CURRICULUM VITAE

AMITA SUNEJA DANG

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Centre for Medical Biotechnology
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EDUCATIONAL QUALIFICATION

- Ph.D. 2007, Department of Biosciences, M.D. University, Rohtak. (Haryana)
- CSIR JRF- NET, Dec 2000.
- M.Sc. (Zoology), 2000, M. D. University, Rohtak.

POSITIONS AND AFFILIATIONS

Teaching Experience: 14 years

- **Sept,2022-Present: Associate Professor,** Centre for Medical Biotechnology, M.D. University, Rohtak
- **Sept,2010-Sept,20122**: **Assistant Professor,** Centre for Medical Biotechnology, M.D. University, Rohtak
- **Aug,2007- March 2010**: **Lecturer**, Govt. College for Girls, Sector-42, Chandigarh
- **Aug,2006- March,2007**: **Lecturer**, Govt. College, Sector-11, Chandigarh

RESEARCH PROFILE

Research Experience **: 15 years**

Research Area **: Molecular Diagnostics**

Research Guidance (Ph.D.):

Ongoing **: Four**
Completed **: Four**

RESEARCH PROJECTS

- Co-PI in the Interdisciplinary life science (IPLS) program for advance research and education for 'Proteomic analysis of malaria parasite and its vector under different physiological conditions' granted by DBT, New Delhi. (completed)
- "To study the association of IL-18 serum level with polycystic ovary syndrome" under Radha Krishanan fund 2013-2014 (completed)
- "Evaluating the role of rs2414096 polymorphism in predisposition of polycystic ovary syndrome" under Radha Krishanan fund 2017-2018 (completed)
- Evaluating the role of biopriming and nanopriming in Cicer arietinum: a genomics and proteomics approach under drought stress 2022 (Ongoing)

RESEARCH PUBLICATIONS

RESEARCH PAPERS

- Rani, S., Kumar, P., Dahiya, P., Mehta, A., **Dang, A. S**., & Suneja, P. (2025). Optimization, Characterization and Antibacterial Activity of Copper Nanoparticles Biosynthesized Using Pantoea agglomerans CPHN2. *Indian Journal of Microbiology*, 1-12. **(I.F-1.6)**
- Gaba, K., Malhotra, P., Kumar, A., Suneja, P., & **Dang, A. S**. (2024). Understanding the Genetic Basis of Celiac Disease: A Comprehensive Review. *Cell Biochemistry and Biophysics*, 1-12. (**I.F-2.5)**
- Dahiya, P., Kumar, P., Rani, S., **Dang, A. S**., & Suneja, P. (2024). Draft genome sequence of halotolerant plant growth-promoting Bacillus paralicheniformis MHN12. *Microbiology Resource Announcements*, *13*(4), e01138-23.
- Dahiya, P., Kumar, P., Rani, S., **Dang, A. S**., & Suneja, P. (2024). Comparative Genomic and Functional Analyses for Insights into Pantoea agglomerans Strains Adaptability in Diverse Ecological Niches. *Current Microbiology*, *81*(8), 254. **(I.F-2.6)**
- Bhatnager, R., Gaba, K., & **Dang, A. S**. (2024). Comprehensive Analysis of Damage Associated SNPs of Luteinizing Hormone and Its Receptor: A Computational Approach. *American Journal of Reproductive Immunology*, *91*(6), e13886 **(I.F-2.4)**
- Rani, S., Dahiya, P., Sharma, A., Vashisth, Y., Arora, K., **Dang, A. S**., & Suneja, P. (2024). Evaluating the role of biopriming and nanopriming on the morphometric, biochemical, and yield parameters of chickpea (Cicer arietinum L.) under drought stress. *Plant Stress*, *14*, 100675. **(I.F-6.9)**
- Rani, S., Kumar, P., Dahiya, P., Gupta, A., Arora, K., **Dang, A. S**., & Suneja, P. (2024). Effect of biopriming and nanopriming on physio-biochemical characteristics of Cicer arietinum L. under drought stress. *Plant Stress*, *12*, 100466. **(I.F-6.9)**
- Batra, M., Bhatnager, R., Kumar, A., Suneja, P., & **Dang, A. S.** (2022). Interplay between PCOS and Microbiome: The road less travelled. *American Journal of Reproductive Immunology*. **(I.F-2.4)**
- Kumar, P., Rani, S., Dahiya, P., Kumar, A., **Dang, A. S.,** & Suneja, P. (2022). Whole genome analysis for plant growth promotion profiling of Pantoea agglomerans CPHN2, a non-rhizobial nodule endophyte. *Frontiers in Microbiology*, *13*, 998821. **(I.F-4.5)**
- Kumar, P., Chauhan, V., **Dang, A. S**., Kumar, A., & Suneja, P. (2022). Draft genome sequence of Pantoea agglomerans CPHN2, a potential plant-growth-promoting Endophyte. *Microbiology Resource Announcements*, *11*(8), e00192-22.
- Rani, S., Kumar, P., Dahiya, P., **Dang, A. S**., & Suneja, P. (2022). Biogenic Synthesis of Zinc Nanoparticles, Their Applications, and Toxicity Prospects. *Frontiers in Microbiology*, *13*. **(I.F-4.5)**
- Rani, S., Kumar, P., Dahiya, P., Maheshwari, R., **Dang, A. S**., & Suneja, P. (2022). Endophytism: A Multidimensional Approach to Plant–Prokaryotic Microbe Interaction. *Frontiers in Microbiology*, *13*. (**I.F-4.5)**
- Bhutani, N., Maheshwari, R., Sharma, N., Kumar, P., **Dang, A. S**., & Suneja, P. (2022). Characterization of halo-tolerant plant growth promoting endophytic Bacillus licheniformis MHN 12. *Journal of Genetic Engineering and Biotechnology*, *20*(1), 113. **(I.F-3.6)**
- Lather, M., Mallick, P. K., Sharma, D., Kale, S., **Dang, A. S**., Adak, T., & Singh, O. P. (2022). Population genetic structure of the malaria vector Anopheles fluviatilis species T (Diptera: Culicidae) in India. *Medical and Veterinary Entomology*, *36*(2), 194-202. **(I.F-1.9)**
- Deswal, R., Narwal, V., Kumar, P., Verma, V., **Dang, A. S**., & Pundir, C. S. (2022). An improved amperometric sarcosine biosensor based on graphene nanoribbon/chitosan nanocomposite for detection of prostate cancer. *Sensors International*, *3*, 100174

- Bhatnager, R., Bhasin, M., Arora, J., & **Dang, A. S**. (2021). Epitope based peptide vaccine against SARS-COV2: an immune-informatics approach. *Journal of Biomolecular Structure and Dynamics*, *39*(15), 5690-5705. **(I.F-2.7)**
- Deswal, R., Narwal, V., **Dang, A**., & Pundir, C. S. (2020). The prevalence of polycystic ovary syndrome: a brief systematic review. *Journal of Human Reproductive Sciences*, *13*(4), 261. (**I.F-1.1)**
- Deswal, R., & **Dang, A. S.** (2020). Dissecting the role of micro-RNAs as a diagnostic marker for polycystic ovary syndrome: a systematic review and meta-analysis. *Fertility and sterility*, *113*(3), 661-669. **(I.F-7)**
- Deswal, R., Nanda, S., & **Dang, A. S**. (2019). Single nucleotide polymorphisms in treatment of polycystic ovary syndrome: a systematic review. *Drug Metabolism Reviews*, *51*(4), 612-622. **(I.F.: 6.984)**
- Deswal, R., Nanda, S., Ghalaut, V. S., Roy, P. S., & **Dang, A. S**. (2019). Cross-sectional study of the prevalence of polycystic ovary syndrome in rural and urban populations. *International Journal of Gynecology & Obstetrics*, *146*(3), 370-379. **(I.F-2.4)**
- Deswal, R., Nanda, S., & **Dang, A. S**. (2019). Association of Luteinizing hormone and LH receptor gene polymorphism with susceptibility of Polycystic ovary syndrome. *Systems Biology in Reproductive Medicine*, *65*(5), 400-408. **(I.F-2.958).**
- Bhatnager, R., Senwal, A., Nanda, S., & **Dang, A. S**. (2019). Association of rs6259 polymorphism with SHBG levels and Poly Cystic Ovary Syndrome in Indian population: a case control study. *Molecular biology reports*, *46*(2), 2131-2138. **(I.F-2.8)**
- Bhatnager, R., Jalthuria, J., Sehrawat, R., Nanda, S., & **Dang, A. S.** (2019). Evaluating the association of TNF α promoter haplotype with its serum levels and the risk of PCOS: a case control study. *Cytokine*, *114*, 86-91. **(I.F-3.7)**
- Bhatnager, R., Bhasin, M., & **Dang, A. S**. (2018). Comprehensive analysis of damage associated SNPs of MMP9 gene: A computational approach. *Computational Biology and Chemistry*, *77*, 97-108. **(I.F-3.1)**
- Bhatnager, R., & **Dang, A. S**. (2018). Comprehensive in-silico prediction of damage associated SNPs in Human Prolidase gene. *Scientific reports*, *8*(1), 1-14. **(I.F-3.9)**
- Bhatnager, R., Nanda, S., & Dang, A. S. (2018). Plasma prolidase levels as a biomarker for polycystic ovary syndrome. *Biomarkers in Medicine*, *12*(6), 597-606. **(I.F-2.498)**
- Bhatnager, R., Nanda, S., & **Dang, A. S**. (2018). The role of rs267606943 polymorphism in the prolidase gene and plasma prolidase in polycystic ovary syndrome. *British Journal of Biomedical Science*, *75*(3), 153-155. **(I.F-4.6)**
- Bhatnager, R., Dangi, M., & **Dang, A. S**. (2018). Comprehensive analysis of damage associated SNPs of Sex Hormone Binding Globulin gene. *Journal of Applied Biology and Biotechnology*, *6*(5), 1-1.
- Deswal, R., Nanda, S., & **Dang, A. S**. (2019). Unveiling the association between Vitamin D receptor and poly cystic ovary syndrome–A systematic review and meta-analysis. *International Journal for Vitamin and Nutrition Research*, *87*(3–4), 207-218. **(I.F-2.5)**
- Deswal, R., Yadav, A., & **Dang, A. S**. (2018). Sex hormone binding globulin-an important biomarker for predicting PCOS risk: A systematic review and meta-analysis. *Systems biology in reproductive medicine*, *64*(1), 12-24. **(I.F-3.061)**
- Bhatnager, R., Kaur, R., Dahiya, T., & **Dang, A. S.** (2017). Computational prediction of damage associated non synonymous SNPs of CYP17A1 and CYP19A1 gene. International Journal of Trend in Scientific Research and Development (IJTSRD), 1(6), 635-646.
- Sharma, S., Kumar, S., Tahlan, S., **Dang, A. S.,** & Narasimhan, B. (2016). QSAR Studies of Thiazolidinone Derivatives as Antimicrobial Agents. Der Pharma Chemica, 8(12), 236-246.
- Bhatnager, R., Nanda, S., & **Dang, A. S**. (2016). Increased Prolidase Level and Altered Hormonal Profile in Women with Poly Cystic Ovarian Syndrome. *growth*, *9*, 10. **(I.F-**

4.2)

- Saini, Vandana., Sween, Vishal, **Dang, A. S** and Ajit Kumar(2016).Molecular Dynamics and Docking Simulation Studies of Human Voltage Gated Sodium Channel against Neurotoxins.J Drug Des Res.3(1)1022
- Saini, V., Piplani, S., **Dang, A .S.,** & Kumar, A. (2016). CoMFA, CoMSIA and Docking Studies of Saquinavir Based Peptidomimetic Inhibitors of HIV-1 Protease. *Current Enzyme Inhibition*, *12*(2), 161-169.
- Lather, M., Sharma, D., **Dang, A. S**., Adak, T., & Singh, O. P. (2015). Isolation and characterization of polymorphic microsatellite markers from the Malaria Vector Anopheles fluviatilis Species T (Diptera: Culicidae). *Journal of medical entomology*, *52*(3), 408-412. (**I.F-2)**
- Sharma, D., Lather, M., Mallick, P. K., Adak, T., **Dang, A. S**., Valecha, N., & Singh, O. P. (2015). Polymorphism in drug resistance genes dihydrofolate reductase and dihydropteroate synthase in Plasmodium falciparum in some states of India. *Parasites & vectors*, *8*(1), 1-9. **(IF.: 4.223)**
- Sharma, D., Lather, M., Dykes, C. L., **Dang, A. S**., Adak, T., & Singh, O. P. (2016). Disagreement in genotyping results of drug resistance alleles of the Plasmodium falciparum dihydrofolate reductase (Pfdhfr) gene by allele-specific PCR (ASPCR) assays and Sanger sequencing. *Parasitology research*, *115*(1), 323-328. **(I.F-2)**
- Sharma, D., Lather, M., Adak, T., **Dang, A.S**., (2015). Allele-specific PCR (ASPCR) assays for the detection of mutations in dihydropteroate synthase gene of plasmodium falciparum are highly unreliable. Journal of international academic research for multidisciplinary (5).
- Bhatnager, R., Rani, R., & **Dang, A. S**. (2015). Antibacterial activity of Ferula asafoetida: a comparison of red and white type. *Journal of Applied Biology and Biotechnology*, *3*(2), 0-2. **(I.F-0.85**)
- **Dang, A. S., &** Deswal, R**.** (2014). Prevalence of Depression in Women with Polycystic Ovary Syndrome (PCOS) Research & Reviews: A Journal of Biotechnology Volume 4, Issue 311-16 **(I.F-3.307)**
- **Dang, A. S**., & Deswal, R. (2014). The metabolic syndrome: Time for addressal. *Journal of Health Research and Reviews*, *1*(3), 59.

PROCEEDINGS

- Ritu Deswal, Manisha and **Amita Suneja Dang**. (2015) Association of Interleukin 18 with Polycystic ovary syndrome (PCOS). Proceedings of National Seminar on Innovative researches in life sciences
- Richa Bhatnagar, Monika, Reena Rani and **Amita Suneja Dang**. (2015) Evaluation of antibacterial activity of Moring oleifera extracts, Proceedings of National Seminar on Innovative researches in life sciences
- Pooja Suneja and **Amita Suneja** (2014) Probiotics. Proceedings National Seminar "Next Generation Science: vision 2020 & Beyond"March 8,2014. Department of Zoology, Maharshi Dayanand University, Rohtak (Haryana)
- **Amita Suneja Dang** and Pooja Suneja (2014). Gut microbiota, major health concern: A Review Proceedings National Seminar "Next Generation Science: vision 2020 & Beyond" March 8,2014. Department of Zoology, Maharshi Dayanand University, Rohtak (Haryana)
- **Amita Suneja Dang**, Preeti, Pooja Suneja Madan and Ajit Kumar A (2013). Primary characterization of staining effects of Lawsonia inermis extracts on plant tissues.Proceedings National Seminar "Promising trends in Science Galaxy"March 20,2013. Department of Zoology, Maharshi Dayanand University, Rohtak (Haryana).

BOOK CHAPTERS

- Rani, S., Dahiya, P., Rathi, C., Veerapagu, M., Jeya, K. R., **Dang, A. S.,** & Suneja, P. (2025). Detection of Foodborne Gram-Positive Bacterial Toxins by LC-MS/MS MRM. In *Gram Positive Bacterial Food Borne Pathogens* (pp. 121-125). New York, NY: Springer US.
- Veerapagu, M., Jeya, K. R., **Dang, A. S**., Suneja, P., Rajarajan, T., Sankara Narayanan, A., & Aravinthan, K. (2025). Detection of Foodborne Gram-Positive Bacteria by Microscopic Tool. In *Gram Positive Bacterial Food Borne Pathogens* (pp. 85-94). New York, NY: Springer US.
- Veerapagu, M., Jaabir, M. M., Aravinthan, K., Jeya, K. R., **Dang, A. S**., Suneja, P., & Sankara Narayanan, A. (2025). Detection of Foodborne Gram-Positive Bacterial Toxins by ELISA. In *Gram Positive Bacterial Food Borne Pathogens* (pp. 201-206). New York, NY: Springer US.
- Rani, S., Anshu, Dahiya, P., Rathi, C., **Dang, A. S**., Suneja, P., & Narayanan, A. S. (2024). Detection of Plant-Associated Fungi by Nucleic Acid-Based Technique. In *Plant Microbiome Engineering* (pp. 161-165). New York, NY: Springer US.
- Jeya, K. R., Veerapagu, M., Narayanan, A. S., Aravinthan, K., Suneja, P., & **Dang, A. S.** (2024). Detection of Plant Growth Promoting Fungal Community. *Plant Microbiome Engineering*, 83.
- Rani, S., Dahiya, P., Rathi, C., Narayanan, A. S., **Dang**, **A. S**., & Suneja, P. (2024). Collection and Processing of Plant Endophytes from Large Woody Plants. In *Plant Microbiome Engineering* (pp. 31-39). New York, NY: Springer US.
- Dahiya, P., Rani, S., Rathi, C., Narayanan, A. S., Suneja, P., & **Dang, A. S**. (2024). Collection and Processing of Bacteria from Plant Vascular Tissues. In *Plant Microbiome Engineering* (pp. 11-18). New York, NY: Springer US.
- Rani, S., Kumar, P., Dahiya, P., Narayanan, A. S., Suneja, P., & **Dang, A. S**. (2024). Omics Tools in Plant–Microbiome Interactions. In *Plant Microbiome Engineering* (pp. 341-350). New York, NY: Springer US.
- Rathi, C., Rani, S., Dahiya, P., Mohamed, V. B. H., **Dang, A. S**., & Suneja, P. (2024). Plant Microbiome Engineering to Improve Drought Stress Tolerance. In *Plant Microbiome Engineering* (pp. 521-526). New York, NY: Springer US.
- Dahiya, P., Rani, S., Rathi, C., Jeya, K. R., Veerapagu, M., Suneja, P., & **Dang, A. S**. (2024). Detection of Microalgal Community from Soil and Plant Root. In *Plant Microbiome Engineering* (pp. 91-97). New York, NY: Springer US.
- Rani, S., Dahiya, P., Rathi, C., Narayanan, A. S., **Dang, A. S**., & Suneja, P. (2024). Collection and Processing of Plant Endophytes from Large Woody Plants. In *Plant Microbiome Engineering* (pp. 31-39). New York, NY: Springer US.
- Rathi, C., Rani, S., Dahiya, P., Narayanan, A. S., **Dang, A. S**., & Suneja, P. (2024). Plant Microbiome Engineering to Improve Plant Growth Promotion and Biocontrol. In *Plant Microbiome Engineering* (pp. 493-497). New York, NY: Springer US.
- Pushkarna, S., Kumar, A., Narayanan, A. S., Suneja, P., & **Dang, A. S**. (2024). Plant-Microbiome Engineering to Improve Stress Tolerance. In *Plant Microbiome Engineering* (pp. 509-519). New York, NY: Springer US.
- Rani, S., Anshu, Dahiya, P., Rathi, C., **Dang, A. S**., Suneja, P., & Narayanan, A. S. (2024). Detection of Plant-Associated Fungi by Nucleic Acid-Based Technique. In *Plant Microbiome Engineering* (pp. 161-165). New York, NY: Springer US.
- Rani, S., Kumar, P., Dahiya, P., Priya, **Dang, A. S**., & Suneja, P. (2023). Synthesis of Nanoparticles by Microbes. In *Role of Microbes in Sustainable Development: Human Health and Diseases* (pp. 629-640). Singapore: Springer Nature Singapore.

- Pushkarna, S., Bhatnager, R., Kumar, A., Suneja, P., & **Dang, A. S**. (2023). Role of Microbiome in Reproductive Health: An Expanding Dimension. In *Role of Microbes in Sustainable Development: Human Health and Diseases* (pp. 361-394). Singapore: Springer Nature Singapore.
- Rani, S., Kumar, P., Dahiya, P., **Dang, A. S**., & Suneja, P. (2023). Microbial Secondary Metabolites: Targeting Tumors and Associated Challenges. In *Role of Microbes in Sustainable Development: Human Health and Diseases* (pp. 429-439). Singapore: Springer Nature Singapore.
- Suneja, P., Kumar, P., Rani, S., Simran, **Dang, A.S**. (2023). Identification of Fungal Endophytes by ITS rDNA Technique. In: Sankaranarayanan, A., Amaresan, N., Dwivedi, M.K. (eds) Endophytic Microbes: Isolation, Identification, and Bioactive Potentials. Springer Protocols Handbooks. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-2827-0_11.
- Rani, S., Kumar, P., Deepika, **Dang, A.S**., Suneja, P. (2023). Detection of Endophytes by Reactive Oxygen Staining. In: Sankaranarayanan, A., Amaresan, N., Dwivedi, M.K. (eds) Endophytic Microbes: Isolation, Identification, and Bioactive Potentials. Springer Protocols Handbooks. Humana, New York, NY. https://doi.org/10.1007/978-1-0716- 2827-0_9
- Kumar, P., Rani, S., Sarita, **Dang, A.S**., Suneja, P. (2023). Detection of Endophytes by Electron Microscope. In: Sankaranarayanan, A., Amaresan, N., Dwivedi, M.K. (eds) Endophytic Microbes: Isolation, Identification, and Bioactive Potentials. Springer Protocols Handbooks. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-2827-0_8
- Deswal, R., Nanda, S., & **Dang, A.S**. Evaluating the Association of Vitamin D Receptor Gene Polymorphism with the Risk of Polycystic Ovary Syndrome Trends in Technology for Agriculture, Food, Environment and Health *Editors* R. K. Behl Machiavelli Singh Achim Ibenthal Manfred J. Kern Pg -495-503 Agrobios Digitals, Jodhpur
- Amita Suneja Dang,Neha Verma, Shiv Kumar Giri and Anil Kumar. Probiotics and Health Benefits Nutraceuticals: Food Applications and Health Benefits 978-1-68507-209-30 Nova Science Publishers, USA

ASSOCIATION WITH PROFESSIONAL BODIES

- Life Member, Indian Science Congress Association
- Life Member, Biotech Research Society of India
- Life member, Association of Microbiologists of India

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