

Biochemistry

FACULTY AND STUDENTS

Dr. Mousumi Mukhopadhyay MD	Professor & Head
Dr. Utpal Kumar Biswas DCP, MD	Professor
Dr. Debasish Mandal MD	Associate Professor
Dr. Debasmita Bandyopadhyay MD	Assistant Professor
Dr. Sharmistha Choudhuri MD	Demonstrator
Dr. Amrita Karmakar MD	Demonstrator
Dr. Arghya Ray Chaudhuri MD	Demonstrator
Dr. Prasenjit Pal MD	Senior Resident

Postgraduate trainees

Session 2014-17	Session 2015-18	Session 2016-19
Dr. Suparba Chakrabarti	Dr Debasish Mandal	Dr. Sayani Chaudhury
Dr. Ananya Kundu	Dr Ananya Saha	Dr. Tiasha Sinha
Dr. Chandramallika Paul	Dr Nilabja Das	Dr. Ayesha Hassan
Dr. Sabyasachi Sarkar	Dr Swati Paul	Dr. Anannya Ghosh
Dr. Indrajyoti Sarkar	Dr Sunita Biswas	Dr. Parna Chakraborty
Dr. Anindya Prakash Ghosh	Dr Ananya Roy	Dr. Sudarshan Chakraborty
Dr. Bablu Saren	Dr Sk Sariful Islam	Dr. Ajay Biswas

PhD research scholars

- Mr. Jit Poddar
- Mrs. Upasana Ganguly

REGULAR ACADEMIC ACTIVITIES

- Theory and practical classes for MD, MBBS, DMLT, BPT and B.Sc (Nursing) students.
- College and University examinations for MD, MBBS students.
- Weekly journal club and seminars
- Thesis / Dissertation of MD and PhD students and regular project work.
- Summer Training Programmes of postgraduate and undergraduate students of Biochemistry and Biotechnology of other institutions.

CME Programme on Microarray organized by Dept of Biochemistry of IPGME&R on behalf of AMBI, WB

CME Programme on Innate Immunity attended by faculty and PGTs.

Publications of faculty members and students in last three years

1. Chakrabarti S, Sinha M, Thakurta I.G, Banerjee P, Chattopadhyay M (2013). Oxidative stress and amyloid beta toxicity in Alzheimers disease; intervention in a complex relationship by antioxidants. Curr Medic Chem. (in press)
2. Sinharay M and Mukhopadhyay M. A case of Hurler Scheie Syndrome, attenuated form of mucopolysaccharidosis Type I. Int J Curr Res Rev. (2013); 05 (14); 49-5

3. Roy UK, Pal M, Datta S, Ghosh T, Harlalka S, and Ray Chaudhuri A. Assessment of susceptibility of different areas of brain to oxidative stress in insulin induced hypoglycaemic diabetic rats. *Int J Biol Med Res* (2013);4(4);3550-57
4. Pal M, Datta S, Pradhan AK, Biswas L, Ghosh J, Mondal P, Rahut R, Ray Chaudhuri A, Sau S and Das S. Comparison between different methods of estimation of vitamin D. *Adv Biol Chem* (2013);3;501-504.
5. Mukhopadhyay M, Chattopadhyay S, Chakraborty S, Bhattacharyya S and Biswas. Primary Hyperparathyroidism due to bilateral parathyroid adenoma - A clinical case report. (2014);6(1); 95-100.
6. Choudhuri S, Sharma C, Banerjee A, Kumar S, Kumar L, Singh N. A repertoire of biomarkers helps in detection and assessment of therapeutic response in epithelial ovarian cancer. *Mol Cell Biochem* (2014).
7. Patel S, Choudhuri S, Kumar L, Singh N. Role of Metformin and Paclitaxel alone and in combination in primary ovarian cancer cells. *Int J Biol & Pharm Research*. 2016; 7(5): 262-268.
8. Bhattacharyya S, Mukhopadhyay M, Chakraborty S and Banerjee S. Fructosemia with early onset and atypical presentation- A clinical case report. *Int J Adv Case Reports*. (2014); 1(4); 153-155.
9. Das M, Ray Chaudhuri P, Mondal BC, Mitra S, Bandyopadhyay D, Pramanik S. Assessment of serum magnesium levels and its outcome in neonates of eclamptic mothers treated with low-dose Magnesium sulfate regimen. *Ind J Pharm*. Oct 2015; 47(5); 502-508.
10. Karmakar A, Jana CK and Das HN. Serum adenosine deaminase activity among newly diagnosed patients with type 2 diabetes mellitus and its correlation with insulin resistance. *APJR* (2014);1(XV);1-6.
11. Karmakar A, Roy Choudhury J, Guha B and Rout JK. Glycated haemoglobin for the diagnosis of diabetes mellitus and to determine estimated average glucose (EAG) concentration. *IOSR-JDMS* (2015);14(2);15-18.
12. Roy Choudhury J, Karmakar A, Guha B, Das B and Rout JK. Ischaemia modified albumin and malondialdehyde level in subjects suffering from hypothyroidism. *Int J Biochem Res & Rev*. (2015);7(3);160-165.
13. Chatterjee S and Mukhopadhyay M. Assessment of the relationship of the circulating nitrate-nitrite ratio with the female sex steroids in different phases of the menstrual cycle. (2015);13(2).
14. Pinaki Saha, Sayantan Dasgupta, Sukla Nath, Pradipta Ghosh, Santanu Sen, Tanmay Jyoti Sau, Arun Kumar, Utpal Kumar Biswas. Increased H₂S synthesizing activity in plasma correlated to fasting blood glucose levels: A study in type 2 diabetes patients. *Asian Journal of Medical Sciences | Nov-Dec 2016 | Vol 7 | Issue 6*, p 6-10.
15. Pinaki Saha, Sayantan Dasgupta, Santanu Sen, Arun Kumar, Utpal Kumar Biswas. Patients with type 2 diabetes have reduced levels of plasma vitamin D₃ and are well correlated with the oxidative stress parameters. *Asian Journal of Medical Sciences* 2016; Vol 7: Issue 3, P: 11-15.
16. Pinaki Saha, Piyasha Banerjee, Lakshmi Auddya, Prasenjit Pal, Mousumi Das, Moumita Dutta, Santanu Sen, Mohan Chandra Mondal, Arun Kumar, Utpal Kumar Biswas. Simple Modified Colorimetric Methods for Assay of Total Oxidative Stress and Antioxidant Defense in Plasma. Study in Diabetic Patients. *Archives Of Medicine* 2015; Vol. 7: No. 5, 1, P: 1-7.
17. Pinaki Saha, Piyasa Banerjee, Prasenjit Pal, Lakshmi Auddya, Santanu Sen, Tanmay Jyoti Sau, Arun Kumar, Utpal Kumar Biswas. Enhanced plasma H₂S levels associated with fasting blood glucose in Type-2 diabetes mellitus. 2015. *Asian Journal of Medical Sciences*. Vol. 6, Issue 6, P: 35-40.
18. Moumita Dutta, Utpal Kumar Biswas, Runu Chakraborty, Piyasa Banerjee, Arun Kumar and Utpal Ray Chaudhuri. Reduced Erythrocyte Carbonic Anhydrase Activity by *Swietenia Macrophylla* Seeds in Diabetic. *Journal of Diabetes, Metabolic Disorders & Control* 2015; Vol: 2, issue 2, : 00035 .
19. Mousumi Das, Utpal Kumar Biswas and Arun Kumar. 24 Hours Urinary Hydroxyproline - A noninvasive, cost-effective and early biochemical marker which may be used to screen the osteoporotic lesion in postmenopausal women. *Asian Journal of Medical Sciences* 2015; Vol 6: Issue 4, p 21-24.
20. Mousumi Das, Utpal Kumar Biswas, Sabyasachi Mallick, Anindya Dasgupta and Aparna Khan. A Study On Biochemical Markers Of Bone Turnover For Early Detection Of Osteoporosis In Postmenopausal Women. *Indian Journal of Medical Biochemistry* 2015; Vol 17: Issue 1, p 50-55.

Conference or Workshop attended:

- AMBICON (National and West Bengal chapter) 2016 attended by faculties and PGTs
- ACCLMPCON 2016 attended by faculties and PGTs
- Regional workshop on "Capacity Building of Faculty/ Researcher in various Medical Colleges/Research Institutes" from 19th -21st September 2016 in National Institute of Cancer Prevention and Research, Noida attended by Dr. Sharmistha Choudhuri.

SERVICE INFORMATION**Census of test done in last year**

- Number of samples analysed by autoanalyzer, Semi-autoanalyzer and ISE in 2016:
Indoor - 71625, Outdoor - 53560, Emergency - 31374, (Total 1,80,883)
- Total number of special parameter analysed (ELISA) in 2016: 24324

Number of tests analysed by autoanalyzer, semi-autoanalyzer, ISE and ELISA in 2016:

Tests	No. of Patients
1. Alkaline Phosphatase	21180
2. Albumin	20498
3. Amylase	3504
4. BUN(Blood Urea Nitrogen)	109200
5. Bilirubin	79008
6. Creatinine	102592
7. Calcium	14736
8. Cholesterol	22752
9. Direct HDL	22752
10. Direct LDL	22752
11. fT3	9888
12. fT4	15480
13. FSH	1536
14. Na+ K+ Cl-	81024
15. TG	22752
16. Total Protein	21,180
17. HbA1C	1176
18. Prolactin	2,596
19. S.G.O.T	23832
20. S.G.P.T	23512
21. Sugar	106108
22. TSH	21792
23. Microalbumin	996

Tests	No. of Patients
24. 24hoururinary protein	1104
25. Uric Acid	6048
26. LH	1224
27.CA 125	348
28.CA 15.3	48
29.CA19.9	96
30.CEA	108
31.PSA	660
32.Protein Electrophoresis	24
33.25(OH) Vitamin D3	312
34.Serum Fe	432
35.TIBC	432
36.Transferrin saturation	432
37.Ferritin	301
38.LDH	6528
39.Phosphate	10896
40.CSF sugar	576
41.CSF protein	576
42.CSF chloride	576
43. Urine Osmolality	156
44. Urinary calcium creatinine ratio	59
45. G6PD	12
46. Vitamin B12	03