

**Lady Hardinge Medical College
Department of Microbiology**

Annual Report (Jan –Dec 2021)

Faculty Members:

Director Professor & Head:

Dr Ravinder Kaur

Director Professors:

1. Dr V.S. Randhawa
2. Dr Manoj B. Jais

Professors

1. Dr Yogita Rai

Associate Professors:

1. Dr Deepti Rawat
2. Dr Manoj Kumar (on study leave with effect from 26.6.2020 to 25.6.22)
3. Dr Shweta Satija
4. Dr Sanjib Gogoi

Research Projects with funding:

Name of the Investigator	Project in Charge	Title of the Project	Name of the funding agency	Budget in Rs.
Dr Ravinder Kaur Director Professor & Head PI Dr Deepti Rawat Associate professor Co PI	Dr Ravinder Kaur	Establishment of Advanced mycology Diagnostic and Research Center	ICMR	Rs 1,96,67,920/-
Dr Ravinder Kaur Director Professor & Head Dr Shweta Satija, Assoc. Prof.	Dr Ravinder Kaur, Nodal Officer	National program for containment of antimicrobial resistance	NCDC, Delhi	Rs 8,40,000/-
Dr Ravinder Kaur Director Professor & Head(Co-PI)	Dr Sushma Nangia Director Professor & HOD Dept of Neonatology	NeoAMR Global Neonatal Sepsis Observational Study (NeoOBS): A prospective cohort study of sepsis in hospitalised neonates	St Georges' University London UK	Rs 61,39,971/-
Dr Ravinder Kaur Director Professor & Head	Dr Sushma Nangia Director Professor & HOD Dept of Neonatology	Indo-Norway project entitled “ Born in the twilight of antibiotics.Implications of antibiotic use to the preterm infant respiratory microbiome and resistance development.”	Indo-Norwegian cell for collaborative research ICMR	Rs 7863225/-
Dr Ravinder Kaur Director Professor	Dr. V.S. Randhawa	EQAS Programme	NACO/DSA CS	Rs 75,000/-

& Head Dr. V.S. Randhawa Director Professor	Director Professor			
Dr. Manoj B. Jais, Director Professor, Dr Ravinder Kaur Director Professor & Head Dr. Sanjib Gogoi, Associate Professor	Dr Manoj B Jais	Establishment of Medical College Viral Research and Diagnostic Laboratory (VRDL) DHR, Min of H & F W, Network of Laboratories for managing Epidemics and Natural Calamities.	DHR-ICMR	Rs 1,82,90,00 0/-
Dr Manoj Jais, Director Professor, Dr.Sanjib Gogoi, Assoc Professor	Dr.Madhumath i. J, Scientist C, ECD, ICMR, Ansari Nagar, New Delhi-29	Validation of a dry swab RNA-extraction-free method based diagnostic test for SARS-CoV-2 compared with the standard VTM based swab collection method: A multicentric study	ICMR, New Delhi	Rs 100000/-
Dr. V.S. Randhawa Director Professor	Dr Sushma Nangia Director Professor & HOD Dept of Neonatology	Comparison of the efficacy of a 7day versus 14day course of intravenous antibiotics in the treatment of uncomplicated bacterial sepsis`a randomized controlled non-inferiority trial.	ICMR	Rs 18,00,000/-

Non funded Research Projects :

Name of the Investigator	Project in Charge	Title of the Project	Name of the funding agency
Dr Ravinder Kaur Director Professor & Head Dr. Manoj B. Jais, Director Professor	Dr Ravinder Kaur Co PI	Capacity Building and Strengthening of HAI Control to detect and prevent AMR in India	CDC& AIIMS
Dr Ravinder Kaur Director Professor & Head Dr Manoj Jais, Director Professor,	Dr Anil Gurtoo Director Professor, Dept of Medicine Dr Anupam Prakash Director Professor Dept of Medicine	Plasma trial management in COVID-19 patients	ICMR
Dr Ravinder Kaur Director Professor &Head	Dr Manju Puri Dir. Professor & Head Dept of Gynae	National Registry of COVID-19 infection among pregnant women and their neonates	ICMR

Dr Manoj Jais, Director Professor,	Dr Sushma Nangia Dir. Professor & HOD Dept of Neonatology		
Dr Ravinder Kaur Director Professor & Head	Dr Manju Puri, Dir. Professor & Head Dept of Gynae	Surveillance of Covid in Pregnancy” (SCOPE) Standardizing data collection and protocol for improving the Quality of evidence on clinical characteristics and outcomes of COVID-19 and Pregnancy	WHO, LHMC& other centres
Dr Manoj Jais, Director Professor,	Dr Sushma Nangia, Dir. Professor & HOD Dept of Neonatology		
Dr Ravinder Kaur Director Professor & Head Co PI	Dr Sushma Nangia Director Professor & HOD Dept of Neonatology	PhaseIII, Multicentric double blind randomized trial to assess the efficacy of Probiotics in the treatment of Neonatal sepsis in 0-2 months low birth weight neonates in India	ICMR
Dr Ravinder Kaur Director Professor & Head	Dr Ravinder Kaur, Co PI	Congenital Rubella syndrome surveillance in India- A multicentric study	ICMR

Projects other than research projects:

- National AIDS Control programme
- National Tuberculosis Control Programme
- Vector Control Programme of India
- National AMR Containment programme

Teaching: Postgraduate thesis submitted and accepted by University of Delhi:

S.No	PG Student	Topic	Supervisor	Co-supervisor
1.	Dr. Sarita Yadav	Estimation of burden of Clostridium difficile infection in patients with Antibiotic Associated Diarrhea	Dr. Manoj B. Jais	Dr Shubha Laxmi Margekar Dr Praveen Kumar
2.	Dr. Grace Hundor Nylla Lapang	A comparative Evaluation of Different Methods to Detect Colistin Resistance in Gram Negative Bacteria	Dr. Sonal Saxena	Dr. Ravinder Kaur

Organizing training course Conference/ Symposia/ Seminar/ Workshops/ CME:

Sl. No	Faculty member	Organizer	Name, venue & date
1.	Dr Ravinder Kaur, Director Professor & Head Dr VS Randhawa, Director Professor Dr Manoj Jais, Director Professor Dr Yogita Rai, Assoc Professor Dr Shweta Satija, Assoc Professor Dr Sanjib Gogoi, Assoc Professor	Dept. of Microbiology, LHMC	World Antibiotic Awareness week in the dept. Of Microbiology from 18th-24th Nov. 2021 -Lectures and Small group Discussion on AMR with MBBS 5TH Semester students, Faculty and Residents , 18th Nov 21 Training & demonstration of Infection control practices and AMR awareness for doctors, 22nd Nov 2021 -Poster competition on" Avoid misuse of antimicrobials and combat AMR" 23rd Nov 2021 - Lectures on " Newer Antibiotics in horizon" "Diagnostic stewardship " 23 rd November 2021
2.	Dr Ravinder Kaur, Director Professor & Head Dr VS Randhawa, Director Professor Dr Manoj Jais, Director Professor Dr Deepti Rawat, Assoc Professor Dr Yogita Rai, Assoc Professor Dr Shweta Satija, Assoc Professor Dr Sanjib Gogoi, Assoc Professor	Dept. of Microbiology, LHMC & MICRO-D- CON	Preconference satellite workshop on ‘ Diagnosis of Invasive fungal infections by MICRO-D- CON on 25 th November 2021 at LHMC
3.	Dr Ravinder Kaur, Director Professor & Head Dr VS Randhawa, Director Professor	SRL LHMC	Online workshop on HIV EQAS for ICTC/PPTCT LTs on 9/2/2021 SRL, Dept. of Microbiology

4.	Dr Ravinder Kaur, Director Professor & Head Dr VS Randhawa, Director Professor	SRL, LHMC	Online workshop on HIV EQAS for ICTC/PPTCT LTs on 26/3/2021 SRL, Dept. of Microbiology
5.	Dr Ravinder Kaur, Director Professor & Head Dr Manoj Jais Director Professor Dr Sanjib Gogoi Assoc .Professor	Dept. of Microbiology, LHMC	Training programme on “Hand hygiene, Biomedical waste management and Personal Protection” of Group C & D workers , 06-04-2022
6.	Dr Ravinder Kaur, Director Professor & Head Dr Manoj Jais Director Professor Dr Sanjib Gogoi Assoc. Professor	Dept. of Microbiology, LHMC	Training programme on “Health infection control (HIC) practices, Biomedical waste management (BWM) & Post Exposure Prophylaxis (PEP) of Human Immunodeficiency Virus (HIV) and Hepatitis B Virus (HBV)” of Medical Doctors , 07-04-2022
7.	Lab personnel in Dept. of Microbiology	Dept. of Microbiology, LHMC	- - Programmes held on SWACHHTA Abhiyan programme in the deptt. - - Play on "SWACHHTA KA MHATAV" by Lab persons, 08-04-2022 Poster competition by UG students on "Importance of swachhta in human health", 11-04-2022
8.	Dr Ravinder Kaur, Director Professor & Head Dr Deepti Rawat Associate Professor	Dept. of Microbiology, LHMC	Programme on ‘Fungal Infections: A Diagnostic Dilemma’ by department of Microbiology, LHMC on 3rd July 21

Publications

1. Shivani Tyagi, Ravinder Kaur and Deepti Rawat. Mycological Profile and Prevalence of Superficial Mycoses Agents: A Study from North India. International Journal of Medical and Dental Sciences: Vol 10(1).
2. Shivani Tyagi, Neha, Ravinder Kaur, Deepti Rawat. A study of etiology and epidemiology of onychomycosis from a tertiary care hospital in North India .Int J Res Med Sci. 2021;9(2):559-64

3. Sonal Saxena, Ravinder Kaur, Valinderjeet Singh Randhawa. Changing Pattern of Resistance in Typhoid Fever in An Era of Antimicrobial Resistance: Is It Time to Revisit Treatment Strategies? JMID 2021; 11(1):1-7.
4. Garima Gautam, Manoj B. Jais, Ravinder Kaur, Megh Singh Dhakkad. Human leptospirosis in patients with undifferentiated acute febrile illness in a tertiary care hospital in New Delhi. Int J Res Med Sci. 2021;9(2):485-488
5. Garima Gautam, Sanjib Gogoi, Sonal Saxena, Ravinder Kaur, Megh Singh Dhakad. Nitrofurantoin Susceptibility Pattern in Gram-Negative Urinary Isolates: In Need of Increased Vigilance. J Lab Physicians. 2021 6;(01): 1-96.
6. Ashish William, Yogita Rai, Ravinder Kaur Evaluation of Rifampicin-resistant Tuberculosis in Pediatric Patients by GeneXpert MTB/RIF. Journal of Microbiology and Infectious Diseases 2021; 11 (2):81-87
7. Singh GB, Nair M, Kaur R. Is there fungal infestation in paediatric chronic otitis media - Mucosal disease? Am J Otolaryngol. 2022 May-Jun;43(3):103435.
8. Sanjib Gogoi, Manoj Jais, R Kaur. Comparative evaluation of cost effective extraction free molecular technique for detection of SARS-CoV-2 with reference to standard VTM based RT-qPCR method. Iran J Microbiol. 2021;13(6):748-756.
9. Sahoo JK, Tiwari S, Chhapola V, Jais M. Seroprotection against measles in previously vaccinated children with difficult-to-treat nephrotic syndrome. Pediatr Nephrol. 2022;37(4):843-48.
10. Rathi A, Randhawa VS, Kumar P, Kaur R. Antigenic profile of infective diarrhoea in immunocompromised children in a paediatric tertiary hospital. IJMM. 2021; 39 Supplement S86-S87
11. Verma IK, Randhawa VS, Andley M. Susceptibility profile of bacteria isolated from cases having health care acquired catheter associated urinary tract infection. IJMM. 2021; 39 (Supplement) : S78-S79

Books/ Chapters Contributed :

1. Dr Randhawa. Essentials of Microbiology-an integrated approach Research and Publishing house, New Delhi 2021 ISBN no. 9789354377549

National & International Conferences / Symposia/ Workshops/ CMEs attended by faculty members:

S. no.	Name & Designation of participant	Role/ Topic	Organizer	Name of conference, venue & date
1.	Dr Ravinder Kaur Director Professor and Head	Participant		"National AMR Laboratory Capacity Building ECHO" session a digital laboratory capacity building initiative under the National Programme on AMR Containment on January 19th 2021
2.	Dr Ravinder Kaur Director Professor and Head	Participant	Dept of Dermatology	Guest Lecture on" Non Chlamydial infections: Diagnostic Advances" at a webinar organized by Dept of Dermatology, LHMC on 14th Feb 2022 as a part of STI awareness week.
3.	Dr Ravinder Kaur	Participant	RNTCP	RNTCP STF VIRTUAL meeting cum

	Director Professor and Head			Workshop 30.03.21
4.	Dr Ravinder Kaur Director Professor and Head	Expert	Min H&FW	Expert meeting of the Sub-committee for drafting of Minimum Standards of Collection Centre, point of care testing etc on 15.04.2021
5.	Dr Ravinder Kaur Director Professor and Head	Participant	ELBS, Delhi	Webinar on Self Embrace Your Ambiguity : Laboratory Screening and Diagnosis of Blood Borne Viruses on 30 July,2021
6.	Dr Ravinder Kaur Director Professor and Head	Invited Delegate & Expert	WHO & Min of H &FW	"National Consultation to operationalise Action Plan for AMR Containment" on 24-25th August 2021 at New Delhi.
7.	Dr Ravinder Kaur Director Professor and Head		ASCLS P.A.C.E.® Program.	Webinar: Demystifying HbA1c testing at the point of care and the impacts of COVID-19 on patients with diabetes as continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program. 23 RD September 21
8.	Dr Ravinder Kaur Director Professor and Head	Expert	IAMM-DC	2nd Chapter Virtual Meet of Indian Association of Medical Microbiologists, Delhi Chapter on 11-12 September 2021 dedicated to World Sepsis Day
9.	Dr Ravinder Kaur Director Professor and Head	Participant	Bhai Vir Sadan Academy	Guest lecture on " Antibiotic pollution in environment" 4th oct 21
10.	Dr Ravinder Kaur Director Professor and Head	Participant	IAMM- DC	"Immunology & Autoimmune Disorder: An Update. Virtual Chapter meeting of IAMM, Delhi Chapter on 9th October, 2021 by ABVIMS.
11.	Dr Ravinder Kaur Director Professor and Head	Member	ICMR	UKRI Phase III MRC meeting on 19th Nov 2021 as part of ICMR initiative
12.	Dr Ravinder Kaur Director Professor and Head	Participant	AMU Aligarh	Webinar on World Antibiotic Awareness Week 23 Nov, 2021 by AMU Aligarh
13.	Dr Ravinder Kaur Director Professor and Head	Participant	Department of Microbiology , UCMS & GTBH Hospital	CME On "AMSP: The solution for AMP MENANCE Organized By department of Microbiology , UCMS & GTBH Hospital on 18th November 2021.
15.	Dr Ravinder Kaur Director Professor and Head	Participant	SAPS Delhi	Virtual AMR Review Meeting and Training workshop for development of Antibiograms, 3rd - 4th December 2021
16.	Dr Ravinder Kaur Director Professor	Organizer	Dept. of Microbiology,	Programme on "Fungal infections: A Diagnostic Dilemma" on 3rd July 21 at

	and Head Dr Deepti Rawat Associate Professor	Organizer	LHMC	Dept. of Microbiology, LHMC
17.	Dr Ravinder Kaur Director Professor and Head Dr Deepti Rawat Associate Professor	Organizer Organizer	Dept. of Microbiology, LHMC	Preconference Satellite Workshop on "Diagnosis of Invasive Fungal Infections" on 25th November 2021 as part of MICRO-D-CON 2022 at Dept. of Microbiology, LHMC
18.	Dr Ravinder Kaur Director Professor and Head Dr Manoj Jais Director Professor Dr Yogita Rai Professor Dr Deepti Rawat Associate Professor Dr Shweta Satija Associate Professor Dr Sanjib Gogoi Associate Professor	Organizer Participant Participant Participant Organizer Participant	Dept. of Microbiology, LHMC	Programme on "Rational use of Antimicrobials" during World antimicrobial awareness week from 18th to 24 th November 2021 at department of Microbiology, LHMC
19.	Dr Ravinder Kaur Director Professor and Head Dr Deepti Rawat Associate Professor Dr Shweta Satija Associate Professor	Speaker Participant Participant	IAMM- Delhi Chapter	MICRO-D-CON 2021
20.	Dr Ravinder Kaur Director Professor and Head Dr Yogita Rai Professor	Participant Participant	RNTCP	Delhi State Virtual Task Force Meeting on 30 th March 2021
21.	Dr Ravinder Kaur Director Professor and Head Dr Shweta Satija Associate Professor	Participant Participant	Hospital Infection Society of India on 19 th June 2021	webinar on” Do we understand the Proteus and how far are us from Aristaeus-Changing trends in virology, including variants, Epidemiology, Clinical & Emerging therapeutics of a shape shifter SARCOV2 & Covid 19 organized by Hospital Infection Society of India on 19 th June 2021
22.	Dr Ravinder Kaur Director Professor	Participant	IAMM- Delhi Chapter	Online webinar on the ‘ Rise of titans after Covid: opportunistic infections”

	and Head Dr Shweta Satija Associate Professor	Participant		on 22 nd May 2021 by IAMM- Delhi Chapter.
23.	Dr Shweta Satija Associate Professor	Participant	WINSAR –D	WINSAR –D Review meeting held on 16-17 th Nov 2021 and presented the Antimicrobial surveillance data, held at The Hotel Heritage, Manesar, Haryana.
24.	Dr Shweta Satija Associate Professor	Participant	WINSAR-D	WHONET Training Workshop on WINSAR-D on 29 th – 30 th November 2021 at Hotel Crowne Plaza, Greater Noida
25.	Dr Shweta Satija Associate Professor	Participant	Department of Microbiology, UCMS & GTBH Hospital	CME On “AMSP: The solution for AMP MENANCE Organized By department of Microbiology, UCMS & GTBH Hospital on 18 th November 2021.
26.	Dr Sanjib Gogoi Associate Professor	Participant	IAP at Indraprastha Apollo Hospitals	Research Methodology " organized by IAP at Indraprastha Apollo Hospitals, New Delhi from 8th to 10th November 2021
27.	Dr Sanjib Gogoi Associate Professor	Participant	CDC	Hands on Workshop on " Shipping Infectious substances & biological Specimens" organized by CDC India in collaboration with Sandia Laboratories, USA held in Pune from 18th to 19th November 2021.
28.	Dr Sanjib Gogoi Associate Professor	Organizer	IAMM	Pre- conference Workshop on " Diagnostic Stewardship in Clinical Microbiology" in 44th Annual National Conference of IAMM held at Guwahati on 21st December 2021.
29.	Dr Sanjib Gogoi Associate Professor	Participant	AIIMS, Hyderabad	VIROCON2022 (National Conference on Virology, Virtual mode) organized by AIIMS, Hyderabad from 26th to 28th March 2022

Special Achievement of the Staff:

New Initiatives in Microbiology Dept

(I)Setting up of Virology diagnostic and research facility (VRDL) in Department of Microbiology in LHMC in collaboration with DHR/ICMR

- Expand the identification and diagnosis of different viral diseases at serological and molecular level
- Diagnose suspected outbreaks of viral diseases like H1N1 etc

- 47727 samples tested for COVID in 2021

(II) Setting up of advanced mycology diagnostic and research facility (MRDL) in Department of Microbiology in LHMC to

(III)MIGIT & Gene-Expert for rapid culture and Susceptibility testing of Mycobacterium tuberculosis and Detection of Rifampicin Resistance.

(IV)Molecular lab services started for rapid identification of pathogens which are difficult to grow/unable to grow at an early stage.

(V) Microbiological Culture Bank of Breast milk samples from Indo Norweign Milk bank in Neonatology

Strengthening Of Patient Care Services in the Dept. of Microbiology

1. **Infection control and BMW trainings** strengthened and made available to all sections of healthcare workers at regular intervals
2. **Centre for HIV testing (CHT)**, department of Microbiology, LHMC accredited by NABL for diagnosis of HIV

Strengthening Of Patient Care Services in LHMC

Incorporation of **Laboratory Information Management System** has started to ensure smoother and faster workflow and laboratory information exchange interface with clinicians.

Representation on Expert Bodies/ Committees

1. Dr Ravinder Kaur

- Focal person for AMR programme of NCDC & Min of H&FW
- **Member Technical group** for formulation of State Action Plan for Control of Antimicrobial Resistance Delhi (SAPCARD).
- Member of expert group constituted by DGHS under chairmanship of Director NCDC to frame “National treatment guidelines” under “National Programme on containment of Antimicrobial Resistance”.
- Member& Expert in Infection control &AMR Control Programme by CDC & Min of H&FW
- Nominated member in expert group on developing patient safety implementation for India.
- Expert at CSIR Board Committee
- Invited Expert member in DGHS Committee on Diagnostic labs standardization
- Invited Expert at Union Public Service Commission
- **Coordinator**, WHO IAMM Network for Surveillance of Antimicrobial Resistance-Delhi (WINSAR-D)
- Member Subcommittee on Minimum standards of Medical Diagnostic laboratory in Min of H&FW
- Technical expert to NBE,AIIMS New Delhi, AIIMS Rishikesh, AIIMS Jodhpur, Punjab university, I.P University, NMC New Delhi, ILBS New Delhi, MCD.
- Invited Faculty in NPTEL Medical education programme under HRD ministry

- Subject expert for the faculty interview of Professor and Assistant Professor, Microbiology at ESIC Medical College & Hospital, NH-3, NIT Faridabad
- Expert reviewer in J of Chemotherapy, IJMR
- Expert in National Board Examinations
 - Examiner for DNB.
 - Revision of Curriculum guidelines for DNB Microbiology

2. Dr V S Randhawa:

- Approved Assessor for NABL, New Delhi, NAAC, Bangalore and NMC, New Delhi
- Contributed ;as subject expert to various organizations as ICMR New Delhi, Punjab university, AIIMS New Delhi, NACO, AIIMS Patna, AIIMS Jodhpur, AIIMS Kalyani, Pt B.D. Sharma University of Health Sciences, RUHS Jaipur, HIMR New Delhi, RMLH New Delhi, G.G.S. I.P University, NMC New Delhi, KGMU, Srimanta sankaradeva University of Health Sciences, Punjab University, M.S. University of Baroda, IAE, Bharath Institute of Higher education and Research
- NABL renewal of CHT, HIV(for two years)

3. Dr Manoj B Jais:

- Member Secretary of infection prevention committee
- Member Secretary of patient safety committee
- Nodal officer and member secretary of BMW Committee

4. Dr Deepti Rawat

- Member of the undergraduate election committee, LHMC
- Member of library tender committee

5. Dr Yogita Rai:

- Nodal Officer , CBNAAT/TRUENAT COVID 19 Testing, LHMC

6. Dr Shweta Satija

- Focal person for AMR programme of NCDC & Min of H&FW

7. Dr Sanjib Gogoi

- Member of Kaya Kalp committee, LHMC