



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

## Endocrinology & Metabolism

### FACULTY

Dr. Subhankar Chowdhury MBBS, DTM&H, MD, DM, MRCP	Professor and HOD
Dr. Satinath Mukhopadhyay MBBS, MD, DM, FRCP	Professor
Dr. Pradip Mukhopadhyay MBBS, MD, DM	Professor
Dr. Sujoy Ghosh MBBS, MD, DM, MRCP, FRCP, FACE	Professor
Dr. Pranab Kumar Sahana MBBS, MD, DM	Professor
Dr. Anirban Shina MBBS, MD, DM, FACE	Associate Professor
Dr. Dibakar Biswas MBBS, MD, DM,	Assistant Professor
Dr. Rana Bhattacharjee MBBS, MD, MRCP, DM, FICP, FRCP, FACE	Assistant Professor and In-Charge Hormone Assay Lab (RIA Lab)
Dr. Tapas Chandra Das MBBS, MD, DM	Assistant Professor
Dr. Indra Maisnam MBBS, MD, DM, FRCP, FACE	Assistant Professor
Dr. Subir Chandra Swar MBBS, MD, DM	Assistant Professor

### Senior residents

Dr. Ipsita Ghosh  
Dr. Sunetra Mondal  
Dr. Mainak Banerjee  
Dr. Soham Tarafdar

### Postdoctoral trainees

Session 2020-23	Session 2019-22	Session 2018-21 *
Dr. Pankaj Singhanian Dr. Anish Kar Dr. Aditya Deshpande Dr. Vijay Budhwar Dr. Arunava Ghosh Dr. Sreejith Babu	Dr. Debadiya Das Dr. Piyas Gargari Dr. Subhasish Neogi Dr. Moxit Shah Dr. Arijit Singha	Dr. Akash Panigrahi. Dr. Akhil Krishna Dr. Soham Tarafdar Dr. Pankaj Patawari Dr. Jan Ahamed Dr. Shaikh Naseemuddin

Cleared University examination in 2021

### Research scholars and non-teaching staff

Sudipta Banerjee, MSc	Senior Research Fellow (SRF)
Madhurima Basak, MSc	Senior Research Fellow (SRF)
Pieu Adhikary, MSc	Senior Research Fellow (SRF)
Subhasish Pramanik, MSc	Senior Research Fellow (SRF)
Hiya Ghosh, MSc	Senior Research Fellow (SRF)
Bidisha Mukherjee	Senior Research Fellow (SRF)
Chiranjit Bose	Senior Research Fellow (SRF)
Asif Mondal	Senior Research Fellow (SRF)

Debgopal Bera	Senior Research Fellow (SRF)
Pampita Chakraborty	Senior Research Fellow (SRF)
Madhurima Basu	Senior Research Fellow (SRF)
Susmita Dutta	Senior Research Fellow (SRF)
Shatabdi Ghosh	Senior Research Fellow (SRF)
Arunima Sinha	Summer Trainee
Debajit Dhar	Summer Trainee
Sri Pradip Mandal	MT Lab
Sri Chandan Sarkar	MT Lab
Ujjwal Chatterjee	MT Lab
Narayan Das	Group C
Rajinder Balmiki	Group D
Kapil Deb Shaw	Group D

### **TRANSFERS, POSTINGS AND SUPERANNUATIONS**

Drs. Pranab Kr Sahana, Anirban Sinha, and Indira Maisnam have joined this department on 29/11/2021 following promotion and transfer. DrSubirchandraSwar has joined on 03/12/2021 following promotion and transfer. Dr. Tapas Chandra Das has been promoted to the post of Asst. Professor on 29/11/2021. Prof. Nitai Pada Bhattacharyya, has joined as Hony. Senior research Advisor on extension on and from 05/10/2021. Dr. Kaushik Pandit has joined as Hony. Scientific Officer on extension on and from 05/10/2021. Mr. Ujjwal Chatterjee, MT Lab, has joined on 19/06/2021.

### **FACULTY NEWS**

#### **Prof. Subhankar Chowdhury**

##### Speaker

1. 'Diabetes remission and changes in liver and pancreas' at Virtual National Insulin Summit on 13 Dec'20.
2. 'How to limit development of diabetes in youth' at Virtual International Conference on Metabolic Diseases on 9 Jan'21.
3. 'Inflammation and Diabetes – The Connect' at 5<sup>th</sup>International Diabetes Summit – Virtual, organized by Chellaram Diabetes Institute, Pune on 14 March'21.
4. 'Hypothyroidism – clinical case scenarios' at pan-India Physicians' webinar organized by Dr Murugan on 19 March'21.
5. 'Thyroid and Children' at virtual World Thyroid Day programme organized by Dr Arundhati Dasgupta in Siliguri on 25 May'21.
6. 'Post-COVID19 glycaemic control' at webinar organized by DocSpace Plus on 30 May'21.
7. Consensus Meeting on Glucose Monitoring Guidelines of Research Society for Study of Diabetes in India (RSSDI) on 27 June'21.
8. 'Continuous Glucose Monitoring' at a webinar organized by DocMode on 10 July'21.
9. 'Expert Consensus on Fibres' organized by Diabetes India on 7 Aug'21.
10. 'Adrenocortical Disorders' at Association of Physicians of India-Indian College of Physicians' Masterclass(online) on 8 Aug'21.
11. 'Patient misinformation' in Patient Safety Week webinar organized by Unihealth on 16 Sep'21.
12. 'Technical Deliberations on Diabetic Retinopathy' on World Retina Day meeting organized by IMA, Calcutta branch on 27 Sep'21.
13. 'Indian perspectives on Hypertriglyceridaemia and NAFLD' at webinar on Best of American Association of Clinical Endocrinologists' Annual Conference 2021.
14. 'Hypothyroidism dilemmas' at DIACARECON 2021 (virtual) on 3 Oct'21.
15. 'Iodine deficiency Disorders' at Annual National Conference (online) of Association of Endocrine Surgeons of India on 30 Oct'21.
16. 'Anti-diabetic agents and bone health' at Annual National Conference of Indian Society of Bone Mineral Research on 31 Oct'21.
17. 'Globesity and Mitochondrial Dysfunction' at Annual National Conference of RSSDI on 11 Nov'21.
18. 'Clinical Inertia and Barriers to Insulin Therapy' at webinar organized by International Diabetes Federation and KIDS on 20 Nov'21.

#### Chairperson/ Moderator

1. Session on 'Idiopathic Short Stature' in virtual Growth Symposium organized by Medical College Ex-Students' Association on 10 Dec'20
2. Session on 'Indications and choice of insulin therapy' in virtual Current Insulin Therapy Centennial Celebration on 9 Jan'21.
3. Session on Dyslipidaemia in Virtual Endocrine Week Programme organized by Endocrine Society on 14 Jan'21.
4. Session on 'New molecular diagnostic approach to diagnosis of indeterminate thyroid nodule' at virtual East Zone webinar organized by Endocrine Society of India on 6 Feb'21.
5. Session on 'Roadmap of drug development – Dapagliflozin' at 3<sup>rd</sup> Canvas of Clinical Pharmacology Workshop organized by Seth GS Medical College and KEM Hospital, Mumbai on 5 Mar'21.
6. Session on 'Personalised therapy for Acromegaly' in International Pituitary Conclave (virtual) organized by Endocrine Society of India on 9 April'21.
7. Session on 'Diagnostic pitfalls in thyroid disorders' in World Thyroid Day Webinar organized by Endocrine Society of Bengal on 25 May'21.
8. Session on 'Hypopituitarism' at webinar organised by Endocrine Society of India on 11 July'21.
9. Case presentation for DM/ DNB trainees at Endocrine Masterclass organized by Public Health Foundation of India (PHFI) on 23 July'21.
10. Session on 'Diabetes management in mental illness' at International Webinar (REGCON 2021) organized by Association of Diabetes Educators on 1 Aug'21.
11. Session on 'Androgen Replacement' in webinar on Geriatric Endocrinology organized by Endocrine Society of India on 12 Aug'21.
12. Session on Diabetes Complications at Eastern India update on Diabetes organized by Endocrine Society of India on 25 Sep'21.
13. Session on 'Controversies in Diabetes Management' at annual conference of RSSDI, Bihar Chapter (online) on 26 Sep'21.
14. Prof BR Sengupta Oration at annual conference of API, West Bengal (online) on 26 Sep'21.
15. National Expert for Kaun Banega Diabetes Ka Big Boss organized by RSSDI on 27 Oct'21.
16. Session on 'GLP-1 and SGLT2i' at Annual Conference (virtual) of Kolkata Diabetes and Endocrine Forum on 20 Nov'21.
17. 'Mitochondria: the missing piece in Diabetes treatment' at Annual Conference of Endocrine Society of India on 11 Dec'21.
18. 'Lessons learnt in 30 years of Endocrine practice' at the "Pearls of Wisdom" session at the Annual Conference of Endocrine Society of India on 11 Dec'21.

#### Examiner

1. Virtual Endocrine Masterclass Programme for DM and DNB (Endocrinology) students across the country organized by Christian Medical College, Vellore on 24 Jan'21.
2. PhD interview (online) for Ms Soumi Srimani under West Bengal University of Health Sciences on 8 April'21.
3. DM (Endocrinology) examination at Medical College, Calcutta on 7 Sep'21.

#### PhD Guide for Studies (Current)

- 1). "Role of Different Lipid Components in Pathogenesis of Diabetic Retinopathy." under Calcutta University
- 2). "Study on Potential Pathogenetic Factors of Gestational Diabetes Mellitus: Focus on Role of Placenta, Inflammatory Markers and Gut Microbiota" under Calcutta University
- 3). "A study of Aetiopathogenesis of Graves' Ophthalmopathy – Focus on Role of Circulating Fibrocytes." under Calcutta University.
- 4). "Role of endometrial cytokines of the female genital tract tuberculosis in the context of infertility" under Calcutta University.
- 5). "Study of differential adipogenesis of visceral and subcutaneous adipocytes and its association with the biochemical markers of macrovascular risk factors in obese and non-obese diabetic individuals" under Calcutta University.
- 6) "Role of TSH beyond the thyroid with special reference to peripheral blood mononuclear cells and markers of Atherosclerotic cardiovascular diseases: A study on subclinical and overt hypothyroid subjects" under Calcutta University.
- 7) "Cytogenetic, molecular and hormonal studies of Disorders of sex development and its psychosexual effects" under West Bengal University of Health Sciences.

#### Other ongoing research projects

- 1) "Evaluation of prevalence, regional phenotypic variation, co-morbidities, risk factors and the variations in response to different therapeutic modalities among Indian women with polycystic ovary syndrome (PCOS): A Multicenter study across India" funded by ICMR.
- 2) Semaglutide cardiovascular outcomes trial in patients with Type 2 Diabetes (SOUL)", Protocol Trial ID : EX9924-4473, Sponsored by "Novo Nordisk"

#### New Appointment

1. Chairperson, Institutional Ethics Committee of Institute of Neurosciences, Kolkata

#### **Prof. Satinath Mukhopadhyay**

##### Guest Lectures and orations

1. Lecture on "Vitamin D- The Sunshine Hormone", in the Dr. Sunil Chandra Bose Memorial oration, West Bengal Academy of Science & Technology (WAST), February, 2021.
2. Guest lecture on "Cost effective management of Acromegaly in the Indian Setting", IDEACON, July, 2021.
3. Lecture on "Hepatokines, Adipokines and metabolic syndrome connecting the dots", in the ACA MMINI Oration, November, 2021.
4. Lecture on "Worsening diabetes control in recent times, a cause for concern", Kolkata Diabetes and Endocrine Foundation (KEDF), November 2021.
5. Lecture on "Hepatokines, Adipokines and Insulin Resistance", in the BAJAJ Oration, Annual Conference of the National Academy of Medical Sciences (NAMSCON, BHU), November 2021.

##### Award:

Outstanding Researcher Award. Ahuja-Bajaj Symposium, 28th NOV, 2021.

#### **Prof. Pradip Mukhopadhyay**

Worked as a Member of the committee of the Mucormycosis and Rapid Response Team of Mucormycosis Team at IPGME&R, Kolkata. Contributed to the Your Health of Indian Medical Association Nov 2021. Also working as a

- i) Vice Chairman to Endocrine Society of Bengal, a state affiliate of Endocrine Society of India.
- ii) Honorary Treasurer to Research Society for Study of Diabetes in India, West Bengal Chapter

#### **Prof. Sujoy Ghosh**

##### Ongoing Projects

1. A Study On The Clinical And Microbiological Association Between Chronic Periodontitis And Diabetes
2. Identification of non-invasive signatures for differential diagnosis of biopsy proven diabetic nephropathy and non-diabetic kidney disease by metabolomics and peptidomics approach
3. SGLT2 Expression in human renal proximal tubular cells predicting efficacy of SGLT2 inhibitors'
4. Utility of protein markers in urine/plasma to help differentiate diabetic kidney disease (DKD) from non-diabetic kidney disease (NDKD) in patients with Type 2 diabetes with biopsy proven nephropathy
5. Liquid biopsy: a non-invasive approach for detection of known driver mutations and Long-Noncoding RNA expression in patients with Differentiated thyroid carcinoma
6. A Double Blind Comparative Prospective Study of The Safety of Teneagliptin and Sitagliptin To Evaluate QTc Prolongation In Indian Type 2 Diabetes Patients
7. Comprehensive Molecular studies in Monogenic Forms of Diabetes In India (Co-I)
8. ICMR INDIAB Study (Co-I)
9. A study on clinical biochemical and molecular signatures in type 2 diabetes mellitus with renal involvement
10. Correlation of cyto-histopathological, radiological and genetic markers from FNAC material and Plasma in thyroid nodules
11. Determination of differences in insulin resistance as measured by frequently sampled intravenous glucose tolerance test (fsIVGTT) in obese and non-obese PCOS with obese and non-obese control with special reference to body composition as measured by DXA
12. Role of long non-coding RNA in progression of early neuropathy to late neuropathy in type 1 diabetes mellitus
13. Evaluation of Adrenal functions in patients with HbE/Beta Thalassemia.

##### Completed Projects

1. A prospective study on the role of incretin hormones in patients undergoing bariatric surgery
2. A Study of Anti-Hyperglycemic properties of *Gymnedenia orchidis* Lindl of Orchidaceae Family
3. A Study of Glucagon response and incretin levels in patients with fibrocalculous pancreatic disease attending SSKM Hospital Kolkata
4. A Study of the prevalence of autoantibodies in Type 1 Diabetes
5. A prospective, multi-centre, double-blind, randomized, study to evaluate the safety and efficacy of Saroglitazar 4mg versus Placebo in the treatment of HIV associated lipodystrophy
6. Clinical significance of in Vivo Corneal Confocal Microscopy in Type 1 Diabetes mellitus patients
7. Evaluation of bone mineral density in subjects with type 1 diabetes mellitus
8. Dietary Fat & Cholesterol intake in patients with Type 2 Diabetes and input of Dietary intervention on serum Lipid parameters

### **Prof. Pranab Kumar Sahana**

Projects: A Phase IIb, Open-label, Randomized, Comparative Study to Evaluate the Safety and Efficacy of USVCP Formulation in Type 2 Diabetes Mellitus Subjects Uncontrolled with Metformin Hydrochloride treatment.

Achievements:

1. DDCT Academic Co-ordinator, Govt. WB
2. Reviewer and Editor of Journal (OAJE, IJCR)
3. Subject Expert Committee member of CDSCO,GOI

Speaker at 2nd Global webinar on Diabetes and Endocrinology on 22.11.21 organized by Scientex Conferences

### **Dr. Rana Bhattacharjee**

Textbook Chapters

1. Gestational Diabetes. Rana Bhattacharjee, Purvi Chawla, Sunil Gupta, Rajeev Chawla. In: Sujoy Ghosh (Ed.) RSSDI Yearbook of Diabetes. Jaypee Brothers. 2020. p 95-101
2. Lipoprotein measurement. Rana Bhattacharjee. In: Sujoy Ghosh, BanshiSaboo (Eds) Manual of Lipidology. Jaypee Brothers 2021. p 127-135
3. Cholesevelam in Type 2 Diabetes Mellitus. Rana Bhattacharjee, Sujoy Ghosh, Sanjay Kalra. In: Romesh Khardori, Ved V Dossain (Eds.) Drugs in Diabetes. Jaypee brothers 2021. p 134-143

Guest Lectures

1. Cardio-Renal Protection in Type 2 Diabetes. IACMCON 2021. Web-based. 30th Jan 2021.
2. Malnutrition & Endocrinopathies. Digital Satellite Symposium Endocrine Society of India. 6th Feb 2021
3. Physiology of Thyroid and its Clinical Implications, Interpretation of Thyroid Tests. Master Class Webinar Series on Thyroid. Chennai (Digital). 12th March 2021
4. Approach to Drug Induced Rise in Prolactin. IDEACON 2021. 4th July 2021
5. Hormone Assays: What the Endocrinologists Should Know. 4E (Electronic Endocrine Enrichment by Experts) webinar. Endocrine Society of Bengal. 9th July 2021
6. Hypothyroidism: An Overview. Dept. of Medicine, Medical college, Kolkata. 20th July 2021
7. Elusive Bends. An approach to rickets due to renal tubular acidosis. PHFI Endocrine Masterclass. Webinar on Rickets due to Distal RTA. 6th August 2021

Ongoing Projects:

1. Novel Biomarkers for prediction of Gestational Diabetes Mellitus. Sanction no: 157(Sanc.)/ST/P/S&T/9G-35/2016 dt. 08.02.2018. Department of Science & Technology and Biotechnology, Govt. of West Bengal.
2. Study of differential behavior of visceral and subcutaneous adipocytes and its association with the biochemical markers of macrovascular risk factors in obese and non-obese diabetic individuals. Multidisciplinary Research Unit. The Institute of Post-Graduates Medical Education and Research, Kolkata. Memo No. MRU/FG/06/2019. (Funded by Dept. of Health Research, Govt. of India)

### **Dr. Tapas Chandra Das**

Textbook chapter:

- Lipoprotein(a): Update. Tapas Chandra Das. In: Sujoy Ghosh, BanshiSaboo (Eds) Manual of Lipidology. Jaypee brothers 2021. p 29-36.

Guest lecture:

- Aggressive Management of Diabetes on 25th Feb 2021 in Coorg.

### **Dr. Subir Chandra Swar**

- Attended as Faculty in Metabolic Summit 2021, 24th – 26th Sep'21, Darjeeling

### **ACADEMIC ACTIVITY OF THE DEPARTMENT**

- Seminar on Monday
- Case presentation on Tuesday
- Journal club on Friday
- Regular class for DDCT students.

### **PUBLICATIONS BY FACULTY, STUDENTS AND RESEARCH SCHOLARS**

1. Mohan V, Shanthi Rani CS, Saboo B, Mukhopadhyay S....., Anjana RM, Unnikrishnan R. Clinical profile of long-term survivors and non-survivors with type 1 diabetes in India. *Diabetes Technol Ther.* 2021 Sep 27
2. Mohan V, Bhavadharini B, Mukhopadhyay S, Nallaperumal S, Tiwaskar M, Anjana RM, Unnikrishnan R. Diabetes in Pre-independence India: Rediscovering a Forgotten Era. *J Assoc Physicians India.* 2021 Aug;69(8):11-12.
3. Mukherjee S, Mondal A, Sengupta M, Chatterjee U, Sarkar D, Mukhopadhyay S. Composite pheochromocytoma with malignant peripheral nerve sheath tumour: A case report with summary of prior published cases. *Indian J Pathol Microbiol.* 2021 Jul-Sep;64(3):571-574
4. Bhadada SK, Chadha M, Sriram U....., Mukhopadhyay S, Mukherjee S, Kukreja SC, Rao SD, Mithal A. The Indian Society for Bone and Mineral Research (ISBMR) position statement for the diagnosis and treatment of osteoporosis in adults. *Arch Osteoporos.* 2021 Jun 26;16(1):102
5. Goswami S, Choudhuri S, Bhattacharya B, Bhattacharjee R, Roy A, Mukhopadhyay S, Ghosh S, Chowdhury S. Chronic inflammation in polycystic ovary syndrome: A case-control study using multiple markers. *Int J Reprod Biomed.* 2021 Apr 22;19(4):313-320
6. Dinneen SF, Mukhopadhyay S. Tackling diabetes care at a population level. *Diabet Med.* 2021 Sep;38(9): e14590
7. Arya AK, Bhadada SK, Kumari P, Agrawal K, Mukhopadhyay S, Sarma D, Rao SD. Differences in Primary Hyperparathyroidism Between Pre- and Postmenopausal Women in India. *EndocrPract.* 2021 Jul;27(7):710-715
8. Mondal S, Bhattacharjee R, Chowdhury S, Mukhopadhyay S. Karyotype-Phenotype Correlation in Turner Syndrome at a Single Center in Eastern India. *Indian Pediatr.* 2021 Jan 15;58(1):34-37.
9. Das S, Chattopadhyay D, Chatterjee SK, Mondal SA, Majumdar SS, Mukhopadhyay S, Saha N, Velayutham R, Bhattacharya S, Mukherjee S. Increase in PPAR $\gamma$  inhibitory phosphorylation by Fetuin-A through the activation of Ras-MEK-ERK pathway causes insulin resistance. *BiochimBiophys Acta Mol Basis Dis.* 2021 Apr 1;1867(4):166050
10. Anamika Pandey, Michael Brauer, Maureen L Cropper, Kalpana Balakrishnan, Prashant Mathur, Satinath Mukhopadhyay....., Philip J Landrigan, Lalit Dandona. Health and economic impact of air pollution in the states of India: The Global Burden of Disease Study 2019. *Lancet Planet Health.* 2021 Jan;5(1): e25-e38.
11. Associations of insulin- induced lipodystrophy in children, adolescents and young Adults with Type 1 diabetes mellitus using recombinant human insulin: a cross-sectional study. Arijit Singha, Rana Bhattacharjee, Bibhas Saha Dalal, Dibakar Biswas, Subhadip Choudhuri and Subhankar Chowdhury. Accepted on: 21 Dec 2020, Published Online: 04 Mar 2021. *Journal of Pediatric Endocrinology and Metabolism* [aophttps://doi.org/10.1515/jpem-2020-0556](https://doi.org/10.1515/jpem-2020-0556)
12. Periodontal Disease in Type 1 Diabetes Mellitus: Influence of Pubertal Stage and Glycemic Control. Pampita Chakraborty, Pradip Mukhopadhyay, Kingshuk Bhattacharjee, Abhijit Chakraborty, Subhankar Chowdhury, Sujoy Ghosh. Accepted on 08 Jan 2021, Available Online 21 Jan 2021. *AACE , Endocrine Practice* 27 (2021) 765-758. AACE Published by Elsevier Inc. <https://doi.org/10.1016/j.eprac.2021.01.010>
13. Efficacy and Cost-Effectiveness of Anti-VEGF for Treating Diabetic Retinopathy In the Indian Population. Subhasish Pramanik, Lakshmi Kanta Mondal, Suman Kalyan Paine, Sneha Jain, Subhankar Chowdhury, Upasana Ganguly, Sayantan Ghosh, Chiranjit Bose, Koena Bhattacharjee, Gautam Bhaduri. *Clinical Ophthalmology* 2021;15 3341-3350
14. Clinical and Biochemical characteristics of patients with renal tubular acidosis in Southern part of West Bengal, India: A Retrospective Study. ParthaPratim Chakraborty, Rana Bhattacharjee, Shinjan Patra, Ajitesh Roy, KripasindhuGantait, Subhankar Chowdhury. *Indian Journal of Endocrinology and Metabolism, Vol-25, No.2, Mar-Apr2021,PP. 121-128*
15. Role of Lipid, Protein – Derived Toxic Molecules, and Deficiency of Antioxidants behind the Pathogenesis of Diabetic Retinopathy (DR) in Type2 Diabetes Mellitus SubhasishPramanik, Lakshmi Kanta Mondal, SubhankarChowdhury, Chiranjit Bose, Debgopal Bera and Koena Bhattacharjee. *Diabetic Eye Disease – From Therapeutic Pipeline to the Real World*, 22 Sep 2021. DOI: <http://dx.doi.org/10-5772/ intechopen.99904>

16. Peripheral blood mononuclear cells – Can they provide a clue to the pathogenesis Of Graves’ Orbitopathy? Madhurima Basak, Tamalika Sanyal, Anish Kar, Pritha Bhattacharjee, Madhusudan Das, Subhankar Chowdhury  
Published online: 20 Sep 2021, Endocrine <https://doi.org/10.1007/s12020-021-02865-0>
17. One-year trends from the LANDMARC trial: A 3-year, pan-India, prospective, Longitudinal study on the management and real-world outcomes of type2 diabetes mellitus. Ashok K Das, Sanjay Kalra, Shashank Joshi, Ambrish Mithal, Prasanna Kumar K.M, Ambika G. Unnikrishnan, Hemant Thacker, Bipin Sethi, Subhankar Chowdhury, Romik Ghosh.  
First Published : 01 Dec 2021, <https://doi.org/10.1002/edm2.316> Endocrinology, Diabetes & Metabolism.
18. Chakraborty P, Chowdhury R, Bhakta A, Mukhopadhyay P, Ghosh S. Microbiology of periodontal disease in adolescents with Type 1 diabetes. *Diabetes Metab Syndr.* 2021 Nov 12;15(6):102333. doi: 10.1016/j.dsx.2021.102333. Epub ahead of print. PMID: 34784572.
19. Bhat S, Pramanik S, Mukhopadhyay P, Chowdhury S. Old Wine in a New Bottle: Acromegaly Presenting as Diabetic Ketoacidosis. *J Clin of Diagn Res.*2021; 15(7):OD10-OD12. [https:// www. doi.org/10.7860/JCDR /2021/48795/15099](https://www.doi.org/10.7860/JCDR/2021/48795/15099)
20. Pal P, Chatterjee N, Ghosh S, Ray BK, Mukhopadhyay P, Bhunia K, Srivastava SR, Adhikari S, Barman D, Banerjee B, Mukhopadhyay M, Pal J. COVID Associated Mucormycosis: A Study on the Spectrum of Clinical, Biochemical and Radiological Findings in A Series of Ten Patients. *J Assoc Physicians India.* 2021 Oct;69(10):11-12. PMID: 34781648.
21. Mandal S, Mukhopadhyay P, Ghosh S. Sexual Dysfunction in Sheehan Syndrome. *EndocrPract.* 2021 Jul 24:S1530-891X (21)01147-2. doi: 10.1016/j.eprac.2021.07.013. Epub ahead of print. PMID: 34311117.
22. Dubey S, Mukherjee D, Sarkar P, Mukhopadhyay P, Barman D, Bandopadhyay M, Pandit A, Sengupta A, Das S, Ghosh S, Adhikari S, Biswas PS, Pal P, Roy H, Patra N, Das A, Sinha P, Mondal MK, Shrivastava SR, Bhattacharya K, Mukhopadhyay M, Ahmed K, Halder TK, Saha M, Ahmed K, Maity S, Mandal A, Chatterjee D, Saha S, Chunakar A, Saha A, Ray BK. COVID-19 associated rhino-orbital-cerebral mucormycosis: An observational study from Eastern India, with special emphasis on neurological spectrum. *Diabetes Metab Syndr.* 2021 Sep 1;15(5):102267. doi: 10.1016/j.dsx.2021.102267. Epub ahead of print. PMID: 34509790; PMCID: PMC8407938.
23. Ghosh I, Basu M, Beatrice A, Mukhopadhyay P, Ghosh S. Exocrine pancreatic dysfunction in diabetes: An observational study. *Indian J EndocrMetab* 2021; 25:67-8.
24. Adrenal Disorders in the Tropics. Mukhopadhyay P, Pandit K, Ghosh S. 2021 May 22. In: Feingold KR, Anawalt B, Boyce A, Chrousos G, de Herder WW, Dhatariya K, Dungan K, Grossman A, Hershman JM, Hofland J, Kalra S, Kaltsas G, Koch C, Kopp P, Korbonits M, Kovacs CS, Kuohung W, Laferrère B, McGee EA, McLachlan R, Morley JE, New M, Purnell J, Sahay R, Singer F, Stratakis CA, Trencle DL, Wilson DP, editors. *Endotext* [Internet]. South Dartmouth (MA): MD Text.com, Inc.; 2000– PMID: 34033308 Free Books & Documents. Review.
25. Mondal S, Singha A, Das D, Neogi S, Gargari P, Shah M, Arjunan D, Mukhopadhyay P, Ghosh S, Chowdhury J, Chowdhury S. Prevalence of COVID-19 Infection and Identification of Risk Factors among Asymptomatic Healthcare Workers : A Sero-survey Involving Multiple Hospitals in West Bengal. *J Ind Med Assoc* 2021;119(5):21-6.
26. Dutta S, Tarafdar S, Mukhopadhyay P, Bhattacharyya NP, Ghosh S. Plasma cell free DNA to differentiate malignant from benign thyroid nodules. *J Clin Endocrinol Metab.* 2021 Jan 21;dgab030. doi: 10.1210/clinem/dgab030. Epub ahead of print. PMID: 33475693.
27. Neogi S, Mukhopadhyay P, Sarkar N, Datta PK, Basu M, Ghosh S. Overt and Subclinical Adrenal Insufficiency in Pulmonary Tuberculosis. *EndocrPract.* 2020 Dec 14:S1530-891X (20)48391-0. doi: 10.1016/j.eprac.2020.11.012. Epub ahead of print. PMID: 33645514.
28. Cardiovascular safety of Glimepiride: An indirect comparison from CAROLINA and CARMELINA. Ghosh S, Mukhopadhyay P, Pandey P, Chatterjee P, Pandit K. *Diab Vasc Dis Res.* 2020 Nov-Dec;17(6):1479164120973653
29. S Siddhanta, S Goswami, N Sengupta, PK Sahana. Re-emergence of a rare syndrome: Mauriac syndrome. *J Clin Images Med Case Rep.* 2021; 2(5): 1387.
30. R Valsaraj, N Sengupta, A Baidya, S Goswami, PK Sahana :Relationship between Testosterone, Insulin Resistance, Inflammatory Markers and Obesity Parameters in Overweight and Obese Adolescents and Adult Males - A Cross-Sectional Study. *J Evid Based Med Healthc*, pISSN - 2349-2562, eISSN - 2349-2570 / Vol. 8 / Issue 13 / Mar. 29, 2021
31. A Goyal, PK Sahana, B Mukherjee, N Sengupta :Outcome of Carbimazole Therapy in Indian Patients of Graves’ Disease over a Period of 12 Months .*International Journal of Medical Science and Current Research* | January-February 2021 | Vol 4 | Issue 1
32. A Study of Residual C-Peptide Level (Fasting and Post OGTT) in Type –1 Diabetes Population & It’s Correlation with duration of Diabetes and Antibody Status in a Tertiary Care Centre in Eastern India Dr Sayan Ghosh<sup>1</sup>, Dr Animesh Maiti<sup>2</sup> Dr Anirban Sinha<sup>3</sup>, Dr Somnath Singh Raghuvanshi<sup>4</sup> *JMSRC Vol||09||Issue||02||Page 288-298||February 2021*
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## SERVICE INFORMATION

### Out-patient care

	New Patient	Old Patient	Total
<b>Endocrinology</b>	8419	12629	21048
<b>Diabetes</b>	24831	37247	62078



**Special clinic**

	<b>Foot Clinic</b>	<b>GDM (Diabetes in Pregnancy Clinic)</b>	<b>Pediatric Endo clinic</b>
<b>No. of patients</b>	1443	209	352

Inpatient care (patient served)

Male Ward 47

Female Ward 89

**RIA Lab – Tests data from December 2020 to November 2021**

FT3	F4	TSH	LH	FSH	PRL	TEST	COR	GH	INS	ATA	ATG	IG1	PEP	ACT	AND	DHS	TG	IPT	E2	CAL	PRG	SBG	TOTAL TESTS	TOTAL PATIENT
788	8264	8892	827	756	929	863	1546	241	375	1080	196	369	215	529	209	309	203	1095	25	39	81	69	27900	13086

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