

1. Highlights & Achievements –

Patient Care

In 2016, the **NABL accreditation** as per ISO 15189:2012 for all the tests carried out was renewed for a further period of two years after a successful assessment. The department has **performed consistently well in the EQAS** administered by Indian Association of Medical Microbiologists, PGIMER Chandigarh, RNTCP, NACO, NARI as applicable. Automated bacterial identification and MIC for antibiotics has been made available and is used as per clinical or laboratory need. Viral loads for HIV, HBV and HCV has been initiated for select patients.

Research

The departmental faculty successfully conducted research projects funded by ICMR, Research Society or other agencies.

2. Patient care –

Clinical microbiology services are provided by different divisions of the Microbiology Department. Emergency laboratory services are available after routine hours.

The annual workload for the different service divisions of the department was as follows:

Section	Workload
Bacteriology including Emergency laboratory <ul style="list-style-type: none">• Samples processed• AMST• Vitek rapid ID and ABS Total	57350 36172 256 93812
Virology <ul style="list-style-type: none">• Serological tests (HIV,HBV,HCV, RPR)• CD4 count• Viral Load Total	106667 16271 815 122938
Serology including Emergency laboratory <ul style="list-style-type: none">• Leptospirosis• Dengue• Widal• Others Total	30979 55071 3167 4521 93738
Mycobacteriology <ul style="list-style-type: none">• Microscopy• GeneXpert• Culture Total	25640 4010 683 30333

Mycology	3220
Parasitology <ul style="list-style-type: none"> • Stool examination • Malaria Antigen Test- including Emergency laboratory 	7805 24053
Total	31858

3. Community care –

The department provided Integrated Counseling and Testing services for 972 direct walk-in clients.

4. Education –

The department carried out undergraduate training for MBBS, B.Sc.(OT) , B.Sc. (PT), BPMT, and B.Sc.(nursing) students. Post graduate training was provided to MD (Microbiology), M.Sc. (Microbiology) by research, PGDMLT and Ph.D. students.

- Six students have registered for MD Microbiology this year.
- The pass percentage for M.D in 2015 was 50%.
- Library (Departmental Library) Books – 110
Journals – IJMM, JPGM
- Internet facility is available for all staff and students

5. Research –

Themes of ongoing projects

PG Dissertations

- Prevalence of intestinal parasites in alcoholics with special reference to *Strongyloides stercoralis*.
- Prevalence of intestinal parasites in pregnant women attending antenatal clinic.
- Prevalence of intestinal parasites in patients with chronic idiopathic urticaria.
- Prevalence of *Malassezia furfur* associated seborrheic dermatitis in HIV positive and negative patients.
- Risk factors and clinical outcome of patients harbouring carbapenem resistant Enterobacteriaceae in a tertiary care teaching hospital.
- Performance of LED fluorescent microscopy and Xpert MTB/RIF assay in extra-pulmonary tuberculosis.

- Prevalence of various pathogenic bacteria including Mycobacterium tuberculosis in patients with Diabetes Mellitus with Lower respiratory tract infections.
- Evaluation of PreviFlu TB method using LED microscopy for the diagnosis of pulmonary tuberculosis.

Projects

- Prospective Study for the diagnosis and prevalence of Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococci (PANDAS) in Mumbai Population (disbursement of funds are awaited from MRU/ICMR).
- Determination of MIC distribution of fosfomycin, biapenem and other antibiotics against gram negative clinical isolates :A prospective study.
- Study of secondary bacterial infections in scabies cases of Mumbai with special reference to Microbiome study.

Completed projects

- Prevalence of cryptococemia in HIV seropositive patients.
Prevalence of rifampicin resistance in new and previously treated cases of pulmonary tuberculosis by “Xpert MTB / RIF assay”.

Collaborations

Projects are being undertaken in collaboration with ICMR / NIRRH / NACO / MDACS / NARI, Pune

6. Publications –

1. Paranjpe SM, Koticha A, Mehta PR. Chronic Giardiasis in a Case of Common Variable Immunodeficiency (CVID): A Case Report. Journal of Clinical and Diagnostic Research : JCDR. 2016;10(7):DD03-DD04.
2. Paranjpe SM, Sarkate PP, Ingole NA, Raut SS, Mehta PR. Profiles of HIV-infected anti-retroviral therapy naïve children from Mumbai, India. World J Pediatr. 2016 Nov;12(4):430-435.
3. Prasad PS, Nataraj G, Raut SS, Surase PV, Mehta PR. Utility of a rapid immunochromatographic test (Enterocheck WBTM) for the diagnosis of enteric fever in an endemic region. Indian Journal of Basic and Applied Medical Research. 2016 Sept;5(4):217-223.

4. Prasad PS, Nataraj G, Nanavati RN, Mehta PR. Changing trends in bacterial spectrum of neonatal sepsis at a tertiary care teaching hospital - 2011 to 2015. J. Evolution Med. Dent. Sci. 2016;5(65):4628-4633.
5. Phulsunge S, Koticha A, Shinde S, Mehta P. Intestinal Parasites in patients having haematological malignancies. Journal of Evolution of Medical and Dental Sciences.2016; 5(31):1613-17.
6. Wanjare Shashir, Gupta Rajarshi, Mehta Preeti. Caspofungin MIC distribution amongst commonly isolated *Candida* species in a tertiary care centre - An Indian experience.. Journal of Clinical and Diagnostic Research. 2016 Nov, Vol-10(11): DC11-DC13.
7. Deshpande PU, Mehta PR, Kerkar SC et al. Prevalence of HPV infection in women at a tertiary care hospital in Mumbai. Int J Res Rev. 2016; 3(6):68-75.
8. Solanke VN, Suryawanshi RS, Nataraj G, Mehta PR. Trends in Bacterial Spectrum of Community Acquired Urinary Tract Infections (UTIs): A Comparison of Data for Years 2011 & 2014 at a Tertiary Care Teaching Hospital.IJHSR.2016;6(7): 130-137.
9. Surase P, Nataraj G, Kuyare S, Mehta P. The Ever Increasing Reservoirs of Infection in the Health Care Environment – Time for a Sixth Moment of Hygiene. J Assoc Physicians India 2016;64(8):31-36.
10. Surase PV, Nataraj G, Pattamadai K, Mehta PR, Pazare AR, Agarwal MC, Nanavati RN. An appropriately performed conventional blood culture can facilitate choice of therapy in resource-constrained settings-comparison with BACTEC 9050. J Postgrad Med. 2016;62(4):228-234.
11. Shinde S, Nataraj G, Raut S, Gupta R, Mehta P. CarbaNP as a simpler, rapid, cost effective and a more sensitive alternative to other phenotypic tests for detection of carbapenem resistance in routine diagnostic laboratories. Accepted for publication in Journal of Laboratory Physicians (Manuscript No. JLP_28_16).
12. Kanade Swapna, Nataraj Gita, Ubale Milind, Mehta Preeti. Fluorescein Diacetate (FDA) vital staining for detecting viability of acid fast bacilli in patients on antituberculosis treatment. International Journal of Mycobacteriology. 2016; 5(3): 294-298.
13. Nataraj G, Kanade S, Mehta P. Xpert® MTB/RIF assay for improved case detection of extrapulmonary TB in tertiary care setting from urban India. International Journal of tuberculosis and lung diseases. 2016;20(7): 890–894.

14. Lahane P, Kanade S, Nataraj G, Mehta P. Alarming increase in drug resistant extrapulmonary tuberculosis at a tertiary care centre. *International Journal of Current Medical and Applied sciences*. 2016;11(3):138-142.
15. Raut S, Kanade S, Nataraj G, Mehta P. Unusual presentation of multibacillary nodular leprosy. *J Lab Physicians*. 2017;9:57-9.
16. Anand Manoharan, Vikas Manchanda, Sundaram Balasubramanian, Sanjay Lalwani, Meera Modak, Sushama Bai, Ajith Vijayan, Anita Shet, Savitha Nagaraj, Sunil Karande, Gita Nataraj, Vijay N Yewale, Shrikrishna A Joshi, Ranganathan N Iyer, Mathuram Santosham, Geoffrey D Kahn, Maria Deloria Knoll, for the Alliance for Surveillance of Invasive Pneumococci (ASIP) Study Group* Invasive pneumococcal disease in children aged younger than 5 years in India: a surveillance study. *Lancet Infect Dis* 2016 Published Online December 9, 2016 [http://dx.doi.org/10.1016/S1473-3099\(16\)30466-2](http://dx.doi.org/10.1016/S1473-3099(16)30466-2)
17. Torane V, Kuyare S, Nataraj G, Mehta P, Dutta S, Sarkar B. Phenotypic and antibiogram pattern of *V. cholerae* isolates from a tertiary care hospital in Mumbai during 2004–2013: a retrospective cross-sectional study. *BMJ Open* 2016;6:e012638. doi:10.1136/bmjopen-2016-012638.

7. In the Limelight –

- Nil

8. Awards & Honors –

- PhD student Ms. Nuzhat Surve won Best student poster prize on “Rapid diagnosis of cardiac damage in Acute Rheumatic Fever” at North Queensland Festival of life science 2016.
- Dr Anindita Banerjee was awarded the first prize in poster section for paper titled “Filariasis due to *Wuchereria bancrofti* : An unusual presentation” at Mahamicrocon 2016.
- Dr Shilpa Rathod was awarded the first prize in poster section for paper titled “Incremental yield in sputum smear positivity by examining spot sputum specimen : a ten year analysis of RNTCP laboratory register” at Mahamicrocon 2016 held in Sholapur.

- Dr Gita Nataraj delivered the Dr Ajita P Mehta Oration at the 2016 Infectious Disease Certificate Course held in Mumbai.

9. Donations & Grants –

S. No	Name of donor	Amount (Rs.)	Activity	Type
1	MDACS	50000/-	ICTC	Patient care
2	MSACS	1,45,000/-	HIV IBBS	Research
3	MDACS	40,000/-	HCV ANC Surveillance	Research
4	PATH	79968/-	Conducting workshop	Training
5	MDACS	25000/-	ICTC	Patient care
6	MDACS	20000/-	HCV IBBS	Research
7	Sun Pharma	2,54,700/-	Determination of MIC distribution of fosfomycin, biapenem and other antibiotics against gram negative clinical isolates :A prospective study	Research
8	DJST	1,00,000/-	Equipment and consumables	Strengthening and Research
9	GSMC & KEMH Research Society	49, 800/-	Test kit	Research
	TOTAL	7,14,668/-		

10. Looking Ahead –

- Strengthening of Mycobacteriology laboratory for performing liquid culture and drug susceptibility testing accredited by Central TB Division

11. Committees –

I. Dr. Preeti Mehta

Local

- Member, Steering Committee, Development of Healthcare Management Information System by MCGM
- Treasurer, Dept. Development Fund
- Member, Executive Committee, Medical Education Unit
- Member, Hospital Infection Control Committee
- Member, Academic Committee
- Member, AIDS Core Committee
- Member, RNTCP Core Committee

- Member, Editorial Board, JPGM

State

- Member, UG Board of Studies in paraclinical subjects, Faculty of Medicine, MUHS
- Member, PG Board of Studies in paraclinical subjects, Faculty of Medicine, MUHS

National

- Nodal Officer, Regional Resource Centre, Seth G S Medical College & KEM Hospital, National Medical College Network, MoHFW, Govt. of India
- Member, Regional STI Centre National Mentoring Committee, NACO, Ministry of Health and Family Welfare, Govt. of India
- Member, Governing Council, AIDS Society of India
- Member, Editorial Board, Indian Journal of Medical Microbiology
- Internal auditor, NABL ISO 15189:2012
- Technical assessor, NABL ISO 15189:2012

International

Member, Editorial Board, Austin Journal of HIV/AIDS Research

II . Dr. Gita Nataraj

Local

- Hon. Pathologist & Prof. I/c , Laboratory, GTB Hospital, Mumbai
- Convenor, Hospital Infection Control Committee
- Secretary, Gosumec Alumni Association
- Member, RNTCP Core Committee
- General Secretary, Hospital Infection Society, Mumbai Forum
- Member – TPMU , RRC-KEMH
- Member – Library Committee, GSMC & KEMH
- Member, GTB Hospital, Infection Control Committee

National

- Associate Editor, Journal of Patient Safety and Infection Control
- Internal Auditor, NABL ISO 15189: 2012

III. Dr. M. G. Karmarkar

- Treasurer, Research Society
- Chairman, Ethics Committee, National Inst. of Immunohaematology
- Member, Ethics Committee, Enterovirus Research Centre

IV. Dr. NayanaIngole

- Secretary, GSMC –UNESCO Bioethics Unit
- Member, PIMM, Project Implementation

V. Dr. Priyanka Prasad

- Member, Executive Committee, Staff Society

12. Photographs- NIL

13. Contact Information

Sr.no.	Name	Designation	Cell no.	E-mail ID
1	Dr. Preeti Mehta	Prof. & Head	9820489004	prm.kem@gmail.com preetimehta@kem.edu
2	Dr. Gita Nataraj	Professor	9820067349	gitanataraj@gmail.com gitanataraj@kem.edu
3	Dr. M. G. Karmarkar	Professor	9869284148	rajivkarmarkar@yahoo.com
6	Dr. Shashir Wanjare	Prof.(Addl.)	9987019430	shashirwanjare@gmail.com
7	Dr. NayanaIngole	Asso. Prof.	9821471788	nayanaingole@gmail.com
8	Dr. SwapnaKanade	Asso. Prof.	9820569565	drswapnakanade@yahoo.co.in
9	Dr. Priyanka Prasad	Asso. Prof.	9930923115	priyanka1975@gmail.com
10	Dr. Sunil Kuyare	Asst. Prof.	9224110191	drsunil77@gmail.com
11	DrSupriyaParanjpe	Asst. Prof.	9987098381	supriyaparanjpe@rediffmail.com
12	Dr. VijayaTorane	Asst. Prof.	9820771180	vijayatorane@yahoo.co.in

13	Dr. PallaviRodge	Asst. Prof.	9702558850	vpsurase@gmail.com
14	Dr. RupaliSuryavanshi	Asst. Prof.	9833559321	doctorryupali@gmail.com
15	Dr. ShivaniShinde	Asst. Prof.	9819037234	drshivaniverma@gmail.com
16	Dr. AlpanaMhashilkar	Asst. Prof.	9769628035	alpana2908@gmail.com
16	Dr. VaishaliSurase	Asst. Prof.	9320506432	surasevaishali@gmail.com