

Dr PRAVEEN SANKER S

Clinical Microbiologist

PROFESSIONAL SUMMARY

Clinical Microbiologist with more than 17 years of experience (post MD) in establishing and leading referral Microbiology and Mycobacteriology labs, extensively trained and experienced (National and International) in Clinical Microbiology/Mycobacteriology, Bio-safety/Infection control, Microbiology lab management, Containment facility setup & administration, PCR lab setup & administration, Quality assurance and Operational research. I also have additional experience (before post graduation) with working in medical education sector and as a general health practitioner for over 7 years (details given below).

My areas of interest are Hospital Infection Control, Antibiotic stewardship and Drug resistance among microbes.

CORE SKILLS

Clinical Bacteriology, Biosafety/Infection control, Antibiotic stewardship, Establishment of new Microbiology/Molecular Microbiology labs, Lab Management/Administration, Containment /Clean room set up, Decontamination & Sterilisation, Teaching/Training, Trouble shooting, Operational research & Publication.

WORK EXPERIENCE

Consultant Microbiologist & Infection control officer - Valluvanad Hospital Complex, Ottapalam, South India

Currently working from May 2024 and from Aug 2020 to Dec 2021 **(1 Year, 5 Months)**

Valluvanad hospitals is a **300** bedded NABH accredited Super specialty hospital (40 ICU beds) with Neurology, Neurosurgery, Cardiology/Cardio-thoracic surgery, Nephrology/Urology, Gastroenterology/Gastro-intestinal surgery, Rheumatology, Orthopaedic surgery with implants, Plastic Surgery, Trauma care and other basic specialties. It is also a training centre for multiple PG medical courses (Diplomate of National Board - India)

The NABL certified Microbiology lab handles around **1200 - 1800 samples/cases per month.**

My role includes leading the works of Bacteriology/Mycology/Molecular diagnostics including Automated Blood and body fluids culture by BacT/ALERT, Automated Susceptibility testing of Bacteria and Yeasts by Vitek 2, Molecular diagnostics by RTPCR TRUENAT/LAMP assay (CoViD, Hep B, Hep C and MTB), Consultancy services for Serology, Sterilisation (CSSD), Infection control activities by serving as Infection control officer and Quality assurance activities in connection with NABL & NABH certifications

Routine works include providing inputs to Clinicians in selecting appropriate diagnostic tests, appropriate samples, appropriate collection & transport of samples to the lab

Directions for processing and storage of samples, selecting appropriate culture medias/tests, Culture reading and DST reading and finalisation of reports

Communicating interim and final reports promptly to the Clinicians and actively taking part in discussions with the Clinical team. Giving timely suggestions for appropriate escalation and de-escalation of Antibiotics

Monitoring CSSD and Sterility checking, Cleaning & Decontamination of ICUs and OTs and other Infection control activities, Surveillance of Hospital acquired infections and Drug resistance in collaboration with the Infection Control Team

Taking part in Audits including Death Audits, health staff training sessions, and development of SOPs and policy development.

Consultant Clinical Microbiologist & Infection control Consultant - Aravind Medical Centre, Kollam, South India

From January to May 2024 (4 months 16 days)

Aravind Medical Centre is a **70 bedded** multi-specialty hospital with all basic specialties including surgical specialties.

Served as Consultant for Infection control activities and Clinical Microbiology on a part time basis.

Consultant Clinical Microbiologist & Lab Director - Ahalia Central Lab, Ahalia Hospitals, Palakkad, South India

From January 2022 to Dec 2023 (2 Years)

Ahalia Central laboratories serves Ahalia Diabetes Hospitals, Ahalia Women & Children Hospital, Ahalia Foundation Eye Hospital, Ahalia Ayurvedic College and Ahalia Paramedical College all situated in a huge Campus in South India. The lab is **NABL accredited**.

The Hospitals together account for **200 beds** excluding Ahalia Ayurvedic Medical College. The Microbiology department handles around **950-1700 samples/cases per month**. Ahalia Diabetes Hospitals include specialties like Endocrinology, Podiatry, Plastic Surgery, Microvascular surgery, Nephrology, Cardiology, Orthopaedics with implants and other general specialties. The hospital is a Training hospital for multiple Medical postgraduate courses - DNB.

Ahalia Foundation Eye Hospital is one of the leading Reference Centre and teaching hospital in South India for Ophthalmology sub specialties with publication of numerous research papers.

The hospital is the first **JCI accredited eye hospital in Kerala state**.

Ahalia Women and Children hospital has a State of the art 12 bedded level 3 Neonatal ICU along with O& G and Paediatric departments.

My role included leading the works of Bacteriology/Mycology/Molecular diagnostics including Automated Blood and body fluids culture by BacT/ALERT, Automated Susceptibility testing of Bacteria and Yeasts by Vitek 2, Molecular diagnostics by RTPCR (open and Chip based TRUENAT/ (CoViD, Hep B, Hep C, HIV, Chikungunya, Dengue, HLAB27 and MTB), Consultancy services for Serology, Sterilisation (CSSD), Infection control activities by serving as Infection control officer and Quality assurance activities in connection with NABL & NABH certifications

Routine works include providing inputs to Clinicians in connection with appropriate diagnostic tests, appropriate samples, appropriate collection & transport of samples to the lab

Directions for processing and storage of samples, selecting appropriate culture medias/tests, Culture reading and DST reading and finalisation of reports

Communication of interim and final reports promptly to the Clinicians and actively taking part in discussions with the Clinical team. Giving timely directions to support appropriate escalation and de-escalation of Antibiotics

Taking part in Audits including Death Audits, health staff training sessions, teaching students and development of SOPs and policy development.

Administration of the lab with all its departments and over 25 lab personnel as the Lab Director.

Monitoring CSSD and Sterility checking, Cleaning & Decontamination of ICUs and OTs and other Infection control activities, Surveillance of Hospital infections and Drug resistance in collaboration with the Infection Control Team

International Lab Consultant

***Foundation for Innovative New Diagnostics – Save The Children - Global Fund,
National TB Center, National TB Control Program, Nepal***

Multiple Contracts between Dec 2017 and Jan 2020

- Establishment of National TB Reference lab at Kathmandu (BSL2+) and a network of culture / LPA-PCR labs (differential pressured TB containment labs) in NEPAL.
- Installation, operationalisation and International certification of LPA (PCR) and Bactec MGIT DST (Mycobacterium Culture/DST) in NRL.
- Trained Technical manpower in NRL and other culture labs in NEPAL on MGIT & LPA.
- Supported Preparation of SOPs and registers for NRL.
- Helped in the Establishment of QA system for Culture/LPA/ MGIT labs, GeneXpert network and Microscopy network of Nepal.

Chief Microbiologist (Lab in-charge), IRL, State TB Cell, DHS, RNTCP, Kerala, India

From Aug 2006 to Nov 2017 (11 Years, 3 Months)

Establishment of BSL 3 culture DST facility and differential pressured PCR complex in **State TB Reference lab, Kerala State**

- Installation and Certification of LJ culture DST, LPA (PCR-Molecular diagnostics), MGIT culture DST.
- Led Lab based research and supporting programmatic operational research. Publication of papers.
- Led QA of Microscopy and GeneXpert labs all along Kerala State.
- Served as master trainer for training Medical and Para-medical staff of the State of Kerala on Mycobacteriology, TB diagnostics, DRTB and PMDT.
- Active decision making in the treatment of DRTB and Extra pulmonary TB cases as a Member of State and District DOTS plus committee
- Procurement of Lab equipments and consumables. Served in the panel of experts for procurement by KMSCL (Kerala govt. procurement agency)
- Administration of 20 lab workers (Microbiologists, Technologists, LTs, Attenders and Cleaners) of the lab.

Clinical Assistant Professor, Microbiology, Amrita Institute (AIMS), Kochi, India (Deemed University)

From Aug 2005 to Dec 2005 (5 Months)

- Taught undergraduate students (MBBS, BDS) and MSc Microbiology
- Served at Clinical Microbiology lab which handles all the patient's samples from the 800 bedded Medical college hospital.
- Patient care (selected cases)

Before Post graduation

Lecturer, Physiology, ACME (medical college), Kannur, Kerala, India

From Jan 1999 to April 2002 (3 Years, 3 Months)

theory and demonstrated practical sessions for MBBS students and BSc Nursing students.

General Practitioner

From 1995 to 1999 (4 Years)

- Treated patients in pvt hospitals and Govt hospitals (ESI)
- Managed casualties and manning emergency dept.
- Assisted surgeries.
- ICU management.

PUBLICATIONS as First Author

- **Sanker P, Ambika AP, Santhosh VT, Kottuthodi RP, Balakrishnan R, Mrithunjayan SK, *et al.* Are WHO approved nucleic acid amplification tests causing large-scale “false identification” of rifampicin-resistant tuberculosis?: Programmatic experience from south india.** Int J Mycobacteriol 2017;6:21-6
- **Sanker P, Kottuthodi RP, Ambika AP, Santhosh VT, Balakrishnan R, Mrithunjayan SK, *et Al.* Predictable repeatability issues with GeneXpert – Xpert MTB/RIF (version 4) derived Rifampicin resistant TB results from South India: Appreciating the limits of a technological marvel!** Biomed Bio-technol Res J 2017;1:76-80
- **Sanker P, Satheesan A, Ambika AP, Balakrishnan R, Moosan H, Mrithunjayan SK, *et Al.* Role of Line Probe Assay in detection of Extra-pulmonary TB/MDRTB: The experience from Kerala state, India.** J Acad Clin Microbiol 2017;19:12-8
- **Sanker P, Satheesan A, Ambika AP, Santhosh VT, Balakrishnan R, Mrithunjayan SK, *et Al.* High Moxifloxacin cross resistance levels among “newly identified” Ofloxacin resistant MDRTB patients from South India: A ticking bomb or a tricky challenge?** Biomed Bio-technol Res J 2017;1:59-64

INNOVATIONS AND PATENTS

1. Assisted the development of a LAMP assay for identification of Mycobacterium tuberculosis complex by SCTIMST, Dept of science and technology, GoI. Joint patent holder.

2. Designed a low cost multi-purpose safety hood (not patented) for safe TB work in the peripheral labs and installed the same in 52 govt. labs with active involvement of a small scale industry firm, utilizing the Kerala govt. plan fund.
3. Developed Low cost, low maintenance TB containment lab designs.
4. Cost cutting modifications for the usage of BD Bactec MGIT 960.

EDUCATIONAL QUALIFICATIONS

Degree/Diploma	College/University	Year of completion	Field of study
MD (Doctor of Medicine) Microbiology	Govt. Medical College, Trivandrum, Kerala, India	2005	Bacteriology (General, Systematic and Applied), Immunology, Virology, Parasitology, Mycology
MBBS (Bachelor of Medicine, Bachelor of Surgery)	TD Medical college, Alleppey, Kerala University, India	1995	Medicine, Surgery, Gynecology, Community Medicine, ENT, Orthopedics, Ophthalmology, Forensic medicine, Pharmacology, Pathology, Microbiology, Physiology,
Permanent registration No: 23941 (Travancore-Cochin Medical council, year of registration; 1996			

Additional Trainings

- Infection prevention and Control (Master Class Certificate Level 1 and 2 from Medvarsity online): 2021
- Antibiotic Stewardship (Certification from WHO online): 2021
- Antimicrobial stewardship (University of Dundee & BSAC; Future learn, conducted online): 2021
- QMS and Internal Audit in Medical Labs as per ISO 15189:2012: 2022
- CoViD RTPCR testing (conducted online and certified by FIND): 2020
- High level bio-containment for health care facilities (conducted online and certified by University of Nebraska): 2020

- TB lab management, conducted by FIND, Hyderabad: 2015
- Biosafety training, NTI Bangalore and FIND: 2015
- Master trainer for Line Probe Assay (PCR)
- Fully trained and master trainer for TB culture and MGIT C & DST

Languages:

- English (advanced) and Hindi (basic), Malayalam (native)

References			
Dr G N Sajan MBBS, DNB Medical Superintendent Cardio-thoracic Surgeon Valluvanad Hospitals Ottapalam Palakkad +91 9605348605	Dr Suresh Babu MBBS Chief Medical Director, Ahalia Hospitals, Palakkad +91 9944959950	Dr C N Paramasivan PhD, DSc, FAMS, FNASc (Formerly) Senior scientific advisor, FIND 26 kilpauk garden western extension, Arumugham first street, Kilpauk, Chennai, India +91 9025 124 503 USA 5229, shadow estate San Jose, 95135 CA +1 408 508 8168 cnparamasivan@gmail.com m	Dr Anoop Thekkuveetil, PhD Scientist G and Head Division of Molecular medicine Sree Chitra Tirunal Institute for Medical Sciences and Technology, BMT wing, Trivandrum, India +91 471 2520256/7 +91 8943746480 anoop@sctimst.ac.in

Professional Memberships

Indian Medical Association (IMA), life member

Academy of Clinical Microbiologists (ACM), life member

Personal information

Name: Dr PRAVEEN SANKER SIVASANKARAN **Age:** 52 yrs, **Gender:** Male, **Marital status:** Married,
Wife: Doctor, Psychiatrist, **Children:** Two (school going).