

Physiology

FACULTY

1.	Prof. Utpal Kumar Datta, MD	Professor & Head
2.	Prof. Kakali Roy (Basu), MD	Professor
3.	Prof. Sangita Sen, MD, PhD	Professor
4.	Dr. Ardhendu Mazumdar, MD	Associate Professor
5.	Dr. Shubhankar Kumar, MD, DNB	Associate Professor
6.	Dr. Deepankshu Shekhar Mandal, MD	Associate Professor
7.	Dr. Md. Mahboob Alam, MD	Assistant Professor
8.	Dr. Jayati Das, MD	Assistant Professor
9.	Dr. Debdeep Dasgupta, MD	Assistant Professor
10.	Dr. Subrata Nag, MD	Demonstrator
11.	Dr. Srila Ghosh Chowdhury, MD	Demonstrator
12.	Dr. Debjani Banerjee, MD	Demonstrator
13.	Dr. Sucheta Biswas, MD	Demonstrator
14.	Dr. Bikashendu Samui, MD	Demonstrator
15.	Dr. Soma Roy, MD	Demonstrator

Postgraduate Trainee:

1.	Dr. Madhusmita Boro	PGT 2013-2016
2.	Dr. Chandan Biswas	PGT 2013-2016
3.	Dr. Manik Chandra Ghosh	PGT 2013-2016
4.	Dr. Gouranga Sardar	PGT 2013-2016
5.	Dr. Prasenjit Majumdar	PGT 2013-2016
6.	Dr. C. Biakhlupuii	PGT 2014-2017
7.	Dr. Manaswee Ray	PGT 2014-2017
8.	Dr. Sanchari Ghosh	PGT 2014-2017
9.	Dr. Aparajita Mitra	PGT 2014-2017
10.	Dr. Uday Sarkar	PGT 2014-2017
11.	Dr. Shib Sankar Pal	PGT 2015-2018
12.	Dr. Saikat Manna	PGT 2015-2018
13.	Dr. Rama Chakraborty	PGT 2015-2018
14.	Dr. Sourav Ganguly	PGT 2015-2018
15.	Dr. Paromita Roy	PGT 2015-2018

COURSES CONDUCTED BY THE DEPARTMENT:

- MBBS (150 seats)
- MD (5 seats)
- BSc (Nursing)
- 4. BPT
- 5. DPFT & DCLT

LABORATORY FACILITIES

- Neurophysiology lab for NCV studies.
- Biochemistry lab for routine biochemical parameters like urea, creatinine, glucose, lipid profile by spectrophotometer.
- Hematology lab for routine hematology investigation like Hb%, TC, DLC, PCV, ESR, Platelet count, reticulocyte count & bone marrow study.
- Behavioral Physiology laboratory for behavioral studies in different mazes.
- Autonomic Function Laboratory.

FACULTY NEWS

Prof. (Dr.) Utpal Kumar Datta

- a) Guiding Thesis work of Dr. Aparajita Mitra: Topic- Effect of training in one spatial navigation task upon the learning curve in a different spatial navigation task.
- b) Publications
- Chakraborty, N., Bhattacharyya, S., De, C., Mukherjee, A., Bhattacharya, D., Santra, S., Sarkar, R. N., Banerjee, D., Guha, S. K., Datta, U. K. And Chakrabarti, S. (2010): Incidence of multiple Herpes virus infection in HIV seropositive patients, a big concern for Eastern Indian scenario. *Virology Journal*, 7, 147.
 - Santra, S., Basu, A.K., Roychowdhury, P., Banerjee, R., Singhania, P., Singh, S. And Datta, U.K. (2011): Comparison of left ventricular mass in normotensive type 2 diabetes mellitus patients with that in the nondiabetic population. *Journal of Cardiovascular Disease Research*, 2, 50-56.
 - Lahiri S. K., Haldar D., Chowdhury S. P., Sarkar G. N., Bhadury S. And Datta, U. K. (2011): Junctures to the therapeutic goal of Diabetes Mellitus: Experience in a tertiary care hospital of Kolkata. *Journal of Mid-life Health*, 2, 31-36.
 - Chakraborty, A., Siddhanta, S., Bhattacharya, K., Das, A., Banerjee, S., Sarkar, R.N., Datta, U.K. and Chakraborty, N. (2013): Unravelling the Gordian knot: diagnostic dilemma in an HIV-positive patient with neurological involvement. *BMJ Case Report*, 1-4.

Prof. (Dr.) Kakali Roy (Basu)

- Guiding Thesis work of Dr. Shib Shankar Pal: Topic- Association of Obesity and Fatty Liver in Patients with Gall Stone Disease

Prof. (Dr.) Sangita Sen:

- a) Project:
- Completed a project titled " Evaluation of diabetic polyneuropathy in Type II DM by nerve conduction studies & association of severity of neuropathy with serum s-FAS level."
- b) Guiding Thesis work of the following PGTs:
- Dr. C. Biakhlupuii- Reference memory error of rats in radial maze of different sizes with suppression of foraging exploration by increased travel distance within the larger maze.
 - Dr. Saikat Manna – Role of Serum Uric Acid and Its Association with Other Risk Factors in Patients with Coronary Artery Disease
- c) Publications:
- Sen S, Das S, Ray P et al. Association of microalbuminuria with glycemic index, cardiovascular function, renal function & BMI in patients with DM; A cross sectional study in eastern India. *Biomedicine* 32(3): 383-388, 2012.
 - Biswas A, Chatterjee S, Chowdhury R, Sen S et al. Anti-diabetic effect of seeds of *Strychnos potatorum* (Linn) in a Streptozocin induced model of diabetes. *Acta Poloniae Pharmaceutica n Drug Research*; 69(5) 939-43, 2012.
 - Mondal A, Sen S, Chanda D, Kundu S, Chatterjee M & Mukherjee S. Evaluation of diabetic polyneuropathy in type 2 DM by nerve conduction study and association of severity of neuropathy with serum sFas 1 level. *Indian Journal of Endocrinology and Metabolism* 2012; 16 (2) : S465-467.
 - Sarkar A, Ghosh S, Pakrashi S, Roy D, Sen S & Chatterjee M. Leishmania strains causing self healing cutaneous leishmaniasishave greater susceptibility towards oxidative stress. *FreeRadical Research* 2012; 46 (5): 665- 673.

Dr. Ardhendu Mazumdar

- Guiding thesis work of Dr. Rama Chakraborty: Topic- Pulmonary Function Tests in Hypothyroid Patients and effect of Thyroid Hormone Replacement

Dr. Subhankar Kumar

- a) Guiding Thesis work of the following PGTs:
- Dr. Uday Sarkar: Topic- Effect of enriched environment on different cognitive abilities in rats: Visual recognition, context discrimination, working memory, spatial learning and semantic learning
 - Dr. Sourav Ganguly: Topic- Difference in Retention of Inter- and Intra-day Learning Process of Rats
- b) Working at Rodent Memory Laboratory in the Dept. of Physiology with radial mazes (8-arm & 24-

arm), Multi unit 'T' maze & Morris Water Maze to study spatial learning & memory in rat model of relevant diseases. A new work on the effect of antihistaminic drugs on performance in Morris water maze has been completed.

c) Currently in progress are research works on effect of enriched environment on non-spatial and spatial cognitive performance and on the effect of one maze training upon learning curve in another maze.

Dr. Deepankshu Sekhar Mandal

- a) Guiding Thesis work of Dr. Sanchari Ghosh: Topic- Effect of enriched environment on non spatial cognitive abilities of Wister rat.

Dr. Md. Mahboob Alam

Projects:

- Working on the project "Assessment of autonomic functions in Systemic Lupus Erythematosus and its relation with duration, disease activity, damage index and renal complications.
- Assessment of autonomic functions in Asthma and its relation with disease severity and duration.

Publications:

- Alam MM, Ray B, Sarkar S, Mandal O, Mondal R, Hazra A et al. Spirometric evaluation in juvenile idiopathic arthritis: Data from Eastern India. Indian J Pediatr. 2014; 81: 1010-14
- Alam MM, Sarkar S, Ghosh P, Ray B, Mondal R. Spirometric Evaluation in Juvenile Systemic Lupus Erythematosus. Indian Pediatrics 2014; 51:909-11
- Alam MM, Das P, Ghosh P, Salimuzzaman M, Boro M, Sadhu M et al. Cardiovascular Autonomic Neuropathy in Systemic Lupus Erythematosus. Indian J Physiol Pharmacol 2015; 59(2) : 155–161
- Alam MM, Ray B, Sarkar S, Mandal O, Mondal R. Spirometric Assessment in Juvenile Idiopathic Arthritis. Indian J Physiol Pharmacol 2015; 59(2) : 199–203
- Sarkar S, Alam MM, Ray B, Chaudhuri G. Study of Blood Pressure in Medical Students in Kolkata and Its Variation with BMI, Waist Circumference, Waist-To-Hip Ratio and Waist-To-Height Ratio. JMSCR 2015; 3:4044-51

Dr. Sreela Ghosh Chowdhury

Publications:

- Mandal M, Bandyopadhyay A, Datta A, G.Chowdhury S. Comparison of lower limit of normal values with a fixed ratio assessed by spirometry in obstructive and restrictive lung diseases in Indian population. Int. J. Clin. Exptl.Physiol 2015; 2: 67-73
- GhoshChowdhury S, Mandal O, Datta A, Chakraborty D. Effect of central adiposity on lung function tests in young adults. IOSR 2015; 14: 24-28

THESIS SUBMITTED IN 2015

- Dr. Madhusmita Boro: - Evaluation of Autonomic Function in Hypothyroid Patients Before and After L – Thyroxine Therapy (Under Guidance of Dr. Utpal Kumar Datta)
 - Dr. Chandan Biswas: - A Study of Cardiovascular Autonomic Functions in Diabetes Mellitus Patients (Under Guidance of Dr. Utpal Kumar Datta and Dr. Md. Mahboob Alam)
 - Dr. Manik Chandra Ghosh: - Evaluation of Electrophysiological Changes in Asymptomatic Type 1 Diabetic Patients (Under Guidance of Dr. Sangita Sen)
 - Dr. Gauranga Sardar: Effect of antihistaminic drug on spatial learning and memory recall of rats in Morris water maze (Under Guidance of Dr. Subhankar Kumar)
 - Dr. Prasenjit Majumdar: - Spirometric Evaluation of Adult SLE Patient and Its Relation with Duration, Disease Activity and Damage Index (Under Guidance of Dr. Ardhendu Mazumdar and Dr. Md. Mahboob Alam)
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