**Pathology PG training [First year] in Microbiology: 2021**

Topics to be covered:

1. Identification of Pathogenic bacteria, fungi & parasites
2. Interpretation of special stains helpful to identify common organisms

Total training period in the first year: 2 Weeks

**Program plan:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Day***  | ***Theory***  | ***Date*** | ***Practical*** | ***Assigned Faculty***  |
| 1 | Brief Introduction to Microbiology & Bacterial morphology | 16-06-21 | Morphology of BacteriaSample processing | RM |
| 2 | Various staining techniques & Differential staining in Microbiology | 17-06-21 | Gram staining & modificationsBlood culture & reportingCulture media preparation | MT |
| 3 | Differential staining-2 | 18-06-21 & 19-06-21 | AFB staining & modificationsRespiratory samples culture  | RAJ |
| 4 | Special staining | 21-06-21 | Albert stainingRespiratory samples culture | TG |
| 5 | Other staining techniques | 22-06-21 | Spore staining, Capsular staining, Flagellar staining, Silver impregnation techniquesUrine culture & reporting | SS |
| 6 | Fungal identification techniques | 23-06-21 | KOH, LPCB, PAS,GMSFungal culture | RAJ |
| 7 | Parasitic identification | 24-06-21 | Wet film, Peripheral smear & othersExudates culture | AJ |
| 8 | Viral identification | 25-06-21 | Inclusion bodies, EMSerological tests | RAJ |
| 9 | Pathogenesis of important Gram positive infections-1 | 26-06-21 | Log book writingMolecular tests | RM |
| 10 | Pathogenesis of important Gram positive infections-2 | 28-06-21 | Log book writing | MT |
| 11 | Pathogenesis of some important Gram negative infections-1 (Neisseria + Enterobacteriaceae) | 29-06-21 | Log book writing | RM |
| 12 | Pathogenesis of some important Gram negative infections-2 (Non- fermenters, Spirochetes, Mycoplasma. Chlamydia, Rickettsia, Misc) | 30-06-21 | Log book completion | MT |

8-10 am: PG student spends time in the reporting lab along with faculty in each section/10-12 noon: Theory to be covered by the faculty/12-1 noon: Self learning /2-4.30 pm: Practical experience & Log book writing

**Instructions:**

1. PG student is expected to be present in the Department throughout the working hours and see any important smears or reports as and when it comes.
2. Record the details whenever necessary.

Prof & Head of Microbiology, BCMC