### Dr Padma Srikanth

Degree : MBBS, MD

#### **Designation :** Professor

Area of research expertise with projects conducted /Ongoing: Molecular Biology and Clinical Virology, Gut Microbiota, Anti-microbial drug resistance, Infection control and Biomedical waste management

- 1. Varicella zoster virus (VZV) and the gut (SPARC, Govt of India Funded) 2019
- 2. "Pen to Paper"-Evaluation of Scientific Reading, Writing and Working Skills (SPARC, Govt of India Funded)2019
- MLFA Development and Evaluation: RUB19 (Development and Evaluation of a Multiplex Lateral Flow Assay to screen for Rubella and B19 parvovirus (SPARC, Govt of India Funded)2019
- 4. A jolt from the gut HIV-1 infection and the intestinal microbiome (SPARC, Govt of India Funded)2019
- 5. Surveillance of Norovirus in children (Wellcome Trust Research lab in Collaboration with Christian Medical College Hospital, Vellore) 2018,2019
- 6. Design & development of hospital waste management technique for safe disposal of biomedical waste (DST, Govt of India)2016
- 7. Norovirus surveillance in India : Multi centric study(CDC, USA Reagents support)2017
- Evaluation of invivo neutralization efficacy of antibodies raised by DNA vaccines against Chikungunya (CHIKV) and Dengue virus 2 (DENV) (University of Pennsylvania Reagents support) 2017
- 9. Pilot study on analysis of oral Microbiota in Type 2 Diabetes before and after neem stick usage (RSSDI, India )2015
- 10. Gut microbiota an identity marker of Type 2 Diabetes Mellitus (RSSDI, India)2014
- 11. Evaluation of molecular and nanotechnologies in the diagnosis of certain pathogens causing acute undifferentiated febrile illness (ICMR-TSS ) 2012-13
- 12. Molecular characterization and clinical correlates of Rotavirus and norovirus causing acute diarrhoea in children and adults (ICMR-TSS ) 2013-14

- 13. TNHSP project in Biomedical Waste management and infection control (Tamil Nadu Health System project Funded by World Bank) 2010-2015
- 14. Surveillance of Rota virus in adults and children (Wellcome Trust Research lab in Collaboration with Christian Medical College Hospital, Vellore) 2014-2017
- 15. Co-investigator of multi-centric study on "Alliance for study on Invasive pneumococci", 2010 funded by GlaxoSmithkline
- 16. Co-investigator of grant award for establishing Bioaerosols monitoring programs in South India, by Foundation for Occupational Health & Safety (FOHS, ACGIH) USA
- 17. Co-investigator of Agora Foundation funded project on "Impact Assessment of Water/Sanitation/Hygiene Programs in Tamil Nadu" (2007-2008)
- 18. Co-investigator of multi-centric study on Surveillance of Antimicrobial Resistance among Gram positive and Gram Negative bacteria in the Intensive Care Units in India and South East Asia (SENTRY) 2006 & 2007.
- 19. Co-investigator of multi-centric study on Surveillance of Antimicrobial Resistance among Gram positive and Gram Negative bacteria in the Intensive Care Units in India (SARI) partially funded by Cipla (2005)
- 20. Principal Investigator "Bioaerosols characterization in healthcare settings and epidemiological investigation of nosocomial infections." SRIHER 2005
- 21. Co-investigator of a phase IV clinical trial on the efficacy of levofloxacin versus azithromycin in the treatment of mild to moderate pneumonia (2003-2004) Pfizer
- 22. Association and influence of gut microbiota on non-alcoholic fat and prediabetes (ICMR-TSS ) 2017-18

## Awards and recognitions of faculty:

 Certificate of Appreciation by Government of Tamil Nadu (TNHSP supported by World Bank 2005-2015 for excellent performance in implementation of TNHSP activities for Infection control and Waste Management Aug 2015

- 2. Certificate of Appreciation by Tamil Nadu Nursing Council for contribution as author for Illustrative Manual for nurses on basics of Infection control and waste Oct 2015
- 3. Nominated and Received ACME (Advanced course in Medical Education) award ACME in Medical Education. Nominated as Research ambassador of Sri Ramachandra Medical College an Research Institute
- 4. Nominated as Research Ambassador @ SRIHER
- 5. Certificate for Twenty years service @ SRIHER

## Workshops/ Training undergone by faculty :

- Selected for teachers training workshop at SRMC &RI, 2000
- Selected for Immunodiagnostic course in Infectious Diseases held at Mahatma Gandhi Institute of Medical Sciences, Sewagram in Feb 2001
- Selected for Basic Statistics Course held by National Institute of Epidemiology ICMR (TRC campus), Chennai
- Underwent training in good clinical practice (Helsinki guidelines) conducted by Pfizer in 2003
- Selected for UGC sponsored orientation course on 'Integrated approach to Knowledge and Information For University Teachers', conducted by National Institute of Advanced Studies, Bangalore, Feb 2005
- Selected for Capacity Building Workshop on HIV- AIDS at NIE, Chennai 2009
- Participated in an intensive course on "TB Diagnostic Research beyond the basics" organized by ICMR, December 2010.
- Participated in SRU-CITI workshop @ SRIHER 2013, 2014
- Participated in Revised Basic Course Workshop @SRIHER
- Participated in Attitude Ethics and Communication (AETCOM) @SRIHER
- Participated in Advance Course in Medical education workshop @SRIHER
- Participated in SRU FERCARP Accreditation workshop 2014 @SRIHER
- Participated in Life skills workshop conducted by Shri Aravindan Vedanta Institute and College of Management @ SRIHER 2016
- Participated in UNESCO-BIOETHICS workshop @ SRU Jan 2017
- Participated in Clinical trial related Ethics workshop @ SRU Feb 2017

# Membership in committee :

Medical Education:

- 1. Member Medical Education Unit 2005 to date
- Member of the Expert working group on Curricular Reforms in MBBS, Medical Council of India (MCI) office, New Delhi (Jan, Feb, March, April 2011 and Oct 2013). Published 2018 <u>https://old.mciindia.org/UG-Curriculum/UG-Curriculum-Vol-I.pdf</u>
- 3. Member Faculty development Program, SRU 2011 to date
- 4. Member, Editorial Board, Sri Ramachandra Journal of Medicine 2006 to date
- 5. Secretary Faculty Development Program, SRU 2014 to 2017
- 6. Chairperson Faculty Development Program, SRIHER 2017 to date
- 7. Chairperson Institutional Committee for Stem Cell Research( ICSCR) 2008 -2017
- 8. Secretary ICSCR- 2017 to date
- 9. Member IEC (Clinical Trials) 2017 to date
- 10. Member / Resource person of Level-I Faculty Development Workshop at SRMC.2009 to date
- 11. Resource person of Advanced Course in Faculty Development Workshop at SRMC.2017 to date
- 12. Resource person for AETCOM from 2018
- 13. Member of working group for Leadership & Faculty development program at SRMC, Chennai (Jan 2005).

14. Member of working group of Advanced level Faculty Development Workshop conducted by SRMC in conjunction with Harvard Medical International, Chennai (2003, 2005, 2006, 2007, 2008).

# Infection Control, BMW Management and Others

- 15. Member, Medical Staff Executive Committee, Sri Ramachandra Medical Center,2010 to 2012
- 16. Nodal Officer TNHSP Phase II ICWN2010-2015
- 17. Member core group for Workshop on Operationalizing Infection prevention under the TNHSP BMW
- 18. Secretary: Infection control Committee, Sri Ramachandra Medical Center 2008-2010
- 19. Chairperson: Infection control Committee, Sri Ramachandra Medical Center 2010-2012
- 20. Member: Infection control Committee, Sri Ramachandra Medical Center 2012-2014
- 21. Chairperson: Biomedical Waste Cell 2015 to date
- 22. Officer-in-charge Internal Assessment Test Cell, Sri Ramachandra University( SRU) April 2015 to date

# List of publications

1. **Padma Srikanth** and T. Jacob John. "A Review of Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome in India, Indian Journal of Medical Microbiology, 12, 1994, 150-64.

2. **Padma Srikanth,** T. Jacob John, Harriot Jeyakumari, P George Babu, D. Mathai, M Jacob, A M Cherian, Alka Ganesh and A Zachariah "Epidemiological Features of Acquired Immunodeficiency Syndrome in Southern India", Indian Journal of Medical Research, 105, 1997.

3. **Padma Srikanth,** P. George Babu G Sridharan, T Jacob John and D Mathai, "Immunoblot Reactivity in relation to Human Immunodeficiency Virus Disease Progression", Indian Journal of Medical Microbiology, 1998, 16:3.

4. **Padma Srikanth**, R C Castillo, G Sridharan, T J John, A. Zachariah , D. Mathai and David Schwartz, "Increase in Plasma IL-10 Levels and Rapid Loss of CD4+ T cells among HIV infected individuals in South India" International Journal of STD and AIDS, 11(10), 2000 49-51.

5. Anupma J Kindo, Somu L, **Padma Srikanth**, Varadrajan M, Lakshmanan K. Role of surface swab versus core swab in the diagnosis of tonsillitis. Indian J Pathol Microbiol 2001; 44(3):293-5.

6. Uma Sekar, **Padma Srikanth**, Anupma J Kindo, Praveen Babu V, V Ramasubramanian. Increase in minimum inhibitory concentration to quinolones and ceftriaxone in salmonellae causing enteric fever. Journal of Communicable Diseases 2003; 35 (3): 162-169.

7. Hemalatha V, Padma Srikanth, M Mallika. "Superantigens – concepts, clinical disease and

therapy" - Review article. Indian J Med Microbiol 2004; 22(4): 204-211.

8. Tamizselvan S, **Padma Srikanth**, Balaji TM, Vijayalakshmi Thanasekaran, Suresh R. Isolation of rare species Vibrio fluvialis in dental plaque - a case report, in Indian J Pathol Microbiol 2004;47(3): 448-9.

9. Ravikumar, Mohanty, **Padma Srikanth**, Vivek Sasindran "Apex orbital syndrome in a child", Asian Journal of Ear Nose Throat, 2006; 4(3): 26-31.

10. Anandan V, Nayak V, Sundaram S, **Padma Srikanth.** An association of Alternaria alternata and Scopulariopsis brevicaulis in cutaneous phaeohyphomycosis. Indian Journal of Dermatology and Venerology, 2008; 74(3): 244-247.

11. Suchithra S, **Padma Srikanth**, Merline Sheela, Ralf Steinberg. Study of Indoor Air Quality in Hospitals in South Chennai, India – Microbial Profile. Indoor Built Environ 2008; 17(5): 435-441.

12. **Padma Srikanth,** Suchithra S, Ralf Steinberg. Bioaerosols in Indoor Environments – Composition, Health Effects and Analysis. - Review article. Indian J Med Microbiol 2008; 26(4): 302-12.

13. **Padma Srikanth,** Kamesh S, Peter Daley. Bleach Optimization of Sputum Smear Microscopy for Pulmonary Tuberculosis. - Review article.Indian J Tuberc 2009; 56: 174-84.

14. Dilip Mathai, Dougles J.Biedenbach, Ronald N.Jones, Jan M.Bell, John Turnidge, Helio S. Sader, India Daptomycin study group. Activity of daptomycin against Grampositive bacterial isolates from Indian medical centres. (2006-2007). Letters to the Editor International Journal of Antimicrobial Agents. 2009; 34: 490-503.

15. **Padma Srikanth**, Ezhilarasan R, Suchithra S, Anandhi L, Umamageswari SSM, Kalyani J. Mobile Phones – Emerging Threat for Infection Control. Journal of Infection Prevention 2010;2(3) 87-90.

16. Thiboutot MM, Kannan S, Kawalekar OU, Shedlock DJ, Khan AS, Gopalsamy S, **Padma Srikanth,** Weiner DB, Muthumani K Chikungunya : a potentially emerging epidemic? PLoS Neglected Tropical Diseases 2010;4(4) e623

17. **Padma Srikanth,** Gopalsamy Sarangan, Karthik Mallilankaraman, Seema A Nayar, Ramya Barani, Thomas Mattew, Gracy Fathima Selvaraj, Khaleefathullah Sheriff A, Gunasekaran Palani, Karuppiah Muthumani. Molecular characterization of Chikungunya virus during an outbreak in south India. Indian J Med Microbiol 2010; 28(4): 299-302.

18. Deepa Agarwal, Hemapriya, Tanushka Bali, Hemamalini AJ, **Padma Srikanth** and Gopalan TR. Microbial Quality of Enteral Feeds. Journal of Pure & Applied Microbiology. 2010; 4(2):755-760.

19. A Manoharan, S Chatterjee, D Mathai, SARI Study Group Detection and characterization of metallo beta lactamases producing Pseudomonas aeruginosa. IJMM2010, 28, 3, 241-244.

20. Benjamin M Pulimood Laboratories for Infection, Immunity and Inflammation (BMPLIII), Department of Medicine Unit I and Infectious Diseases, Christian Medical College, Vellore -632004, Tamil Nadu, India2 Surveillance of Antimicrobial Resistance in India Study Group (SARISG), Kothari Medical Center, Kolkata - Dr.Anuradha Aggarwal; Mahatma Gandhi Institute of Medical Sciences, Wardha - Dr. Vijayshree Deotale & Dr. D. K. Mendiratta; P D Hinduja Hospital, Mumbai - Dr.Camilla Rodriguez; Sri Ramachandra Medical College, Chennai - **Dr. Padma Srikanth**; Sir Gangaram Hospital, New Delhi - Dr. Chand Wattal; Sundaram Medical Center, Chennai - Dr. Vaidehi & Dr. Ram Rajagopal; Tata Memorial Center, Mumbai - Dr. Rohini Kelkar, India.

21. Mallilankaraman K., Shedlock DJ., Bao H, Kawalekar OU, Fagone P, Ramanathan AA, Ferraro B, Stabenow J, Vijayachari P, Sundaram SG, Muruganandam N, Sarangan G, **Padma Srikanth**, Khan AS, Lewis MG, Kim JJ, Sardesai NY, Muthumani K, Weiner DB. A DNA Vaccine against Chikungunya Virus Is Protective in Mice and Induces Neutralizing Antibodies in Mice and Nonhuman Primates PLoS Negl Trop Dis 2011, 5(1) e92810.

22. Sankar S, Ramamurthy M, Nandagopal B, **Srikanth P**, Venkatraman G, Sridharan G. Molecular and nanotechnological approach to etiological diagnosis of infectious syndromes. Molecular Diagnosis and Therapy 2011; 15(3): 1-14.

23. Suchithra Sudharsanam, Ravi Annamalai, Mohanbabu Ethiraj, Anupma J Kindo, Sandhya Swaminathan, Ralf Steinberg, Kalpana Balakrishnan, **Padma Srikanth.** Factors influencing the Microbial Loads in Indoor Bioaerosols of a Closed System of a Healthcare facility in a Tropical Setting. Indian Journal of Aerobiology. 2011;24(1): 7-11.

24. Ramya Barani, Gopalsamy Sarangan, Tessa Antony, Soundararajan Periyasamy, Anupma Jyoti Kindo, **Padma Srikanth**. Improved detection of Mycobacterium tuberculosis using two independent PCR targets in a tertiary care centre in South, The Journal of Infection in Developing Countries, 2012, 6(1),46-52.

25. **Padma Srikanth**, Sivagamasundari S, Suchithra S J Kalyani.Assessment of Aerobic bacterial contamination of computer keyboards. Journal of Associated Physicians of India 2012, 60.

26. Suchithra Sudharsanam, Ayyappan Ramalingam, Sandhya Swaminathan, Thangavel Gurusamy, Ravi Annamalai, Ralf Steinberg, Kalpana Balakrishnan, **Padma Srikanth.** Variation in Indoor Bioaerosol Concentrations of a Hospital Ward in a Tropical Setting. African Journal of BioSciences. June 2012.

27. Khush RS, Arnold BF, **Srikanth P**, Sudharsanam S, Ramaswamy P, Durairaj N, London AG, Ramaprabha P, Rajkumar P, Balakrishnan K, Colford JM Jr. H2S as an indicator of water supply vulnerability and health risk in low-resource settings: a prospective cohort study. Am J

Trop Med Hyg. 2013, 89(2): 251-9.

28. Radhakrishnan Preethi, **Padma Srikanth**, Seshadri, Krishna G, Barani, Ramya,Samanta, Maitreya "Serum Monocyte Chemoattractant Protein-1 (MCP-1) is a Biomarker in patients with Diabetes and Periodontitis" Indian Journal of Endocrinology and Metabolism, 2014, 18(4), 505.

29. Tessa Thanakaran and **Padma Srikanth** "Mycobacterial activity of various concentrations of bleach" Indian Journal of Tuberculosis, 2014, 61(3), 257-260.

30. Colleen Tingey, Seleeke Flingai, Emma Reuschel, Gopalsamy Sarangan, **Padma Srikanth**, Nagarajan Muruganantham, Paluru Vijayachari, Kenneth E Ugen, Niranjan Y Sardesai, Joseph J Kim, David B Weiner, Kar Muthumani, Direct Plasmid based Generation of InVivo Protective Monoclonal antibodies against Chikungunya Virus Molecular Therapy 2014,22, S270-S271.

31. Sesha Poornima Boominathan, Gopalsamy Sarangan, , Sarala Srikakulapu2. Suma Rajesh, Chamundeeswari Duraipandian, , **Padma Srikanth**. Antiviral activity of bioassay guided fractionation of Plumbago zeylanica roots against herpes simplex virus type 2.WJPS 2014;3 (12), 1003-1017.

32. Suchitra Sudharsanam, Shanthi Mathias, M. Ethiraj, G. Sarangan, Ramya Barani, Sandhya Swaminathan, R. Annamalai, **Padma Srikanth**. Airborne Pseudomonas species in healthcare facilities in a tropical setting. Current health sciences journal vol. 41, no. 2, 2015.

33. Suchithra Sudharsanam, Shanthi Mathias, Ramya Barani, Madhan Sugumar, Jeshina Janardhanan, Ravi Annamalai, Sandhya Swaminathan, **Padma Srikanth**. Fate of airborne coagulase-negative Staphylococci. Int J Infect Control 2015; v11:i4

34. Premalatha Pushpanathan, **Padma Srikanth**, Krishna G. Seshadri, Sribal Selvarajan, Ravi Shankar Pitani, Thomas David Kumar, R. Janarthanan , Gut Microbiota in Type 2 Diabetes Individuals and Correlation with Monocyte Chemoattractant Protein1 and Interferon Gamma from Patients Attending Tertiary Care Centre in Chennai, India. Indian Journal of Endocrinology and metabolism, 2016, 20(4), 523.

35. Vigna Seshan R, V, Gopalsamy.S, **Padma Srikanth.** Dengue and typhoid Coinfection – Case Report from a tertiary care hospital in Chennai, International Journal of Case Reports and Images, 2016 7(9), 563-565.

36. Siddhartha Ojah, Ramya Barani, M. K. Sudhakar, S. R. Ramakrishnan, **Padma Srikanth**, Maculopapular rash presentation of febrile illness in an adult with Varicella zoster virus infection. Indian Journal of Pathology and Microbiology, 2016, 59(3), 422.

37. Muthumani K, Block P, Flingai S, Muruganantham N, Chaaithanya IK, Tingey C, Wise M, Reuschel EL, Chung C, Muthumani A, Sarangan G, **Srikanth P**, Khan AS, Vijayachari P, Sardesai NY, Kim JJ, Ugen KE, Weiner DB. Rapid and long-term immunity elicited by DNA

encoded antibody prophylaxis and DNA vaccination against Chikungunya virus. The Journal of Infectious Diseases. 2016. 214(3), 369-378.

38. Kumaran Vadivel, Ramamurthy Mageshbabu, Sathish Sankar, Amita Jain, Vivekanandan Perumal, **Padma Srikanth**, Ghosh Asit Ranjan, Aravindan Nair, Eric A.F Simoes, Balaji Nandagopal, Gopalan Sridharan, Detection of Parvovirus B19 in selected high risk patient groups and their phylogenetic and selection analysis Indian Journal of Medical Research. 2017, 147(4), 391.

39. Kumaran Vadivel, Ramamurthy Mageshbabu, Sathish Sankar, Amita Jain, **Padma Srikanth**, Asit Ranjan Ghosh, Balaji Nandagopal, Aravindan Nair, Gopalan Sridharan, Development and standardization of an in-house IgM Indirect ELISA for the detection of Parvovirus B19 infections Indian Journal of Medical Research 2017. 146(3), 381.

40. Sribal selvarajan, Sudhabharathi Reju, Premalatha Pushpanathan, Rajesh Arumugam, Padmanabhan Ramachandran, Sudhakar Muthaih Kothandaramanujam, **Padma Srikanth**, Gagandeep Kang "Molecular characterization and clinical correlates of rotavirus in children and adults in a tertiary care centre, Chennai, South India". Indian Journal of Medical Microbiology. 2017, 35(2), 221.

41. Seshan V, Sarangan G, Sheriff K, Krishnasamy K, Palani G, **Srikanth P.** Serological, molecular and clinical correlates of dengue from a tertiary care centre in Chennai, India. 2017, 162(10), 2983-2988. Archives of Virology: 1-6.

42. Rubini Anbalagan, **Padma Srikanth**, Monika Mani, Ramya Barani, Krishna G. Seshadri, R. Janarthanan. Next generation sequencing of oral microbiota in Type 2 diabetes mellitus prior to and after neem stick usage and correlation with serum monocyte chemoattractant-1, Diabetes Research and clinical practice, 2017, 130, 204- 10.

43. Sarangan, Gopalsamy, Seema A. Nayar, Monika Mani, Sudharasana Sundarrajan, Sathish Sankar, Gunasekaran Palani, Gracy Fathima Selvaraj, Jayachandran Damodharan, Karuppaiah Muthumani, and **Padma Srikanth**. "Genetic characterization of Chikungunya virus 2009 isolates from South India." Bioinformation 14, no. 3 (2018): 106-112.

44. Ramya Barani, Yazhini Ravi, Vigna Seshan, Sudha Bharathi Reju, Periasamy Soundararajan, Gunasekaran Palani, **Padma Srikanth**. Epstein Barr Virus DNAemia and co-occurrence with CMV DNAemia in post renal transplant recipients from a tertiary care centre. Indian journal of Transplantation, 2018, 12(2), 95.

45. **Padma Srikanth**, Yazhini Ravi, Shyamala Mani, Needle stick Injury- A Perspective, Journal of Patient safety and Infection Control, Year : 2018 | Volume : 6 | Issue : 3 Page : 90-92

46. Radhakrishnan P, Anbalagan R, Barani R, Mani M, Seshadri KG, **Srikanth P.** Sequencing of Porphyromonas gingivalis from saliva in patients with periodontitis and type 2 diabetes mellitus. Indian journal of medical microbiology. 2019 Jan 1;37(1):54.

47. Pushpanathan P, Mathew GS, Selvarajan S, Seshadri KG, **Srikanth P.** Gut microbiota and its mysteries. Indian J Med Microbiol 2019 ;37:268-77.

48. Barani R, Seshan V, Ravi Y, Soundararajan P, Palani G, Srikanth P. Detection of cytomegalovirus disease by real-time quantitative PCR targeting immediate early gene (ppUL83) in different samples among post-renal-transplant recipients. Indian J Med Microbiol 2019;37:281-4

49. Monika Mani, Shanthi Vijayaraghavan, Gopalsamy Sarangan, Ramya Barani, Priya Abraham, **Padma Srikanth**. Hepatitis B virus X protein: The X factor in chronic hepatitis B virus disease progression. Indian journal of Medical Microbiology (Accepted for publication)

50. Monika Mani, Shanthi Vijayaraghavan, Gopalsamy Sarangan, Abhinaya Raghuramachandran, **Padma Srikanth.** Hepatitis B virus genotype in T2DM; A report from a tertiary care center, Chennai. Obesity Medicine (Accepted for publication)

GenBank Publications:

- Sequences in GenBank Database (<u>http://www.ncbi.nlm.nih.gov</u>): 250
  - 1. Staphylococcus sequences : JF306643-JF306644
  - 2. *Pseudomonas* sequences : HQ221549-HQ221552; JF264901-JF264902
  - 3. Chikungunya virus sequences : GQ272368-GQ272381
  - 4. *Chikungunya virus* sequences:KC977313-KC977322
  - 5. Chikungunya virus sequences: KJ577651-KJ577660
  - Hepatitis B Virus sequences: KM590904-KM590923 HBV Pol sequence: MK948372-MK948402 ; MK975841-MK975866 HBV X gene: MN066375-MN066411 ; MN182657-MN182693
  - 7. Mycobacterium tuberculosis sequences: MG589367-MG589378
  - 8. Rotavirus sequences: MF434832-MF434843, MH 981244 MH981306