi.org/10.56042/ijbb.v61i7.4367>.

Devi S, Goyal Y, Malik M, Kaur N, Sangar Y, Singh K, **Sachdeva R**.

Computational analysis of differential gene expression in rice during abiotic stress. *J App Biol Biotech.* **2024**;12(1):172-181.

Sachdeva R, Priyadarshini P, Gupta S. Aquaporins Display a Diversity in their Substrates. *J Membr Biol.* **2023** Feb;256(1):1-23.

Sachdeva R, Kaur N, Kapoor P, Singla P, Thakur N, Singhmar S. Computational analysis of protein-protein interaction network of differentially expressed genes in benign prostatic hyperplasia. *Molecular Biology Research Communications* **2022**;11(2):85-96. DOI:10.22099/mbrc.2022.43721.1746.

Sharma VK, Chandel N, Lohani D, **Sachdeva R**. Using protein-protein interaction network to prioritize drug targets for malaria. *International Journal of Scientific Research and Review.* **2018**; 7(3):922-932.

Kaur P, Gandhi R, Kaur H, Gupta S, **Sachdeva R**. Functional annotation of uncharacterized proteins of *Listeria monocytogenes*. *International Journal of Research and Review.* **2016**; 3(12):4-15.

Sachdeva R., Singh B. Phosphorylation of Ser-180 of rat aquaporin-4 shows marginal affect on regulation of water permeability: molecular dynamics study. *J Biomol. Struct. Dyn.* **2014**, 32(4):555-66.

Sachdeva R, Singh B. Insights into structural mechanisms of gating induced regulation of aquaporins. *Prog Biophys Mol Biol.* **2014**, 114(2):69-79.

**Seminars/
Conferences/Symposiums
(Paper Presented)**

- **Poster presentation** on the topic ‘Differential gene expression analysis of Arabidopsis Ged1 mutant’ during an International conference – InSyB – International Symposium on Bioinformatics at Hans Raj Mahila Maha Vidyalaya, Jalandhar held on 21-22 Dec 2019.
- **Poster presentation** on the topic ‘Analysis of selenium induced differential gene expression of roots and shoots in *Arabidopsis thaliana*’ at National symposium on Biotechnology: Trends and Innovations organized by Department of Biotechnology, GGSDS College, Chandigarh, held on Feb 7-8 2020.

**Refresher
Courses/Workshops/
Training Programmes**

- Online - NEP2020 Orientation & Sensitization Programme’ from 16.02.2024 to 29.02.2024 under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by UGC-Malaviya Mission Teacher Training Centre (MMTTC), Panjab University, Chandigarh.
- One-Week National Faculty Development Program on ‘Subject-Specific Benchmarking of Learning Outcomes: Outcome-Based Education’ from 26th October to 1st November 2023, jointly organized by Goswami Ganesh Dutta Sanatan Dharma College, Chandigarh and Guru Angad Dev Malaviya Mission Teacher Training Centre, SGTB Khalsa College, University of Delhi.
- Advanced course on Predictive Analytics using IBM SPSS Modeler from 19th December 2022 to 30th December 2022 conducted by

IBM Career Education Program.

- One-week faculty development program on 'Biological data science and data analysis' organized by Department of Bioinformatics, Goswami Ganesh Dutta Sanatan Dharma College, Chandigarh.

Invited Talks	Nil
Projects	Nil
MOOCS/Online Content	Nil
M. Phil Dissertation Supervised	N.A.
PhD Thesis	N.A.
Administrative Experience	Conducting various activities organized by the department.
Membership of Economic Associations	Nil

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