Annual Report

Department of Biochemistry (1st April 2020-_ 31st March_2021)

FACULTY

Director Professor and HOD: Dr. Ritu Singh

Director Professor: Dr. Anju Jain

Professor:

Dr. Smita Tripathi Dr. Ekta Debnath Dr. ParijatGogoi

Associate Professor:

Dr. Preeti Chauhan Dr. Rajeev Goyal

Assistant Professor:

Dr. Mukesh Kumar Meena

Assistant Professor (contract)

Dr Aditi Singh (joined w.e.f. 06/12/2019) Dr.Parma Banerjee (joined w.e.f 18/03/21)

Senior specialist: Nil Medical officer: Nil

Members who have left during the period: Nil

Research schemes /projects

Name of	Project in	Title of the project scheme	Name of the funding	Budget in
investigators	charge		agency	Rs.
Research projects	with funding			
Dr Ritu Singh Dr Sanjay Tyagi DrJ.Bhattacharjee Dr Parul Goyal Dr Mukesh Kumar Meena	Dr Ritu Singh	Study of Genetic and proteomic biomarkers of inflammatory and matrix remodelling pathways having significance in myocardial infarction. (In collaboration with Deptt of cardiology, G.B.Pant hospital)	DHR- MoHFW	Rs 29 lacs
Dr Ritu Singh Dr Anupam Prakash	Dr Ritu Singh	Study of genetic polymorphisms and gene expressions of Interleukin-6, Interleukin-10 and Tumor necrosis factor-alpha in patients with Type 2 Diabetes mellitus	DBT	Approx 18 lacs

Dr Ritu Singh Dr Rajeev Goyal Dr Anil Gurtoo Dr Shubhalaxmi ShubhalaxmiMar gekar Dr Sanjib Gogoi	Dr AnshuSh NCDC	narma	profile of the COVID-19 patients		National Centre for Disease Control, New Delhi	Rs 20 lakhs (approx.)
Dr. Anju Jain	Dr. Pike Saxena Dr. R. M Pandey Dr. Anuj Prakash	Ι .	A randomized control trial to compare the efficacy of N Acetyl Cysteine, metformin or placebo therapy on clinical, hormonal, and oxidative stress profile of infertile women with Polycystic Ovary Syndrome along with clomiphene citrate		ICMR funded project (ongoing since 2016)	Approx- 34 lac
Dr Ekta Debnath	Dr Mani Kumar	"Establishment of Diagnostic Centre DBT-NIDAN-Kendra" and Outreach programme for Aspirational district under UMMID initiative For Beta Thalassemia and sickle cell Anaemia Carrier Screening, couple screening abd pre-natal diagnosis, DMD carrier screening, New born screening for G-6PD, Congenital adrenal hyperplasia, biotinidasedeficiency, congenital hypothyroidism and galactosemia		DBT	Rs 4.48 crore	
Dr Ekta Debnath Dr Manisha Kumar		sha	"Study of serial change in placental profile during pregnancy and its role in predicting hypertension in pregnancy"		DHR-MOHFW	50 lakhs
Dr Smita Tripathi Tripathi		Effect of common variations in the PCSK9 gene on the lipid lowering effect of statins in a north Indian population.		ICMR	9.88 lakhs	
Non –funded proj	ects	ı			1	
Jain Garg methy Dr Ekta Debnath morph		tic polymorphism of lenetetrahydrofolatereductase FR) and inheritance of cological traits in primary open glaucoma and angle closure	CSIR		Non – funded	

Beri		disease in Northern India" project initialized on 5 th Nov 2011		
Projects other	than research	h projects : Nil		

STS projects Nil

Teaching: Current postgraduatethesis with supervisor in Deptt of Biochemistry

s.no	PG Student	Topic	Supervisor
1	Dr. RoshnaraP.P	Association of serum he4& he-4 (wfdc2) geneexpression in patients with tubo-ovarian masses	Supervisor :Dr Smita Tripathi Co-supervisor Dr Pikee
2	Dr Janani R.	The study of Genetic Polymorphism(T786c) of endothelial nitric oxide synthase, its mRNA expression and plasma levels in Primary open angle glaucoma	Supervisor :Dr Ekta Debnath Co-supervisors Dr Rajiv Garg Dr. Anju Jain
3	Dr Swati	Evaluation of Circulating tumor DNA and p53 mutation as a non-invasive biomarker in head and neck squamous cell carcinoma.	Supervisor :Dr Rajeev Goyal Co-supervisors Dr Mayank Singh Dr Ritu Singh Dr Parvesh Mehra

Organizing training course /conference /symposia/seminars/workshops/CMEs

s.no	Faculty member	Organizer (s)	Name, Venue & Date
1	Dr Anju Jain	Under aegis of Association of	PG Update in Biochemistry under
	(President)	Medical Biochemists of India	Aegis of Ambicon
			Nov 2020
	Dr Ritu Singh		
	(Judge)		
3	Dr Ritu Singh	Stress management workshop	Foundation Course of new MCI-
			CBME Curriculum in
	Dr ParijatGogoi	Foundation course committee -	August2020- Time and Stress
		LHMC,NewDelh	Management Workshop" for
			MBBS students
4	Dr Ritu Singh	MEU - LHMC,New Delhi	Curriculum Implementation
			support programme for LHMC
			faculty 29 th April 2020 to 1 st May
			2020, LHMC, New Delhi as Core

			Committee and faculty of Medical
			Education Unit
5	Dr Ritu Singh	Renaissance webinar -Wolters	National webinar on 10 th Nov 2020
		KluverWebinar on Biochemistry-	
	Dr Rajeev Goyal	The basis of Medicine and the new	
	, ,	CBME curriculum	

Publications (In Vancouver style)

- 1. Pasricha N, Aggarwal R, Jain SK, Prakash A, **Jain A**. Insulin resistance in transfusion dependent adult beta thalassemia major subjects with metabolic syndrome. *J Assoc Physicians India*. 2020;68(1):84.
- 2. Mishra J, Tomar A, Puri M, **Jain A,**Saraswathy KN. Trends of Folate, Vitamin B12, and Homocysteine levels in different trimesters of pregnancy and pregnancy outcomes. American J. of Human Biology.2020;e23388.https://doi.org/10.1002/ajhb.23388
- 3. Monika Garg **Anju Jain** ,Binita Goswami, Manju Puri. Study of incidental finding of Primer induced mutagenesis in subjects with respect to PPAR Pro12Ala polymorphism in Polycystic Ovary Syndrome (PCOS) Indian J of Basic and Applied Medical Research December 2020 Vol-10 Issue-1 p:150-155 DOI: 10:36848/IJBAMR/2020/16215.55645
- 4. **Dr Ritu Singh**, **Dr Mukesh Kumar Meena**, Dr Seema Kumari, Dr Jayashree Bhattacharjee, Dr Sanjay Tyagi,Role of Oxidized-LDL (ox-LDL) and anti-Oxidized-LDL (antiox-LDL) antibodies in Myocardial Infarction.international journal of scientific research (Print ISSN: 2277-8179) forVolume 9 | Issue 9 1st September, 2020
- 5. **R.Singh**, S.Tasnim, S.Kumari, J Bhattacharjee, S Tyagi. Association of paraoxonase-1 levels and g allele (192 A/G polymorphism) in occurrence and recurrence of myocardial infarction. International Journal of Scientific Research.69-71:Vol-9(8):2020.), ISSN No 2277 8179
- 6. Sana Tasnim, RituSingh, ParulGoyal, RajeevGoyal, Jayashree .Bhattacharjee, Sanjay Tyagi . Association of MCP-1 in first time vs Recurrent Acute Myocardial Infarction. International Journal of Current advanced Research Vol 9 .Issue 11(A)pp23257-23261, November 2020.
- 7. TasnimS, Singh R, Chandra S, Goyal P, Bhattacharjee J, Tyagi S. Circulating Inflammatory Markers in first time and recurrent acute Myocardial Ischemia. European Journal of Cardiovascular Medicine .2020, ,Vol VI, Isuue 1, Page 591-595
- 8. K, Kruthika, Tiwari Soumya, ChhapolaViswas, **Debnath Ekta**, Seth Anju, Jain Anju. (2020). Subclinical kidney dysfunction in HIV infected children: a cross-sectional study. JAIDS Journal of Acquired Immune Deficiency Syndromes. Publish Ahead of Print. 10.1097/QAI.000000000002470

- 9. Gogoi S, Bora I, **Debnath EM**, Sarkar S, Jais MB, Sharma A. Perplexity vs clarity in choosing the right molecular diagnostic techniques for SARS-COV2 detection in Indian Set up.J family Med Prim Care 2020
- 10. Sanjukta Naik, **Preeti Chauhan**, Janani R, Roshanara P P. Role of maternal lipid profile and cord blood lipid profile in the GDM mothers and their infants. Int. Jn. Sci Res ISSN 2319-7064 NOV 2020.
- 11. Convalescent plasma in the management of moderate covid-19 in adults in India: open label phase II multicentrerandomised controlled trial (PLACID Trial). <u>Anup Agarwal</u>, consultant,1<u>Aparna Mukherjee</u>, scientist E, <u>IGunjan Kumar</u>, scientist C,1<u>Pranab Chatterjee</u>, scientist B,1<u>Tarun Bhatnagar</u>, scientist E,2 and <u>Pankaj Malhotra</u>, professor3, on behalf of the PLACID Trial Collaborators (...<u>Anil Gurtoo</u>, <u>Ritika Sud</u>, <u>Sangeeta Pahuja</u>, <u>Anupam Prakash</u>, <u>ParijatGogoi</u>, Shailja Shukla, ...): BMJ.Oct 2020; 371: m3939.
- 12. S Sanke, S Samudrala, A Yadav, R Chander, **R Goyal** Study of serum vitamin D levels in men with premature androgenetic alopecia. International Journal of Dermatology 59 (9), 1113-1116
- 13. **R Goyal**, S Chacham, JP Goyal, M Chegondi .Wilson's Disease Masquerading as Juvenile Idiopathic Arthritis in an Adolescent. Cureus. 2020 Jul 12;12(7):e9160.
- 14. A Samadhiya, Meenakshi, M Singhai, **R Goyal** A Review of Cytokine Storm in COVID-19. Indian Journal of Medical Biochemistry 24 (2), 60

Books /chapters contributed (In Vancouver style)

1. Dr Ritu Singh "Chief Editor, SAE of Lippincott Illustrated Reviews Biochemistry" And Dr Rajeev Goyal -Co-editor:Lippincott Illustrated Reviews: Biochemistry (SAE)

LIR is a long standing book of International repute by the Wolters Kluver Publishing House. This book has been majorly over-hauled as per MCI-CBME curriculum and competencies to suit doctors of all Asian countries. At least 50 percent of the book is newly written now . Released in 2020

National and international conferences /Symposia/Seminars/workshops/CMEs attended by the faculty members

S.	Name &	Role /topic	Organizer	Name of the conference		
No	Designation of			,venue& Date		
	the					
	participant					
	International					
	conference					
Nati	National conferences/CME					
1	Dr Ritu Singh	Organiser	Stress and Time	August 2020		

	Dr ParijatGogoi		Management	
			workshop	
2	Dr Ritu Singh	Delegate	"CAHO Webinar on "NABL - Medical	' Date Time: Oct 20, 2020
	Dr Smita Tripathi	Delegate	(Entry Level) Testing [M(EL)T] Laboratories Recognition Program"	
3	Dr Ritu Singh	Facilitator : Awareness Session About Stem Cell Transplant	Student Leadership mission under Aegis of Medical education Unit	DECEMBER 13,2020
4	Dr Ritu Singh	Certificate course	Good Clinical Laboratory Practice (GCLP) Certificate course by My Quality Team	12-13 December 2020
5	Dr Ritu Singh	Judge	Abhivyakti-The Creative Writing Competition. Organized by SLM-Organ Donation team	1 st Dec 2020
6	Dr Ritu Singh	Delegate	Emerging Applications: India Droplet Digital PCR Symposia webinar by Bio-Rad	9-11 dec 2020
7	Dr Ritu Singh	Delegate	Genetic Testing by DSS Imagetech Pvt Ltd .Webinar	25 th Nov 2020
	Dr Ritu Singh	Delegate	Global Summit of Newborn Screening by Perkin elmer	Dec 8 th 2020
8	Dr Smita Tripathi	Delegate	National Medical Commission "Post Graduate Assessor's Orientation Program"	On 22/12/2020
9	Dr Smita Tripathi	Delegate,	ABCD of Ante Natal Thalassemia Diagnosis	Nov 25, 2020, Arun Harith, Medanta Hospital
10	Dr Smita Tripathi	CertificateCourse	Completed the certificate eCourse in Clinical Research Methods (eLearning)	September 2020 - January 2021 at Indian Institute of Public Health-Delhi, Public Health Foundation of India
11	Dr Smita Tripathi	Attendee	Curriculum Implementation Support Program (CISP) – 2, for Second Phase Faculty / MEU/CC members of allocated medical colleges,	April 2020.

21	Dr Mukesh Kr.	Delegate	Pregnancy and	Department of Neurology, Lady
20	Dr Rajeev Goyal	Speaker	Department of Biochemistry, Government Medical College & Hospital, Chandigarh	10 November 2020
19	Dr Rajeev Goyal	Judge for poster session	Biorad	1 st & 2 nd November 2020
18	Dr Ekta Debnath	Delegate	Webinar	Endocrine biochemistry – HbA1c Clinical Utility and misperceptions 7 th Nov 2020
17	Dr Ekta Debnath	Delegate	AIIMS New Delhi	Tuberous Sclerosis Complex (TSC) on 12 th of February 2020 & CME on 11th February. organized by AIIMS, Division of Genetics, Department of Pediatrics & Tuberous Sclerosis Alliance of India
16	Smita Tripathi	Speaker	Ayurvedic and Unani Tibbia College and Hospital	Webinar on Principles of physiology and its practical application. Delivered a lecture on topic of Molecular basis of Physiology; 21.12.2020
15	Smita Tripathi	Delegate	CAHO Webinar	"NABL - Medical (Entry Level) Testing [M(EL)T] Laboratories Recognition Program" Oct 20, 2020
14	Dr Smita Tripathi	Delegate	"MEDICAL HUMANITIES"	Department of Biochemistry, VMKV Medical College and Hospitals, Salem, on , 28.10.2020
13	Dr Smita Tripathi	online course	Successfully completed online course with Delhi State Legal Services Authority	10.08.2020 to 14.09.2020 on Legal Awareness.
12	Dr Smita Tripathi	panellist and speaker	webinar on Principles of physiology and its practical application,delivered a lecture on topic of Molecular basis of Physiology	Ayurvedic and Unani Tibbia College and Hospital, on .21.12.2020

				New Delhi on Dec,7th .2020
22	Dr Mukesh Kr.	Delegate	9 TH Annual CME on	Department of biochemistry,Sir
	Meena		Role of laboratory	Ganga Ram Hospital on
			medicine in	9 th Dec 2020
			Cardiovascular risk	
			STATIFICATION in	
			patients and healthy	
			population	
23	Dr Mukesh	Delegate	Programe on	5 th Dec,2020
	Kumar Meena		Antimicrobial	
			Resistance	
			&Antimicrobial	
			Stewardship in	
			COVID19 Era	
24	Dr Mukesh	Delegate	Hypertension	Department of anaesthesia &
	Kumar Meena		Disorder of	Critical Care LHMC,on 18 th
			Pregnancy	Sept.2020
25	Dr Mukesh	Delegate	Orientation workshop	LHMC, ON
	Kumar Meena		on research	11th-13th September 2020
			methodology	
			&protocol	
			development	
26	Dr Mukesh	Attendee	Awareness	Dec,13th 2020
	Kumar Meena		Session about	
			Stem cell	
			Transplant with	
			dkms-bmst	
27	Dr Mukesh	Delegate	International CME	Department of Dermatology &
	Kumar Meena		Webinar	STD,
			Theme: Atopic	is conducting a 4-day program
			eczema and Hand	on Eczema
			eczema	Date: 14-09-2020 to 17-09-
				2020

Special achievement of the staff

Dr Anju Jain

- 1. Expert for procurement of equipment for AIIMS Raibareilly by HSCC
- 2. Subject expert for selection of Professor at GIMS, Greater Noida on 30/09/20
- 3. Expert for P G update by AMBI on 1-2 November 2020
- 4. Examiner for supplementary exam at North Delhi Medical college on 18/11/20
- 5. Examiner first supplementary examination(2019batch) on 19/11/20
- 6. Part of selection committee for Dynamic appraisal of faculty of UCMS on 28/11/20
- 7. Coordinator for PhD viva at MAMC on 21/12/20

- 8. Coordinator for Departmental CCS, DRC and BRS meetings of FMS
- 9. Expert selection Committee for faculty appointment at VPCI on 05/01/21
- 10. Coordinator for PhD viva at MAMC in January 2021
- 11. Coordinator for PhD viva at VPCI on 01/02/2021
- 12. Internal Examiner first MBBS 2021
- 13. Expert selection committee for faculty at ESI Basai Darapur on 22/02/2021
- 14. Moderator for first MBBS result, Examination Branch South Campus on 26/03/21

Dr Ritu Singh

- 1. Editor -in-chief of South Asian Edition of "Lippincott Illustrated Reviews Biochemistry" which is a long standing book of International repute by the Wolters Kluver Publishing House. This book is now adapted as per MCI-CBME curriculum and competencies to suit doctors of all Asian countries. Released in 2020
- 2. Primary custodian e-APAR for all doctors of LHMC and Associated Hospitals
- 3. **Elected President** of the Delhi Chapter of Indian Society for Atherosclerosis research (ISAR) in Nov 2020 . ISAR is a member society of International atherosclerosis Society , Italy
- 4. As Medical Education Core Faculty received the **Curriculum Implementation Support Programme** 11 Training by Regional centre MAMC on 16th and 17th Sept 2020
- 5. As core faculty member MEU Organised the CISP workshop for Faculty of LHMC
- 6. **Stress management workshop in** MEU –SLM for MBBS students as well as in Foundation course
- 7. Co-Supervisor to DM cardiology students of G.B.Pant Hospital
- 8. MoHFW committee for establishment of Biochemistry lab in new 100 bedded Najafgarh hospital
- 9. PhD thesis Evluation of SRM University, Sonepat, Haryana
- 10. Cultural Head for Undergraduate students of LHMC
- 11. Early clinical exposure multi-disciplinary module on Thallasemia and Duchenne Muscular Dystrophy Genetics on 11th and 13th March 2020 for First Proff Students .
- 12. Institute of liver and Biliary Sciences Consultant interview board
- 13. Kerala University-Thesis evaluation
- 14. Sikkim Manipal University, Thesis evaluation
- 15. PGI Chandigarh Thesis Evaluation

Dr Ekta Debnath

- 1. Six months fellowship Training in Division of Genetics, Deptt of Paediatrics, AIIMS New Delhi w,e.f 16th Oct 2019 under DBT-UMMID Initiative by permission of Ministry of Health and family welfare. Completed successfully training in April 2020.
- 2. DBT- NIDAN KENDRA work has been started for screening of thalasemic couples and Molecular mutational analysis for hemoglobinopathies.

3. Posted in VRDL Lab Microbiology, Covid Lab as expertise by institute from 27th March 2020 onwards till Aug 2020.

Dr Mukesh Kumar Meena

- 1. Executive Member of Indian Society (DC) of Atherosclerosis Research of India in 2020
- 2. Started the Urine Chemistry in KSCH
- 3. Stabilized Advanced Drug Assay Laboratory and started Drugs level in serum/blood in KSCH
- 4. Successfully completed NABL Technical assessor course
- 5. Paper setter for MBBS 1st Prof Examination RUHS, Jaipur Rajasthan/Delhi University
- 6. External examiner for MBBS, MGM Medical college MPMS

University, Indore, Madhya Predesh

- 7. External examiner for BDS, Govt. Medical college MPMS University Indore, Madhya Predesh
- 8. External examiner for B Sc (BMLT), DMLT (Paramedical), DAVV Indore, Madhya Predesh
- 9. Member- MLT Recruitment committee, LHMC
- 10. Member- SR interview committees

Representation on expert bodies /Committees

Dr Anju Jain

Institutional

- a. Nominated Head of Department of Biochemistry, Delhi University wef 28/08/19
- b. Editor in chief Indian Journal of Medical Biochemistry
- c. Chairperson Archival committee wef 19/09/19
- d. Consultant for UG Mentorship programme
- e. President LHMC Alumni Association from 15/12/19
- f. President Association of Medical Biochemists of India
- g. Member Task Force for CRP
- h. Research & projects committee- member
- i. Member Diamond jubilee committee
- j. Member consultative board for UG mentorship programme

Extra institutional

- 1. Nominated Head of Department of Biochemistry, FMS, Delhi University wef 28/08/19
- 2. Editor in chief Indian Journal of Medical Biochemistry
- 3. Member BRS at PGIMS Rohtak and SGT Gurgaon, Haryana
- 4. Subject expert for Standing Selection Committee for Faculty post of NEIGRIMS Shillong on 03/10/19held at ICMR New Delhi
- 5. Nominated representative by DGHS for technical specification for procurement & installation of Machinery & Equipment for CCRF Lab, AIIMS

6. Member PG expert group with BOG at MCI with regular meetings at MCI

Dr Ritu Singh

- 1. Elected President Delhi Chapter –Indian Society of Atherosclerosis Research :Nov 2020
- 2. Primary Custodian, APAR, LHMC 2018-2019
- 3. Indian Society of Inborn Errors of Metabolism- Founder member
- 4. **International atherosclerosis society-**Member
- 5. Associate Editor of Journal of Indian Society for Atherosclerosis Research (Atherosclerosis and Metabolic Research)
- 6. Member -Alignment and Integration committee and committee for formulating Linker cases with vertical and Horizontal integration for Undergraduates 2020
- 7. Member, Committee of courses and studies, Delhi University
- 8. Member of Association of Clinical Biochemists of India (ACBI)
- 9. Member of Association of Medical Biochemists of India (AMBI)
- 10. Member- MLT Recruitment committee, LHMC
- 11. Member- SR interview committees
- 12. Member Contract Asstt. Professors Recruitment Board
- 13. Institute of liver and Biliary Sciences Consultant interview board
- 14. Member-Purchase of Proprietary Items of Machinery and Equipment
- 15. Member of Furniture committee for Academic block
- 16. Executive committee member and past president of ISAR
- 17. Thesis Evaluation of MD Biochemistry of AIIMS Delhi.
- 18. Member-Committee for Repair Maintenance and Purchase of Proprietary Items of Machinery and Equipment for college side ,LHMC
- 19. Member of Screening committee for financial upgradation of non technical employees under MACP scheme

Dr Smita Tripathi

- 1. UG batch teaching incharge
- 2. Nursing Batch teaching incharge
- 3. Curriculum subcommittee member

Dr Ekta Debnath

- 1. Member of Institutional Ethical committee for human research
- **2.** Subject Expert in various confidential academic activities in National board of Examinations (NBE), MOH, Govt of India
- 3. External examiner for DNB Biochemistry Practical examination June 2020
- 3. Thesis reviewer for MD &Phd Candidates from AIIMS New Delhi, AIIMS Bhopal, and Kolkata university

- 4. External examiner and Paper setter for MBBS first prof for IP University and AIIMS New Delhi
- 5. Expert faculty for UbiQuizone, Biochemistry Quiz competition for AIIMS Nagpur Jan 2020
- 6. Reviewer for Journal of Laboratory physicians & JIMSA
- 7. Certified NABL technical assessor, Biochemistry

Dr Preeti Chauhan

- 1. Medical superintendent of examination for MBBS as well as for MD surgery examination.
- 2. Member of Institutional Committee for purchase of kits and chemical
- 3. Nodal officer of computerization and e-hospital
- 4. Chemical committee of department of Biochemistry
- 5. Nursing teaching in charge for this year 2019-2020
- 6. Paper setter for nursing students by delhi university as well as esic dental college by indraprastha university, delhi.

Dr ParijatGogoi

- 1. Member of Institutional Feedback Committee for New MBBS Curriculum
- 2. Member of Document Screening Committee for appointment of Nursing Officers
- 3. Member of Institutional Condemnation Committee
- 4. Member (external) of Committee for Purchase of Equipments (RML)

Dr Mukesh Kumar Meena

- 1. Member, of Institutional Recruitment committee.
- 2. Member, Committee for recruitment of MLT, LHMC.
- 3. Executive Member, Delhi chapter –Indian Society of Atherosclerosis Research
- 4. Member, of Departmental the technical specifications committee for the procurement of equipment Biochemistry department
- 5. Member, of Institutional Students Hostel Committee as Assistant Warden
- 6. Examiner and expert in various academic activities Under Graduate and Post Graduate Medical Examination
- 7. Member, of Institutional committee for Senior Residents interview
- 8. Certified NABL Technical assessor