



INSTITUTE OF HOME ECONOMICS
UNIVERSITY OF DELHI



Name	Dr Ashok Saini	Photograph
Designation	Assistant Professor	
E-mail	ashok.saini@ihe.du.ac.in	
Educational Qualifications: M.Sc. (Biotech), Ph.D.		
Teaching experience: 11 yrs		
Subjects/Papers Taught Introduction to Microbiology, Cell Biology, Instrumentation & Biotechniques, Microbial Biotechnology, Food Microbiology, Molecular Biology, Bacteriology, Mushroom cultivation technology		
Awards received CSIR-JRF and SRF; UGC-JRF; ICMR-JRF; DBT-JRF		
Research Interest/Specialization Biotechnology and Microbiology		
ORCID No. https://orcid.org/0000-0001-6530-4281		
Research Projects		
Title	Funding agency/ organization	Duration of Project
A project cum training was done on the topic “Studies on the production of an alkaline protease from a bacterial isolate” at Institute of Microbial Technology (IMTECH), Chandigarh	CSIR-IMTECH	1.5 months
A project work was done on the topic “Callusing, Somatic Embryogenesis & Agrobacterium mediated transformation of GUS gene in <i>Sapindus trifoliatus</i> ” at Kumaun University, Nainital	Dept of Biotech, Kumaun University	4 months

Research papers since 2010 (APA format)

Dubey, R. N., Nakwal, N., Bisht, K. K., **Saini, A.**, Haldar, S., & Singh, J. (2009). Interaction of APC/C-E3 ligase with Swi6/HP1 and Clr4/Suv39 in heterochromatin assembly in fission yeast. *The Journal of biological chemistry*, 284(11), 7165–7176. ISSN 0021-9258 <https://doi.org/10.1074/jbc.M806461200>

Haldar, S., **Saini, A.**, Nanda, J. S., Saini, S., & Singh, J. (2011). Role of Swi6/HP1 self-association-mediated recruitment of Clr4/Suv39 in establishment and maintenance of heterochromatin in fission yeast. *The Journal of biological chemistry*, 286(11), 9308–9320. ISSN 00219258 <https://doi.org/10.1074/jbc.M110.143198>

Shukla, P., Singh, B., **Saini, A.**, Thakur, J., Haldar, S., & Singh, J. (2016). Efficient PCR based epitope gene tagging in *S. pombe*. *Current Science*, 110(2), 146-148. ISSN 0011-3891

Shembekar, N., Mallajosyula, V. V., Malik, A., **Saini, A.**, Varadarajan, R., & Gupta, S. K. (2016). Neutralization and Binding Profile of Monoclonal Antibodies Generated Against Influenza A H1N1 Viruses. *Monoclonal antibodies in immunodiagnosis and immunotherapy*, 35(4), 191–198. ISSN: 2167-9436 <https://doi.org/10.1089/mab.2016.0015>

Aggarwal, S., Bhardwaj, M., Singh, P., Shukla, H., **Saini, A.**, & Suri, M. (2021). Attitude and Awareness about Antimicrobial Usage and Resistance in Delhi, India. *Journal of Advanced Scientific Research*, 12(1) Suppl 1, 317-325. ISSN: 0976-9595.

Mittal M, Kumari A, Paul B, Varshney A, Bhavya, **Saini A**, Verma C, Mani I. (2024) Challenges and Opportunities of Gene Therapy in Cancer. *OBM Genetics*, 8(1): 219; doi:10.21926/obm.genet.2401219

Book chapters published/edited

Saini, A., Yadav, S., Vasdev, K (2020) Enzyme Biosensors. *Advances in Biosensors: Reviews Volume 3*, pp 223-272; S. Yurish (Ed.) International Frequency Sensor Association Publishing International, ISSN: 8409251256

Yadav, S., **Saini, A.**, Vasdev, K (2020) Nanobiosensors. *Advances in Biosensors: Reviews Volume 3*, pp 273-333/S. Yurish (Ed.) International Frequency Sensor Association Publishing International, ISSN- 8409251256

Sehgal, S., Aggarwal, S., **Saini, A.**, Thakur, M., Soni, K. (2022). Smart Monitoring and Surveillance of Food Contamination. In: Sehgal, S., Singh, B., Sharma, V. (eds) Smart and Sustainable Food Technologies. Springer, Singapore. Print ISBN: 978-981-19-1745-5 https://doi.org/10.1007/978-981-19-1746-2_9

Saini A, Yadav S, Mani I (2022) Chapter 14 - DNA/RNA-based self-assemblies for bio-sensing, Editor(s): Alok Pandya, Rajesh S. Bhosale, Vijai Singh; Design, Principle and Application of Self-Assembled Nanobiomaterials in Biology and Medicine, Academic Press, Pages 227-249, ISBN 9780323909846, <https://doi.org/10.1016/B978-0-323-90984-6.00004-0>.

Saini, A., Mani, I., Rawal, M.K., Verma, C., Singh, V., Mishra, S.K. (2023). An Introduction to Microbial Genomic Islands for Evolutionary Adaptation and Pathogenicity. In: Mani, I., Singh, V., Alzahrani, K.J., Chu, DT. (eds) Microbial Genomic Islands in Adaptation and Pathogenicity. Springer, Singapore. https://doi.org/10.1007/978-981-19-9342-8_1

Pandita P, Bhalla R, **Saini A**, Mani I (2023) Chapter Two - Emerging tools for studying receptor endocytosis and signaling, Editor(s): Indra Mani, Vijai Singh, Progress in Molecular Biology and Translational Science, Academic Press, Volume 194, Pages 19-48, ISSN 1877-1173, ISBN 9780443191855, <https://doi.org/10.1016/bs.pmbts.2022.10.003>. (Jan 2023)

Ragini, Sakshi, **Saini A**, Mani I (2023) Chapter Six - Endocytosis and signaling of 5-HT1A receptor, Editor(s): Indra Mani, Vijai Singh, Progress in Molecular Biology and Translational Science, Academic Press, Volume 196, Pages 113-123, ISSN 1877-1173, ISBN 9780323955591, <https://doi.org/10.1016/bs.pmbts.2022.11.002>

- Sakshi, Ragini, **Saini A**, Verma C, Mani I (2023) Chapter Four - Epigenetics in renal diseases, Editor(s): Vijai Singh, Indra Mani, Progress in Molecular Biology and Translational Science, Academic Press, Volume 198, Pages 61-71, ISSN 1877-1173, ISBN 9780443214448, <https://doi.org/10.1016/bs.pmbts.2023.02.013>
- Saini A, Varshney A, **Saini A**, Mani I (2023) Chapter One - Insight into epigenetics and human diseases, Editor(s): Vijai Singh, Indra Mani, Progress in Molecular Biology and Translational Science, Academic Press, Volume 197, Pages 1-21, ISSN 1877-1173, ISBN 9780443186691, <https://doi.org/10.1016/bs.pmbts.2023.01.007>
- Mittal M, Tripathi S, **Saini A**, Mani I (2023) Chapter Two - Phage for treatment of Vibrio cholerae infection, Editor(s): VIJAI SINGH, Progress in Molecular Biology and Translational Science, Academic Press, Volume 201, Pages 21-39, ISSN 1877-1173, ISBN 9780323955652, <https://doi.org/10.1016/bs.pmbts.2023.03.021>
- Saini A**, Rawat Y, Jain K, Mani I (2023) Chapter Two - State-of-the-art techniques to study epigenetics, Editor(s): Vijai Singh, Indra Mani, Progress in Molecular Biology and Translational Science, Academic Press, Volume 197, Pages 23-50, ISSN 1877-1173, ISBN 9780443186691, <https://doi.org/10.1016/bs.pmbts.2023.02.004>
- Yadav, S., **Saini, A.**, Devi, R., Lata, S. (2023). Transducers in Biosensors. In: Kumar, P., Dash, S.K., Ray, S., Parween, S. (eds) Biomaterials-Based Sensors. Springer, Singapore. https://doi.org/10.1007/978-981-19-8501-0_4
- Mittal, M., Varshney, A., Singh, N., **Saini, A.**, Mani, I. (2023). Yeast Cell Factory for Production of Biomolecules. In: Singh, V., Show, P.L. (eds) Biomanufacturing for Sustainable Production of Biomolecules. Springer, Singapore. https://doi.org/10.1007/978-981-19-7911-8_11
- Jain, K., Pandita P, Mathuria A, Mehak, Das D, **Saini A**, Mani I (2024). Emerging Tools for Generating Genomics Data. In: Singh, V. (eds) Advances in Genomics. Springer, Singapore. https://doi.org/10.1007/978-981-97-3169-5_1 31st july 2024
- Mathuria, A. Mathuria A, Chaudhary A, Mehak, Sharma H, Singla S, Verma C, **Saini A**, Mani I (2024). Chloroplast Genomics and Their Uses in Crop Improvement. In: Singh, V. (eds) Advances in Genomics. Springer, Singapore. https://doi.org/10.1007/978-981-97-3169-5_15
- Rajnandini, D., Sahani V, Praveen M, Debolina, Arora R, Saraswat J, Kaur K, **Saini A**, Mani I (2024). Microplastics in Human Health. In: Kumar, A., Singh, V. (eds) Microplastics Pollution and its Remediation. Springer, Singapore. https://doi.org/10.1007/978-981-97-4068-0_12
- Verma C, Jain K, **Saini A**, Mani I, Singh V (2024) Chapter Four - Exploring the potential of drug repurposing for treating depression, Editor(s): Vijai Singh, Progress in Molecular Biology and Translational Science, Academic Press, Volume 207, Pages 79-105, ISSN 1877-1173, ISBN 9780443241147, <https://doi.org/10.1016/bs.pmbts.2024.03.037>. 26 june 2024
- Mathuria, A., Jain, K., **Saini, A.**, Verma, C., Mani, I. (2024). Metatranscriptomics, Metaproteomics, and Metabolomics Approaches for Microbiome Characterization. In: Mani, I., Singh, V. (eds) Multi-Omics Analysis of the Human Microbiome. Springer, Singapore. https://doi.org/10.1007/978-981-97-1844-3_6
- Jain, K., Arora, R., **Saini, A.**, Mani, I. (2025). Opioid Receptor Endocytosis and Signaling. In: Mani, I. (eds) Neuroreceptor Endocytosis and Signaling in Health and Disease. The Receptors, vol 2. Humana, Cham. https://doi.org/10.1007/978-3-031-81991-9_12
- Jain, K., Mehak, Mathuria, A., **Saini, A.**, Mani, I. (2025). Insights of Neuroreceptor Endocytosis and Signaling in Health and Disease. In: Mani, I. (eds) Neuroreceptor Endocytosis and Signaling in Health and Disease. The Receptors, vol 2. Humana, Cham. https://doi.org/10.1007/978-3-031-81991-9_1
- Munshi ID, Mathuria A, Sharma H, Acharya M, Chaudhary A, Jain K, Ragini, Dahiya S, Arora R, Singh V, **Saini A**, Mani I. Emerging concept of genomic islands in bacterial adaptation and pathogenicity. Res Microbiol. 2025 Jun 27;104303. doi: 10.1016/j.resmic.2025.104303. Epub ahead of print. PMID: 40582582.

Association with Professional Societies

Any other

- Done DL-101 General Course on Intellectual Property from WIPO, Geneva, Switzerland.
- Done DL-204E Biotechnology and IPR from WIPO, Geneva, Switzerland.
- Done one year Post Graduate Diploma in Intellectual Property Rights (PGDIPR) from IGNOU, New Delhi.
- Complete MOOC on Bioinformatics: Algorithms and Application from SWAYAM/NPTEL
- Complete MOOC on Introduction to Professional Scientific Communication from SWAYAM/NPTEL
- Complete MOOC on Introduction to Proteomics from SWAYAM/NPTEL
- Complete MOOC on Patent Drafting for Beginners from SWAYAM/NPTEL
- Complete MOOC on Functional Genomics from SWAYAM