

# ANNUAL REPORT 2015

## 1. Highlights & Achievements –

### Patient Care

In 2015, the Microbiology Department became the first in MCGM to get **NABL accreditation** as per ISO 15189:2012 for all the tests carried out. The department has **performed consistently well in the EQAS** administered by Indian Association of Medical Microbiologists.

The department is co-ordinating the accreditation requirements for NABH Safe I for hospital infection control. As per suggestions given by NABH team during their pre-assessment visit several training workshops have been conducted to make all concerned aware on infection control. The department is continuing to provide Xpert MTB RIF Assay for rapid detection of TB and MDRTB for patients satisfying programmatic criteria.

### Education

The department has continued with the clinical case based approach for undergraduate training bringing about a paradigm shift from organisms to infectious diseases and their aetiology.

### Research

The departmental faculty successfully conducted research projects funded by ICMR, and Research Society of our institute.

## 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:

<b>Division</b>	<b>Total samples processed in 2014</b>
Bacteriology specimens processed / ABS	55,000 / 33000 ABS
Virology & Immunology (HIV,HBV,HCV,CD4,RPR)	90,000
Mycobacteriology	30,000
Mycology	3,300
Serology	50,000
Parasitology – Stool	6,718
Parasitology – Malaria antigen detection (RDT)	2,442
GeneXpert MTB/RIF Assay	2,590
Emergency Laboratory	50,000

Anaerobic work station has been procured to improve anaerobic culture. A biosafety cabinet class II has been installed for safer processing of specimens. Automated

identification system (Vitek 2) is used to confirm the identity of bacteria that are difficult to identify with manual phenotypic methods.

### **3. Community care –**

The department provided Integrating Counseling and Testing services for ~1506 direct walk-in clients who wanted to know their HIV status. The service was provided free of cost and Confidentiality was ensured. They were also provided information regarding RTI/STI and TB.

### **4. Education –**

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

- Two undergraduate II MBBS student representatives were selected to participate in the intercollegiate zonal quiz at the chapter conference of IAMM.
- Six students have registered for MD Microbiology this year
- The pass percentage for M.D – 2015 was 100%.
- Library (Departmental Library ) Books – 108

Journals – IJMM, JPGM

- Internet facility is available for all staff and students

### **5. Research –**

#### **Themes of ongoing projects**

- Prospective Study for the Diagnosis and prevalence of Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococci (PANDAS) in Mumbai Population.
- Microbiological profile of diarrhea in children in less than 2 years of age.
- Prevalence of Tuberculosis in diabetes mellitus patients Prevalence of intestinal parasites in HIV seropositive patients attending an ICTC
- Prevalence of intestinal parasitic infections among alcoholics with special reference to *Strongyloides stercoralis*
- Prevalence of Cryptococcaemia in HIV seropositive patients
- Seroprevalence of toxoplasma gondii in HIV seropositive patients
- Nasal carriage of MRSA in non patient population subsets in tertiary teaching hospital

### **Collaborations**

**Several projects are being undertaken in collaboration with the following:**

- ICMR
- NIRRH
- NACO
- MDACS

- NARI, Pune

## **6. Publications – International**

1. Rajarshi Gupta , Preeti Mehta , Avani Koticha , Sunil Kuyare , Nayana Ingole and Niwruutti Hase

*Intestinal Parasitic Infections in Renal Allograft Recipients-Necessity of Periodic Screening and Prudent Choice of Diagnostic Techniques- A Prospective Study*  
*Int.J.Curr.Microbiol.App.Sci. (2015) 4(10): 757-763.*

2. Arati Bhadade, Preeti Mehta, Swapna Kanade, Gita Nataraj

*"Utility of light-emitting diode microscopy for the diagnosis of pulmonary tuberculosis in HIV infected patients."*

*International Journal of Mycobacteriology 2015;4(1):31-35.*

3. Shreshtha Tiwari, Gita Nataraj, Swapna Kanade, Preeti Mehta

*"Diagnosis of pediatric pulmonary tuberculosis with special reference to polymerase chain reaction based nucleic acid amplification test."*

*International Journal of Mycobacteriology 2015; 4(1):48-53.*

4. Raut S, Nataraj G, Mehta P

*Staphylococcal Cassette Chromosome mec Typing In Clinical Isolates Of Methicillin Resistant Staphylococcus Aureus In A Tertiary Care Hospital In Mumbai*

*International Journal of Medical and Applied Sciences 2015; Vol. 4, Issue No. 2: 98-108.*

5. PL Kashyap, Preeti Mehta, Gita Nataraj, Amar Pazare

*Mycobacteremia as the major bloodstream infection in HIV infected febrile adults in Mumbai*

*The International Journal of Tuberculosis and Lung Disease 2015 Vol 19, No. 10: pp.1266-1267.*

<http://dx.doi.org/10.5588/ijtld.15.0567>

6. Purva Sarkate, Supriya Paranjpe, Nayana Ingole, and Preeti Mehta, "Monitoring HIV Epidemic in Pregnant Women: Are the Current Measures Enough?" *Journal of Sexually Transmitted Diseases*, vol. 2015, Article ID 194831, 5 pages, 2015. doi:10.1155/2015/194831

7. Hule, Gouri P., Mohan G Karmarkar, Ainslie Cameron, NiwruuttiHase, UdayKhopkar, Preeti R Mehta, Celia L McNeilly, David McMillan, Kadaba S Sriprakash. "Seropositivity for antibodies to DRS-G, a virulence factor from *Streptococcus dysgalactiae* subsp. *Equisimilis*, is an independent risk factor for Post Streptococcal Glomerulonephritis and Chronic Kidney Disease in Mumbai."

*Clinical and Vaccine Immunology* (2015): CVI-00275.

8. Ahir, S., Mania-Pramanik, J., Chavan, V., Kerkar, S., Samant-Mavani, P., Nanavati, R., & Mehta, P.

*Genetic variation in the promoter region of pro-inflammatory cytokine TNF- $\alpha$  in perinatal HIV transmission from Mumbai, India.*

*Cytokine*, 2015 72(1), 25-30.

9. Solanke, V., Verma, S., Nataraj, G., & Mehta, P.

*Chryseobacterium indologenes* Associated  
Urinary Tract Infection—A Case Report. *British  
Biomedical Bulletin* 2015; 3(1): 75-80.

10. Mohan G Karmarkar, Gouri P Hule, Ainslie Cameron, Preeti R Mehta, UdayKhopkar, Niwruutti K Hase, Kadaba S Sriprakash

"Antibodies to group A streptococcal virulence factors, SIC and DRS, increase predilection to GAS pyoderma."

*BMC infectious diseases* 2015; 15(1): 113.

11. Solanke, Vaishali N., Mohan G. Karmarkar, and Preeti R. Mehta. "Early dengue diagnosis: Role of rapid NS1 antigen, NS1 early ELISA, and PCR assay."

*Tropical Journal of  
Medical Research* 2015;18(2):95-99.

12. Vijay R. Chavan, S. Ahir, Z. Ansari, P. Samant-Mawani, R. Nanavati, **Mehta**, J. Mania-Pramanik.

*Diversity in KIR gene repertoire in HIV-1 infected and HIV exposed uninfected infants: a study from  
India*

*Virology* Aug 2015 DOI: 10.1002/jmv.24348

*Journal of Medical*

13. Rashmi Mehta, Avani Koticha, Sunil Kuyare, **Preeti Mehta**

*Are we neglecting Blastocystis hominis in patients having irritable bowel syndrome?*

*Journal of evolution of medical and Dental Sciences Aug 10 2015;4(64); 11164-11171.*

### **National**

14. Vijay R Chavan, Deepali V Chaudhari, Swati P. Ahir, Preeti R Mehta, Samant-Mavani, S. Kerkar, J. Mania-Pramanik

*Current scenario of opportunistic and coinfection in HIV infected individuals at a tertiary care hospital in Mumbai, India.*

*Indian Journal of Medical Microbiology 2015; 33(1):78-83.*

15. Chaudhari DV, Kerkar SC, Chavan VR, **Mehta PR**, Mania-Pramanik J.

*Chemokine receptors CCR5 and CCR2 genes in HIV positive, HIV exposed seronegative and in HIV unexposed individuals: A study from Mumbai. Indian J Dermatology, venereology and Leprology;81 (5): 548.*

16. Pooja Thakkar, Preeti Mehta, Gita Nataraj, Pallavi Surase

*Biofilm forming capacity in staphylococci and comparison between its Species*

*Indian Journal of Basic and Applied Medical Research; June 2015: Vol.-4, Issue- 3, P. 313-323*

17. **Shinde Shivani S, Koticha Avani, Mehta Preeti R, Gatne Mukulesh L**

*Subconjunctival dirofilariasis.*

*Journal of Case Reports July-Dec 2015; 5(2):340-342.*

DOI :<http://dx.doi.org/10.17659/01.2015.0087>

18. Pallavi Surase, Dr. Shweta Raut, Dr. Gita Nataraj, Dr. Narendra Patil, Dr. Preeti Mehta

*Performance of different phenotypic tests in detecting mecA mediated methicillin resistance in Coagulase negative staphylococci (CoNS)*

*Indian Journal of Basic and Applied Medical Research; 2015;4(4): 538-544*

### **Chapter in Book**

Mehta P R, Ingole N A

*Mechanics of Paper Setting In The Art of Teaching Medical Students*

*Bhuiyan PS, Rege NN, Supe AN eds Third edition, Elsevier, August 2015*

### **7. In the Limelight –**

- First department of the Municipal Corporation of Greater Mumbai to be accredited as per ISO 15189: 2012

### **8. Awards & Honors –**

- *Rajarshi Gupta stood first and Dr. Rashi Mehta stood second at the MUHS MD (Microbiology) examination May 2015.*
- *Dr Sujata Lall was awarded the first prize and Dr. Shreeraj Talwadekar was awarded the second prize at the Oral Paper presentation competition at The Maharashtra Chapter Conference of IAMM October 2015*
- *Dr Sukanya Verma – 1<sup>st</sup> prize in Teaching Pathologists Conference Quiz, April 2015*
- *Dr Ujwala Kawane – 1<sup>st</sup> prize in Teaching Pathologists Conference Quiz, March 2015*
- *Dr Preeti Deshpande – 1<sup>st</sup> prize in Teaching Pathologists Conference Quiz, March*
- *Dr J P Panda – 2<sup>nd</sup> prize in essay competition on World Zoonosis Day, Bombay Veterinary College*

## **9. Donations & Grants –**

<i>S. No.</i>	<i>Source</i>	<i>Purpose</i>	<i>Amount in Rupees</i>
1	NACO	HIV related activity	70,000
4	NACO	Accreditation activity	46,662
5	NVBDCP	Dengue and CHK testing	1,00,000
		For PG Dissertation	15,000
6	DJST	For Departmental consumables	1,00,000
		Utility of Vitek-2 for yeast identification and Antifungal susceptibility Test	50,000
7	Research Society	Transfusion transmitted infections- special reference to HBV, HCV and HIV	50,000

## **10. Looking Ahead –**

- *Strengthening of Mycobacteriology laboratory for doing culture and Drug susceptibility testing and*

## **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*
- *Coordinator, Equipment Procurement, MCGM*
- *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**

- Pathologist & Prof. I/c , Laboratory, GTB Hospital, Mumbai
- Convenor, Hospital Infection Control Committee
- Secretary, Gosumec Alumni Association
- Member, RNTCP Core Committee
- Member, GTB Hospital, Infection Control Committee
- Member, Core Group, Airborne Infection Control, Public Health Dept.
- Member, Ethics Committee, Nair Hospital Dental College

### **National**

- General Secretary, Hospital Infection Society, Mumbai Forum
- 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. MadhavSathe**

- Secretary, Diamond Jubilee Society Trust
- Treasurer, GSMC Gymkhana
- Member, Animal Ethics Committee

## **V. Dr. NayanaIngole**

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

**V. Dr. Priyanka Prasad**

- Member, Executive Committee, Staff Society

**VI. Dr. SupriyaParanjpe**

- Member, Women's Development Cell

**12. Photographs- NIL**

**13. Contact Information**

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