

CURRICULUM VITAE

Dr. MANSI VERMA

AMI YOUNG SCIENTIST

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TEACHING EXPERIENCE

Total Teaching Experience: >11 years

Teaching Undergraduate students at Hansraj College as an Assistant Professor on permanent basis from 7th October, 2022 till date.

Taught undergraduate students of B.Sc. (Hons.) Zoology, B.Sc. Life Sciences and B.Sc. (Hons.) Biological Science at Sri Venkateswara College as an Assistant Professor on Ad-hoc basis from February 15, 2011 to 6th October, 2022.

Subjects: Molecular Biology, Cell Biology, Bioinformatics, Genetics and Evolutionary Biology

Ph.D. THESIS WORK

Worked on whole genome sequencing of the bacterium, *Amycolatopsis mediterranei* S699 under the supervision of Prof. Rup Lal and have been awarded Ph.D. on 16th February, 2012 on the topic **"Targeted Gap Filling of the Genome of Rifamycin Producing Actinobacterium, *Amycolatopsis mediterranei* S699 and Exploring Genomic Data of Ninety Actinobacteria for Phylogenetic, Codon Usage and Metabolic Analyses"**.

EDUCATIONAL QUALIFICATION

DEGREE	SUBJECTS	UNIVERSITY	YEAR	GRADE/ DIVISION	PERCENT
Ph. D.	Molecular Biology	Department of Zoology, University of Delhi	2006-2012		
M. Sc.	Zoology Specialization: Cell Biology	Department of Zoology, University of Delhi	2004-2006	I	73.3 %
B. Sc.	Zoology	Miranda House, University of Delhi	2001-2004	I	72.1 %
Diploma	Information Technology	NIIT	2003	I	89%
XII	Physics, Chemistry, Biology, Maths, English	Butler Memorial Girls Senior Secondary School	2001	I	72.2 % (PCB)
X	Science, Maths, Social Studies, English, Hindi	Butler Memorial Girls Senior Secondary School	1999	I	75 %

ACADEMIC ACHIEVEMENTS

Year	Awards
2021	Bill and Melinda Gates Abstract award 2021 for World Microbe Forum, organized by ASM and FEMS
2020	Moderator of COVID-19 community page at ResearchGate
2020	Token of Appreciation (along with registration and accommodation complete waiver) at an International Conference entitled "Strengthening Microbial Ecology Research Network in SouthEast Asia" held during February 12-14, 2020 in Pokhra, Nepal
2019	Certificate of Appreciation for Oral Talk in Young Scientist Forum at International conference on the Theme: Current Trends In Microbiology And MicrobiomeResearch: A Global Perspective (Ctm 2019) organized by INSCRand Department of Microbiology, MDU during October 11-12, 2019 at Maharshi Dyanand University, Rohtak, India.
2019	Recipient of International Travel Grant from TTD (Tirumala Tirupati Devasthanam's) for attending international Conference at Singapore during March 20-21, 2019
2019	Certificate of recognition for conducting workshop on "Bioinformatics and its tools" at the "International Conference of Bioinformatics and System Biology" held during March 20-21, 2019 in Singapore City, Singapore.
2018	Best Oral presentation in Indo-US colloquium on recent developments in interdisciplinary research organized by the IQAC, Department of Chemistry, Hansraj College, University of Delhi in association with Loyola University Stritch School of Medicine, USA on 2 nd July 2018.
2017	Recipient of Young Scientist Award in Molecular Microbiology and Biotechnology by the Association of Microbiologists of India (AMI) for the year 2017 during the 58th Annual Conference of AMI (AMI 2017) scheduled from November 16-19, 2017 at Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh
2017	Best Oral Presentation in Innovative Sciences Session at INSCR International Conference (IIC-2017) on Role of Microbe-Plant-Animal Interactions in Human Health held from September 26 to 28, 2017 at University of Delhi, Delhi, India
2016	Invited Speaker of the 6th Annual World Congress of Microbes-2016 (WCM-2016) held during November 16-19, 2016 in Nanjing, China, International Travel Grant obtained from DST-SERB.
2016	Awarded Certificate of Appreciation for presenting research work on Comparative genomics of Dengue virus as a poster presentation at the 94 th Foundation Day of University of Delhi at Viceregal Lodge on May 1, 2016.
2015	Awarded Certificate of Appreciation for Best Display for the project SVC-206 under the theme-Scientific Arena at AntarDhwani- Academic and Cultural Festival held during February 20-22, 2015 at University of Delhi.
2012	Interviewed for the newspaper " Dainik Bhaskar " in recognition of the Innovation Project SVC-107 on August 121, 2012 for easy diagnosis of pathogenic proteobacteria using <i>in silico</i> approach.
2010	Awarded Senior Research Fellowship from Council of Scientific and Industrial Research (CSIR-SRF) in Life Sciences
2008	Awarded Junior Research Fellowship from Council of Scientific and Industrial Research (CSIR-JRF) in Life Sciences
2007	Qualified National Eligibility Test (NET) for Council of Scientific and Industrial Research (CSIR-JRF)
2008	Awarded certificate of excellence for 'Springer Best Poster Award' in the 49 th

	Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics" held at University of Delhi, Delhi
2001-2002	Awarded certificate of distinction for securing 3 rd position in University, B.Sc. Zoology (Hons.) examination
2001-2002	Awarded certificate of distinction for securing 1 th position in Miranda House, B.Sc. Zoology (Hons.) examination
2001-2003	Awarded certificate of distinction for securing highest aggregate in 1 st & 2 nd year, B.Sc. Zoology (Hons.) examination
1999	Awarded certificate of merit for qualifying National Mathematics Olympiad Contest

MEMBERSHIPS OF ACADEMIC SOCIETIES/COMMITTEES

1. Life Member, Association of Microbiologists of India (AMI)
2. Life Member, Indian Network for Soil Contamination Research (INSCR)
3. Member of International Society of Microbial Ecology (ISME) Membership number 935506 (for 1 year) expires on Monday 01 March 2021.
4. Member of American Society for Microbiology (ASM) Membership number 43415038 (for 1 year).

MEMBER OF COMMITTEES

1. Jury Member of 6th National Level Exhibition and Project Competition (NLEPC)- 2016 under INSPIRE Awards component of Department of Science & Technology during December 10-11, 2016.
2. Jury Member of 5th National Level Exhibition and Project Competition (NLEPC)- 2015 under INSPIRE Awards component of Department of Science & Technology during December 6-7, 2015.

INTERNATIONAL VISITS/TRAVEL GRANT

1. Invited Speaker for the 6th Annual World Congress of Microbes-2016 (WCM-2016) held during November 16-19, 2016 in Nanjing, China, Travel Grant obtained from DST-SERB.
2. One-day visit to Helmholtz-Zentrum für Umweltforschung (UFZ, Leipzig, Germany) to view microscopic facilities on July 3, 2017.
3. Invited Speaker for the "International Conference of Bioinformatics and System Biology" held during March 20-21, 2019 in Singapore City, Singapore.
4. Invited speaker for the Southeast Asian Regional Symposium on Microbial Ecology (SARSME-2020) held during February 12-14, 2020 in Pokhara, Nepal.

RESEARCH PROJECTS UNDERTAKEN

1. "Comparative genomics of Dengue virus to explore potential candidates for novel vaccine targets" sanctioned by **Delhi University under Delhi University Innovative Project Scheme** (2015-2016).
2. "Immunohistochemical evaluation of candidate markers for sebaceous differentiation and their association with aggressive eyelid sebaceous gland carcinoma" sanctioned by **Delhi University under Delhi University Innovative Project Scheme** (2013-2014).

3. "Isolation of novel bacterial isolates from contaminated soil at Yamuna River Bank and adjoining area to explore their degradation potential against various persistent Organic Pollutants" sanctioned under **DBT Star College Programme** (2011-2014).
4. "An easy identification of few pathogenic gamma/epsilon proteobacteria by exploring the internal features of their 16S rRNA" sanctioned by **Delhi University under Delhi University Innovative Project Scheme** (2012-2013).

Summer Internships

1. SRI-VIPRA Summer Internship on "In silico screening of phytochemicals for Dengue Virus" during 3rd July 2021-31st August 2021 at Sri Venkateswara College (Trained 8 students).
2. SRI-VIPRA Summer Internship on "CpG island analysis of Coronaviruses" during 8th June 2020-August 2020 at Sri Venkateswara College (Trained 8 students).
3. Summer Internship on "CpG dinucleotide analysis of Deltacoronavirus" (Intern- Ms. Vishakha Gupta, a student of Bachelor of Technology –Biotechnology (Batch 2017-2021) at Amity University, Noida) from 15th June, 2020 to 14th August, 2020.

EDITOR/REVIEWER

Invited Project Reviewer- Polish-U.S. Fulbright Commission, for the Fulbright Senior Award 2023/24, project entitled "An attempt to understand the pediatric skull defects' pathogenesis".

Invited Project Reviewer- Project entitled "Trusted genomics" at a network of translational research platforms in Switzerland funded by Swiss University Conference and the Swiss Federal Institutes of Technology

Invited Project Reviewer: 2018-2019 Joint Call by BiodivERsA on the theme "BIODIVERSITY AND ITS INFLUENCE ON ANIMAL, HUMAN AND PLANT HEALTH".

Reviewer- International Journal of Molecular Biology
BMC Bioinformatics
Indian Journal of Microbiology
Gene Reports
BioTechniques

TALKS DELIVERED

1. **Invited talk on "SARS-CoV-2 and its variants: In silico analysis" at the 2nd International Conference on Advances in Smart Materials and Emerging Technologies (ASMET, 2021) with the theme "Innovations for Gen A" organized by Indira Gandhi Delhi Technical University for Women, Delhi on 20th-21st December 2021.**
2. Invited talk on "**Combating SARS-CoV-2 using drugs and phytochemicals**" at the 6th Annual International Conference of INSCR on "MICROBES IN SUSTAINABLE DEVELOPMENT" organized in association with the Department of Zoology (DU), Acharya Narendra Dev College (DU), Deen Dayal Upadhyaya College (DU), Gargi College (DU), Kirori Mal College (DU), PG Department of Zoology (MU), Maitreyi College (DU), Ramjas College (DU), Sri Venkateswara College (DU), C.M.P. College (AU), SGTB Khalsa College (DU), COCAS (PU) & PhiXgen Pvt. Ltd.,

Gurugram from November 15 to 18, 2021.

3. Invited talk on **"CpG DINUCLEOTIDES AS POTENTIAL CANDIDATES FOR ZAP MEDIATED DEGRADATION AGAINST SARS-COV-2"** in 61st annual international conference of association of microbiologist of India (AMI) and 5th annual conference of Indian network for soil contamination research (INSCR) in association with University of Delhi, Indian agriculture research institute (IARI), the energy and resources institute (TERI) and Indian national science academy (INSA) during 3rd-5th February, 2021.
4. Invited talk on **"Dengue, Zika, West Nile Virus: One vaccine for many targets"** for the Southeast Asian Regional Symposium on Microbial Ecology (SARSME-2020) held during February 12-14, 2020 in Pokhara, Nepal.
5. Practical session on Bioinformatics for the Add On Course: Medical Biotechnology 2019-20 at Miranda House, University of Delhi on December 19, 2019 from 10 am -3pm .
6. Oral presentation on **"Flaviviruses : one vaccine several solutions"** in Young Scientist Forum at International conference on the Theme : Current Trends In Microbiology And Microbiome Research: A Global Perspective (Ctm 2019) organized by INSCR and Department of Microbiology, MDU during October 11-12, 2019 at Maharshi Dyanand University, Rohtak, India
7. Oral presentation at on **"Structural or Non-structural, proteins reveal all about Dengue virus"** at International Conference- Integrative Chemistry, Biology and Translational Medicine(ICBTM-2019) 25-26 February, 2019 Organised by: Centre for Global Health, Hansraj College, University of Delhi, Delhi, India & Loyola University Chicago Stritch School of Medicine, USA
8. Keynote presentation on **"Conserved epitopes of DENV structural and non-structural proteins for exploring universal vaccine targets"** at the "International Conference of Bioinformatics and System Biology" held during March 20-21, 2019 in Singapore City, Singapore.
9. Delivered oral presentation on **"Comparative analysis of CpG islands in dengue virus for methylation induced gene silencing as an epigenetic tool"** at the "International Conference of Bioinformatics and System Biology" held during March 20-21, 2019 in Singapore City, Singapore.
10. Delivered oral presentation on **"Exploring conserved epitopes and CpG islands of DENV serotypes to exploit their genetics and epigenetics for vaccine development"** in Indo-US colloquium on recent developments in interdisciplinary research organized by the IQAC, Department of Chemistry, Hansraj College, University of Delhi in association with Loyola University Stritch School of Medicine, USA on 2nd July, 2018.
11. Delivered oral presentation on **"Comparative Genomics of Dengue Virus: Conserved Epitopes And Cpg Island Analysis"** in Innovative Sciences Session at INSCR International Conference (IIC-2017) on Role of Microbe-Plant-Animal Interactions in Human Health held from September 26 to 28, 2017 at University of Delhi, Delhi, India.
12. Young Scientist presentation on **"Genomics and Comparative genomics of microorganisms"** during the 58th Annual Conference of AMI (AMI 2017) scheduled from November 16-19, 2017 at Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh.
13. Delivered oral presentation on **"Dengue Virus: Is There Any Solution?"** during One-day Indo-Hungarian symposium on RECENT ADVANCES IN CHEMISTRY AND BIOLOGY (INHCB-2017) held on 11th December, 2017.

14. Delivered a talk on **"Comparative Genomics of Dengue Virus to explore Potential Candidates for Novel Vaccine Targets"** at 6th Annual World Congress of Microbes-2016 (WCM-2016) held during November 16-19, 2016 in Nanjing, China.
15. Delivered a talk on **"Primer Designing"** in the one day Hands-on-Training cum Workshop for Teachers for the course "Paper 21: Evolutionary Biology (ZOHP 610)" conducted by Sri Guru Tegh Bahadur Khalsa College in collaboration with Acharya Narendra Dev College and Swami Shraddhanand College on 10th Feb, 2013 at SGTB Khalsa College.
16. Delivered a talk on **"Gene Annotation"** at Department of Zoology, University of Delhi on 22nd Feb., 2012 for the course "LSPT-409: Bioinformatics".
17. Delivered a talk on **"The use of Micropipettes"** in the "Workshop for Laboratory Staff in Chemical and Life Sciences" under DBT-sponsored Star College Programme at Sri Venkateswara College, University of Delhi (South Campus) (March 5, 2012 to March 6, 2012).

PUBLICATIONS

Citations: >900

H-index: 17

S.No	Publications	ISBN/ ISSN No.	Impact Factor
Book Chapters			
1.	Phartyal R., Verma M. (2021) SARS-CoV-2 Mutations: An Insight. In: Ahmad S.I. (eds) Human Viruses: Diseases, Treatments and Vaccines. Springer, Cham. https://doi.org/10.1007/978-3-030-71165-8_25	978-3-030-71164-1	
2.	Verma M. , Phartyal R., Bhatt A. (2021) Introduction to Flaviviruses and Their Global Prevalence. In: Ahmad S.I. (eds) Human Viruses: Diseases, Treatments and Vaccines. Springer, Cham. https://doi.org/10.1007/978-3-030-71165-8_19	978-3-030-71164-1	
3.	Verma M., Samarth and Puri A. (2017) Genome Sequencing in <i>Bioinformatics, Volume I: Data, Sequence Analysis and Evolution</i> , Humana Press, Springer	978-1-4939-6622-6	
4.	Lal, D. and Verma M. (2017) Large Scale Sequence Comparison in <i>Bioinformatics, Volume I: Data, Sequence Analysis and Evolution</i> , Humana Press, Springer	978-1-4939-6622-6	
5.	Verma, M. (2015). Nucleic Acids: DNA I. in <i>Molecular Biology</i> . Virtual learning (e-chapter)	ISBN: 2349-154X	
6.	Verma, M. (2015). Nucleic Acids: DNA II in <i>Molecular Biology</i> . Virtual learning (e-chapter) http://vle.du.ac.in/mod/book/view.php?id=12575	ISBN: 2349-154X	
7.	Lal, D., Verma. M. (2016). Cytoskeleton I in <i>Cell Biology</i> . Virtual learning (e-chapter) http://vle.du.ac.in/mod/resource/view.php?id=11946		
8.	Lal, D., Verma. M. (2016). Microtubule in <i>Cell Biology</i> . Virtual learning (e-chapter) http://vle.du.ac.in/mod/resource/view.php?id=11946		
9.	Lal, D., Verma. M. (2016). Cytoskeleton III: Microfilaments in <i>Cell</i>		

	<i>Biology</i> . Virtual learning (e-chapter) http://vle.du.ac.in/mod/resource/view.php?id=11946	
10.	Lal, D., Verma. M. (2016). Mitochondria: Function in <i>Cell Biology</i> . Virtual learning (e-chapter) http://vle.du.ac.in/mod/resource/view.php?id=11946	
11.	Lal, D., Verma. M. (2016). Mitochondria: Structure in <i>Cell Biology</i> . Virtual learning (e-chapter) http://vle.du.ac.in/mod/resource/view.php?id=11946	
12.	Lal, D., Verma. M. (2016). Chloroplast in <i>Cell Biology</i> . Virtual learning (e-chapter) http://vle.du.ac.in/mod/resource/view.php?id=11946	
13.	Anand, S., Verma, M., Mukherjee, U., Hira, P., Sood, U. (2016). Introduction to Biotechnology in <i>An Introduction to Biotechnology: A genetic Manipulation Perspective</i> . Pp 1-51. I.K. International Publishing House Pvt. Ltd, New Delhi, India.	978-9-3845-8886-1

Research Publications

1.	Sharma V, Vashishtha A, Jos ALM, Khosla A, Basu N, Yadav R, Bhatt A, Gulani A, Singh P, Lakhera S, Verma M. Phylogenomics of the Phylum Proteobacteria: Resolving the Complex Relationships. <i>Curr Microbiol</i> . 2022 Jun 15;79(8):224. doi: 10.1007/s00284-022-02910-9. PMID: 35704242.	1432-0991	2.1
2.	Jaglan A, Satija S, Singh D, Phartyal R, Verma M. Intra-genomic heterogeneity in CpG dinucleotide composition in dengue virus. <i>Acta Trop</i> . 2022 Aug; 232:106501. doi: 10.1016/j.actatropica.2022.106501. Epub 2022 May 2. PMID: 35513073.	18736254, 0001706X	3.1
3.	Rolta R, Salaria D, Sharma P, Sharma B, Kumar V, Rathi B, Verma M, Sourirajan A, Baumler DJ, Dev K. Phytocompounds of <i>Rheum emodi</i> , <i>Thymus serpyllum</i> , and <i>Artemisia annua</i> Inhibit Spike Protein of SARS-CoV-2 Binding to ACE2 Receptor: In Silico Approach. <i>Curr Pharmacol Rep</i> . 2021 7(4): 135-149,. doi: 10.1007/s40495-021-00259-4. Epub ahead of print. PMID: 34306988; PMCID: PMC8279807.	2198-641X	1.524
4.	Gupta, V.*, Haider, S.*, Verma, M.*, Singhvi, N., Ponnusamy, K., Malik, M., Verma, H., Kumar, R., Sood, U., Hira, P., Satija, S., Singh, Y., and Lal, R. "Comparative Genomics and Integrated Network Approach Unveiled Undirected Phylogeny Patterns, Co-mutational Hotspots, Functional Crosstalk and Regulatory Interactions in SARS-CoV-2". 2021. <i>mSystems</i> , 6(1), e00030-21. https://doi.org/10.1128/mSystems.00030-21	2379-5077	6.49
5.	Kumar, R., Verma, H., Singhvi, N., Sood, U., Gupta, V., Singh, M., Kumari, R., Hira, P., Nagar, S., Talwar, C., Nayyar, N., Anand, S., Rawat, C.D., Verma, M., Negi, R.K., Singh, Y., Lal, R. Comparative genomic analysis of rapidly evolving SARS-CoV-2 reveals mosaic pattern of phylogeographical distribution. <i>mSystems</i> . 2020; 5(4):e00505-20. doi: 10.1128/mSystems.00505-20, PMID 32723797.	2379-5077	6.49
6.	Verma, M., Bhatnagar, S., Kumari, K., Mittal, N., Sukhralia, S., Gopirajan AT, S., Dhanaraj, P.S., Lal, R. 2019. Highly conserved epitopes of DENV structural and non-structural proteins: Candidates	0378-1119	3.688

	for universal vaccine targets. <i>Gene</i> , 695: 18-25.		
7.	Kulshreshtha, S., Kapuria, A., Patel, D.D., Dhanaraj, P.S., Verma, M. 2016. In silico Analysis of Genus <i>Proteus</i> for Identification of Redundant Sequences in the Database. <i>DU J. Undergrad Res. Inno.</i> 2: 149-165		
8.	Lal, D., Verma, M., Behura, S. K., and Lal, R. 2016. Codon usage bias in phylum Actinobacteria: relevance to environmental adaptation and host pathogenicity. <i>Res. Microbiol.</i> , 167: 669-677	0923-2508	3.992
9.	Muralidharan, M.S., Ghosh, A., Singhvi, N., Dhanaraj, P.S., Lal, R., Patel, D.D., Kaicker, A., and Verma, M. 2016. Identification of genus <i>Campylobacter</i> up to species level using internal features of 16S rRNA gene sequences. <i>Molecular genet. Microbiol. Virol.</i> 31:187-196	0891-4168	0.352
10	Jayaraj, P., Sen, S., Bhattacharya, T., Arora, J., Yadav, S., Chhoker, V., Kumar, A., Dhanaraj, P.S., Sharma, K. YVR, Verma, M. 2016. Clinical relevance of cyclo-oxygenase 2 and peroxisome proliferator activated receptor γ in eyelid sebaceous gland carcinoma. <i>Histopathology</i> 69(2):268-75 DOI: 10.1111/his.12932	1365-2559	5.087
11	Puri, A., Rai, A., Dhanaraj, P.S., Lal, R., Patel, D.D., Kaicker, A., and Verma, M. 2016. An in silico approach for identification of the pathogenic species, <i>Helicobacter pylori</i> and its relatives. <i>Indian J. Microbiol.</i> , 56: 277-286. DOI 10.1007/s12088-016-0575-7.	0046-8991	2.461
12.	Dubey, M., Yadav. G., Kapuria, A., Muralidharan, M.S., Lal, D., Lal, R., Dhanaraj, P.S., and Verma, M. 2014. Exploring bacterial diversity from contaminated soil samples from river Yamuna. <i>Microbiol.</i> 83: 585-588.	0026-2617	1.156
13.	Kaur, J., Anand, S., Verma, M. , Lal, R. 2014. Role of Horizontal Gene Transfer Events in the Evolution of Phenol 2–Monooxygenase Gene: a Comparative Study across 75 Prokaryotic Genomes. <i>Indian J. Bioinfo. Biotech.</i> 3:1-15.	2319-6580	
14.	Verma, M. , Lal, D., Saxena, A., Anand, S., Kaur, J., Kaur, J., and Lal, R. 2013. Understanding alternative fluxes/effluxes through comparative metabolic pathway analysis of phylum actinobacteria using a simplified approach. <i>Gene.</i> 531: 306-317.	0378-1119	3.688
15.	Verma, M. , Lal, D., Kaur, J., Saxena, A., Kaur, J., Anand, S. and Lal, R. 2013. Phylogenetic analyses of phylum actinobacteria based on whole genome sequences. <i>Res. Microbiol.</i> 164: 718-728.	0923-2508	3.992
16.	Sangwan, N., Lata, P., Dwivedi, V., Singh, A., Niharika, N., Kaur, J., Anand, S., Malhotra, J., Jindal, S., Nigam, A., Lal, D., Dua, A., Saxena, A., Garg, N., Verma, M. , Kaur, J., Mukherjee, U., Gilbert, J.A., Dowd, S.E., Raman, R., Khurana, P., Khurana, J.P., and Lal, R. 2012. Comparative Metagenomic analysis of soil microbial communities across three Hexachlorocyclohexane contamination levels. <i>PLoS One</i> : 7, e46219.	1932-6203	3.240
17.	Anand, S., Sangwan, N., Lata, P., Kaur, J., Dua, A., Singh, A., Verma, M. , Kaur J., Khurana, P., Khurana, J.P., Mathur, S and Lal, R. 2012. Genome Sequence of <i>Sphingobium indicum</i> B90A, a Hexachlorocyclohexane (HCH) Degrading Bacterium, India. <i>J.</i>	0021-9193	3.490

	<i>Bacteriol</i> : 194 , 4471-4472 .		
18.	Verma, M. , Kaur, J., Kumar, M., Kumari, K., Saxena, A., Anand, S., Nigam, A., Ravi, V., Raghuvanshi, S., Khurana, P., Tyagi, A. K., Khurana, J. P. and Lal, R. 2011 . Whole Genome Sequence of Rifamycin B Producing <i>Amycolatopsis mediterranei</i> S699. <i>J. Bacteriol.</i> 193 : 5562-5563.	0021-9193	3.490
19.	Kaur, J., Verma, M. and Lal, R. 2011 . <i>Rhizobium rosettiformans</i> sp. nov., isolated from hexachlorocyclohexane (HCH) dump site in India, and reclassification of <i>Blastobacter aggregatus</i> Hirsch and Müller (1985) as <i>Rhizobium aggregatum</i> comb. nov. <i>Int. J. Syst. Evol. Microbiol.</i> 61 :1218-1225.	1466-5026	2.747
20.	Lal, D., Verma, M. , and Lal, R. 2011 . Exploring internal features of 16S rRNA gene for identification of clinically relevant species of the genus <i>Streptococcus</i> . <i>Ann. Clin. Microbiol. Antimicrobials</i> 10 :28.	1476-0711	3.944
21.	Verma, M. , Sharma, P., Bala, K., Nigam, A. and Lal, R. 2010 . <i>Sphingopyxis ummariensis</i> sp. nov., isolated from hexachlorocyclohexane (HCH)-dumpsite in north India. <i>Int. J. Syst. Evol. Microbiol.</i> 60 :780-784.	1466-5026	2.747
22.	Verma, M. , Kumar, M., Dadhwal, M., Kaur, J., and Lal, R. 2008 . <i>Devosia albogilva</i> sp. nov. and <i>Devosia crocina</i> sp. nov., isolated from hexachlorocyclohexane (HCH) dump site. <i>Int. J. Syst. Evol. Microbiol.</i> 56 :6594-6603.	1466-5026	2.747
23.	Kumar, M., Verma, M. and Lal, R. 2008 . <i>Devosia chinhatensis</i> sp. nov., isolated from hexachlorocyclohexane (HCH) dump site in India. <i>Int. J. Syst. Evol. Microbiol.</i> 58 :861 - 865.	1466-5026	2.747
24.	Dadhwal, M., Singh, A., Prakash, O., Gupta, S. K., Kumari, K., Sharma, P., Jit, S., Verma, M. , Holliger, C., and Lal, R. 2008 . Proposal of Biostimulation for Hexachlorocyclohexane (HCH)-decontamination and characterization of culturable bacterial community from high-dose point HCH-contaminated soils. <i>J. App. Microbiol.</i> 106 :381-392.	1365-2672	3.772
Review articles			
1.	Sood, U., Dhingra, G. G., Anand, S., Hira, P., Kumar, R., Kaur, J., Verma, M. , Singhvi, N., Lal, S., Rawat, C. D., Singh, V. K., Kaur, J., Verma, H., Tripathi, C., Singh, P., Dua, A., Saxena, A., Phartyal, R., Jayaraj, P., Makhija, S., ... Lal, R. (2022). Microbial Journey: Mount Everest to Mars. <i>Indian journal of microbiology</i> , 62(3), 323-337. https://doi.org/10.1007/s12088-022-01029-6	0046-8991	2.461
2.	Chugh A, Khurana N, Verma K, Sehgal I, Rolta R, Vats P, Phartyal R, Salaria D, Kaushik N, Choi EH, Verma M, Kaushik NK. Changing Dynamics of SARS-CoV-2: A Global Challenge. <i>Applied Sciences</i> . 2022; 12(11):5546. https://doi.org/10.3390/app12115546	2076-3417	2.67
3.	Sukhralia, S.*, Verma, M.* , Gopirajan, S. et al. 2018 . From dengue to Zika: the wide spread of mosquito-borne arboviruses. <i>Eur. J. Clin. Microbiol. Infect. Dis.</i> 38 , 3-14 https://doi.org/10.1007/s10096-018-3375-7 (*equal contribution)	1435-4373	3.267
4.	Prakash, O., Verma, M. , Sharma, P., Kumar, M., Kumari, K., Singh, A., Kumari, H., Jit, S., Gupta, S. K., Khanna, M. and Lal, R. 2007 . Polyphasic approach of bacterial classification – An overview of recent advances. <i>Indian J. Microbiol.</i> 47 :98-108.	0046-8991	2.461
5.	Sharma, P., Kumari, H., Kumar, M., Verma, M. , Kumari, K., Khurana, J., and Lal, R. 2008 . From bacterial genomics to metagenomics:	0046-8991	2.461

	Concept, Tools and Recent Advances. <i>Indian J. Microbiol.</i> 48 :173-194.		
6.	Lal, R., Dadhwal, M., Kumari, K., Sharma, P., Singh, A., Kumari, H., Jit, S., Gupta, S.K., Nigam, A., Lal, D., Verma, M. , Kaur, J., Bala, K. and Jindal, S. 2008 . <i>Pseudomonas</i> sp. to <i>Sphingobium indicum</i> : A journey of microbial degradation and bioremediation of Hexachlorocyclohexane. <i>Indian J. Microbiol.</i> 48 :3-18.	0046-8991	2.461
7.	Anand, S., Malhotra, J., Dua, A., Garg, N., Saxena, A., Sangwan, N., Lal, D., Verma, M. , Jindal, S., Kaur, J., Kumari, K., Nigam, A., Niharika, N., Kaur, J., Jit, S., Bala, K., Negi, P. L. and Lal, R. 2010 . A New Life in a Bacterium through Synthetic Genome: A successful venture by Craig Venter. <i>Indian J. Microbiol.</i> 50 :125-131.	0046-8991	2.461
8.	Lal, R., Jit, S., Verma, M. , Dadhwal, M., Singh, A., Prakash, O., Sharma, P., and Khanna, M. 2006. Nanoorganisms: Smallest form of life got smaller!, (Research News) <i>Indian J. Microbiol.</i> , 46: 413.	0046-8991	2.461
Other publications			
9.	Dhingra GG, Saxena A, Nigam A, Hira P, Singhvi N, Anand S, Kaur J, Kaur J, Dua A, Negi V, Gupta V, Sood U, Kumar R, Lal S, Verma H, Verma M , Singh P, Rawat CD, Tripathi C, Talwar C, Nagar S, Mahato NK, Prakash O, Singh M, Kuhad RC, Singh Y, Lal B, Pabbi S, Singh N, Kalia VC, Lal R. Microbial World: Recent Developments in Health, Agriculture and Environmental Sciences: An Annual Conference Organized by Association of Microbiologists of India and Indian Network for Soil Contamination Research. <i>Indian J Microbiol.</i> 2021 Mar 29;61(2):1-5. doi: 10.1007/s12088-021-00931-9. Epub ahead of print. PMID: 33814643; PMCID: PMC8006636.	0046-8991	2.461
10	Anand S, Lal S, Sood U, Gupta V, Dhingra GG, Solanki R, Kaur J, Kumar R, Saxena A, Dua A, Tripathi C, Talwar C, Rawat CD, Kaur H, Verma H, Kaur J, Verma M , Singh M, Hira P, Singhvi N, Mahato NK, Prakash O, Malhotra J, Lal R, Kalia VC. The Alphabet of the Elementary Microbiology: Revisited. <i>Indian J Microbiol.</i> 2021 Oct 6;61(4):1-4. doi: 10.1007/s12088-021-00987-7. Epub ahead of print. PMID: 34629565; PMCID: PMC8492822.	0046-8991	2.461
11	e-Lesson plan on "Evolutionary Adaptations to Climate Change" (December 2019) by Dr. Rajendra Phartyal and Dr. Mansi Verma for TROPICSU project is funded by the International Council for Science (ICSU), led by the International Union of Biological Sciences (IUBS), and co-led by the International Union for Quaternary Research (INQUA).		

ADMINISTRATIVE EXPERIENCE

1. **Member of NAAC Drafting Committee** of SVC during Ist cycle in 2016.
2. Co-opted member of Criteria 2 in **NAAC** 2nd cycle 2022.
3. **Department of Zoology Coordinator** for NAAC in 2nd cycle 2022.
4. Member of DBT-Sponsored **Tirumala Tirupati Exchange Programme** (January 22-31, 2013).
5. Member of Volunteer Committee for Organizing Delhi University Annual Festival **ANTARDHWANI-2015**.

6. Member of College Magazine Committee (2017-2018).
7. Convenor of **"Certificate Program in Bioinformatics & Computational Biology (CBC) 2020"** organized by Sri Venkateswara College from 12th September 2020-06th February, 2021.
8. Venkateswara Initiatives in Science Training in Academics and Research (VISTAAR) Stall Incharge of Zoology, (Public health and Molecular Diagnostics) held on 1st November 2019 at Sri Venkateswara College, Sponsored by DBT.
9. Co-opted member of college Magazine committee, Sri Venkateswara College from 2018-2020.
10. **Co-convenor** of Zoological Society **"Evolvere"** and **Convenor** of Zoological magazine **"Phoenix"** at Sri Venkateswara College, Delhi University since 2011.

Conferences/Symposiums organized:

1. Organizing Secretary of the 6th Annual International Conference of INSCR on "MICROBES IN SUSTAINABLE DEVELOPMENT" organized in association with the Department of Zoology (DU), Acharya Narendra Dev College (DU), Deen Dayal Upadhyaya College (DU), Gargi College (DU), Kirori Mal College (DU), PG Department of Zoology (MU), Maitreyi College (DU), Ramjas College (DU), Sri Venkateswara College (DU), C.M.P. College (AU), SGTB Khalsa College (DU), COCAS (PU) & PhiXgen Pvt. Ltd., Gurugram from November 15 to 18, 2021.
2. Member of Organizing Committee in the International Symposium on Recent Methodologies and Advances in Termite Research organized by Department of Zoology on September 28th, 2021.
3. Member of Organizing Committee in the Symposium on "Wildlife Conservation: Challenges, efforts and scope" organized by Department of Zoology, Sri Venkateswara College, University of Delhi on 20th March, 2021.
4. Member of Organizing Committee in the International Webinar on Rewilding Immunology: Current Status and the Road Ahead" organized by Department of Zoology, Sri Venkateswara College, University of Delhi on 9th January, 2021.
5. Member of organizing committee of 61st annual international conference of association of microbiologist of India (AMI) and 5th annual conference of Indian network for soil contamination research (INSCR) in association with University of Delhi, Indian agriculture research institute (IARI), the energy and resources institute (TERI) and Indian national science academy (INSA) during 3rd-5th February, 2021.
6. Convenor of an International e-conference on "Health and Research in Current Scenario: with special emphasis on COVID-19 Genomics and Pathogenicity" organized by Sri Venkateswara College, University of Delhi on 17th July, 2020.
7. Member of Organizing Committee of International Conference- Integrative Chemistry, Biology and Translational Medicine(ICBTM-2019) 25-26 February, 2019 Organised by: Centre for Global Health, Hansraj College, University of Delhi, Delhi, India & Loyola University Chicago Stritch School of Medicine, USA
8. Member of Organizing Committee of International Conference- Integrative Chemistry, Biology and Translational Medicine(ICBTM-2019) 25-26 February, 2019 Organised by: Centre for Global Health, Hansraj College, University of Delhi, Delhi, India & Loyola University Chicago Stritch School of Medicine, USA

9. Member of Organizing Committee and Convener for college committee for the INSCR International Conference (IIC-2017) on Role of Microbe-Plant-Animal Interactions in Human Health held from September 26 to 28, 2017 at University of Delhi, Delhi, India.
10. Conference Head of International Conference and Outreach Programme on "Environment & Ecology: Sustainability and Challenges" (ENCON 2017) during January 4-6, 2017.
11. Member of Organizing Committee of 1st International Conference on "Emerging Trends of Nanotechnology in Drug Discovery" from 26th-27th May, 2014 at University of Delhi, South Campus, Delhi.
12. Member of Organizing Committee of National Symposium entitled "Recent Trends in Innovative Research at Undergraduation: Science and Society" from 28th Feb-2nd March, 2013 at Sri Venkateswara College, University of Delhi.
13. Worked as a Student Expertise in Indo-Swiss Collaboration in Biotechnology (ISCB) International Conference entitled "Recent trends in developing Bioremediation strategies for Hexacholocyclohexane (HCH) & other chlorinated contaminants" from 9th-11th February, 2011 at University of Delhi, Delhi.
14. Worked as a Student Expertise in 49th Annual Conference of The Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics & Metagenomics" from 18th-20th November, 2008 at University of Delhi, Delhi.

Workshops/FDPs/Outreach Programs/Webinars organized:

1. Resource person for "Digital Pedagogy and Climate Change Education Workshop for Teachers", organized by TROP ICSU and IISER Pune, on 5-6 Aug 2022 held at IISER Pune.
2. Organizing Committee Member of Microsphere: An International Outreach Program on occasion of International Microorganism Day on 17th September, 2021 organised by Deen Dyal Upadhyaya College (DU), Gargi College (DU), IIT Rorkee, Kirori Mal College (DU), Ramjas College (DU), PG Dept. of Zoology (MU) & PhiXgen Pvt. Ltd., Gurugram in association with Acharya Narendra Dev College (DU), Maitreyi College (DU), Sri Venkateswara College (DU) & C.M.P. College (AU).
3. Coordinator of **One Day Online Faculty Development Program on Digital Pedagogy & Climate Change Education across Disciplines**, organized by Sri Venkateswara College, University of Delhi, India in collaboration with TROP ICSU, a Climate Change Education Project by the International Union of Biological Sciences (IUBS), on the 28th August, 2021.
4. Organizing Committee Member in the Webinar on 'Reproductive health in the New Age: Challenges of the Modern World' organised by Department of Zoology Sri Venkateswara College, DU, on 26th June, 2021.
5. Member and Resource person for "Two Days Online Workshop On **Lab Safety And Waste Management**" organised by Sri Venkateswara College, University of Delhi during 4th-5th June, 2021.
6. Convenor of International Hands-on e-Workshop on "Health and Research in Current Scenario: with Special Emphasis on Covid-19 Virus Genomics and Pathogenicity" organized jointly by Sri Venkateswara College, University of Delhi and PhiXgen Pvt. Ltd., India held during July 14-16, 2020 (**Sponsored by ISME, The Netherlands**).
7. Coordinator of INSA 'Delhi local Chapter' Programme for celebrating Science week on the Theme: "Computational Biology for (Meta) Genomics Analysis" from 24th-26th February, 2020 held at Sri Venkateswara College (**sponsored by INSA**).
8. Organized a Workshop on "Bioinformatics and its tools" in International Conference on "Bioinformatics and System Biology" held in Singapore on March 20th-21st, 2019.

9. Organizing member of the first TROP ICSU workshop for teachers held in collaboration with Sri Venkateswara College (University of Delhi), New Delhi, India, on October 13 and 14, 2018.
10. Co-convenor of two-days workshop on **"Molecular Characterization Of Human Samples To Identify Disease Risk Loci"** at Sri Venkateswara College, University of Delhi during 7th-8th April, 2017.
11. Member of Organizing Committee for conducting the workshop on Advanced Science and Mathematics for Senior Secondary School students on 7th-8th April, 2017, jointly organized by Sri Venkateswara College and LNJ Bhilwara Group.
12. Organizing member of the workshop-cum-camp on **Foldscope**, speaker- Dr. Manu Prakash at Stanford University, jointly organized by Sri Venkateswara College and Department of Biotechnology, Govt. of India on 16th December, 2015.
13. Co-convenor of the virtual workshop of American Society of Microbiology on **"Scientific writing and publishing"** by the virtual speaker Dr. Larry McDaniel (University of Mississippi Medical Centre) on 6th February, 2013 at Sri Venkateswara College, University of Delhi (South Campus).
14. Member of organizing committee of the **"Workshop for Laboratory Staff in Chemical and Life Sciences"** under DBT-sponsored Star College Programme at Sri Venkateswara College, University of Delhi (South Campus) (March 5, 2012 to March 6, 2012).
15. Resource person in one day Hands-on-Training cum Workshop for Teachers for the course **"Paper 21: Evolutionary Biology (ZOHP 610)"** conducted by Sri Guru Tegh Bahadur Khalsa College in collaboration with Acharya Narendra Dev College and Swami Shraddhanand College on 10th Feb, 2013 at SGTB Khalsa College.

CONFERENCES/WORKSHOPS/WEBINARS ATTENDED AND POSTERS PRESENTED

Conferences:

1. Participated in 2nd International Conference on Advances in Smart Materials and Emerging Technologies (ASMET, 2021) with the theme "Innovations for Gen A" organized by Indira Gandhi Delhi Technical University for Women, Delhi on 20th-21st December 2021.
2. Participated in Online National Conference on Innovation in Management, Technology and Communication NC-IMTC organized by Institution's Innovation Council (Ministry of Education Initiative) of IIMT College of Management, Greater Noida, U.P. from 18-19 June, 2021.
3. Participated in the International E-conference entitled "NeuroEunoia 2020: A Neuroscience Affair" hosted by Gargi College, University of Delhi, held under the aegis of IQAC, Gargi College held on 16-17 October 2020.
4. Participated in an International Conference entitled "Strengthening Microbial Ecology Research Network in SouthEast Asia" organized by International Society of Microbial Ecology (ISME) at Nepal from 12th-14th February, 2020.
5. Participated in International conference on the Theme : Current Trends In Microbiology And Microbiome Research: A Global Perspective (Ctm 2019) organized by INSCR and Department of Microbiology, MDU during October 11-12, 2019 at Maharshi Dyanand University, Rohtak, India.
6. Attended International Conference on " Bioinformatics and System Biology" held in Singapore on March 20th-21st, 2019.
7. Member of Organizing Committee of International Conference- Integrative Chemistry, Biology and Translational Medicine(ICBTM-2019) 25-26 February, 2019 Organised by: Centre for Global Health, Hansraj College, University of Delhi, Delhi, India & Loyola University Chicago Stritch School of Medicine, USA

8. Participated in Indo-US colloquium on **recent developments in interdisciplinary research** organized by the IQAC, Department of Chemistry, Hansraj College, University of Delhi in association with Loyola University Stritch School of Medicine, USA on 2nd July 2018.
9. Participated in the 58th Annual Conference of AMI (AMI 2017) scheduled from November 16-19, 2017 at Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh.
10. Participated in a One-day Indo-Hungarian symposium on RECENT ADVANCES IN CHEMISTRY AND BIOLOGY (INHCAB-2017) held on 11th December, 2017.
11. Participated in 6th Annual World Congress of Microbes-2016 (WCM-2016) held during November 16-19, 2016 in Nanjing, China.
12. Participated in 57th Annual conference of Association of Microbiologists of India (AMI-2016) & International Symposium on "Microbes and Biosphere: What's New What's Next" from 24th-27th November, 2016 at Guwahati University, Guwahati, Assam, India.
13. Participated in 56th Annual conference of Association of Microbiologists of India (AMI-2015) & International Symposium on "Emerging Discoveries in Microbiology" from 7th-10th December, 2015 at JawaharLal Nehru University, Delhi.
14. Participated in 5th International Conference on "Stem Cells and Cancer (ICSCC-2014): Proliferation, Differentiation and Apoptosis" from 8th -10th October, 2014 at JawaharLal Nehru University, Delhi.
15. Participated in International Conference entitled "Structural and Functional Genomics" organized by Sastra University, Thanjavur, Tamil Nadu from 6-7th January, 2013.
16. Participated in Indo-Swiss Collaboration in Biotechnology (ISCB) International Conference entitled "Recent trends in developing Bioremediation strategies for Hexacholocyclohexane (HCH) & other chlorinated contaminants" from 9th-11th February, 2011 at University of Delhi, Delhi.
17. Participated in National Conference on "Ecology and Environment Management: Indian Scenario" organized by Sri Venkateswara College, University of Delhi from 24th-26th February, 2011.
18. Participated ISCB International symposium entitled "A decade of experience in R&D and technology Management" organized by Indo-Swiss collaboration in Biotechnology (ISCB) from 10th-11th March, 2011 at NASC Complex, Delhi.
19. Participated in 51st Annual Conference of The Association of Microbiologists of India entitled "**International Symposium on Recent Advances in Cross Disciplinary Microbiology: Avenues and Challenges**" held at Birla Institute of Technology, Ranchi from December 14 -17, 2010.
20. Participated in 49th Annual Conference of The Association of Microbiologists of India entitled "**International Symposium on Microbial Biotechnology: Diversity, Genomics & Metagenomics**" from 18th-20th November, 2008 at University of Delhi, Delhi.
21. Participated in Indo-Portuguese workshop on "**Emerging Trends of Nanotechnology in Chemistry and Biology**" from 12-13th February, 2016 at University of Delhi, Delhi.

Orientation Programme attended:

Successfully completed a 4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" organized by Teaching Learning Centre, Ramanujan College, University of Delhi in collaboration with Shaheed Sukhdev College of Business Studies (SSCBS) under the aegis of MINISTRY OF EDUCATION, PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING from 19 October – 18 November, 2021 and obtained Grade A+

Workshops/ Faculty Development Programme/Webinars:

1. Participated in two-week Interdisciplinary Refresher Course on "Research Methodology" organised under the Ministry of Education sponsored Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) scheme organised by TLC Ramanujan College from 22nd December 2021-05th January 2022.
2. Participated in One week online Faculty Development Programme (FDP) on "Innovative pedagogy for effective teaching and e-learning during covid era" conducted by Institution's Innovation Council (Ministry of Education Initiative)-IIMT College of Management, Greater Noida, U.P. from 2nd June, 2021 to 8th June, 2021.
3. Participated in Faculty Development Programme on "ICT Enhanced Teaching and Learning 2.0" organized by IQAC and ICT of Sri Venkateswara College, University of Delhi during July 25-29, 2020.
4. Participated in Webinar on Intellectual Property Rights (IPR) organized by IQAC and CRC, Sri Venkateswara College on 29th August, 2020.
5. Participated in "OPEN SOURCE TOOLS FOR RESEARCH" scheduled from June 08-14, 2020, under the MHRD-sponsored Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), organized by Ramanujan College, University of Delhi.
6. Participated in 4-day Faculty Development Program on ICT Enhanced Teaching and Learning organized by IQAC, Sri Venkateswara College, November 1-4, 2018.
7. Participated in Faculty Development Program cum Workshop on "Development of Interactive Teaching Methodologies: Need of Contemporary Teaching" held on 25th July, 2018 at Sri Venkateswara College, University of Delhi.
8. Participated in the two days workshop on "**Bioinformatics Training Programme for College Teachers**" organized by Bioinformatics Centre, Sri Venkateswara College, University of Delhi on July 27-28, 2017 commemorating the 10th anniversary of the Centre.
9. Participated in an interactive session on FOLDSCOPE held at Gargi College on 16th December, 2015.
10. Participated in **Workshop on Microbial Genomics and Metagenomics** held on September 26, 2016 at University of Delhi, Delhi, India.
11. Participated in Pre-conference Workshop at IIC-2017 on **hands on to Computational Biology for (Meta)Genomics Analysis** held on September 26, 2017 at University of Delhi, Delhi, India.
12. Participated in workshop on "**Biochemistry of Metabolic Processes**" at Kirori Mal College, University of Delhi (February 2, 2015).
13. Participated in workshop on Immunology entitled "**Immunis**" at Sri Venkateswara College, University of Delhi, sponsored by DBT (7th-9th February, 2013).
14. Participated in "Bioinformatics Training Programme for College Teachers" at Sri Venkateswara College, University of Delhi, sponsored by DBT Star College Programme (14th -18th May, 2012).
15. Participated in workshop on **Computational Biology: A workshop for Science Teachers** of University of Delhi at D. S. Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi, sponsored by Department of Biotechnology (DBT) (9th- 11th January, 2012).
16. Participated in workshop on **Genetics, Genomics and Biotechnology for Zoology Teachers** of University of Delhi at Department of Zoology, University of Delhi, sponsored by University of Delhi (10th-12th August, 2006).
17. Participated in workshop on **Genetics, Genomics and Biotechnology for Botany Teachers** of University of Delhi at Department of Zoology, University of Delhi, sponsored by University of Delhi (14th -15th December, 2006).

18. Participated in The Academic Congress entitled "Enabling the Young: Redefining Education" organised by University of Delhi ((6th-7th September, 2012).

Webinars/e-learning Programs Attended:

1. Participated in the webinar on "Zebrafish Model System" organized by the Department of Biochemistry, Shivaji College, University of Delhi under the aegis of DBT sponsored Star College Scheme held on May 8, 2020.
2. Participated in the "E-Learning Program on Bioinformatics as Cartographic Tool In Drug Discovery" organised by the Department of Bioinformatics, Alagappa University, Karaikudi during 19th to 30th May, 2020.

Posters/Abstracts:

1. **Verma, M.**, Kumar, M., Kaur, J., Dadhwal, M., and Lal, R. "*Devosia albogilva* sp. nov., *Devosia chinhatensis* sp. nov. and *Devosia crocina* sp. nov., isolated from Hexachlorocyclohexane (HCH) dumpsite." Poster presented in the 49th Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics" held at University of Delhi, Delhi from November 18 -20, 2008.
2. **Verma, M.**, Kaur, J., Kumar, M., Anand, S., Kumari, K., Ravi, V., Raghuvanshi, S., Khurana, P., Tyagi, A.K., and Lal, R. "Assembly and Targeted Genome Sequencing of Rifamycin producing Actinomycete *Amycolatopsis mediterranei* S699". Poster presented in the 49th Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics" held at University of Delhi, Delhi from November 18 -20, 2008.
3. Dadhwal, M., Singh, A., Prakash, O., Gupta, S.K., Kumari, K., Sharma, P., Jit, S., **Verma, M.**, Holliger, C., and Lal, R. "Proposal of Biostimulation for Hexachlorocyclohexane (HCH)-decontamination and Characterization of culturable bacterial community from High-dose point HCH-contaminated soils". Poster presented in the 49th Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics" held at University of Delhi, Delhi from November 18 - 20, 2008.
4. **Verma, M.**, Kaur, J., Kumar, M., Anand, S., Kumari, K., Ravi, V., Raghuvanshi, S., Khurana, P., Khurana, J, P., Tyagi, A. K. and Lal, R. "High quality draft genome sequence and comparative genomics of *Amycolatopsis mediterranei* S699". Poster presented in the 51st Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges" held at Birla Institute of Technology, Mesra, Ranchi from 14-17th December, 2010.
5. **Verma, M.**, Lal, D., Kaur, J., Saxena, A., Kaur, J., Anand, S., and Lal, R. "Understanding phylogeny of Actinobacteria in the light of complete genome sequences". Poster presented in the 51st Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges" held at Birla Institute of Technology, Mesra, Ranchi from 14-17th December, 2010.
6. Anand, S., Lata, P., Dua, A., **Verma, M.**, Kaur, J., and Lal, R. "Genome sequencing of a Hexachlorocyclohexane (HCH) degrading bacterium *Sphingobium indicum* B90A using solexa in conjunction with pyrosequencing". Poster presented in the 51st Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges" held at Birla Institute of Technology, Mesra, Ranchi from 14-17th December, 2010.
7. Nigam, A., Sangwan, N., Garg, N., Niharika, N., **Verma, M.**, Kaur, J., Khurana, P., Khurana, J,P., Rajagopal, R., and Lal, R. "Assembly and targeted genome sequencing of *Thermus manikarensis* RLM". Poster presented in the 51st Annual Conference of the Association of Microbiologists of India entitled "International Symposium on Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges" held at Birla Institute of Technology, Mesra, Ranchi from 14-17th December, 2010.
8. Anand, S., Lata, P., Dua, A., **Verma, M.**, Kaur, J., and Lal, R. "A Deeper Insight of *Sphingobium indicum* B90A, a Hexachlorocyclohexane (HCH) Degrading Bacterium in Light of its Genome Sequence". Poster presented in the Indo-Swiss Collaboration in Biotechnology (ISCB) International Conference entitled "Recent Trends in

Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & Other Chlorinated Contaminants" held at University of Delhi, India from 9th – 11th February, 2011.

9. **Verma, M.**, Kaur, J., Kumar, M., Kumari, K., Ravi, V., Raghuvanshi, S., Khurana, P., Khurana, J, P., Tyagi, A,K., and Lal, R. "Validation of genome sequence and comparative genomics of *Amycolatopsis mediterranei* S699". Poster presented in the Indo-Swiss Collaboration in Biotechnology (ISCB) International Conference entitled "Recent Trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & Other Chlorinated Contaminants" held at University of Delhi, India from 9th – 11th February, 2011.
10. **Verma, M.**, Kaur, J., Kumar, M., Kumari, K., Saxena, A., Anand S., Nigam, A., Ravi, V., Raghuvanshi, S., Khurana, P., Khurana, J,P., Tyagi, A,K., and Lal, R. "Whole Genome Sequence of the Rifamycin B-Producing Strain *Amycolatopsis mediterranei* S699". Poster presented in the 52th Annual Conference of the Association of Microbiologists of India entitled "International Conference on Microbial Biotechnology for Sustainable Development" held at Panjab University, Chandigarh, India from 3-6, Nov 2011.
11. Anand, S., Lata, P., Dua, A., Malhotra, J., **Verma, M.**, Kaur, J., Niharika, N., Kaur, J., Singh, A, K., Saxena, A., Sangwan, N., Dwivedi, V., Mukherjee, U., Raghuvanshi, S., Khurana, J,P., and Lal, R. "Genome sequence of a Hexachlorocyclohexane (HCH) degrading *Sphingobium indicum* B90A". Poster presented in the 52th Annual Conference of the Association of Microbiologists of India entitled "International Conference on Microbial Biotechnology for Sustainable Development" held at Panjab University, Chandigarh, India from 3-6, Nov 2011.
12. Dwivedi V., Nigam, A., Niharika, N., Sangwan, N., Garg, N., Kaur, J., **Verma, M.**, Mukherjee, U., Khurana, P., Khurana, J, P., Rajagopal, R., and Lal, R. "Genome Sequencing of *Thermus sp.* RLM^T isolated from Hot Spring of Manikaran, India". Poster presented in the 52th Annual Conference of the Association of Microbiologists of India entitled "International Conference on Microbial Biotechnology for Sustainable Development" held at Panjab University, Chandigarh, India from 3-6, Nov 2011.
13. **Verma, M.**, Lal, D., Kaur, J., Saxena, A., Kaur, J., Anand, S., and Lal, R. "Phylogenetic analysis of phylum actinobacteria based on whole genome sequences". Poster presented at "Structural and Functional Genomics" at Thanjavur, Tamil Nadu from 6-7th January, 2013.
14. Menon, A., Gahlot, S., Patel, D. D., Lal, R., and **Verma, M.** "An effortless detection and identification of the uncharacterized strains of genus *Yersinia* via 16S rRNA gene sequences". Poster presented at "Structural and Functional Genomics" at Thanjavur, Tamil Nadu from 6-7th January, 2013.
15. Rai, A., Puri, A., Kaicker, A., Lal, R., and **Verma, M.** "An approach to characterize the pathogenic species of genus *Helicobacter* by analysing their 16s rRNA gene". Poster presented at "Structural and Functional Genomics" at Thanjavur, Tamil Nadu from 6-7th January, 2013.
16. Muralidharan, M., Ghosh, A., Singhvi, N., Dhanaraj, P. S., Lal, R., and **Verma, M.** "An approach to classify uncharacterized species of *Campylobacter* by exploring the internal features of housekeeping genes". Poster presented at "Structural and Functional Genomics" at Thanjavur, Tamil Nadu from 6-7th January, 2013.
17. Samarth, Kapuria, A., Patel, D. D., Dhanaraj, P. S., Lal, R., and **Verma, M.** "An easy identification of *Proteus* species for characterizing pathogenic strains and to record nonrepetitive data in the database". Poster presented at "Structural and Functional Genomics" at Thanjavur, Tamil Nadu from 6-7th January, 2013.
18. Arora, J., Kumar, A., Chhoker, V., Anupriya, S., Sinha, V., Dhanaraj, P.S., Sharma, K., **Verma, M.**, Sen, S., Jayaraj, P. "Immunohistochemical Evaluation of Cyclooxygenase-2 as a Poor Prognostic Marker for Eyelid Sebaceous Gland Carcinoma." Poster presented at 5th International Conference on Stem Cells and Cancer (ICSCC-2014): Proliferation, Differentiation and Apoptosis" at JNU from 8th-10th November, 2014.
19. Tanaya, B, Sameeksha, Y., Mandeep, G, Megha, S, Christeena, B, Rhythm, P, Ankita, Nikita, G , P.S. Dhanaraj, Kameshwar S, **Mansi V**, Seema S, Perumal J. "Immunohistochemical evaluation of PPAR γ as the candidate marker for sebaceous differentiation and its association with aggressive Eyelid Sebaceous Gland Carcinoma". Poster presented at 5th International Conference on Stem Cells and Cancer (ICSCC-2014): Proliferation, Differentiation and Apoptosis" at JNU from 8th-10th November, 2014.

20. Muralidharan, M., Ghosh, A., Singhvi, N., **Dhanaraj, P. S.**, Lal, R., and Verma, M. "An approach to classify uncharacterized species of *Campylobacter* by exploring the internal features of housekeeping genes". Poster presented at National Symposium on Recent Trends in Innovative Research at Undergraduate: Science and Society (RTIRUGSS) at Sri Venkateswara College, University of Delhi from February 28-March 2, 2013.
21. Samarth, Kapuria, A., Patel, D. D., **Dhanaraj, P. S.**, Lal, R., and Verma, M. "An easy identification of *Proteus* species for characterizing pathogenic strains and to record nonrepetitive data in the database". Poster presented at National Symposium on Recent Trends in Innovative Research at Undergraduate: Science and Society (RTIRUGSS) at Sri Venkateswara College, University of Delhi from February 28-March 2, 2013.
22. Menon, A., Gahlot, S., **Dhanaraj, P.S.**, Patel, D. D., Lal, R., and Verma, M. "An effortless detection and identification of the uncharacterized strains of genus *Yersinia* via 16S rRNA gene sequences". Poster presented at National Symposium on Recent Trends in Innovative Research at Undergraduate: Science and Society (RTIRUGSS) at Sri Venkateswara College, University of Delhi from February 28-March 2, 2013.
23. Dhanaraj, P.S., **Verma, M.**, Dubey, M., Yadav, G., Kapuria, A., Ghosh, A., Muralidharan, M.S., Lal, D., Lal, R. "Culture-dependent and culture-independent Bacterial Diversity from Soil Samples of River Yamuna". Poster presented in the 56th Annual Conference of the Association of Microbiologists of India entitled "56th Annual conference of Association of Microbiologists of India (AMI-2015) & International Symposium on "Emerging Discoveries in Microbiology"" held at JawaharLal Nehru University, Delhi, India from 7-10 December, 2015.
24. **Verma, M.**, Puri, A., Rai, A., Dhanaraj, P.S., Lal, R. "An in silico approach for identification of the pathogenic species, *Helicobacter pylori* and its relatives". Poster presented in the 56th Annual Conference of the Association of Microbiologists of India entitled "56th Annual conference of Association of Microbiologists of India (AMI-2015) & International Symposium on "Emerging Discoveries in Microbiology" held at JawaharLal Nehru University, Delhi, India from 7-10 December, 2015.
25. Nidhi Mittal, Kavita Kumari, Akanksha Kashyap, Manisha Bhardwaj, Jyoti Bodwal, Aakriti Aggarwal, Shruthi Gopiranjana, Shivani Sukhralia, Shradha Bhatnagar, Rashmika Puri, Aditi Sharma, Shabnam Bano, Yugal Sandilya, P.S. Dhanaraj, Neeti Mehla, YVR Kameshwar Sharma, Rup Lal, **Mansi Verma.** "Comparative genomics of Dengue Virus to Explore Potential Candidates for Novel Drug Targets". Poster presented in Indo-Portuguese Workshop on "Emerging Trends of Nanotechnology in Chemistry and Biology" from 12-13 February, 2016 at Hansraj College, University of Delhi.
26. Shradha, Rashmika, Shivani, Shruthi, Kavita, Aakriti, Yugal, Nidhi, Aditi, Akanksha, Manisha, Jyoti, Shabnam, P.S. Dhanaraj, Neeti Mehla, YVR Kameshwar Sharma, Rup Lal, **Mansi Verma.** "Dengue virus: Comparative genomics to explore potential markers for potential drug targets". Poster presented in National Symposium on "trends in research and innovations in life sciences at undergraduate level" on 30 March, 2016 at Deen Dyal Upadhyay College, University of Delhi.
27. Ayush Puri, Arshiya Rai, P.S. Dhanaraj, Rup Lal, **Mansi Verma.** "Helicobacter pylori and its relatives: conserved motifs and in silico Restriction analysis for easy identification". Poster presented in National Symposium on "trends in research and innovations in life sciences at undergraduate level" on 30 March, 2016 at Deen Dyal Upadhyay College, University of Delhi.
28. Kavita Kumari, Nidhi Mittal, Akanksha Kashyap, Manisha Bhardwaj, Jyoti Bodwal, Aakriti Aggarwal, Shruthi Gopirajan, Shivani Sukhralia, Shradha Bhatnagar, Rashmika Puri, Aditi Sharma, Shabnam Bano, Yugal Sandilya, P. S. Dhanaraj, Neeti Mehla, Rup Lal, **Mansi Verma.** "Comparative genomics of Dengue virus to Explore Potential Candidates for Novel Drug Targets". Poster presented at the 94th Foundation Day of University of Delhi at Viceregal Lodge on May 1, 2016.
29. **Mansi Verma**, Nidhi Mittal, Kavita Kumari, Aditi Sharma, Shabnam Bano, Rashmika Puri, Shivani Shukraliya, Shruthi Gopirajan, Shradha Bhatnagar, P. S. Dhanaraj, Neeti Mehla, Rup Lal. "Comparative genomics of Dengue Virus to Explore Potential Candidates for Novel Vaccine Targets". Presented in the 57th Annual Conference of AMI and International Symposium on "Microbes and Biosphere: What's New and What's Next" from November 24-27, 2016.
30. P. S. Dhanaraj, **Mansi Verma**, Jyoti Bodwal, Yugal Sandilya, Manisha Bhardwaj, Aditi Sharma, Aakriti Aggarwal, Neeti Mehla, Rup Lal. "Epigenetics of Dengue virus: Comparative analysis of CpG islands". Presented

in the 57th Annual Conference of AMI and International Symposium on "Microbes and Biosphere: What's New and What's Next" from November 24-27, 2016.

31. Nidhi Mittal, Kavita Kumari, Shradha Bhatnagar, Manisha Bhardwaj, Rashmika Puri, Aditi Sharma, Shabnam Bano, P.S. Dhanaraj, Neeti Mehla, YVR Kameshwar Sharma, Rup Lal, **Mansi Verma**. "Dengue : A Major Threat to public Health" presented in "International Conference and Outreach Program on Environment and Ecology: Sustainability and Challenges" at Conference Centre, University of Delhi, Delhi from 4- 6 January, 2017.
32. Jyoti Bodwal, Yugal Sandilya, Shruthi Gopirajan, Shivani Sukhralia, Aakriti Aggarwal, Akanksha Kashyap, P.S. Dhanaraj, Neeti Mehla, YVR Kameshwar Sharma, Rup Lal, **Mansi Verma**. "CPG Islands in Dengue Virus: A Solution to Combat Dengue" presented in "International Conference and Outreach Program on Environment and Ecology: Sustainability and Challenges" at Conference Centre, University of Delhi, Delhi from 4- 6 January, 2017.
33. Vaibhav Sharma, Amit Bhatt, Rishabh Yadav, Akshanshi Gulani, **Mansi Verma**. Poster presented on "Phylogenomics of phylum Proteobacteria: Resolving complex relationships" at International conference on the Theme: Current Trends In Microbiology And Microbiome Research: A Global Perspective (Ctm 2019) organized by INSCR and Department of Microbiology, MDU during October 11-12, 2019 at Maharshi Dyanand University, Rohtak, India.
34. Arsha Liz M Jos, Vaibhav Sharma, Rishabh Yadav, Amit Bhatt, Akshanshi Gulani, Akshita Khosla, Nirmegh Basu, Amit Vashishtha, **Mansi Verma**. Poster presented on "Comparative Phylogenetic Analysis of Phylum Proteobacteria: Resolving the Classification System" at International E-conference on "Health and Research in Current Scenario: with special emphasis on Covid-19 virus genomics and pathogenicity" jointly organized by Sri Venkateswara College, University of Delhi and PhiXgen Pvt. Ltd. on July 17, 2020.
35. Shiva Satija, Amit Bhatt, Vaibhav Sharma, Rajshree, Kanishka Kumar, Twinkle Yadav, Muskan Prajapati, Vipasha, Vishakha Gupta, Shubhi, **Mansi Verma**. Poster presented on "CpG islands in Coronaviruses and its implications towards pathogenicity" at International E-conference on "Health and Research in Current Scenario: with special emphasis on Covid-19 virus genomics and pathogenicity" jointly organized by Sri Venkateswara College, University of Delhi and PhiXgen Pvt. Ltd. on July 17, 2020.
36. Dravie Bansal, Pranjal Vats, Rajan Rolta, Shubhangi Antil, Inderpreet Singh, Ishika Sharma, Amit Vashishtha, **Mansi Verma**. Poster presented on "Computational exploration of broad spectrum drugs for their antiviral activity against dengue" at the 6th International INSCR e-Conference on "Microbes in Sustainable Development: Clinical Microbiology And Infectious Diseases" jointly organised by INSCR, Sri Venkateswara College, Gargi College, Deen Dayal Upadhyay College, Ramjas College, Kirori Mal College, Acharya Narendra Dev College, Maitreyi College, University of Delhi, PhiXgen Pvt. Ltd., Magadha University and Allahabad University on November 17th, 2021.
37. Rashi Raj, Rajan Rolta, Aditi Singh, Bhavya Birla, Chahat Dhawan, Ritika Semwal, Amit Vashishtha, **Mansi Verma**. Oral Presentation presented on "In Silico Screening Of Phytocompounds To Cure Dengue" at the 6th International INSCR E Conference on "Microbes in Sustainable Development: Clinical Microbiology And Infectious Diseases" jointly organised by INSCR, Sri Venkateswara College, Gargi College, Deen Dayal Upadhyay College, Ramjas College, Kirori Mal College, Acharya Narendra Dev College, Maitreyi College, University of Delhi, PhiXgen Pvt. Ltd., Magadha University and Allahabad University on November 17th, 2021.

TECHNIQUES KNOWN

Microbiology, Molecular Biology and Genomics

Isolation of bacteria from soil; Maintenance of pure cultures/ clones and their preservation by glycerol stocks; Characterization of bacteria based on their morphological, physiological and biochemical

properties; Resting cell assay; Isolation, purification and quantification of DNA; Isolation of plasmid DNA; **Whole genome sequencing, assembly analysis and validation; Trouble shooting sequencing of GC rich regions; Gap filling by primer walking and transposition; Annotations;** Preparation of competent cells; Restriction digestion and ligation techniques; Transformation of bacterial cells; Comparative genomics and phylogenomics; Cloning; PCRs; Southern Hybridization; DNA-DNA Hybridization; *in-vivo* HGT assay.

Biochemical and Analytical Techniques

Qualitative and quantitative analysis of carbohydrates, lipids, polyamines and quinones from bacterial cells; Thin layer chromatography.

Computer Skill/Bioinformatics

Genomics/Assembly software: Phred, Phrap, Consed; Sequence analyzer; **Alignment/Comparative genomics softwares:** BLAST, Clustal X; BlastClust, Mauve, Mummer, DNAPlotter, Circos, Clone Manager; **Annotation softwares:** ORFinder, Artemis; RAST; **Phylogenetics:** PHYLIP, TREECON, MEGA, CVtree, OGTree, FastTree; **Scientific databases:** RDP, NCBI, KEGG, CAMP; Other web-based bioinformatics tools along with daily applicable software like Microsoft Office, Photoshop, CorelDRAW, ChemDRAW and PDF Writer which are used in generation and presentation of scientific data and reports.

PERSONAL INFORMATION

Date of Birth	20 th November, 1983
Gender	Female
Nationality	Indian
Marital Status	Unmarried
Language(s) Known	English, Hindi
Permanent Address	B-169, Sector 19, Noida, UP
Designation	Assistant Professor at Hansraj College, University of Delhi