Dr. Deepak Pandey

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Professional & Research Experience:

- Scientist-II at Department of Reproductive Biology, All India Institute of Medical Sciences, New Delhi (September 16, 2016-Till date).
- Scientist-B (Molecular Biology Division) at Central Silk Board, Ministry of Textiles, Govt. of India (November 5, 2015 to September 12, 2016).
- Research Associate at National Institute of Immunology, New Delhi India (August 5, 2011 to September 30, 2014).
- Ph.D. (Biotechnology), Himachal Pradesh University, Shimla, India (2011).

Awards and achievements

- Awarded Senior Research Fellowship (SRF) 2008-2011 by Indian Council of Medical Research (ICMR), India.
- Awarded Junior Research Fellowship (JRF) 2006-2008 by Indian Council of Medical Research (ICMR), India.
- Awarded Scholarships from Department of Biotechnology (DBT), Govt. of India (July 2003-June 2005).

Ongoing Projects

- To elucidate the impact of micronutrients and vitamins on sex-steroid mediated stromal-epithelial interaction in prostate cells: role in maintenance of normal prostate physiology (PI).
- Integrative Analysis of Ovarian Cancer Transcriptome to Identify Biomarkers and Potential Molecular Targets for Genome-guided Targeted Therapy (Co-PI).
- Clinico-genetic prognostic signatures for development of metastatic Castration-Resistant Prostate Cancer (Co-PI).
- To delineate the impact of selective estrogen receptor modulators (SERMs) on hormone mediated stromal-epithelial interaction in prostate cells (PI).

Completed Projects

- To study the effects of dietary flavonoids on prostate epithelial cells growing under the influence of prostate stromal cells (PI).

Publications and presentations

Papers

1. Choudhury J, **Pandey D**, Chaturvedi P K, Gupta S. Epigenetic regulation of epithelial to mesenchymal transition: a trophoblast perspective. Mol. Hum. Reprod, 2022, 28(5): gaac013 (https://doi.org/10.1093/molehr/gaac013)
2. Thakur N, Patel SKS, Kumar P, Singh A, Devi N, Sandeep K, **Pandey D**, Chand D. Bioprocess for Hyperactive Thermotolerant *Aspergillus fumigatus* Phytase and its Application in Dephytinization of Wheat Flour. Catal Lett, 2022 (https://doi.org/10.1007/s10562-021-03886-0)
3. Kaushik N, Rastogi S, Verma S, **Pandey D**, Halder A, Mukhopadhyay A, Kumar N. Transcriptome Analysis of Insulin Signaling-Associated Transcription Factors in *C. elegans* Reveal Their Genome-Wide Target Genes Specificity and Complexity. Int. J. Mol. Sci., 2021, 22, 12462. (https://doi.org/10.3390/ijms222212462)
4. Devi N, Patel SKS, Kumar P, Singh A, Thakur N, J Lata J, **Pandey D**, Thakur V, Chand D. Bioprocess Scale-up for Acetohydroxamic Acid Production by Hyperactive Acyltransferase of Immobilized *Rhodococcus pyridinivorans*. Catal Lett, 2021 (https://doi.org/10.1007/s10562-021-03696-4)
5. Halder A and **Pandey D**. CFTR gene variants in Indian CBAVD and its relevance in genetic counselling. Indian J Med Res, 2020; (152):535-37
6. **Pandey D**[*], Patel SKS, Singh R, Kumar P, Thakur V, Chand D[*]. Solvent-Tolerant Acyltransferase from *Bacillus* sp. APB-6: Purification and Characterization. Indian J Microbiol, 2019 (doi: 10.1007/s12088-019-00836-8: [*]**Co-Corresponding author**)
7. Kumar P, Singh B, Thakur V, Thakur A, Thakur N, **Pandey D,** Chand D. Hyper-production of Taxol from *Aspergillus fumigatus*, an endophytic fungus isolated from *Taxus* sp. of the Northern Himalayan region. Biotechnol Rep, 2019 (doi: 10.1016/j.btre.2019.e00395
8. Singh PK, Yadav VK, Kalia M, Sharma D, **Pandey D**, Agarwal V. *Pseudomonas aeruginosa* quorum-sensing molecule *N*-(3-oxo-dodecanoyl)-l-homoserine lactone triggers mitochondrial dysfunction and apoptosis in neutrophils through calcium signaling. Med Microbiol Immunol, 2019 (doi: 10.1007/s00430-019-00631-8)
9. Choudhury AR, Gupta S, Chaturvedi PK, Kumar N, **Pandey D**[*]. Mechanobiology of cancer stem cells and their niche. Cancer Microenviron, 2019 (doi: 10.1007/s12307-019-00222-4: [*]**Corresponding author)**
10. Choudhury AR, Kumar N, Sandeep K, **Pandey D**[*]. Stem cell repertoire in the prostate epithelium. J Stem Cell Res Ther, 2019; 5(2): 44-46. (doi: 10.15406/jsrt.2019.05.00133: [*]**Corresponding author**)

11. Singh R, **Pandey D**, Devi N, Chand D. Bench scale production of butyramide using free and immobilized cells of *Bacillus* sp. APB-6. Bioprocess Biosyst Eng, 2018; (doi:10.1007/s00449-018-1951-y)
12. Singh R, **Pandey D**, Dhariwal S, Sood P, Chand D. Bioconversion of acrylonitrile using nitrile hydratase activity of *Bacillus* sp. APB-6. 3 Biotech, 2018; 8(5): 225 (doi: 10.1007/s13205-018-1207-1)
13. Choudhury AR, Kumar N, Sandeep K, **Pandey D**. Biotechnological Potential of Stem Cells. J Stem Cell Res Ther, 2017; 3(1): 00090. (doi: 10.15406/jsrt.2017.03.00090).
14. Yadav D, Sandeep K, **Pandey D**, Dutta RK. Liposomes for Drug Delivery. J Biotechnol Biomater, 2017; 7: 276. (doi: 10.4172/2155- 952X.1000276)
15. Kumar P, **Pandey D**, Thakur V, Thakur A, Chand D. Hyperproduction of tannin acylhydrolase in submerged fermentation from *Aspergillus fumigatus*. J Adv Microbiol, 2017; 3(2): 60-77 (ISSN Online: 2349-7785).
16. **Pandey D**, Singh R and Chand D (2011). An improved bioprocess for synthesis of acetohydroxamic acid using DTT (dithiothreitol) treated resting cells of *Bacillus* sp. APB-6. **Bioresource technology.** 102, 6579–6586.

Book Chapters

1. Kumar N, **Pandey D**, Halder A. Preventive, diagnostic and therapeutic applications of baculovirus expression vector system. In: Kumar D, Gong C (Eds). *Trends in Insect Molecular Biology and Biotechnology*. First edition. Austria: Springer; 2018: pp 163-191.
2. Yadav D, Sandeep K, **Pandey D**. Monoclonal Antibodies. In: Sharma AK, Kesarwani RK, Dutt R (Eds). Nanotechnology and Targeted Drug Delivery System. First edition. Studera Press: Delhi; 2019: pp 321-337.
3. Singh A, Kumar K, Kumar N, Chaudhary DP, **Pandey D**[*]. Protein purification: Basic principles and techniques. In: Bhatt AK, Bhatia RK, Bhalla TC (Eds). *Basic Biotechniques for Bioprocess and Bioentrepreneurship*. Elsevier Inc. (Chapter Submitted: [*]**Corresponding author)**

Proceedings in International Conferences

1. Chand D, Arora K**, Pandey D**, Kumari P, Devi N and Singh R (2013). Batch and fed-batch synthesis of butyrohydroxamic acid using alginate gel entrapped *Bacillus* sp. APB-6: in proceedings of XXIst International Conference on Bioencapsulation, Berlin, Germany: p 01.
2. **Pandey D**, Chand D, Singh R and Bhalla TC (2008). Encapsulation of resting cells of *Nocardia globerula* NHB-2 in agar gel beads and optimization of process parameters for amidohydrolase activity: in proceedings of XVIth International Conference on Bioencapsulation organized by Dublin City University, Dublin, Ireland: p66.
3. Singh R, Chand D, **Pandey D** and Bhalla TC (2008). Encapsulation of resting cells of *Nocardia globerula* NHB-2 in alginate gel beads and optimization of process parameters for their acyltransferase activity: in proceedings of XVIth International Conference on Bioencapsulation organized by Dublin City University, Dublin, Ireland: p64.

4. Chand D, Vitzthum F, Sogani M, **Pandey D**, Singh R, Verma N and Bhalla TC (2007). Batch and fed-batch mode synthesis of acetohydroxamic acid using acyltransferase activity of resting cells of *Nocardia globerula* entrapped in alginate gel beads: in proceedings of XVth International Conference on Bioencapsulation, Vienna, Austria: S1-05.

(Dr. Deepak Pandey, PhD)