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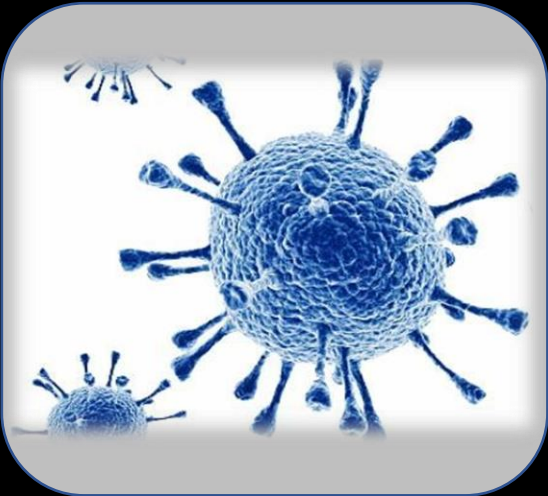
SEPT – DEC 2024

MICRO SCOOP

NEWSLETTER

St. Joseph Vaz College

Department of Microbiology



Rise of HMPV in India:

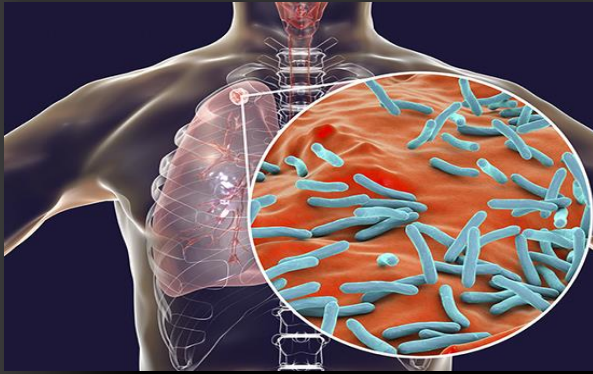
First case of HMPV reported in 8 month-old baby in Bengaluru
Human Metapneumovirus (HMPV) is a respiratory virus

Antimicrobial Resistance in India

More than 70% isolates of superbugs : *E. coli*, *K. pneumoniae*, *A. baumannii* and 50% of *P. aeruginosa* resistant to fluoroquinolones and cephalosporins

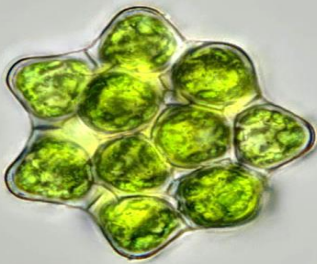


Rapid Diagnostic Approach For TB Using Exhaled Breath Aerosol



Method involves the use of microfluidic chips for concentrating and electrolyzing mycobacteria in the aerosol, followed by extracting and quantifying nucleic acids using real-time fluorescence quantitative PCR

Microalgae cultivation in photobioreactors: sustainable solutions for a greener future



Microalgae cultivation in photobioreactors (PBRs) has emerged as a promising and sustainable approach to address various environmental and energy challenges

Novel Endosymbioses induced by injecting bacteria in fungi

Bacteria were implanted into the filamentous fungus *Rhizopus microsporus* to follow the fate of artificially induced endosymbiosis. *Mycetohabitans rhizoxinica* was transmitted vertically to the progeny at a low frequency.

DEPARTMENT ACHIEVEMENT CORNER

- Ms. Niola Sequeira from F.Y.B.Sc. secured the 2nd place in the National Level GIF Making Competition organized by Microbiologist Society India and Naran Lala College of Professional and Applied Sciences, Navsari, Gujarat
- Ms. Gretchen Fernandes from F.Y.B.Sc. secured the 2nd Consolation prize in the Envelope painting/sketching competition organized by PES' R.S.N. College of Arts and Science, Farmagudi, Goa