



Government of West Bengal
Institute of Postgraduate Medical Education & Research
Centre of Excellence in Medical Education & Research

Microbiology

FACULTY

Prof. Dr. Raja Ray, DTM&H, MD (Microbiology), PhD	Professor and Head of the Department
Prof. Dr. Kumkum Bhattacharyya, MD (Microbiology)	Professor
Prof. Dr. Chitrita Bhattacharyya Chattopadhyay, MD(Microbiology)	Professor
Dr. Hirak Jyoti Raj, MD (Microbiology)	Associate Professor
Dr. Nupur Pal, DCH, MD (Microbiology)	Associate Professor
Dr. Hasina Banu, MD(Microbiology)	Assistant Professor
Dr. Dipankar Paul, DCH, MD (Microbiology)	Assistant Professor
Dr. Rehena Sarkar, MD (Microbiology)	Assistant Professor
Dr. Abirlal Sanyal, MD (Microbiology)	Demonstrator

Senior Residents (of 2019-22 session)

Dr. Arunima Chakravarty
Dr. Puskar Mistry
Dr. Arijit Baidya (transferred to North Bengal MCH on 20/11/2022)
Dr. Sahelee Chandra (transferred in from RG Kar MCH on 19/11/2022)

Senior Residents (of 2018-21 session)

Dr. Hossain Najma Banu – transferred to Barasat Medical College and Hospital, June, 2022
Dr. Ananda Sanchayeeta Mandal– transferred to Uluberia Medical College and Hospital, June, 2022
Dr. Sayan Pal– transferred to BSMCH , released on 21/03/2022

CMO/SR (of 2017 to 2020 session)

Dr. Namrata Jain, MD Microbiology (CMO/SR)– transferred to Sambhu Nath Pandit Hospital, July, 2022
Dr. Mohana Chakraborty, MD Microbiology (CMO/SR)– resigned from CMO/SR post, July, 2022

Postgraduate trainees

Session 2022-2025	Session 2021-2024	Session 2020-2023
Dr. Abhinandita Sarkar	Dr. Suhita Sur	Dr. Rituparna Sinha
Dr. Jyoti Mishra	Dr. Md Asif Akhtar	Dr. Subhalakshmi Gupta
Dr. Sanchari Bairagya	Dr. Shreya Chaudhuri	Dr. Paulami De
-	Dr. Moumita Mallick	Dr. Debalina Nag

Research scholars and non-teaching staff

Ms. Archi Ghosh	PhD scholar, 2018 onwards (Calcutta University)
Mrs. Rehena Parveen	PhD scholar, 2018 onwards (Calcutta University) Recently submitted PhD thesis
Ms. Moonmoon Sinha	PhD scholar, 2018 onwards (Calcutta University) Recently submitted PhD thesis

TRANSFERS, POSTINGS AND SUPERANNUATIONS

Name & Qualifications	Designation
Dr. Namrata Jain, MD Microbiology – transferred out to Sambhu Nath Pandit Hospital	CMO/SR
Dr. Mohana Chakraborty, MD Microbiology – resigned from CMO/SR post, July,2022.	CMO/SR
Dr. Sayan Pal, MD Microbiology – transferred to BSMCH MD Microbiology	SR
Dr. Ananda Sanchayeeta Mandal, MD Microbiology – transferred to Uluberia Medical College and Hospital, June, 2022	SR
Dr. Hossain Najma Banu MD, Microbiology – transferred to Barasat Medical College and Hospital, June, 2022	SR
Dr. Arijit Baidya – transferred to NBMCH on 20/11/2022	SR
Mr. Subrata Biswas – superannuated on 29/09/2022	MT-Lab
Mr. Uttam Kumar Das – transferred to Midnapore Medical College and Hospital	MT-Lab
Mr. Pranab Chakraborty – services getting utilized presently at SDLD OPD	MT-Lab
Mr. Prakash Ghara – transferred to Pathology, IPGMER and SSKM HOSPITAL)	MT-lab
Mr. Pradyut Naba Barua – transferred to SNPH)	Group D

NONTEACHING AND PROJECT STAFFS

I) **Medical Technologist:** 1 Mallika Dubey Bhabataran Manna(**on deputation to Trauma Care Centre since 1st August,2019**) 2.RamkrishnaSahu. Subrata Biswas (**superannuated on 29/09/2022**)3. Sourav Ghosh 4.Sumona Kundu 5. Prasanta Ghose 6. Mr. Uttam Kumar Das (**transferred to Midnapore Medical College and Hospital**)6. Mr. Arup Bara i7. Mr.Subhomay Bhattacharya 8. Mr. SuparnoBhowmick9.Mr. Anik Roy 10. Mrs. Maitrayee Guha 11.ShriManab Ray (Total 11,including VRDL Lab)

II) **Group D staff:** 1.GopalSardar 2. Rama Dutta(**to retire on 31st January,2023**) 3. Sunny Hela.4.AjitMullick.PradyutNabaBarua (**transferred to SNPH**) 5. Sambhu Nath Pal (Total 4 from next year)

III) IDSP and National Vector Borne Disease Control Program

Nodal Officer Prof Dr Raja Ray, Shri Biswanath Das is working as Executive Assistant (Facility) of IDSP,NVBDCP.

IV) **AIIMS-CDC-ICMR** Project staff- Ujjaini Roy (JRF), Sani Safi (DEO, CDC-AIIMS project), PI-Prof Dr Raja Ray.Co-PI-Dr Hirak Jyoti Raj.

V) **VRDL Staff:** PI, Project-Prof. Dr Raja Ray. Co PI-Dr Hirak Jyoti Raj
Dr. Raja Ray (Research Scientist, Medical), Dr Aritra Biswas(Research Scientist, Non- medical) , ,Mr.Rajesh Adak and Ms Payel Dutta (LabTechnicians under VRDL project) Miss Moumita Maity(Multi-Tasker).

VI) **AMRSP-ICMR** Project-PI (Prof Raja Ray), Co-PI-Prof Kumkum Bhattacharyya, Dr Hirak Jyoti Raj,Ms Swati Ganguly (MT,Lab), Mr Pradip Bala(DEO).

VII) **NVHCP under NHM.**-Nodal Officer, State Referral Lab (Prof Dr Raja Ray),Co-PI-Dr Hirak Jyoti Raj,Technical Officer-Dr Ananya Pal, PhD.

VIII) **Sentinel Surveillance for Zoonotic Diseases**-under NCDC and NOHCP-PCZ-PI-Prof Chitrita Chatterjee

IX) MucormycosisHub, IPGMER-Chairperson-Prof Kumkum Bhattacharyya funded by Govt of West Bengal

XI) **Evaluation of different In-house developed fasidios Anaerobic broths as culture media and their use in cost-effectie manner** – Ex HOD,IPGMER,PI and Co-PI respectively Prof P.K. Maity and Dr Hirak Jyoti Raj, Associate Professor (Completed,Feb 2022)

X) **Project Research Fellow & PhD scholars:**Moonmoon Sinha, Rehana Parveen, ArchiGhosh.

FACULTY NEWS

Prof. Raja Ray, HOD, Microbiology

- 1) Course coordinator for MD Microbiology, MBBS Microbiology since beginning role as Professor in the department. Organizing seminars including selecting topics of current day importance in Microbiology and recent advances, organizing journal clubs, organizing classes for MD students. Training postgraduates on reporting of laboratory reporting in the realm of diagnostic stewardship Organizing mock tests and daily interaction with postgraduates MD Microbiology students on clinical microbiology issues along with other departmental faculty Regularly took theoretical lecture classes in MBBS on critical areas like Introduction to Microbiology, Growth, Physiology and Metabolism of microbes, Classification of Bacteria, Tuberculosis, Typhoid, Syphilis, Malaria, Filariasis Immunology, AIDS, etc. Taking classes for DMLT and B. Sc Nursing students and Post-basic B. Sc Nursing students.
- 2) Guiding MD thesis of WBUHS, Microbiology and PhD thesis of candidates (Calcutta University) (currently two completed and one registered and working). Guided summer/winter short-term projects of MSc candidate (Microbiology, Biotechnology) (external candidates/externs (Saint Xaviers, Techno India etc.) Recently served as a guide for completion of summer internship project titled as 'Prevalence Of Viral Hepatitis Types Among Suspected Cases Attending A Tertiary care Hospital And In-Vitro Diagnosis By screening And Confirmatory Methods' 01/04/2020 31/03/2021
- 3) Convenor and Internal examiner of MD Microbiology of August 2021 and April-June, 2022, Convener and Internal Examiner 2nd MBBS Microbiology 2021. External & Internal Examiner of BSc Nursing August 2021 and 2022. Paper setter MBBS Microbiology January 2021 and MD Microbiology, March, 2021 and for 2022
- 4) Adjudicator of 3 MD thesis in Microbiology under WBUHS December, 2022
- 5) 8 publications, 5 national & 3 international during the period under review
- 6) Maintained functioning status of 5 central government funded projects at IPGMER, Microbiology-(1. VRDL (including COVID-19)-Establishment of a Network of Laboratories for managing epidemics and Natural Calamities funded by DHR-ICMR) Lab, IPGMER), 2. AMRSP, 3. AMSP, 2. CDC-AIIMS), NVHCP (National Health Programme) and two state govt programmes-IDSP, NVBDCP,
- 7) The first was Viral research and Diagnostic Laboratory (DHR-ICMR) as Principal Investigator under which testing for eleven viruses in addition to Hep-A, Hep-B, Hep-C, Hep-E, IgM Anti-HBc, Anti-HBs continuing. Transplant screening for Toxoplasma, Rubella, CMV, Herpes Simplex 1, 2, Varicella Zoster, Epstein Barr Viruses testing kits by Microelisa initiated and continuing. Entire Hepatitis viral range and Hepatitis profile like IgM Anti-HBc, Anti-HBs, HBeAg and Anti-HBe being done. Currently COVID-19 Lab has started functioning under VRDL Lab since 17.03.2020 with permission from DG-ICMR and currently testing more than 7 lakh, 19 thousand (approx) samples tested till date (30th November, 2022). Equipment like -80 deg Deep Freeze, -20 deg Deep freeze, RT-PCR instrument (4 donated by UNICEF) Refrigerated Centrifuge, the rest provided by Govt of West Bengal, WBMSCL.
- 8) The second project-AIIMS-CDC-ICMR funded project entitled "Capacity building and Strengthening of Hospital Infection Control to detect and prevent antimicrobial resistance in India initiated in our hospital as Principal Investigator along with Co-PI, Dr HIRAK JYOTI RAJ, under which surveillance of hospital infection respect to CLABSI, CAUTI in ITUs, ICUs has been strengthened plus CLABSI prevention tool kit has been initiated as Quality assurance initiative to cut down on CLABSI rates at ICUs. Under the extended version of the project which commenced in December, 2022 CS-SSIs and VAP are to be included under study. New antibiotic discs and MIC Agar dilution screen for Vancomycin resistance in Staph and Enterococci introduced and MIC micro Broth dilution for Colistin initiated methods under AST.
- 9) "Antimicrobial Resistance Surveillance Project initiated as Principal Investigator wherein IPGMER has been selected as West Bengal Regional Centre for Antimicrobial resistance surveillance" under which cumulative antibiogram data acquisition and formulation of Antibiotic policy for clinicians has been initiated and achieved by June, 2021 last year and is continuing this year. In addition, endorsement of Hospital Infection Control Committee by hospital authorities, ongoing analysis of cumulative antibiogram data and new phenotypic screening, confirmatory and special tests like Colistin Broth Microdilution, E-Test for Oxacillin-Vancomycin Agar Screen, have already begun and continuing. This project will terminate in February, 2023
- 10) Antimicrobial Stewardship Implementation Project, (ICMR) a sister project of AMRSP which commenced in March, 2019 and is continuing-benefits are constructing hospital antibiogram to guide clinicians in choice of antibiotic. In June 2021, Hospital Antibiotic policy was published and distributed amongst clinicians of this institute for serving as a guide to rational antibiotic usage. One hundred fifty beds in different wards and ICUs are under AMSP-Implementation project where Prof Asim Kundu is PI and Prof Dr Raja Ray is Co-PI
- 11) Important roles/responsibilities. 1) Member secretary of Hospital infection control committee constituted by MSVP 01/04/2020 31/03/2021 and re-constituted by Director, IPGMER in August, 2022. Member of rapid response team under secretary (PHP) and MD (NHM), Dept of Health & Family Welfare under order of DME 01/04/2020 31/03/2021 10 Member, Rapid Response Team for COVID 19 01/04/2020 31/03/2021 04.
- 12) Member of expert committee of Medical Board constituted by MSVP, Kolkata Member of the PhD committee of IPGMER along with the other responsibilities. Continuing to function as Principal Investigator in the following projects : 1) Viral Research and Diagnostic Centre, DHR-ICMR, at IPGMER (Medical College Level VRDL) 2) Principal Investigator of the "ICMR, West Bengal Regional Centre for Antimicrobial Resistance" 3) Principal Investigator of AIIMS CDC-ICMR collaborative

project on "Capacity Building and Strengthening of Hospital Infection Control to detect and treat Antimicrobial resistance in India" 4) Nodal Microbiologist, IDSP and NVBDCP, IPGMER, Kolkata. In addition took responsibility as

13) In Charge Lab testing of CB-NAAT/TRU NAAT (NTEP) for tuberculosis testing under collaboration with Pulmonary Medicine department. In addition, took charge as Co-PI in the Antimicrobial Stewardship Implementation Programme commenced since August, 2019. 7) In addition took charge as Nodal Officer, State Referral Laboratory, National Viral Hepatitis Control Programme. 8) Currently, Lab In Charge of COVID 19 Testing Lab at IPGMER under approval from DG-ICMR since March, 2020 01/04/2020 to 31/03/2021 and continuing.

14) Member, Skill Lab Committee, MEU, IPGME&R.

15) Actively participated in the PI meeting on AMRSP project held at Ramalingaswamy Bhawan, ICMR, New Delhi on 1st September, 2022.

16) Actively participated in the AMSP Implementation Data Entry Meeting on November, 25th, 2022 as Co-PI at IPGMER.

17) Data validation and i-AMRSS Workshop on 5th December, 2022 under ICMR-AMRSP project.

18) Organized three MT Lab training workshops and 8 Medical Officer orientation workshops organized during the period Dec, 2020 till Nov, 2022 (Prof Raja Ray, Dr Hirak Jyoti Raj, Dr Hasina Banu, Dr Dipankar Pal, Dr Nupur Pal, Prof Kumkum Bhattacharyya, Dr Anaya PAL-Technical Officer, NVHCP).

19) Actively participated in the 2nd PI Meeting of 2nd Phase of AIIMS-CDC Project funded by CDC, Atlanta, Georgia on November 7th, 2022 as part of the Global Health Security Agenda Project at Ramalingaswamy Board Room, AIIMS, New Delhi, 2022.

20) Actively involved in sending MDRO strains to Nodal Centres for creating genomic database of drug-resistant genes in these organisms of our institute.

21) Member, Expert Committee, NAP-AMR, NMC (appointed by Chairman, NAP-AMR, NMC, New Delhi for designing teaching tools and designing curriculum for training healthcare professionals and students on basic knowledge of antimicrobial resistance).

22) Participated as resource faculty and Speaker at the ICMR sponsored Antimicrobial Stewardship Implementation Project Workshop jointly organized by Dept of Critical Care Medicine and Microbiology on 29th September at IPGMER for Clinicians, PDTs, PGTs, Nurses.

23) Actively participated as Co-Ordinator in the panel discussion at the State Level Meet the occasion of "World Antimicrobial Awareness Week" 23rd Nov, 2022.

24) Received Training on "Laboratory Management System and Internal Auditor" as per ISO 15189:2012 Stds at Centre For Quality Initiative, Kolkata (CQI Certificate No: IRQS/220100579).

25) Served as Speaker and Resource Faculty at the Regional Review and Revisioning Workshop" on NVHCP-NHM-WHO Project where delivered a presentation on "Transmission and Prevention of Viral Hepatitis" held at Taj City Centre, Workshop, Rajarhat on 9th and 10th December, 2022.

26) Submitted a project proposal as Co-PI along with Prof Asim Kundu (PI) to West Bengal, DST on "Implementation of Diagnostic Stewardship at tertiary care Superspecialty hospital from Kolkata: a pilot study".

27) Completed Basic Course in Biomedical Research (NPTEL, Mandatory training under NMC) in April, 2022.

28) Member, Tender Selection Committee of Institute (vide order no Inst/4072 dated 18/8/2021).

29) Member, Expert Committee for inspection of infrastructure and manpower at Jagannath Gupta Meical Sciences, December, 2021 and Hospital, Budge Budge and also at BP Poddar Hospital and Research Institute for commencing DMLT facilities in April, 2022.

30) Participated in Live Webinar on "Mutant Strains-Spread, Scale and Virulence" in June, 2022.

31) Attended the Regional Review Meeting for Eastern and North-Eastern States on 14th and 15th July, 2022 at Kolkata at Fairfield, Marriott under NVHCP in the capacity of Nodal Officer, State Referral Lab.

Prof. Kumkum Bhattacharyya

1) Acted as the Chairperson and Convenor of Mucormycosis multidisciplinary team, May, 2021 onwards.

2) Member of Institutional Bio-safety Committee (IBSC), IPGME&R.

3) Co-Investigator in AMRSP project under ICMR.

4) Presently acting as Consultant Microbiologist, Department of Microbiology.

Prof. Chitrita Bhattacharyya Chattopadhyay

- 1) Presently involved in day to day academic and laboratory activities of the department.
- 2) Guide of ongoing MD thesis works.
- 3) External examiner of MD Microbiology in Silchar.
- 4) Guide of short project of BSc and MSc Microbiology and Biotechnology students
- 5) Nominated for Training personnel for the execution of concept of Centre of Excellence of Pediatric Tuberculosis.
- 6) Prepared the new curriculum for Microbiology for IPGMER (UG) under NMC guidelines.
- 7). Prepared the new curriculum for Microbiology(BSc & MSc) for WBHU
- 8). Nodal person (PI) for "Sentinel Site" (IPGMER & SSKM Hospital) for "National One Health Programme for Prevention and Control of Zoonotic Diseases".
- 10) Attended training on Fire Safety.

Dr. Hirak Jyoti Raj

- 1) Regularly took theoretical lecture classes in MBBS on critical areas like Bacterial identification, Immunological tolerance and autoimmunity, Transplant immunology, Dysentery and diarrhoea, Blood stream infection, Hospital acquired infection, gas gangrene-tetanus, parasitology (Echinococcosis, nematodes), virology-Rabies, JE, etc. Taking classes for DMLT and B. Sc Nursing students and Post-basic B. Sc Nursing students.
- 2) Guiding MD thesis of WBUHS, Microbiology.
- 3) Acting as Co-Guide of one MD thesis.
- 4) Acted as reviewer of MBBS examination under WBUHS.
- 5) Publication one Published and two accepted for publication as of now.
- 6) Acting as Co-Investigator of 5 ongoing central government funded projects at IPGMER, Microbiology

- VRDL (including COVID-19)-**Establishment of a Network of Laboratories for managing epidemics and Natural Calamities funded by DHR-ICMR, IPGMER),**
- AMRSP funded by ICMR- **Antimicrobial Resistance Surveillance Project initiated as Co- Investigator wherein IPGMER has been selected as West Bengal Regional Centre for Antimicrobial resistance surveillance.**
- AMSP funded by ICMR
- **Capacity building and Strengthening of Hospital Infection Control to detect and prevent antimicrobial resistance in India** –A Project of HAI Surveillance and prevention- funded by CDC, ATLANTA, USA. PI-Prof Raja Ray – Performed regular ICU rounds for vigilance of HAI surveillance.

- 7) Completed one R&D project funded by WBDST as co-investigator. PI- Prof PK Maiti.
- 8) Published a book as Author : Quest Microbiology- for UG students-2nd edition. Academic Publisher, Kolkata.
- 9) Acted as paper setter of 2ND PROF. MBBS EXAM (Microbiology) for Tripura University.
- 10) Participated as resource faculty and Speaker at the ICMR sponsored Antimicrobial Stewardship Implementation Project Workshop jointly organized by Dept of Critical Care Medicine and Microbiology on 29th September at IPGMER for Clinicians, PDTs, PGTs, Nurses
- 11) Acted as resource person and Organizer in the TRAINING WORKSHOP under NVHCP- 2 EPISODES IN THE PERIOD OF REVIEW
- 12) Acting as focal person of NVHCP-IPGME&R –SRL
- 13) Actively participated in the workshop of 2nd Phase of AIIMS-CDC Project funded by CDC, Atlanta, Georgia on November 14th & 15th, 2022 as part of the Global Health Security Agenda Project at India Habitat Centre, New Delhi, 2022
- 14) Actively participated in the regional REVIEW meeting of NVHCP- WB, INDIA Chapter-organized by WHO at New Town Taj-City centre.
- 15) Data validation and i-AMRSS Workshop on 5th December, 2022 under ICMR-AMRSP project- attended.
- 16) Acted as Examiner in 2nd Professional MBBS exam under WBUHS, SSUHS-Assam (External Examiner). 17) Acted as external examiner in BDS exam at RIMS, Ranchi under RANCHI UNIVERSITY.
- 18) Guided summer/winter short-term projects of MSc candidate (Microbiology, Bio-Technology) (external candidates/externs (SXC, Techno India, MAKAUT etc).
- 19) Acting as Lab In-charge for ongoing NABL accreditation procedures in Dept of Microbiology under VRDLM activities, along with Dr Hasina Banu and able guidance of Prof Dr Raja Ray.

Dr Nupur Pal

- 1) In-charge of Mycology & Mycobacteriology Lab, Co-incharge of CBNAAT Lab.
- 2) Presently involved in day to day academic and laboratory activities of the department.
- 3) Guide & Co-Guide of ongoing MD & Post doctoral thesis works.
- 5) Examiner of DMLT examination (WBSMF).
- 6) External examiner of MBBS examination (WBUHS)
- 7) In-charge of short project of BSC and MSC Microbiology and Biotechnology students.

- 8) Member of RNTCP Core Committee(IPGMER)
- 9) Principal Investigator of MRU Project titled "Evaluation the antifungal effect of safe, biocompatible serum capped silver nanoparticle on clinically important Candida isolates."
- 10) Principal Investigator of RNTCP OR Project titled "Role of Interferon Gamma Release Assay versus Tuberculin Skin Test for effective diagnosis of latent tuberculosis among children aged 5-14 years having high risk and household contacts of pulmonary tuberculosis in a tertiary care hospital"
- 11) Member of state AMR containt cell, Swasthya Bhavan.

Dr. Hasina Banu

- 1) Involved in day to day academic and laboratory activities of the department.
- 2) Involved in COVID-19 laboratory duties under the aegis of VRDL, IPGME&R and SSKM Hospital, Kolkata-20, since February, 2021.
- 3) Supervisor of COVID-19 Vaccination Programme, IPGME&R and SSKM Hospital, Kolkata-20, since March, 2021.
- 4) Examiner of DMLT examination(WBSMF).
- 5) Scrutinizer in DMLT Examination (WBSMF).
- 6) Guided summer/winter short-term projects of MSc candidate
- 7) Co-Guide of ongoing MD thesis works (Microbiology & Gynecology)
- 8)) Acted as Guide of STS-ICMR projects of One MBBS student .
- 9) Acting as Technical Manager for ongoing NABL accreditation procedures in Dept of Microbiology under VRDLM activities, along with Dr Hirak Jyoti Raj and able guidance of Prof Dr Raja Ray.
- 10) Actively participated in the regional REVIEW meeting of NVHCP- WB, INDIA Chapter-organized by WHO at New Town Taj-City Centre.
- 11) Acting as focal person of NVHCP-IPGME&R –SRL
- 12) Acted as resource person and Organizer in the TRAINING WORKSHOP under NVHCP- 2 episodes in the period of review

Dr. Dipankar Paul

- 1) Presently involved in day to day academic and laboratory activities of the department like conducting theory and practical classes for M.B.B.S., B.Sc. Nursing, D.M.L.T. courses and routine laboratory diagnostic activities including bacteriology, serology, parasitology and mycology.
- 2) Involved in COVID-19 laboratory duties under the aegis of VRDL, IPGME&R and SSKM Hospital, Kolkata-20, since April, 2020.
- 3) Conducted sensitization programme on " Universal/ standard precaution for the health-care worker" for the MBBS Freshers on 4.3.2022 .
- 4) Conducted sensitization programme on "Microbiological sample collection & transport" for the newly-joined interns on 25.5.2022 & 31.5.2022 .
- 5) Guided Arpita Khamrai , Summer Intern from MAKAUT, W.B. on a project titled " Performance of rapid antigen test in comparison ton real-time RT-PCR in diagnosis of COVID-19 infection—a short study" (from 7.2.2022 to 7.7.2022)
- 6) Serving as the Nodal officer (for SSKMH) with respect to RAT for COVID-19.
- 7) Participated in CME on " Tuberculosis: recent update and emerging challenges" held on 23.3.2022 at AIIMS, Bhubaneswar.
- 8) Attended TROPACON-2022 (National Conference On Tropical & Parasitological Diseases) conducted by IATP,WB Chapter on 23.09.2022 – 24.09.2022.
- 9) Guided Dr. Shreya Choudhuri, PGT, Microbiology Dept. to present a poster at TROPACON-2022 titled " Fasciola hepatica infection: A rarely diagnosed neglected tropical disease"
- 10) Publication: Co-author of a original article titled " Changing trends in COVID-19 positivity in Kolkata: a study based on Rapid Antigen Testing in a teaching hospital" which is accepted for publication in the JK Practitioner.
- 11) Attended RBCW training at IPGME&R and SSKM Hospital, Kolkata-20 from 13/12/2022 to 15/12/2022.

Dr. Rehena Sarkar

- 1) Promoted to the post of Assistant Professor, Microbiology under WBMES and joined the Department of Microbiology, IPGME&R and SSKM Hospital, Kolkata-20 on 30/11/2021 FN.
- 2) Involved in preparing theory and practical class rosters for MBBS students with consultation with HOD Microbiology.
- 3) Involved in preparing class rosters for B.Sc. Nursing, D.M.L.T courses, BPT courses and DCLT courses with consultation with HOD Microbiology.
- 4) Presently involved in day to day academic and laboratory activities of the department like conducting theory and practical classes for M.B.B.S., B.Sc.Nursing, D.M.L.T. courses and routine laboratory diagnostic activities including bacteriology, serology, parasitology and mycology.
- 5) Guided Priti Maity , Summer Intern from MAKAUT, W.B. on a project titled " A Study on Bacteriological profile and Anti-microbial Susceptibility Pattern of wound samples collected from patients attending a Tertiary Care Hospital in Kolkata(from 7.2.2022 to 7.7.2022)

6) Involved in COVID-19 laboratory duties under the aegis of VRDL, IPGME&R and SSKM Hospital, Kolkata-20, since joining in the Department in 30 th November, 2021.

Dr. Abirlal Sanyal

- 1) Acting as Serology section in charge, April, 2022 onwards.
- 2) Acting as Nodal Officer for Dengue (from Microbiology) July, 2022 onwards.
- 3) Attended 'International River Congress' under the aegis of SAIARD, Salt Lake, Kolkata, December end, 2021, accompanied by Prof. Dr. Kumkum Bhattacharyya, Professor, Microbiology, IPGME&R and SSKM Hospital
- 4) Acted as a co-Guide of paper presented at 'International River Congress' by Dr. Subhalakshmi Gupta, Postgraduate trainee, Microbiology which won the 'best paper' prize, under guidance of Prof. Dr. Kumkum Bhattacharyya, Professor, Microbiology, IPGME&R and SSKM Hospital.(December, 2021)
- 5) Underwent training for 'Basic Course in Biomedical Research' (Cycle 5) under the aegis of NIE-ICMR, Chennai and successfully cleared the examination.
- 6) Took active part in Mycological evaluation and diagnosis of COVID-19 associated Mucormycosis under guidance of Prof. Dr. Kumkum Bhattacharyya, Professor, Microbiology, IPGME&R and SSKM Hospital; manuscript for publication nearing completion.
- 7) Acted as a Guide and co-Guide of STS-ICMR projects two Final year MBBS students in carrying out and drafting under guidance of Prof. Dr. Kumkum Bhattacharyya, Professor, Microbiology, IPGME&R and SSKM Hospital, Kolkata-20:
 - 1."Knowledge attitude practice and associated factors towards infection prevention among health care workers of a tertiary care hospital" (Sounak Sinha, Dr. Abirlal Sanyal, Prof. Dr. Kumkum Bhattacharyya)
 - 2."A clinico-microbiological study of urinary tract infections in pregnant women attending antenatal clinic of tertiary level hospital with special reference to antimicrobial susceptibility" (Soham Basu, Prof. Dr. Kumkum Bhattacharyya, Dr. Abirlal Sanyal)Both the projects have been submitted at ICMR-STC for consideration.
- 8) Acted as the guide for a short project of two MBBS interns : "A questionnaire based study of knowledge attitude practices among healthcare workers with respect to rising trends in antimicrobial resistance at a tertiary care hospital in Eastern India (Achyut Kanungo, Darshna Dutta, Dr. Abirlal Sanyal, Prof. Dr. Kumkum Bhattacharyya) .
- 9) Acted as the Guide for project titled "A study assessing burden of parenterally transmitted viral hepatitis detected by screening method with special reference for surgery." By Ms. Ena Kundu. (M.Sc Microbiology,MAKAUT) .
- 10) Was involved in arranging MD practical examinations, 2022, with other faculty members.
- 11) Presently carrying out day to day academic and laboratory activities of the department, including UG teaching and examination of MBBS, Nursing, DMLT students.
- 12) Acted as scrutinizer of 2nd Professional MBBS examinations (both old and new regulations) held in the year 2022.
- 13) Involved in maintaining stock of kits in Serology section along with SMIS indent and co-ordination with store etc.
- 14) Acted as a mentor in different Orientation programmes of MBBS interns and fresh MBBS students of this institution in 2022.

Dr. Arunima Chakravarty:

Passed MD examination on 5th July 2022 and posted as Senior Resident in the department of Microbiology, IPGME & SSKMH, Kol-20.

1. Involved in invigilation duties during various MBBS and DMLT examinations.
2. Involved in preparing rosters for DMLT classes.
3. Presently involved in day to day academic and laboratory activities of the department like conducting theory and practical classes for M.B.B.S, D.M.L.T. courses and routine laboratory diagnostic activities including bacteriology, serology, parasitology and mycology.
4. Involved in supervising various duties in COVID-19 related VRDL duties.

Dr. Puskar Mistry

Passed MD examination on 5th July 2022 and posted as Senior Resident in the department of Microbiology, IPGME & SSKMH, Kolkata-20.

1. Presently involved in day to day academic and laboratory activities of the department like conducting theory and practical classes for M.B.B.S, D.M.L.T. courses and routine laboratory diagnostic activities including bacteriology, serology, parasitology and mycology.
2. Involved in preparing rosters for DMLT classes.
3. Involved in invigilation duties during various MBBS and DMLT examinations.
4. Involved in supervising various duties in COVID-19 related VRDL duties of IPGME&R and SSKM Hospital Kolkata
5. Presented in Foundation day of IPGME&R and SSKM Hospital, Kolkata-20

Dr. Sahelee Chandra

Joined as Senior Resident in the department of Microbiology, IPGME & SSKMH, Kolkata-20 on **19th November, 2022.**

1. Presently involved in day to day academic and laboratory activities of the department like conducting theory and practical classes for M.B.B.S, D.M.L.T. courses and routine laboratory diagnostic activities including bacteriology, serology, parasitology and mycology.
2. Involved in preparing rosters for DMLT classes.
3. Involved in invigilation duties during various MBBS and DMLT examinations.
4. Involved in supervising various duties in COVID-19 related VRDL duties of IPGME&R and SSKM Hospital Kolkata

ACADEMIC ACTIVITY

1. Teaching and organizing examinations of MBBS, MD, DNB, DMLT, BPT, DCLT, B Sc Nursing.
2. Organizing Journal club, Seminars, Lecture Classes and guiding thesis for MD & Ph D candidates.
3. Organizing summer and winter projects for M. Sc./BSc (Microbiology/ Biotechnology) students of different reputed colleges of W.B.like Amity University, Techno India, St. Xavier's and also other states, approaching our institute.
4. Inter-departmental advisory role in issues relating to Hospital Infection Control, Antibiotic Policy/Antibiogram / integrated teaching.
5. Participating in Medical Boards as Subject experts .
6. Participating in State, National and International Conferences related to the subject of Microbiology.
7. Poster presentation at TROPACON, 2022- "A comparative study of intestinal coccidian parasitic infection in HIV/AIDS Patient presenting with diarrhea and without diarrhea" Dr. Moumita Mallick,
8. Guide- Prof Dr. Chitrita Chatterjee, Dr. Nupur Pal, Associate professor microbiology: Prof Dr. Raja Ray HOD Microbiology
9. Poster presentation at TROPACON, 2022: Dr. Shreya Chaudhuri, PGT, Microbiology Dept. titled "Fasciola hepatica infection: A rarely diagnosed neglected tropical disease" Guide-Dr Dipankar Paul, Assistant Professor. Microbiology, Dr. Yogiraj Ray, Associate Prof, ID, SNPH, Prof Raja Ray, HOD, Microbiology

PUBLICATION BY FACULTY, STUDENTS AND RESEARCH SCHOLARS

1. N Pal, D Nag, J Halder, A Biswas, R Ray, A Hazra, C Chatterjee, Impact of vaccination on SARS-CoV-2 infection: Experience from a tertiary care hospital ,Asian Pacific Journal of Tropical Medicine 28th February, 2022;15 (2): 90.Published 11th August,2022
2. Pal N, Ray R ,Akthar N, , Maiti PK. Chronic urinary tract infection by biofilm producing Mycobacterium abscessus following a post traumatic laparotomy wound infection. Annals Medical. Science and Research, Published 23rd
3. A Systematic Review on disinfection, airborne precautions and biomedical waste management for prevention of infection by SARS CoV 2:Current evidences and adoptable practices in healthcare settings".Journal of Medical and Allied Sciences2021,11(1)..Print 31st January,2021 ISSN:2231 1696 Online ISSN : 22.B.Chakravarty,R.RayNovember, 2022(journals.lww.com/amsr)
4. Nupur Pal, Rituparna Sinha, Raja Ray, Arunima Chakraborty, Hasina Banu, Supratim Dutta. A rare case of Histoplasma and Cryptococcus Co-infection in an Immunocompetent Child. J NTR Univ Health Sci 2022(accepted)
5. Evaluation of clinical response and bactericidal efficacy after application of Super- oxidized solution and Povidone Iodine in the healing of pressure ulcers Indian Journal of Applied Research. Journal DOI:10.36106,Print ISSN No.2249-55x(International Journal).Vol 11,Issue 9,Sept -December 2021,Pg 42-45
6. Mathur Purva, Guleria Randip, Walia Kamini ,Ray Raja, Jyoti Raj Hirak,et al. "Assessment of core capacities for antimicrobial stewardship practices in Indian hospitals: report from a multi-centric initiative of global health security agenda. Indian Journal of Medical Microbiology. 2019:37:309-17.Published online:20/1/2021
7. In-vitro antiviral action of Eupatorium perfoliatum against dengue virus infection: Modulation of mTOR signaling and autophagy.Publishedonline 9 September 2021 0378-8741/© 2021 Published by Elsevier B.V.Journal of Ethnopharmacology 282 (2022) 114627 Moonmoon Sinha , Urmita Chakraborty , Anirban Kool , Mousumi Chakravarti , Souvik Das , Sandip Ghosh , Lovnish Thakur , Anil Khuranna , Debadatta Nayak , Biswarup Basu , Subhabrata Kar , Satadal Das,Raja Ray
8. ShreyaSingh, NupurPalb1 RamanSardana BellaMahajan NoyalJoseph ArunalokeChakrabarti ShivaprakashM. Rudramurthy et al. Current perspective of adrenal histoplasmosis in India: A prospective study in a tertiary care hospital, Eastern India Indian J Med Microbiol(<https://doi.org/10.1016/j.ijmmb.2022.10.001>)13)

9. Mandira Chakraborty¹, Hasina Banu^{2*}, Manoj Kumar Gupta³. Epidemiology and Antifungal Susceptibility of Candida Species causing Blood Stream Infections: An Eastern India Perspective. The Journal of the Association of Physicians of India, 2021; 69. 11-12 ¹,
10. Mamta Chawla Sarkar, Harsha Raheja, Nidhan K Biswas, Sohini Chakraborti, Animesh Kumar Singh, Shekhar Ghosh, Sumanta Sarkar, Subrata Patra, Rajiv Kumar Mondal, Trinath Ghosh, Ananya Chatterjee, Hasina Banu, Agniva Majumdar, Sreedhar Chinnaswamy, Narayanaswamy Srinivasan, Shanta Dutta, Saumitra DAS. Mutations in SARS-CoV-2 viral RNA identified in Eastern India: Possible implications for the ongoing outbreak in India and impact on viral structure and host susceptibility. Journal of Biosciences, 2020; 45. 10.1007/s12038-020-00046-1.
11. A questionnaire-based study of knowledge attitude practices among healthcare workers with respect to rising trends in antimicrobial resistance at a tertiary care hospital in Eastern India" (Achyut Kanungo, Darshna Dutta, Dr. Abirlal Sanyal, Prof. Dr. Kumkum Bhattacharyya) submitted in September, 2022 for publication in Nepal Journals Online (NepJOL).
12. Banu HN, Bhattacharyya K, Totad RD, Raj HJ, Determination of Minimum inhibitory Concentration is more informative than disc diffusion for decision making purpose: A study on the case of urinary tract infection from a tertiary care hospital of eastern India. Al Ameen J Med Sci 2022;15(4): 285-294.
13. Study of Hepatitis C prevalence at a tertiary care centre by serological and molecular testing for detection, treatment, follow-up by viral load testing". Dr. Ashish Ghos, Dr. B. Chakraborty, Dr. Mahiuddin Ahmed, Dr. Raja Ray submitted in the journal "KLEU, Karnataka (Indian Journal Of Health Sciences and Biomedical Research) in August, 2022
14. Raj HJ, Paul D, Hazra A, Ray R, Changing trend in Covid-19 positivity in Kolkata. A Study based on rapid antigen testing in a teaching hospital. JK Practitioner 2022;27(4): (Accepted for Publication) JK Practitioner in October-December issue of the journal.

PROJECTS AND ACTIVITY OF SRs and SCHOLARS

- Dr. Arunima Chakravarty, Dr. Puskar Mistry, Dr. Arijit Baidya appeared and passed the MD Microbiology examinations, May-June, 2022. They joined as Senior Resident at this department in the month of July, 2022.
- Dr. Debalina Nag, 3rd year post graduate trainee attended XVI NATIONAL CONFERENCE OF INDIAN ACADEMY OF TROPICAL PARASITOLOGY in 2022.
- Dr. Subhalakshmi Gupta, 3rd year post-graduate trainee the paper titled "RIVER, MAN, MICROBIOME: ETERNAL AND EVOLVING TRIAD OF ONE HEALTH INITIATIVE" at 'International River Congress, organized by South Asian Institute For Advanced Research and Development (SAIARD) presented by Dr. Subhalakshmi Gupta, Postgraduate trainee, Microbiology won the 'best paper' prize, acted as the co-guide of the same along with Prof. Dr. Kumkum Bhattacharyya, Professor, Microbiology, IPGME&R and SSKM Hospital in 2021. Dr. Gupta attended MICROCON and presented a poster titled "non-fermentative gram-negative bacilli causing blood-stream infection with emphasis on minimum inhibitory concentration at a tertiary care hospital."
- Dr. Gupta attended XVI NATIONAL CONFERENCE OF INDIAN ACADEMY OF TROPICAL PARASITOLOGY in 2022. Dr. Gupta will be going to attend the NATIONAL WORKSHOP ON MEDICAL MYCOLOGY, JIPMER, PUDUCHERY, Dec, 2022.
- Dr. Gupta has active involvement in M.B.B.S PRACTICAL classes, BPT and DCLT theory classes. (2021 and 2022)
- She is involved in Anti-microbial Resistance surveillance programme under Govt. Of West Bengal.
- Dr. Paulami De, 3rd year post-graduate trainee attended e-MICROCON-2021 and presented a e-poster titled " A RETROSPECTIVE STUDY OF PREVALENCE OF URINARY TRACT INFECTIONS AND ITS VARIATIONS IN POST-RENAL ALLOGRAFT RECIPIENTS AT A TERTIARY CARE HOSPITAL." (co-authored by Dr. Gaurav kumar Khandelwal, Dr. Abirlal Sanyal, Dr. HIRAK Jyoti Raj, Associate Professor, Prof. Dr. Kumkum Bhattacharyya, Professor, Microbiology, Dr. Arpita Raychaudhury, Professor, Dept. of Nephrology, IPGME&R and SSKM Hospital, Kolkata-20.)
- Dr. Paulami De attended XVI National Conference Of Indian Academy Of Tropical Parasitology in 2022.
- Dr. Rituparna Sinha, 3rd year post-graduate trainee attended XVI NATIONAL CONFERENCE OF INDIAN ACADEMY OF TROPICAL PARASITOLOGY in 2022.
- Dr. Sinha has active involvement in M.B.B.S PRACTICAL classes, BPT and DCLT theory classes. (2021 and 2022)
- She is involved in Anti-microbial Resistance surveillance programme under Govt. Of West Bengal.
- Dr. Suhita Sur, 2nd year post graduate trainee attended ICMR- workshop on implementation of antimicrobial stewardship programme in various tertiary care centre across India held on 28/09/2022.
- Involve in conducting the class of BPT student of batch 2021

- Dr. Md Asif Akhtar ,2nd year post graduate trainee attended ICMR- workshop on implementation of antimicrobial stewardship programme in various tertiary care centre across India held on 28/09/2022.
- Involve in conducting the class of BPT student of batch 2021
- Dr. Shreya Chaudhuri ,2nd year post graduate trainee attended ICMR- workshop on implementation of antimicrobial stewardship programme in various tertiary care centre across India held on 28/09/2022.
- Involve in conducting the class of BPT student of batch 2021
- Dr. Moumita Mallick ,2nd year post graduate trainee attended ICMR- workshop on implementation of antimicrobial stewardship programme in various tertiary care centre across India held on 28/09/2022.
- Involve in conducting the class of BPT student of batch 2021

MD Thesis submitted (September, 2022):

1. Role of serial estimation of Ct value in assessment of clinical prognosis of a patient infected with SARS-CoV-2. Dr. Rituparna Sinha, Guide : Prof. Dr. Raja Ray(2020-2023).
2. Study of antifungal susceptibility pattern of clinical isolates of various Candida species with special reference to conventional and automated methods, in a tertiary care hospital. Dr. Paulami De, Guide : Dr. HIRAK Jyoti Raj, other Guides: Prof. Dr. Kumkum Bhattacharyya, Prof. Dr. Raja Ray (2020-2023).
3. Sero-prevalence and demographic profile of Scrub typhus and the contribution of the same with respect to Acute Encephalitis Syndrome in a tertiary care hospital. Dr. Debalina Nag, Guide: Dr. Chitrita Chattopadhyay Bhattacharyya, other Guide: Dr. Nupur Pal(2020-2023).
4. Microbiological profile of blood stream infection patients with special reference to antimicrobial resistance detected by various methods at a tertiary care hospital. Dr. Subhalakshmi Gupta, Guide: Prof. Dr. Kumkum Bhattacharyya, other Guides : Dr. Prof. Avijit Hazra. (2020-2023).

Ongoing MD Thesis works:

5. Study of clinico-microbiological and epidemiological correlates of patients of ventilator associated pneumonia in critical care unit of a tertiary care hospital, Kolkata : Dr. Suhita Sur, Guide: Prof. Dr. Raja Ray, HOD, Microbiology. Other guides: Dr. HIRAK Jyoti Raj, Associate Professor, Microbiology: Dr. Asim Kundu, HOD, Critical care, IPGMER and SSKM Hospital, Kolkata-20.
6. Study of the prevalence of latent tuberculosis among children aged 5-14 years in high-risk group and household contacts of active pulmonary tuberculosis in a tertiary care hospital, Kolkata : Dr. Md Asif Akhtar, Guide: Dr. Nupur Pal Associate professor, Microbiology : Prof. Dr. Raja Ray, HOD Microbiology . Co-guide- Proff Dr. Mrinal kanti Das ,dept of paediatrics: Proff Dr. Amitava Sengupta, HOD Chest medicine at IPGME&R
7. Study to detect female genital infections by Chlamydia trachomatis among women of reproductive age group attending Gynaecology and Obstetrics department in a tertiary care hospital in eastern India. Dr Shreya Chaudhuri Guide-Prof. Dr. Kumkum Bhattacharyya, Dr. Hasina Banu Assistant professor, Microbiology: Prof Dr. Subhash Chandra Biswas, Professor and HOD, Dept. of Gynaecology and Obstetrics.
8. A descriptive cross-sectional study on the occurrence and prognostication in schizophrenics with toxoplasmosis in a tertiary care centre in eastern India. Dr. Moumita Mallick Guide- Prof Dr. Chitrita Bhattacharya Chattopadhyay, Dept of microbiology: Prof Dr. Amit Kumar Bhattacharya, Professor and Head, Institute of Psychiatry-COE.

Ongoing PhD works and activities of PhD scholars:

- 1) Rehana Parveen Registered for PhD Microbiology at the University of Calcutta. Entitled "Preparation and evaluation of antimicrobial silver nano-particles using conventional and novel bio-compatible agents". Guide: Prof. PK Maiti. Recently **submitted her PhD thesis.**
- 2) Archi Ghosh Registered for PhD Microbiology at the University of Calcutta. "Study for correlation between physical and antimicrobial assay for some nano-antimicrobial agents"; Guide: Prof. PK Maiti Ms Archi Ghosh participated in "Applied Nanotechnology and Nanosciences International Conference" held on 24th March-26th March, 2021, at Paris, France. Paper presented titled "Characterization and in-vitro hemolysis evaluation of carboxy-methyl cellulose(CMC)-capped nanoparticles (Ms. Archi Ghosh, Dr. Mahua Ghosh Chaudhuri(JU), Prof. P.K.Maiti, Prof. Dr. Kumkum Bhattacharyya). Ms. Ghosh presented a paper titled "Characterization of anti-microbial nanoparticles by physical parameters and antimicrobial assay" (Ms. Archi Ghosh, Dr. Mahua Ghosh Chaudhuri(JU), Prof. P.K.Maiti, Prof. Dr. Kumkum Bhattacharyya) on 65th Foundation day of IPGMER and SSKM Hospital.
- 3) Ms. Moonmoon Sinha recently submitted her PhD thesis in Calcutta University. Phd thesis entitled "Evaluation of the Role of Eupatorium perfoliatum extract against HEPG2 and primary hepatic cell lines .Guide: Prof Dr Raja Ray, Co-Guide: Dr Satadal

Das.Thesis accepted and submitted to internal and external experts for evaluation.Awaiting Viva defense after final submission.

SHORT PROJECTS

- 1) Identification and antimicrobial susceptibility testing with special reference to determination of MIC of clinical isolates in a tertiary care hospital" Soumyadeep Biswas (Integrated M.Tech, KIIT, Odisha) under Prof. Dr. Kumkum Bhattacharyya (August-September, 2021)
- 2) "Correlation between HBV-DNA and HBeAg with the biomarkers of liver in chronic hepatitis B patient in a tertiary care hospital" Ms. Seena Basu (M.Sc Microbiology,MAKAUT) under guidance of Prof. Dr. Chitrita Bhattacharyya Chattopadhyay.
- 3) "Prevalence of Carbapenem resistance among ITU patients along with demographic pattern". Ms. Anwesha Adhikari (M.Sc Microbiology,MAKAUT) under guidance of Dr. Nupur Pal .
- 4) "Comparison of demographic pattern among Carbapenem sensitive and resistance in IPD and OPD patients" Ms. Triparna Roy (MTech Biotechnology, BITS, Mesra, Ranchi) under guidance of Dr. Hasina Banu
- 5) "Urine culture and antimicrobial stewardship" Asish Biswas(Msc Microbiology) under guidance of Dr. Hasina Banu
- 6) "Antifungal effect of novel silver nanoparticle on Candida spp" Shreya Saha (M.Sc Microbiology,MAKAUT) under guidance of Dr. Nupur Pal
- 7) "Epidemiology of Dengue fever in pre and post covid era in West Bengal" Shilpi Mandal (M.Sc Microbiology,MAKAUT) under guidance of Dr. Hasina Banu.
- 8) "Efficacy of fosfomycin on MDR isolates in ICU set up in Tertiary care Hospital" Oindrila Das.Msc Microbiology under guidance of Dr. Nupur Pal
- 9) "Performance of rapid antigen test in comparison to RTPCR in diagnosis of COVID-19 infection.Arпита Khamrai(M.Sc Microbiology,MAKAUT) under guidance of Dr. Dipankar Paul.
- 10) "Study on bacteriological profile and AST pattern of wound sample collected from patient attending in aTertiary care hospital.Priti Maity(M.Sc Microbiology,MAKAUT) under guidance of Dr. Rehena Sarkar..
- 11) "A study assessing burden of parenterally transmitted viral hepatitis detected by screening method with special reference for surgery." Ena Kundu. (M.Sc Microbiology,MAKAUT) under guidance of Dr. Abirlal Sanyal.
- 12) "Burden,predictor and knowledge of leprosy among patients attending dermatology OPD in Tertiary care hospital.
- 13) "A study on biomarkers of hepatitis patients attending OPD and IPD in Tertiary care hospital" Gargi Halder, (M.Sc Microbiology,MAKAUT) under guidance of Prof Chitrita Chattopadhyay.
- 14) "Determining bacteriological profile of blood culture isolates from suspected patients of sepsis in a tertiary care hospital in Kolkata and their antibiogram."Saptati Pyne(M.Sc Microbiology,MAKAUT) under guidance of Prof R.Ray.
- 15) "Diagnostic stewardship of UTI in a Tertiary care hospital"Ritujoy Chatterjee,Msc Microbiology under guidance of Prof.Kumkum Bhattacharyya.

SPECIAL CONTRIBUTIONS TO FIGHT AGAINST COVID-19 AND OTHER SPECIAL ACHIEVEMENTS

- Department of Microbiology,IPGMER,Kolkata pioneered the testing for SARS CoV 2 in BSL 2 Lab(under VRDL Lab,DHR-ICMR) in West Bengal along with NICED,Kolkata.As per recognition of DG-ICMR, Covid 19 lab started functioning from March,2020 in the midst of the Covid-19 pandemic and served the KMC area, Non-KMC areas including South 24 pargans,North 24 Pargans,Howrah,Hooghly,West and east Midnapore,West and East Burdwan Subsequently our laboratory trained lab techs and faculty from different new up and coming RT-PCR Labs all over West Bengal(thirty labs),thus helping the state government to decentralise the testing process all over the state. Our Covid-19 lab participates in EQAS INITIATED BY NIV,Pune and NICED,Kolkata.

- Our VRDL Covid 19 lab is entrusted with RNA extraction kit validation and RT-PCR kit validation as and when required by WBMSCL.
- Our VRDL lab staff(Dr Raja Ray,Medical Scientist,Dr Aritra Biswas,Non-medical Scientist,Dr Jayeeta Halder(Research Assistant),and PI and Co-PI-Prof Dr Raja Ray, Dr Hirak Jyoti Raj have worked tirelessly throughout the entire period of last two years, subsequently all faculty including Prof Kumkum Bhattacharya, Prof Chitrita Chatterjee,Dr. Nupur Pal,Dr.Dipankar Pal, SR Dr Abirlal Sanyal, MD(PGTs),Research associates and Lab techs Swati Ganguly, Rajesh Adak, Payel Dutta, Prasanta Ghosh, Subrata Biswas, and lab techs subsequently joined, DEOs Sani Safi, Pradip Bala,KMC DEOS-Saikat Ray and his team, and staff from from other departments like Pharmacolgy,Endocrinology,SDLD,Surgery,Pathology,Biochemistry and MRU,PGTs,DEOs all joined in the fray. The contribution of Prof Mitali Chatterjee,HOD,Pharmacology,Dr Soma Banerjee,Associate Professor,Hepatology(SDLLD),Prof Abhijit Chowdhury,Professor,Hepatology,Dr Simanti Dutta,Associate Professor,SDLD is acknowledged with deep sense of gratitude.
- Prof Dr Raja Ray was selected Member,Expert Committee,Lab testing Experts by Principal Secretary,Health and still continues to serve in that capacity.
- IPGMER,Covid 19 lab participates in genome sequencing studies of SARS CoV 2 strains twice a month with NIBMG,Kalyani with Dr Aritra Biswas serving as Nodal officer
- IPGMER,Covid 19 lab participates twice a month in Sentinell Surveillance of Covid 19 lab for tracking prevalnce and demarcating micro-containment zones for epidemiologic measures to be taken by Swasthya Bhawan with Prof Raja Ray as Nodal Officer
- Prof Dr Raja Ray was nominated for the"Chikitsa Jyoti award" on Doctor's day for his pioneering contribution to laboratory diagnostics of SAS CoV2which he recieved on 6th January,2021(Sambad Pratidin)
- The laboratory-Total number of cases tested by RT-PCR till date 5,79,542 and is continuing uninterrupted 24x7x365 even on Sundays and public holidays.The departmental faculty hereby acknowledge the whole hearted support of the Hospital administration and the Department of Health and Family Welfare for making this patient care service available to the people of West Bengal totally free of cost and providing financial support throughout.

Tests under NVHCP in 2022 (Total= 4532)

TEST	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec-21	Total
HCV-RNA RT-PCR	67	79	110	98	98	144	140	124	111	83	104	102	1260
HBV DNA Quantitative assay	160	204	256	243	306	372	298	309	312	276	289	247	3272
Grand total													4532

N.B.: Tests done in Central Lab during evening & night shifts are not included. Tests for HIV done in ICTC; Malaria partly done in Pathology deptt. under Malaria clinic.

**Institute of Post Graduate Medical Education & Research (IPGME&R)
VRDL (Medical College Level), Dept. of Microbiology (Annual Achievements Summary)**

SI No.	Test Done by ELISA	Total test (Jan, 2022-10 th Dec, 2022)
1	HAV	493
2	HEV	493
3	HbeAg	1794
4	Anti-HBe	1794
5	Anti –HBs titre	204
6	HSV1 and HSV2 IgM, IgG	3919
7	VZV IgM, IgG	328
8	CMV IgM, IgG	1832
9	EBV IgM, IgG	17
10	Torch panel	522
11	Scrub Typhus	1469
12	Dengue NS1	2401
13	Dengue IgM	2081
14	JE IgM	165
15	Anti HBc	42
16	VZV IgM	39
17	VZV IgG	39
18	Chikungunya IgM	42
SI No.	Test Done by RT-PCR	Total test (Jan, 2022-10 th Dec, 2022)
1	COVID-19	1,28,170
2	Influenza panel (H1N1)	102
3	Zika	252
4	RubellaIgG,IgM	314

IPGME&R-VRDL is one of the best performing and leading VRDLs in India. Starting from 2017, our VRDL with skilled medical & non-medical personnel catering to the needs of the a huge number of patients as IPGME&Ris best known as medical leaning and research centre of excellence and as a tertiary level super-speciality hospital in West Bengal and also in Eastern India.

IPGME&R-VRDLhas well equipped for serological and molecular analysis. Our laboratory provides facilities like ELISA for diagnosis of various pathogens and also conventional and real time PCR for diagnostic as well as research purpose.

Our VRDL is first medical college level lab to start COVID-19 test and also provided training to thirty other VRDLs and hospitals in our state under specific instructions from DME ,DHS of Health and Family Welfare Department to diagnose this deadly virus by RT-PCR in West Bengal. During the COVID-19 pandemic situation, our VRDL performed RT PCR test in 24x7 modeto generate test results as early as possible.Our VRDL at IPGMER was the first State Govt

Institution to get permission for commencement of SARS CoV 2 testing by validated RT-PCR method(NIV,Pune)We have also participated in the sentinel surveillance programme co-ordinated by Director, Public Health, Govt of West Bengal for a whole one year during the waning phase of the pandemic of asymptomatic patients to explore the epidemiological and clinical characteristics of COVID-19 patients with the collaborations of health department of Govt. of West Bengal.

From January 2022 totill 10th December 2022, we have conducted 1, 28,170(Out of total 7, 19,808) COVID-19 RT-PCR and 9,234(Out of total 54,931) COVID-19 Antigen tests.This VRDL performed tests for other virological diseases by ELISA and RT PCR method are presented in the following table.

Most of the viral test parameters are uploaded in NIE portal (Dengue, JE,Scrub Typhus,Chikungunya uploaded in IDSP portal). Besides testing,our VRDL is also participated in the nationwide validation of kits(RNA extraction kit, RT PCR Kit and antigen detection kit) of COVID-19during this period both from state and Central Govt supplied kits though DG Drugs Control,Eastern Zone and Swasthya Bhawan .

During the outbreak of dengue and H1N1 virus in this year, IPGME&R-VRDL had spread its hands for screening and diagnosing the Dengue viruses by ELISA (NS1and IgM) and H1N1 with influenza panel by real time PCR method. Our VRDL has always maintained a score of 90 % -100 % during the external quality assurance of COVID-19 and other serological tests. Till now 5 publications(4 national and one international) and have done so far and 2 manuscripts are submitted for publication in recent times.Till date 5 different CME/Workshop had been conducted to Sensitize Medical Officers, Lab techs and other associated administrative personnel about clinical and laboratory diagnosis of viral diseases.

Our VRDL Lab contributed to the All India Genome sequencing database studies by sending SARSCoV 2 positive samples to NIBMG,Kalyani through STM,Kolkata.Being a centre of excellence,all suspected Covid 19 samples of distinguished,VIP,State Administrative personnel,Central Ministers,Central Administrative Ministers,Sportspersonnel during football tournaments, Cricketing personnel during Cricketing tournaments whenever important visits and events occur in our state also participated in EQAS of NIV,Virology for SARS CoV 2 and are still continuing to.

When IPGMER was selected as Regional Centre for Organ Transplantation, our VRDL took pioneering initiative in screening for Transplantation panel- CMV,Epstein Barr,Herpes Simplex,Varicella Zoster,Toxoplasma,Rubella by ELISA.Inaddition we include IgManti HbC and Anti-HBs as per requirement of donor and transplant patients When the DHR-ICMR project,Congenital Rubella Syndrome Surveillance project commenced, our VRDL started screening pregnant mothers(314 till date) and new- borns for congenital Rubella since October,2022.

Our Department started screening for pregnant mothers for TORCH and Hep B,C since last one year as part of linkage with ANC mother screening and with NVHCP.

Our Department would be greatly benefitted if we can initiate AES panel and Viral Respiratory panel in our repertoire to serve suffering patients and meet demand of clinicians
