

Bangor Institute of Neurosciences – Neurology (Neuromedicine)

Teachers and medical officers

Dr. Shyamal Kumar Das	MD, DM	Professor & Head
Dr. Goutam Gangopadhyay	MD, DM	Professor
Dr. Tejendra Narayan Kundu	MD, DM	Professor
Dr. Atanu Biswas	MD, DM	Associate Professor
Dr. Biman Kanti Roy	MD, DM	Associate Professor
Dr. Alak Pandit	MD, DM	Associate Professor
Dr. Samar Biswas	MD, DM	Assistant Professor
Dr. Deb Sankar Guin	MD, DNB (Med), DM	Assistant Professor
Neurogenetic unit		
Dr. Anindita Joardar	MSc, PhD	Assistant Professor
Mr. Sayantan Chakravarty	MSc	Senior Research Fellow
Mr. Sarnava Roy	MSc	Research Associate
Medical officers (in Neuro emergency)		
Dr. Bijan Kumar Samajpati	MBBS	Medical Officer
Dr. Mridula Chakarborty	MBBS, DGO	Medical Officer
Dr. Sikha Roy	MBBS	Medical Officer
Dr. Anjana Mukherjee	MBBS	Medical Officer
Dr. Manas Kumar Sinha	MBBS, DGO	Medical Officer
Dr. Malay Das	MBBS	Medical Officer
Dr. Chandan Burman	MBBS	Medical Officer
Dr. Kuhu Diwanjee	MBBS	Medical Officer
Senior Residents		
Dr. Debsadhan Biswas	MD, DM	Senior Resident
Dr. Adreesh Mukherjee	MD, DM	Senior Resident
Dr. Souvik Dubey	MD, DM	Senior Resident

Postdoctoral trainees (DM Neuromedicine) – Seven students per year

1st year DM Residents	2nd year DM Residents	3rd year DM Residents
Dr. Arghya Deb	Dr. Subhodeep Banerjee	Dr. Dinesh Saini
Dr. Aswini Bhat	Dr. Jayanta Ghosal	Dr. Anjan Debnath
Dr. Niraj Saraf	Dr. Apratim Chatterjee	Dr. Sweety Trivedi
Dr. Vishal Sawale	Dr. Sulagna Sahu	Dr. Urmila Das
Dr. Durjoy Lahiri	Dr. Mrinal Acharya	Dr. Kaushik Pan
Dr. Kumar Vijay Anand	Dr. Partha Ghorai	Dr. Anurag Satpati
Dr. Vinayak Rodge	Dr. Sumanta Sarkar	Dr. Anand Choudhari

Institutional and Department Achievement

- Recently, the Bangur Institute of Neurosciences has reached within the top 15 of Neurology specialty hospitals in India according to a survey by the Week magazine.
- Awarded 'Outstanding Paper presented' to Sarnava Roy, Research Associate from unit of Neurogenetics in 1st Regional Science and Technological Congress-2016, West Bengal
- Awarded Young scientist award to Dr. Apratim Chatterjee, DM resident by World Stroke Congress recently held in Hyderabad, India.
- A New Campus of dedicated neuroscience at newly renovated Ramrikdas Haralalka Hospital (Annexe building of the Bangur Institute Neurosciences) has been approved (vide GO HF/O/MERT/1165/7S-33/2016/PT-1 dated 24.10.2016). It has been planned to house 50 beds for Dept of Neurology followed by another 50 beds of Neurosurgery in later phase. This is going to be opened shortly.
- Dr Anand Choudhari has obtained third position in National Quiz completion recently held during annual meeting of Indian Academy of Neurology.
- Participants from the department have secured first position in two three-monthly quiz competitions in Movement disorders held by Movement Disorder Society of India (MDSI), Kolkata chapter.
- Dr. Kaushik Pan, Third year DM resident secured first position from South-Eastern region of India in TYSA Neuro-quiz competition.

CURRENT RESEARCH WORK

- **Epilepsy**
 - Predictors of outcome in newly diagnosed epilepsy patients-a prospective study. (Dr. Anjan)
 - Knowledge attitude practice of epilepsy and marriage. (Dr. Jayanta)
- **Dementia**
 - Comparison of frontal lobe behavior in patient of cortical (bvFTD) v/s subcortical (PDD) dementia with emphasis on significant discriminating symptomatology (Dr. Dinesh)
- **Stroke**
 - Spontaneous IVH: clinical feature and etiological profile with special reference to DSA. (Dr. Koushik)
 - Apo E polymorphism and association with stroke. (Dr. Apratim)
- **Neuromuscular**
 - Chronic polyneuropathy-clinical spectrum and etiological profile in tertiary care hospital. (Dr. Sweety)
 - Early electrophysiological changes in GBS within seven days. (Dr. Partha)
- **Movement disorders**
 - Comparative study of clinical profile of young onset and adult onset Parkinson's disease. (Dr. Anurag)
 - A cross sectional study of non motor symptoms of Parkinson's disease and correlation with motor symptoms and quality of life in a tertiary care hospital. (Dr. Sulagna)
- **Neurogenetics**
 - Phenotypic and genotypic correlation of BMD. (Dr. Urmila)
 - Mitochondrial diseases a clinic-biochemical diagnostic perspective including mutation analysis in a

tertiary care centre of eastern india. (Dr. Subhodip)

- **CNS Infection /Inflammation**
 - Meningoencephalitis clinical features and etiological profile (Dr. Anand)
- **Collaborative work with the National Biogenomics Institute**

SERVICE INFORMATION

Attendance at OPD

	New	Old
Nov 2015	8580	8750
Dec 2015	9687	9770
Jan 2016	8467	9151
Feb 2016	10010	10546
Mar 2016	10798	11287
Apr 2016	10202	8741
May 2016	11232	10150
Jun 2016	10223	10524
Jul 2016	12499	10584
Aug 2016	10330	9055
Sep 2016	11514	8849
Oct 2016	8266	7402
TOTAL	121808	114809

Emergency Department (Neuroemergency)

	Attendance	Admitted
Nov 2015 – Oct 2016	33890	2300 (6.8%)

In-patient

Total admission 794 (predominantly from BIN OPD)

- Stroke: 294 (38.68%)
- Metabolic encephalopathy: 36 (4.7%)
- Wilson's disease: 10 (1.33%)
- Degenerative dementia: 20 (2.63%)
- Movement disorders: Parkinson disease: 23 (3.02%) Others: 25 (3.28%)
- Infections (Brain)
 - Acute: 51 (6.42%)
 - Chronic: 43
 - Tuberculosis: 41 (5.13%)
 - Fungal: 1 (0.013%)
 - Slow viral: 1 (0.013%)
- Demyelination: 30; Primary: 22 (2.89%) Secondary: 28(3.68%)

- Spinal cord disease: 43; Acute 20 (2.63%) Chronic 23 (3.02%)
- Neuromuscular junction disorder: 21(2.76%)
- Peripheral neuropathy : 74 (9.72%); Acute 56 (7.36%) Chronic 18(2.36%)
- Muscle disease: 5 (0.65%)
- Seizure: 46 (6.05%)
- Optic neuritis:36 (4.73%)
- Orbital apex syndrome /multiple cranial nerve palsies:9 (1.18%)
- SSPE: 6 (0.07%)
- Leigh disease: 2 (0.026%)

Special clinic performance in 2016

Clinic	Consultant in charge	New	Old
Cognitive	Dr. Atanu Biswas	87	272
Headache	Dr. Biman Kanti Roy	61	118
Movement disorders	Prof. Shyamal Kumar Das, Dr. Atanu Biswas	144	1089
Botulinum Toxin	Dr. Samar Biswas	13	384
Epilepsy	Prof. Goutam Ganguly, Dr. Alok Pandit	124	2281
Stroke	Prof. TejenDr.a Nath Kundu, Dr. Biman Kanti Roy	241	646
Neurogenetics	Dr. Debshankar Guin, Dr. Anindita Joardar	108	319
Neuromuscular	Dr. Alok Pandit	70	429
Demyelination	Prof. Goutam Ganguly	10	5
Total		858	5543

Total patients seen in special clinic: 6401

Electrophysiology laboratory performance in 2016

- EEG - 6725
- Video EEG - 245
- Portable EEG - 144
- EMG NCS - 6595
- VEP, BAER - 1275
- Polysomnography - 36

Report of Neurogenetic Unit, Neurology Dept. from December 2015 to November 2016

Number of patients who attended the genetic clinic – 557

Number of patients for whom the following diagnostic tests were done in the genetic laboratory:

Muscle Diseases
Duchene's muscular dystrophy – 39
Becker's muscular dystrophy – 12
Myotonic dystrophy-i – 14
Spinal muscular atrophy – 15
Movement Disorders
Huntington's disease – 13

Autosomal dominant ataxia; SCA1, SCA2, SCA3, SCA6, SCA12, DRPLA – 64
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Autosomal Recessive Ataxia; Friedreich's Ataxia – 15
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Genetic Counseling is done to the adult patients, their family members and to guardians in case of minors regarding their marriage, conceiving another issue, affection of their children etc. depending upon the pattern of genetic inheritance such as autosomal dominant, autosomal recessive, X-linked or mitochondrial inheritance.

Projects running in the Neurogenetic Unit funded by State DST

1. Assessing the prevalence of genetic risk factors-APOE and IL-6-G174C polymorphism in Alzheimer related dementia patients of Eastern India.
Three year project with a budget of Rs. 16,58,800.00; third year running.
2. Study on APO E allele in mild to moderate Head Injury in Eastern India.
Two year project with a budget of Rs. 5,36,800.00; completed in Feb, 2016.

Abstract presentations

- Distribution of APO E4 allele and its effect in the prognosis of mild to moderate head injury in Eastern part of India. Sarani Nath, Nikhil Talathi, Sarnava Roy, Anindita Joardar, Samarendra Nath Ghosh. Abstract presented in 23rd Bangla Congress held at Presidency University, Kolkata.
- Evaluation of APOE and IL-6 polymorphism in Alzheimer Patients in Eastern India. Sarnava Ray, Sayantan Chakravarty, Anindita Joardar, Atanu Biswas, Gautam Ganguly, Shyamal Kumar Das. Abstract presented in 1st Regional Science and Technology Congress-2016, Presidency Division, West Bengal, held at National Institute of Technical Teachers' Training and Research, Kolkata- Mr Sarnava Roy received the outstanding paper award.

ACADEMIC ACTIVITIES

- Weekly regular case presentation, seminar, journal clubs, monthly statistical meeting (auditing of death cases) are carried throughout the year.
- All third year residents participated in annual conference of Indian Academy of Neurology (IANCON) held at Kolkata, West Bengal in November, 2016 and presented papers.
- All second year residents participated in annual conference of Associations of Neuroscientist of Eastern India held at Shillong, Meghalaya in October, 2016 and presented papers.

Publications

1. Role of apoe-ε4 allele in recovery from traumatic brain injury: study in a tertiary clinic in Kolkata. Nikhil Talathi, Sarani Nath, Sarnava Roy, Anindita Joardar, Shubhamitra Chaudhuri, Goutam Gangopadhyay and Samarendra Nath Ghosh. Int. J of Adv. Res. 4(11):1780-1786.
2. Moumita Bagchi, Neelanjana Paul, Soumitra Ghosh, Suchitra Majumdar, Santa Saha, Arijit Roy and Shyamal K Das. Spectrum of Abnormal Movement in a Cohort of Neuro-Wilson Patients with Radiological Associations. J Neurol Disord 2016, 4:1.

3. Anindita Banerjee, Vineet Kumar Khemka, Debashree Roy, Aparajita Dhar, Tapan Kumar Sinha Roy, Atanu Biswas, Barun Mukhopadhyay, Sasanka Chakrabarti: Role of Pro-Inflammatory Cytokines and Vitamin D in Probable Alzheimer's Disease with Depression. *Aging and Disease* 10/2016; DOI:10.14336/AD.2016.1017
4. Ujjawal Roy, Shyamal Kumar Das, Adreesh Mukherjee, Debsadhan Biswas, Koushik Pan, Atanu Biswas, Ajay Panwar: Irreversible Hemichorea–Hemiballism in a Case of Nonketotic Hyperglycemia Presenting as the Initial Manifestation of Diabetes Mellitus. *Tremor and Other Hyperkinetic Movements*. 08/2016; 6. DOI:10.7916/D8QZ2B3F
5. Anindita Banerjee, Vineet Kumar Khemka, Debashree Roy, Aparajita Dhar, Tapan Kumar Sinha Roy, Atanu Biswas, Sasanka Chakrabarti: Role of Vitamin D Signaling in Sporadic Alzheimer's Disease: A Clinico-Experimental Study. *Alzheimer's and Dementia* 07/2016; 12(7). DOI:10.1016/j.jalz.2016.06.1096
6. Vineet Khemka, Anirban Ganguly, Anindita Banerjee, Atanu Biswas, Sasanka Chakrabarti: Role of Adipokines and Insulin in the Pathogenesis of Alzheimer's Disease: A Clinical- Experimental Study. *Alzheimer's and Dementia* 07/2016;
7. Adreesh Mukherjee, Atanu Biswas, Shyamal Kumar Das: Gut dysfunction in Parkinson's disease. *World Journal of Gastroenterology* 07/2016; 22(25). DOI:10.3748/wjg.v22.i25.5742
8. Kalyan B Bhattacharyya, Debabrata Pulai, DebShankar Guin, Goutam Ganguly, Anindita Joardar, Sarnava Roy, Saurabh Rai, Atanu Biswas, Alok Pandit, Arijit Roy, AsitKumar Senapati: Spinocerebellar ataxia type 6 in eastern India: Some new observations. *Annals of Indian Academy of Neurology* 07/2016; 19(3). DOI:10.4103/0972-2327.186823
9. Ujjawal Roy, Dinesh Satyanarayan Saini, Koushik Pan, Alak Pandit, Goutam Ganguly, and Ajay Panwar. Neuromyelitis Optica Spectrum Disorder with Tumefactive Demyelination mimicking Multiple Sclerosis: A Rare Case. *Front Neurol*. 2016; 7: 73.
10. Tapas Kumar Banerjee, Saunak Dutta, Sujata Das, Malay Ghosal, Biman Kanti Ray, Atanu Biswas, Avijit Hazra, Arijit Chaudhuri, Neelanjana Paul, Shyamal Kumar Das: Epidemiology of dementia and its burden in the city of Kolkata, India: Epidemiology and burden of dementia in Kolkata. *International Journal of Geriatric Psychiatry* 06/2016; DOI:10.1002/gps.4499
11. Madhushree Chakrabarty, Atanu Biswas, Sandip Pal, Amita Chatterjee: Development of Bengali Audio–Visual Test Battery for Assessment of Pragmatic Skills: Preliminary Normative Data Based on Educational Level. *Journal of Psycholinguistic Research* 05/2016; DOI:10. 1007/s10936-016-9438-y
12. Atanu Biswas, Shyamal Kumar Das: Alzheimer and Parkinson's Disease -Two Faces of the Same Disease? *Journal of Alzheimer's Disease & Parkinsonism* 6: 222. doi: 10.4172/2161-0460.1000222
13. Dhiman Das, Atanu Biswas, Arijit Roy, Anna Sauerbier, Kalyan B Bhattacharyya: Cognitive impairment in idiopathic Parkinson's disease. *Neurology India* 01/2016; 64(3). DOI:10.4103/0028-3886.181533
14. Ujjawal Roy, Dinesh Satyanarayan Saini, Koushik Pan, Alak Pandit, Goutam Ganguly, and Ajay Panwar. Neuromyelitis Optica Spectrum Disorder with Tumefactive Demyelination mimicking Multiple Sclerosis: A Rare Case. *Front Neurol*. 2016; 7: 73.

15. Asutosh Pal, Atanu Biswas, Alak Pandit, Arijit Roy, Debsankar Guin, Goutam Gangopadhyay, AsitKumar Senapati: Study of visuospatial skill in patients with dementia. *Annals of Indian Academy of Neurology* 01/2016; 19(1). DOI:10.4103/0972-2327.168636
16. Sourav Chakrabarty, Abhijit Das, Ananya Mandal, Samar Biswas, Tanmoy Gangopadhyay, Avijit Ganguly. Drug safety monitoring in patients attending epilepsy clinic in a tertiary care teaching hospital in rural Bengal. *J. Evolution Med. Dent. Sci.* 2016;5(10):407-413
17. Sourav Chakrabarty, Abhijit Das, Avijit Ganguly, Tamoghna Maiti, Samar Biswas, Ananya Mandal. A prospective, randomised, comparative study of efficacy and safety of pregabalin, duloxetine and amitriptyline in patients of painful diabetic neuropathy in a tertiary care teaching hospital in rural Bengal. *J. Evolution Med. Dent. Sci.* 2016;5(35):2025-2029
18. Jadab Chandra Sardar, Asit Baran Saren, Dibakar Haldar, Kaushik Chatterjee, Samar Biswas, Tutul Chatterjee, Gautam Narayan Sarkar. Obstinate diphtheria needs innovation in immunization. *Int J Contemp Pediatr.* 2016 Aug;3(3):902-909.

Conferences attended by faculty

Prof. Shyamal Kumar Das	<ul style="list-style-type: none"> • World Stroke Congress 2016 at Hyderabad (Chaired session) • Delivered lecture on "Epidemiology of dementia and its burden in city of Kolkata, India" at the Symposium on Brain Imaging and Dementia in low and middle income countries 2016 at Nairobi Kenya • IANCON 2016 at Kolkata • Attended National Movement Disorder society of India at Chennai held in January, 2016
Prof. Goutam Ganguly	<ul style="list-style-type: none"> • ECON 2016 at Chennai (Chaired session) • Headache update program under IANCON at Udaipur (Chaired session) • IANCON 2016 at Kolkata
Prof. TejenDr.a Nath Kundu	<ul style="list-style-type: none"> • World Stroke Congress 2016 at Hyderabad • IANCON 2016 at Kolkata
Dr. Atanu Biswas	<ul style="list-style-type: none"> • MDSICON 2016 at Chennai • Delivered a lecture on 'Demyelinating disorders: Updates in diagnosis and treatment of MS/NMO' at the 5th IAN postgraduate summer school 2016 • IANCON 2016 at Kolkata
Dr. Biman Kanti Roy	<ul style="list-style-type: none"> • World Stroke Congress 2016 at Hyderabad • IANCON 2016 at Kolkata
Dr. Alak Pandit	<ul style="list-style-type: none"> • IANCON 2016 at Kolkata
Dr. Samar Biswas	<ul style="list-style-type: none"> • World Stroke Congress 2016 at Hyderabad • IANCON 2016 at Kolkata
Dr. Debsankar Guin	<ul style="list-style-type: none"> • IANCON 2016 at Kolkata