

Department of Biochemistry University of Delhi South Campus

Quarterly Report (1st November 2024 – 31st January 2025)

Major Achievements (For Academic Departments): 1. Honors and distinctions, 2. Books/ Patents/ Technology Transfer/ Industrial Collaboration, 3. Seminars/ Conferences/ Workshops Organized

Prof. Amita Gupta – Certificate of Appreciation at 5th International Conference on Bacteriophage Research and Antimicrobial Resistance (ICBRAR 2024) for valuable contribution as a Distinguished Speaker organized by Bhavan's Research Center and Bhavan's College in association with Society for Bacteriophage Research and Therapy (SBRT), 7th November 2024.

Prof. Amita Gupta – Lifetime Achievement Award – 2024 by Society for Bacteriophage Research and Therapy at 5th International Conference on Bacteriophage Research & AMR, Bhavan's Research Centre, Bhavan's College, Mumbai, 8th-9th November 2024.

Prof. Amita Gupta – Invited talk titled, "Expression Patterns and Functions of Toxins-anti-toxin loci in *M. tuberculosis*" in the 65th Annual International Conference of AMI 2024 at Guru Jambheshwar University of Science and Technology, Hisar, Haryana, 14th – 17th November 2024.

Prof. Amita Gupta – Chaired the presentation titled, "Anti-microbial Resistance" in the 65th Annual International Conference of AMI 2024 at Guru Jambheshwar University of Science and Technology, Hisar, Haryana, 14th – 17th November 2024.

Prof. Amita Gupta – Co-chaired the session titled, "Microbial Therapeutics" in the 65th Annual International Conference of AMI 2024 at Guru Jambheshwar University of Science and Technology, Hisar, Haryana, 14th – 17th November 2024.

Dr. Garima Khare - Served as one of the judges in the jury panel for the CBSE Regional Science Exhibition, held at Gurukul The School, Ghaziabad from 27th – 28th November, 2024

Prof. Amita Gupta – Delivered talk at the International Conference "Biochemistry: Ongoing exploration of actions and reactions of life and 93rd Annual Meeting of the Society of Biological Chemists (India), The M.S. University of Baroda, 27-29 December 2024.

Dr. Vijay K. Prajapati - Delivered invited lectures at the 1st International Conference on Biological Sciences for a sustainable Future: Research Innovations, and Solutions organized by Department of Biosciences, School of Science, Indrashil University, Gujarat, India from 23rd - 25th January 2025.

Publications

Cheema, P.S., Nandi, D, **Nag, A.** (2025) "Camptothecin exerts Anti-Cancer effects through FoxM1 Inhibition" *Indian Journal of Biochemistry and Biophysics*, In Press (manuscript accepted for publication on 6th January, 2025).

Kalita, E., Panda, M., Dhar, S., Mehrotra, S., **Prajapati, V.K.*.** (2025). Pharmacoinformatics-based screening and construction of a neutralizing anti-SARS-CoV-2 camelidae nanobody drug conjugate. *Mol Divers.* 2025 Jan 28. doi: 10.1007/s11030-024-11086-2.

Kaur, S., Angrish, N., Vasudevan, M., & **Khare, G.** (2024). Global proteomics reveals pathways of mesenchymal stem cells altered by Mycobacterium tuberculosis. *Scientific Reports*, 14(1), 30677.

Published: 28 December 2024

Book Chapters-

Dadwal, S., Dhar, S., Baghel, K., Mishra, A., Mehrotra, S., **Prajapati, V.K.*;** From past to present: The evolution of immunotherapy and its modern modalities. *Adv Protein Chem Struct Biol.* 2024, <https://doi.org/10.1016/bs.apcsb.2024.10.015>.

Malemnganba, T., Pandey, A.K., Mishra, A., Mehrotra, S., **Prajapati, V.K.*;** Exploring immunotherapy with antibody-drug conjugates in solid tumor oncology; *Adv Protein Chem Struct Biol.* 2024, <https://doi.org/10.1016/bs.apcsb.2024.10.016>.

Rai, P., Mehrotra, S., **Prajapati, V.K.*;** Exploring immunotherapy to control human infectious diseases, *Adv Protein Chem Struct Biol.* 2024; <https://doi.org/10.1016/bs.apcsb.2024.10.010>.

Kar, S., Mehrotra, S., **Prajapati, V.K.*;** From infection to remedy: Harnessing oncolytic viruses in cancer treatment, *Adv Protein Chem Struct Biol.* 2024, <https://doi.org/10.1016/bs.apcsb.2024.10.012>.

Grants:

Dr. Garima Khare - Grant awardee for the project entitled "Development and preclinical evaluation of heterologous prime boost vaccination strategies against tuberculosis" by IGNITE Life Science Foundation. – December 2024.

Awards :

Ms. Nandini Sahani (PhD student under the supervision of Prof. Alo Nag) - Won the **Best Poster presentation award** at the "International Conference on Convergence of Fundamental and Translational Approaches in Cancer Therapeutics", organised by CNCI, Kolkatta on 16-18 January, 2025. She presented a poster on "Uncovering the Role of FoxM1-hTERT Axis in Cancer Progression and Therapeutic Interventions".

Ms. Preeti (PhD student under the supervision of Prof. Alo Nag) - Won Prize for **Third Best Essay** in the IACR essay competition at the "International Conference on Convergence of Fundamental and Translational Approaches in Cancer Therapeutics", organised by CNCI, Kolkatta on 16-18 January, 2025. Her essay was based on "Systems Biology and bioinformatics: Advances and Applications in Cancer Research and Management".

Targets (For Academic Departments: Academic activities and Research)

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Court/Executive Council meetings

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Planning of Convocation/ Honoris Causa Degrees etc.

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Any Pending Issues

Recruitment of teaching posts is pending and recruitment of non-teaching posts is also pending.

Any other important activity (For Academic Departments): 1. International collaborations including students exchange, 2. Extension and outreach activities and any other significant achievements/activity

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