



MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES, FARIDABAD

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DR. KAPILA KUMAR

Designation: Assistant Professor
Qualifications: B.Sc. Genetics (Kurukshetra University), M.Sc. Human Genomics (Panjab University), Ph.D. Biotechnology, JIIT, Noida
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Experience: 6 Years



[Google Scholar Profile:](https://scholar.google.com/citations?user=wUt9kpgAAAAJ&hl=en&oi=ao)

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Research Interest : Infectious Disease Biology, Synthetic Biology

+ Journal Publication Details:

Kumar K., Rana J., Sreejith R., Gabrani R., Sharma S.K., Gupta A., Chaudhary V.K., Gupta S., “Intraviral protein interactions of Chandipura Virus”, *Archives of Virology*, vol. 157, pp. 1949-1957, 2012.

Kumar K., Rana J., Guleria A., Gupta A., Chaudhary V.K., Gupta S., “Expression and Characterization of Chandipura Virus Proteins”, *Research in Biotechnology*, vol. 2, no. 6, pp. 27-36, 2011.

Guleria A., Kiranmayi M., Sreejith R., **Kumar K.**, Sharma S.K., Gupta, S., “Reviewing host proteins of Rhabdoviridae: Possible leads for lesser studied viruses”, *Journal of Biosciences*, vol. 36, pp. 1-9, 2011.

Kumar K., Sreejith R., Gulati S., Rana J., Gupta V., Jain C.K., Gupta A., Chaudhary V.K., Gupta S., “Elucidating the interacting domains of Chandipura virus nucleocapsid protein” , *Advances in Virology*, doi 10.1155/2013/594319,2013.

Sreejith R., Rana, J., Dudha, N., **Kumar, K.**, Gabrani, R., Sharma, S.K., Gupta, A., Vrati, S., Chaudhary, V. K., Gupta, S., “Mapping interactions of Chikungunya Virus nonstructural proteins”, *Virus Research*, vol. 169 pp. 231-236, 2012.

Dudha N., Appaiahgari, M. B., Bharati, K., Gupta, D., Gupta, Y., **Kumar, K.**, Gabrani, R., Sharma, S. K., Gupta, A., Chaudhary, V. K., Vrati, S., Gupta, S., “Molecular cloning and characterization of Chikungunya virus genes from Indian isolate of 2006 outbreak”, *Journal of Pharmacy Research*, vol. 5, pp. 3860-3863, 2012.

Mishra, A.K., Jain, C.K., Agarwal, A., Jain, S., Jain, K.S., Dudha, N., Mehta, K. , Sharma, S.K., Gupta, S., "CHIKVPRO – a protein sequence annotation database for Chikungunya Virus", <i>Bioinformatics</i> , vol. 5, pp. 4-6, 2010.
Singh, G.B., Kumar, K. , Gupta, S., Gupta, N., "PCR cloning and characterization of carbazole dioxygenase gene from <i>Pseudomonas</i> sp. GBS.5," <i>Int. J. BiotechnolBioeng Res.</i> , vol. 4 (3), pp. 207-214, 2013.
Sreejith R., Kumar, K. , Rana, J., Gupta, A., Chaudhary, V. K., Gupta, S., "Host Interactions of Chandipura virus matrix protein", <i>Acta Tropica.</i> , vol. 149, pp. 27–31,2015.
Yadav R., and Kumar, K. , "Treatment of industrial wastes: issues, challenges & solutions" <i>World Journal of Pharmaceutical Research</i> , vol.6, pp. 1414-1436, 2017.
Yadav R., and Kumar, K. , "Reviewing the effects and remedies for Industrial Waste" <i>International Journal of Pharmacy and technology</i> , vol. 10, pp. 31520-31519,2018.
Chauhan, P., Rajbhar, M., Singh, A., Singla, K., Kumar, K. , "A Systematic Review of Conventional and Advanced Approaches for the Control of Plant Viruses" <i>Journal of Applied Biology and Biotechnology</i> , vol. 7(04), pp. 89-98, 2019.
Sharma, P., Sachdeva, A., Kumar, K. , Bhateja, S., Arora, G. "Knowledge, Awareness and Practices Regarding Hepatitis B Virus among Professional College Students: A Questionnaire Based Study" <i>Clinical Dentistry</i> DOI:10.33882/ClinicalDent.13.24939, 2019.

+ Research Supervised (PhD):

- Ms. Anuradha Gautam on "Identification of phytochemicals from *Tinospora Cordifolia* using Anti-Ageing Specific Receptor "(Completed)
- Ms. Prachie Sharma on "Translating the Role of Extra-Hepatic Manifestations of Hepatitis B Virus "(Ongoing)

+ Book/Chapter Publications:

- Sharma, P., **Kumar, K.**, "Phytoproteomics: A New Approach to Decipher Phytomicrobiome Relationships" (Book Chapter) in *Phytomicrobiome Interactions and Sustainable Agriculture Wiley Online Library* , <https://doi.org/10.1002/9781119644798.ch2>

+ Administrative Responsibilities:

- EMS Coordinator of Department since June 2020 till date
- Competition Coordinator of Department from Jan 2021 till date
- Molecular Biosciences Research Cluster Lab Member from June 2018 till date

+ Professional Affiliation:

- Reviewer for IP innovative Publications, International Journal of Medical Microbiology and Tropical Diseases
- Life member of The American Society of Microbiology Since June 2017

+ Expert Talk Delivered:

- Delivered Talk in NIU, Greater Noida on Bioinformatics Tools in Biology in Jan 2018
- Delivered Talk in Atal FDP in Madurai Kamaraj University in December 2020
- Delivered Talk in ATAL FDP in Bharathidasan University in December 2020

+ GenBank Submissions:

- 9 Sequences submitted in GenBank for Chikungunya Virus

+ Patent:

- Provisional Patent filed on A cell-based biosensor for detection of nitrosamines" on 10th August, 2020.

+ Awards:

- **Won iGEM 2020 (International Synthetic Biology Competition organized by MIT USA) bronze medal for project Li- Koff as principal investigator of the team MRIIRS. Funded Project by DBT, Government of India**
- Mentor of **Winning Team at Youth Jalsa**, got a seed funding of **2.5 Lacs from DST**, Awarded by CM of Haryana
- Mentor of **winning team at IIT Mandi for Nidhi Prayas** start up, **Got funding of 10 lacs.**
- Mentor of **Winning Team at Zonal Level of Anveshan 2018**. Represented MRIIRS at National Level.
- Mentor of **Winning Team in Innoskill 2018**.
- Awarded for **BEST poster presentation** in ICABB, IIIT 2018.
- Qualified **CSIR-UGC NET**, 2003.
- **Certificate of Merit** for standing second in B.Sc. Genetics, Dyal Singh College, Kurukshetra University.
- **Certificate of Merit** for standing second in M.Sc. Human Genomics, NCHGSR, Panjab University.