




Faculty Details Proforma

Title	Dr.	First Name	Sunita	Last Name	Yadav	Photograph
Designation		Assistant Professor				
Address		Daulat Ram College, Patel Marg 4				
Email – ID		sunitayadav@dr.du.ac.in				
Educational Qualification						
Degree		Institution				Year
Ph.D.		Department of Biotechnology (JNU)				2014
M.Sc.		Zoology Department, University of Delhi				2005
B.Sc.		Gargi College (Delhi University)				2003
Career Profile						
<p>Dr. Sunita Kumari Yadav's academic interests include immunology, vaccine development, and antimicrobial research. With several publications, an authored book, and NCBI gene sequence submissions, Dr. Yadav's research spans vaccine development against <i>A. hydrophila</i>, public health impacts of COVID-19, and post-COVID-19 sequelae, supported by major and minor grants. She is keen to explore and address the global antimicrobial menace alongside advancing vaccine development for infectious diseases. She is deeply committed to her teaching and mentorship, striving to inspire and guide students to actively pursue research and innovation.</p>						
Administrative Assignments						
<ol style="list-style-type: none">1. Served as Co-convener of the Help Desk Committee in 2024-25.2. Served as Member of the Library Committee in 2023-24.3. Served as Member of the Help Desk Committee in 2023-24.4. Served as Member of the Admission Prospectus Committee in 2022-23.5. Served as Member of the Help Desk Committee in 2022-23.6. Served as Convener of the DRC Grievance Committee under the Admission Committee in 2021-22.7. Served as Science Core Committee Member under the Admission Committee in 2020-21.8. Served as Science Core Committee Member under the Admission Committee in 2019-20.9. Served as Grievance Committee Member under the Admission Committee in 2018-19.10. Served as Admission Committee member under the Admission Committee in 2015-16						
Areas of Interest / Specialization						
Vaccine Development, Molecular Biology, Immunology, Animal Biotechnology						

Subjects Taught (in the last three years)
Animal Biotechnology, Non-chordates, Genetics, Food, Nutrition and Health
Research Guidance
<ol style="list-style-type: none"> 1. JRF student, Ms. Aayushi enrolled in CSIR project 2. Ms. Lekhni Mandre, B. Tech Biotechnology, Amity University, Gwalior 3. Ms. Radhika Singh Jadon, B. Tech Biotechnology, Amity University, Gwalior
Publications Profile (in the last three years)
<ol style="list-style-type: none"> 1. Bhardwaj P, Jetly S, Yadav S, Kaushik R, Naidu K, Saluja D and Taneja J (2024). Comparative analyses of symptoms, severity, and breakthrough infections in vaccinated and unvaccinated individuals during three waves of COVID-19 in India. <i>Acta Virol.</i> 68:13536. doi:10.3389/av.2024.13536 2. Senrung A., Tripathi T., Janjua D., Yadav S. K., Chhokar A., Aggarwal N., Yadav J., Chaudhary A., Joshi U., Sethi P., Bharti A. C. (2023). Chick chorioallantoic membrane: a valuable 3D <i>in vivo</i> model for screening nanoformulations for tumor antiangiogenic therapeutics. <i>Int. J. Dev. Biol.</i> 67: 115-135. https://doi.org/10.1387/ijdb.230198pb 3. Bhardwaj, Priya; Yadav, Sunita K.; Jetly, Sunita; Saluja, Daman; Taneja, Jyoti. Unveiling parental perspectives: COVID-19 vaccination for children in India. <i>Journal of Family Medicine and Primary Care</i> 13(4):p 1481-1487, April 2024. DOI: 10.4103/jfmpc.jfmpc_1485_23 4. Arora G, Taneja J, Bhardwaj P, Goyal S, Naidu K, Yadav SK, Saluja D, Jetly S. Adverse events and breakthrough infections associated with COVID-19 vaccination in the Indian population. <i>J Med Virol.</i> 2022 Jul;94(7):3147-3154. doi: 10.1002/jmv.27708. Epub 2022 Mar 21. PMID: 35261064; PMCID: PMC9088477 5. Jetly S, Bhardwaj P, Arora G, Saluja D. 2. Jetly S, Bhardwaj P, Arora G, Saluja D, Yadav SK, Naidu KP, Taneja J. Hesitancy and Acceptance of COVID-19 Vaccination Amidst the Second Wave of Pandemic in India: A General Population Study. <i>Asia Pac J Public Health.</i> 2022 Feb 8:10105395221077062. doi: 10.1177/10105395221077062. Epub ahead of print. PMID: 35135358. 6. Yadav, SK., Bhardwaj, P., Gupta, P., Saluja, D., Jetly, S., & Taneja, J. (2022). Association of gender, age, and comorbidities with COVID-19 infection in India. <i>Journal of Integrated Science and Technology</i>, 10(2), 61-66. Retrieved from http://pubs.iscience.in/journal/index.php/jist/article/view/1411 7. Taneja, J., Bhardwaj, P., Yadav, SK., & Saluja, D. (2022). Association of ABO blood group and antibody class with susceptibility and severity of COVID-19 infection in Indian Population. <i>Journal of Integrated Science and Technology</i>, 10(1), 24-28. Retrieved from https://pubs.iscience.in/journal/index.php/jist/article/view/1409 8. Bhardwaj P, Yadav SK, Taneja J. Magnitude and associated factors of menstrual irregularity among young girls: A cross-sectional study during COVID-19 second wave in India. <i>J Family Med Prim Care.</i> 2022 Dec;11(12):7769-7775. doi: 10.4103/jfmpc.jfmpc_1201_22. Epub 2023 Jan 17. PMID: 36994040; PMCID: PMC10041006. 9. Yadav SK, Panwar D, Singh A, Tellis MB, Joshi RS, Dixit A. Molecular phylogeny, structure modeling and in silico screening of putative inhibitors of aerolysin of <i>Aeromonas hydrophila</i> EUS112. <i>Journal of Biomolecular Structure and Dynamics.</i> 2021 Apr 30:1-10. doi: 10.1080/07391102.2021.1918254. Epub ahead of print. PMID: 33931004. 10. Yadav SK, Dash P, Sahoo PK, Garg LC, Dixit A. Recombinant outer membrane protein OmpC induces protective immunity against <i>Aeromonas hydrophila</i> infection in <i>Labeo rohita</i>. <i>Microbial Pathogenesis.</i> 2021 Jan;150:104727. doi: 10.1016/j.micpath.2020.104727. Epub 2021 Jan 9. PMID: 33429054. 11. Yadav SK, Yadav R. Case Study: Unlocking resemblance between tuberculosis and cancer. <i>Medical Research Journal</i> 2020. 5 (4), 286-289 12. Yadav SK, Dash P, Sahoo PK, Garg LC, Dixit A. Modulation of immune response and protective efficacy of recombinant outer-membrane protein F (rOmpF) of <i>Aeromonas hydrophila</i> in <i>Labeo rohita</i>. <i>Fish & shellfish immunology.</i> 2018 Sep;80:563-572. doi: 10.1016/j.fsi.2018.06.041. Epub 2018 Jun 27. PMID:

29958980.

13. Dash P, Yadav SK, Garg LC, Dixit A, PK Sahoo. Post-challenge immune gene expression profiling in rohu, Labeo rohita vaccinated with modified adjuvant-based *Aeromonas hydrophila* outer membrane protein R formulation. Veterinarski arhiv. 2017. 87 (5), 607-622
14. Yadav SK, Meena JK, Sharma M, Dixit A. Recombinant outer membrane protein C of *Aeromonas hydrophila* elicits mixed immune response and generates agglutinating antibodies. Immunologic Research. 2016 Aug;64(4):1087-99. doi: 10.1007/s12026-016-8807-9. PMID: 27328672.
15. Yadav SK, Marbaniang CN, Sharma V, Dixit A. Heterologous Soluble Expression of Recombinant ompR of *Aeromonas hydrophila* and Its Immunogenic Potential. Advances in Bioscience and Biotechnology 2015. 6 (07), 443.
16. Yadav SK, Sahoo PK, Dixit A. Characterization of immune response elicited by the recombinant outer membrane protein OmpF of *Aeromonas hydrophila*, a potential vaccine candidate in murine model. Molecular Biology Reports. 2014 Mar;41(3):1837-48. doi: 10.1007/s11033-014-3033-9. Epub 2014 Jan 17. PMID: 24435974.
17. Agarwal S, Yadav SK, Dixit A. Heterologous expression of Translocated promoter region protein, Tpr, identified as a transcription factor from *Rattus norvegicus*. Protein Expression Purification. 2011 May;77(1):112-7. doi: 10.1016/j.pep.2011.01.001. Epub 2011 Jan 7. PMID: 21216290.
18. Alka Jadaun and Sunita Kumari Yadav (2012) An insight in to the cancer origin: Somatic mutations play an immense role. Biotech today.
19. Alka Jadaun and Sunita Kumari Yadav (2012) Cancer stem cells: The future therapeutic targets of cancer. Biotech today.

Publication (Books)

1. **Sunita K. Yadav**. Practical aspects of Animal Biotechnology and Immunology, Authored cum edited book, Astral publications. ISBN: 9789359198422
2. Neha Niharika, **Sunita K. Yadav**, Jyoti Singh. Chapter: Cytokines in the book 'An Interplay of Cellular and Molecular Components of Immunology'. December 2022. ISBN: 9781003286424. CRC Press (Taylor and Francis)
3. Neha Niharika, **Sunita K. Yadav**. Essentials of Immunology (Laboratory Manual)/Assay based on agglutination reaction. October 2022. ISBN: 978-81-958057-4-7. Prestige publishers.

Sequence submission to NCBI data bank

1. **SK Yadav**, PK Sahoo, and Aparna Dixit (2012) *Aeromonas hydrophila* (EUS112) OmpF gene for porin. NCBI Accession No. HF545837
2. **SK Yadav**, JK Meena, PK Sahoo and Aparna Dixit (2012) *Aeromonas hydrophila* (EUS112) OmpC gene for porin. NCBI Accession No. HF546053

Research Projects (Major Grants/Research Collaboration)

1. To investigate the clinical spectrum; health trajectories, incidence and risk factors of post acute sequelae of COVID-19 in a multicentric cohort study in Delhi University funded by CSIR under the ASPIRE scheme (2024-2027, ₹30 Lakhs) as Co-PI.
2. Studying photocatalytic properties of metals, metal oxides, and nanoparticles to prevent bacterial growth funded by Daulat Ram College under the Navdhara scheme (2024-2025, ₹75,000) as Co-PI.

Awards and Distinctions

- Received First Prize for attaining the highest grade in B.Sc. 2nd Year.
- Achieved the highest grade in the 3rd Year of B.Sc.
- NS-CAS fellowship awarded throughout M.Sc. course
- Awarded JRF and SRF by CSIR for the period 2007-2012.
- Ranked in the top 20% of candidates and invited by CSIR to appear for the SPM Fellowship examination.

Other Activities

- Attended NCERT workshop as a resource person to design project-based learning course for XII class biology students from 21 Oct 2024 to 25 Oct 2024
- Served as a resource person in the “In-house Skill Development Program on Digital Literacy” at Daulat Ram College, Zoology Department, from 4th to 10th July 2018.
- Served as a resource person in the “Inspire Science Camp” at Daulat Ram College, Zoology Department, from 17th to 21st December 2018.
- Served as an organizing committee member for the “Inspire Science Camp” at Daulat Ram College, Zoology Department, from 17th to 21st December 2018.
- Coordinated the Life Science Inaugural Lecture on “The Wonderful World of Long Non-Coding RNAs” by Dr. Mary K. Ekka (CSIR-IGIB) through a webinar on 27th January 2021.
- Coordinated the Student Development Program (SDP) on ICT tools for supernumerary admitted seats, conducted online from 6th to 9th January 2021.
- Served as a resource person for the SDP on ICT tools for supernumerary admitted seats, conducted online from 6th to 9th January 2021.
- Delivered a guest lecture in a National Webinar organized by Tilka Manjhi Bhagalpur University, Bihar, on 16th April 2021, on the topic "Role of Recombinant DNA Technology in Production of Vaccine & Challenges in Stem Cell Collection."
- Coordinated a Student Development Program on "Research Analysis: Tools and Techniques" held virtually from 16th to 21st August 2021.
- Served as a resource person for the Student Development Program on "Research Analysis: Tools and Techniques" held virtually from 16th to 21st August 2021.
- Coordinated the organizing committee for a virtual international conference on "Infections and Immunity" held online from 8th to 10th October 2021.
- Coordinated the Student Development Program on "Academic Writing," conducted online from 18th December 2022 to 15th February 2023.
- Served as a resource person for the Student Development Program on "Academic Writing," conducted online on 1st January 2023.
- Served as a resource person for the In-House Skill Development Program on "Unveiling the Animal World in Behavioral Way" at Daulat Ram College on 23rd March 2023.
- Served as a resource person for the In-House Skill Development Program on "Life Sciences: Tools and Techniques" at Daulat Ram College from 13th to 19th July 2023.
- Served as a resource person for the In-House Skill Development Program on "Lifestyle Disorders" at Daulat Ram College from 20th January to 3rd February 2024.
- Served as a resource person for the In-House Skill Development Program on "Economic Importance and Management of Beneficial Insects" at Daulat Ram College from 2nd March to 20th April 2024.