



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

Biochemistry

FACULTY

Prof. (Dr.) Mousumi Mukhopadhyay, MD	Professor and Head
Prof. (Dr.) Pinaki Sarkar, MD	Professor
Prof. (Dr.) Debasish Mandal, MD	Professor
Dr. Debojyoti Bhattacharjee, MD	Associate Professor
Dr. Kapil Deb Lahiri, MD	Assistant Professor
Dr. Kasturi Mukherjee, MD, DNB	Assistant Professor
Dr. Jayati Roy Choudhury, MD	Assistant Professor
Dr. Arghya Ray Chaudhuri, MD	Assistant Professor
Dr. Tanushri Khatua, MD	Demonstrator
Dr. Saumyajit Maity, MD	Demonstrator
Dr. Bithika Ghosh, MD	Demonstrator

Postgraduate trainees

Session 2020-23	Session 2019-22	Session 2018-21
Dr. Asis Bhattacharya	Dr. Ethena Das	Dr. Debabrata Chatterjee
Dr. Soham Biswas	Dr. Shibasis Ghosh	Dr. Arkajit Dasgupta
Dr. Animesh Sardar Singh	Dr. Sudip Kanti Sarkar	Dr. Sudipa Pal
Dr. Debi Mallick	Dr. Pradip Kumar Santra	Dr. Abhijit Saha
Dr. Debraj Bhattacharyya	Dr. Sebanti Chakraborty	Dr. Soma Mandal
Dr. Sekh Rajib	Dr. Papia Mondal	Dr. Rajani Kanta Mondal
Dr. Sankar Narayan Maity		Dr. Madhushree Pahari

Non-teaching staff

Pijush Kanti Mukherjee	M.T. (Lab)	Prabhat Jana	M.T. (Lab)
Nihar Ranjan Mukherjee	M.T. (Lab)	Ipsita Mitra	M.T. (Lab)
Biplab Sarkar	M.T. (Lab)	Sajjad Hossain	M.T. (Lab)
Sudeshna Das	M.T. (Lab)	Utsav Mallick	M.T. (Lab)
Aditya Mukherjee	M.T. (Lab)	Kausik Roy	M.T. (Lab)
Kamalesh Pandey	M.T. (Lab)	Parboti Devi	Group D staff
Ujjal Patra	M.T. (Lab)	Anath Bandhu Mistri	Group D staff
Bikas Kumar Pati	M.T. (Lab)	Satbir Balmiki	SWEEPER
Kakali Chakrabarti	M.T. (Lab)	Suku Mallick	SWEEPER

TRANSFERS, POSTINGS AND SUPERANNUATIONS

- Dr. Debosmita Bandyopadhyay has been transferred to Bankura Sammilani Medical college and Hospital as Associate Professor, Dept. of Biochemistry.
- Prof (Dr.) Pradyut Kr. Sen has been superannuated from Dept. of Biochemistry, IPGME & R

ACADEMIC ACTIVITY

- Theory and practical classes for MBBS, MD, DMLT, BPT classes.
- Thesis/dissertation of MD students.
- Online and offline post graduate seminar.
- Journal club

Training / Conference/ Workshop attended by faculty and PGTs

- Workshop and hands on training on Indirect immunofluorescence microscopy organized by ACCLMP in September, 2021.
- Hands on workshop on Antinuclear antibody (ANA) testing by Indirect immunofluorescence microscopy in September, 2021.
- Workshop on Ion Exchange Chromatography, early and recent perspective in October,2021.
- Training program on Laboratory Quality Management System & Internal Audit as per ISO.15189 IN December 2021.
- Workshop on FLOW CYTOMETRY organized by MRU, IPGME&R in December2021.
- Training on MOLECULAR TECHNIQUES organized by NIBMG in December,2021.
- Training on Basic Course in Biomedical Research organized by ICMR.
- 3-day Training on Revised Basic Course Workshop in Medical Education Technology, 202.

Publications of faculty and students in last three years

1. Jana S, Mukhopadhyay M, Bandyopadhyay SN, Jana T, Pramanik S. Preeclampsia is associated with elevated iron and ferritin in third trimester of pregnancy: a cross sectional observational study from a tertiary centre at Kolkata. *JMSCR*.(2018);6(2):1170-1175.
2. Biswas S, Pal DK, Mukhopadhyay M. Metabolic alteration in prostatic neoplasm: eastern Indian study *SJAMS*;2018;6(8):3077-3080.
3. Das N, Mandal D, Raychaudhuri A, Karmakar A, Ray A, Mukhopadhyay M. Importance of assessment of serum magnesium in type II diabetes mellitus patient and its relationship with urinary micro albumin : creatinine ratio. *J Med Res Prac*.2018;7(3);68-70.
4. Sannigrahi S, Pal DK, Mukhopadhyay M. Study of oxidative stress and one carbon metabolism in prostate neoplasm in a tertiary care hospital. *JCDR*.2020;14(3):XC01-XC04.
5. Tajuddin QM, Mukhopadhyay M, Bandyopadhyay SM. Evaluation of serum oxidative stress, vitamin B12 and homocysteine level in preeclamptic pregnant women. *IJSR*;2020;9(11):4-6.
6. Bandyopadhyay R, Mandal T, Sarkar P. Study of serum total thiol levels and lipid peroxidation as indicator of oxidative stress in patients of acute central serous retinopathy. *J Evol Med Dent Sci*. 2019; 8(01):20-24
7. Banerjee S, Saha (Roy) S, Sarkar P, Sharma Sarkar B, Halder D. Study of thyroid functions in type 2 diabetes, mellitus and relationship with obesity in a tertiary care hospital, Bankura, West Bengal. *World J Pharm Res*.2018; 7(7):1175-86.
8. Banerjee S, Saha (Roy) S, Sarkar P, Sharma Sarkar S. Microalbuminuria: An Early Indicator of Kidney Dysfunction in Type 2 Diabetes Mellitus in Tribal Population of Bankura, West Bengal, India. *Int J Res Rev*. 2018; 5(5):95-101.
9. Chatterjee S, Chakrabarti P, Sarkar P. Relationship of thyroid hormone status with iron overload in the beta-thalassemic tribal children receiving multiple blood transfusions- A CrossSectional Descriptive Study. *Sch Acad J Biosci*, 2019; 7 (2): 40-4.
10. Banerjee S, Lahiri S, Mandal T, Sarkar P. Relationship between overt hypothyroidism and hypocalcemia: a cross-sectional study in the rural population of Bankura, West Bengal. (*IOSR-JDMS*).2018;17(5):14-16.
11. Dr. Debasish Mandal. A study of serum electrolytes with particular reference to magnesium in head injury patients admitted in tertiary care hospital, Kolkata. *International Journal of Scientific Research*. Volume-8, Issue-1, January-2019. Page 61- 62.
12. Avas Chandra Ray, Mosaddeq Hossain, Soubhik Kanjilal, Mridul Kanti Das, Santanu Banerjee, Debasish Mandal. A Study of thyroid function tests in patients with chronic liver disease, admitted in a tertiary care hospital, Kolkata. *International Journal of Scientific Research*. Volume-8, Issue-6, June-2019. Page 13-15.

13. Bhattacharjee R, Mukherjee K, Mukherjee K, Bhattacharjee D, Chowdhuri S. Prevalence of macroprolactinemia by polyethylene glycol precipitation method: a cross-sectional study. *National Journal of Laboratory Medicine*. 2021 Jul, Vol-10(3): 5-8.
14. Mukherjee K, Banerjee A, Bhattacharjee D, De S, Biswas A, Chakraborty R, Manna A. Liver Function Status in COVID-19: An Indian Perspective. *J Assoc Physicians India*. 2021 Feb;69(2):19-21. PMID: 33527805.
15. Bhattacharjee D, Mukherjee K, Rehena Sarkar, Goutam Chakraborti, Oindrila Das. Abnormalities of liver function tests in acute malaria with hepatic involvement: A case-control study in Eastern India. *Medical Journal of Dr D Y Patil Vidyapeeth*.2021.14(1):21-25.
16. Banerjee A, Mukherjee K, Bhattacharjee D, Garai D, Chakraborty R. Status of Health-care Workers in Relation to COVID-19 Infection: A Retrospective Study in a Level 4 COVID Hospital in Eastern India. *J Assoc Physicians India*. 2020 Dec;68(12):55-57. PMID: 33247643.
17. Ghosh R., Mukherjee K., Maiti S, Bhattacharjee D, Chowdhuri S. Role of pleural fluid-serum protein carbonyl gradient in differentiating exudative and transudative effusions. *Asian Journal of Medical Sciences*.2020;11(6), 46-52.
18. Bhattacharjee D, Chowdhury JR, Mukherjee K. Evaluation of cardiac biomarkers in dengue myocarditis in a tertiary care hospital in Eastern India. *Journal of Clinical and Diagnostic Research*. 2020.14(12):4-8.
19. Jha S, Bhattacharjee D, Chowdhuri Set al. Oxidants and antioxidants in COPD associated with tobacco smoke and biomass exposure. *J Evol Med Dent Sci* 2019;8(46):3449-3453.
20. Bandyopadhyay D, Mukherjee K, Banerjee S. A study to evaluate quality indicators in pre-analytical variables in clinical biochemistry laboratory in tertiary care hospital of West Bengal. *Int J Sci Res* 2019; 8: 1-3.
21. Bandyopadhyay D, Roy Choudhury J, Mukherjee K. Vitamin B12 deficiency in Eastern India: A hospital based cross-sectional study. *Journal of Clinical and Diagnostic Research*. 2021 Apr;15(4): 1-4.
22. Ghosh B, Maiti S, Mukherjee K. Assessment and Interrelation of hs-CRP, nitrosative stress and lipid profile in type-2 diabetes mellitus. *International Journal of Current Research and Review*. June 2021; 13(12):54-61.
23. Bandyopadhyay D, Roy Choudhury J, Mukherjee K. Vitamin B12 Deficiency in Eastern India: A Hospital Based Cross-sectional Study. *Journal of Clinical and Diagnostic Research*. 2021 Apr;15(4): 1-4
24. Bandyopadhyay D, Roy Choudhury J, Banerjee S. A study of biochemical profile of anemia in elderly population in a tertiary care hospital of West Bengal. *Int J Sci Res* 2019; 8: 58-60.
25. Roy Choudhury J, Banerjee S, Chakraborty I. Implementation of sigma metrics for evaluation of analytical quality in clinical Biochemistry laboratory of a tertiary care hospital. *J Evol Med Dent Sci* 2018; 7: 6808-11.
26. Banerjee S, Roy Choudhury J, Chakraborty I. Evaluation of preanalytical errors in clinical biochemistry laboratory in a tertiary care hospital in Kolkata. *J Evol Med Dent Sci*.2018, 7: 1118-20.
27. Banerjee S, Roy Choudhury J. Evaluation of alteration of serum uric acid level in hypothyroid and hyperthyroid patients in a tertiary care hospital. *International journal of science and research*.Jan2018,7(1) 1010-1012
28. Ray Chaudhuri A, Banerjee S, Das S, Ali A, Bandyopadhyay SN, Karmakar A, Mandal D. A study of LDL susceptibility to oxidative damage in preeclampsia patients attending a tertiary care hospital Kolkata. *Int J Sci Res* 2019; 8: 20-21.
29. Biswas L, Ray Chaudhuri A. Biochemical correlation between neonatal hyperbilirubinemia and oxidative stress. *IJPCBS* 2019; 9(1): 54-60.
30. Ray Chaudhuri A, Banerjee S, Chakraborty S, Mandal D. Association of neonatal hyperbilirubinemia with glucose phosphate dehydrogenase enzyme activity with reference to ABO-Rh status. *Int J Si Res* 2019; 8: 11-12.
31. Khatua T, Sarkar C, Dey S, Majumder B. Study of pro-oxidant status in acute myocardial infarction. *Asian Journal of Medical Sciences*. July2018;9(4):31-34.
32. Khatua T, Mandal T, Saha M, Majumder B. Distribution of age, gender and body weight in AMI patients in a tertiary care center of Eastern India. *Asian Journal of Medical Sciences* 2021; 12: 75-8.
33. Ghosh R, Mukherjee K, Maiti S, Bhattacharjee D, Chowdhuri S. Role of pleural fluid-serum protein carbonyl gradient in differentiating exudative and transudative effusions. *Asian J Med Sci* 2020; 11: 46-52.

RESEARCH PROJECTS

1. Assessment of albumin globulin ratio in type 2 diabetic patients with non alcoholic fatty liver disease.
2. Assessment of serum vitamin D, calcium and urinary albumin Creatinine ratio in type 2 diabetes mellitus patients attending a tertiary care hospital in Kolkata.
3. Prospective observational study of Biochemical parameters in suspected cases of male infertility in a tertiary care hospital in eastern zone of India.
4. Prevalence of subclinical hypothyroidism in untreated PCOS patients and PCOS patients on Metformin therapy at a tertiary care hospital in eastern India.

5. Study of serum vitamin B12 and serum vitamin D level in patients of chronic liver disease at a tertiary care hospital of eastern India.
6. Prevalence of vitamin B12 deficiency in patients of anti TPO antibody positive primary hypothyroidism in a tertiary care hospital.
7. An observational study to evaluate the effects of chronic liver disease on calcium homeostasis and bone mineral metabolism in a tertiary care hospital of eastern India.
8. Measurement of uncertainty in assessment of thyroid hormones; an evaluation in testing laboratory in a tertiary care hospital.
9. Thyroid function and related biochemical changes in patients of heart failure attending IPGME&R, SSKM hospital, Kolkata.
10. Study of ischemia modified albumin and d dimer as biomarkers of acute stroke.
11. Evaluation of analytical quality of thyroid hormones by estimating sigma matrices using performance data in a tertiary care hospital.
12. A cross sectional study to determine serum iron, Ferritin, and vitamin B12 status in patients with primary hypothyroidism in a tertiary care hospital in eastern India.
13. A study of serum ischemia modified albumin and glycated hemoglobin status in type II diabetes mellitus patients attending a tertiary care hospital in Kolkata.
14. Study of micronutrient status in primary hypothyroidism at a tertiary care hospital in eastern region of India.

SERVICE INFORMATION

Number of samples analyzed in 2021 by Autoanalyzer, semi autoanalyzer and ISE

SN	Test	Number
1	Sugar	226480
2	Urea	239142
3	Creatinine	246148
4	Total Bilirubin	188468
5	Direct. Bilirubin	165000
6	Total Protein	149317
7	Albumin	166968
8	ALP	165830
9	SGOT	172748
10	SGPT	178215
11	Total Cholesterol	45622
12	TG	42862
13	HDL Cholesterol	39507
14	LDL Cholesterol	27043
15	CPK	3382
16	Calcium	37748
17	Phosphate	18761
18	Magnesium	5318
19	Uric Acid	54996
20	Amylase	7014
21	Lipase	6756
22	Hb	9572
23	HbA1C	9426
24	LDH	9669
25	Iron	8551

SN	Test	Number
26	TIBC	8247
27	GGT	3894
28	Urine ACR	3387
29	BUN	23866
30	Na+	188007
31	K+	188007
32	Cl-	188007
33	24 h urinary protein	2810
34	NGRS	549
35	Urine pH	128
36	Bence Jonce protein	58
37	Transferrin Saturation	737
38	Urine for ketones	49
39	ADA	2224
40	OGTT	702
41	Urine for amylase	37
42	Ascitic fluid analysis	1805
43	Pleural Fluid analysis	1632
44	Drain fluid analysis	580
45	Serum Osmolarity	431
46	CSF Sugar	1867
47	CSF Protein	1867
48	CSF Chloride	1867
49	Urine Osmolality	3110
50	Urine Ca-creatinine ratio	3014

Number of samples analyzed in 2021 by Chemiluminescence method:

SN	Test	Number
1	FT4	22068
2	TSH	45542
3	LH	1555
4	FSH	1765

SN	Test	Number
8	CEA	387
9	CA 15.3	162
10	AFP	182
11	VIT B12	613

5	PRL	3540
6	CA 125	475
7	CA 19.9	429

12	PSA	859
13	FERRITIN	869
14	SPEP	47

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

1. Continuation of 24 hours laboratory services during the lockdown period.
 2. Telemedicine duties by PGTs and faculties of the department.
 3. Covid vaccination duty in hospital.
 4. Management of the laboratories runs at Shambhunath Pandit Hospital, Kidderpore Maternity Home and Trauma Care Unit of SSKM Hospital.
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