

# Government of West Bengal

# **Institute of Postgraduate Medical Education & Research**

**Centre of Excellence in Medical Education & Research** 

# **School of Digestive and Liver Diseases**

## A. Faculty

Medical Gastroenterology		
•	Prof. Gopal Krishna Dhali	
•	Prof. Kshaunish Das	
•	Dr. Rajib Sarkar	

- Dr. Debashis Misra
- Dr. Arka BanerjeeDr. Bipul Barman
- Dr. Shamik Banerjee

## **Paediatric Gastroenterology**

Dr. Goutam Ray

## **Hepatology and Center of Liver Research**

- Prof. Abhijit Chowdhury
- Prof. Kausik Das
- Dr. Debarshi Bose
- Prof. Soma Banerjee
- Prof. Simanti Datta
- Dr. Mahiuddin Ahammed
- Dr. Prasenjit Halder
- Dr. Suman Santra

## **GI and Liver Pathology**

- Dr. Ranajoy Ghosh
- Dr. Aniket Halder
- Dr. Sonali Mondal
- Dr. Tamalika Kundu

## **GI Surgery**

- Prof. Sukanta Ray
- Dr. Shomak Das
- Dr. Tuhin Subhra Mandal

## **GI Anesthesia**

- Prof. Tapas Ghose
- Dr. Dibyendu Gharai
- Dr. Saikat Bhattacharjee

#### **GI Radiology**

• Dr. Avik Sarkar

## **B. Students/Trainees/Fellows**

•	Senior Resident (Post DM/MCh)	02
•	MCh (Surgical Gastroenterology)	02
•	DM (Medical Gastroenterology & Hepatology)	28
•	Students pursuing PhD	18
•	Students awarded PhD degree	00

## C. Medical Officers

•	GI Surgery	01
•	GI Radiology	02

## **OPD** and In-patient service provided

	New Patients	Old Patients	Total patients
OPD Service:			

GE OPD	80592	31780	112372
Hepatology OPD	1132	8919	20247
GI Surgery OPD	7446	3876	11322
Pediatric Gastroenterology	2542	1790	4332
IBD clinic	1248	2507	3755
NVHCP OPD	4074	9362	13436
Liver transplant OPD	354	477	831
Pancreatic Clinic	510	760	1270
Indoor admission:			
GE Indoor admission			616
Hepatology Indoor admission			476
GI Surgery Indoor admission			421
Polyclinic admission			2244

## **Endoscopy, Radiology, and Pathology Services**

Endoscopy procedures	Number
Upper GI Endoscopy Diagnostic	6499
Upper GI Endoscopy Therapeutic	1320
Colonoscopy	2828
ERCP	1929
APC	34
Esophageal Dilatation	665
Esophageal Dilatation	003
Fibro Scan	236
Liver Biopsy	264
Endoscopic Ultrasound	342
Double Balloon Enteroscopy	13
Capsule Endoscopy	34
Esophageal manometry	133
Anorectal manometry	58
24-Hr Esophageal pH impedance study	16
Biofeedback	21
PG polyclinic endoscopy procedures	
Upper GI Endoscopy Diagnostic	3896
Upper GI Endoscopy Therapeutic	634
Colonoscopy	2084

Radiology procedures	Number
Diagnostic Ultrasound	11859
PTBD	75
PCD	313
FNAC	265
Diagnostic / therapeutic vascular	
interventions	
PAIR	8
US guided biopsy	6
Single time aspiration	365
HVPG	157
TJLB	1
Pathology procedures	Number
Surgical Biopsy	304
Endoscopic Biopsy	2245
FNAC	531
Review biopsy	60
Liver biopsy	302
Frozen sections	22
Peripheral Blood Smear	84
PAP cytology – Fluid	623
Body fluid analysis	694
M cell block	55
Oualitative stool fat	25

## **Liver ITU service**

	Number
Admitted	110
Death	51

## **Gastrosurgery service**

Operative procedures	Number
Surgery for Chronic Pancreatitis	53
Whipple's Operation	34
Biliary Stricture	31
Recurrent Pyogenic Cholangitis	40

Extended Cholecystectomy	5
Lap/ Open Cholecystectomy	23
CBD Exploration	9
Pancreatic Necrosectomy	1
L-R Shunt	30
Liver Resection	13
Colon/ Rectum(including 7 colon pull ups)	29
Small bowel	24
Stomach/ Esophagus	32
Excision of Choledochal Cyst	34
Liver Transplantation	5
Miscellaneous	36
Total	399

**List of ongoing research projects** (Postgraduate and Postdoctoral Dissertations not included in the list)

SN	Project Title	Investigators / PI	Funding agency
1.	Etiological Study of neonatal cholestasis syndrome (with focus on MMP7 as a Biomarker for biliary atresia and definitive diagnosis of Normal GGT a cholestasis a prospective study. (IPGMER/IEC/2021/377)	CO-PI – Dr Ranajoy Ghosh	MRU project
2.	Role of Interstitial cells of Cajal in chronic constipation in children – WBDSTBT project, Regd. no 384(Sanc.)/STBT-11012(19)/28/2019-ST SEC)	CO-PI – Dr Aniket Halder	WBDSTBT project
3.	Investigating the Role of Macrophage in Hepatitis B virus mediated disease progression towards end-stage liver diseases. #BT/PR32493/MED/29/1492/2020. Period: 2021-2024.	PI: Dr. Soma Banerjee, Co- PI: Prof. Abhijit Chowdhury.	Department of Biotechnology, Government of India.
4	To identify and validate functionally, variants in immune genes as predictor and microRNA restricting those genes as therapeutic for alcohol induced liver diseases: an in vitro and in vivo study.  #BT/PR24838/NER/95/868/2017. Period: 2018-2022.	PI: Prof. Abhijit Chowdhury, Co-PI: Dr. Soma Banerjee	Department of Biotechnology under Twinning Program.
5	"Understanding the biology of monocytes during chronic Hepatitis B virus infection". Period: 2019-2022.	Principal Investigator: Dr. Simanti Datta, Co-Investigator: Prof. Abhijit Chowdhury	DST, Government of India
6	"Understanding the interaction between Hepatitis B virus and host complement system and its implication on immune cell functions and disease pathogenesis" (Sanction No: VIR/10/2020/ECD-I, dated: 03.06.2022). Period: 2022-2025.	Principal Investigator: Dr. Simanti Datta, Co-Investigator: Dr. SK Mahiuddin Ahammed	ICMR, Government of India
7	"Insights into B cell immunity in chronic Hepatitis B virus infection" Period: 2022-2025.	Principal Investigator: Dr. Simanti Datta, Co- Investigator: Prof. Kausik Das	Science & Technology and Biotechnology Department, Government of West Bengal (WB- STBT)
8	"Insights of anti-tubercular drug, isoniazid induced chronic liver injury leading to development of hepatic fibrosis; an in-vitro study" (memo No- 1360 (Sanc.)/ STBT- 11012(19)/21/2021-ST SEC dated: 21.03.2022) Period: 2022- 2025	Principal Investigator: Dr. Suman Santra Co-Investigator: Prof. G.K. Dhali and Prof. Abhijit Chowdhury	Science & Technology and Biotechnology Department, Government of West Bengal (WB-

	STBT)

## **PUBLICATION IN 2022 FROM SDLD:**

- 1. Misra D, Banerjee A, Das K, Das K, Dhali GK. Outcome of sequential dilatation in achalasia cardia patients: a prospective cohort study. Esophagus. 2022 Jul;19(3):508-515. doi: 10.1007/s10388-021-00902-5. Epub 2022 Jan 23. PMID: 35066711.
- 2. Maheshwari A, Patra PS, Ray S, Dhali GK, Das K. External validation of Chronic Pancreatitis Prognosis Score (COPPS): A prospective cohort study. Dig Liver Dis. 2022 May;54(5):654-662. doi: 10.1016/j.dld.2021.08.022. Epub 2021 Sep 17. PMID: 34544675.
- 3. Singh P, Chakraborty B, Sarkhel S, Ray S, Patra PS, Das K. Indian Outpatients with Idiopathic Chronic Pancreatitis Have Catastrophic Healthcare Expenditure, Malnutrition, Anxiety/Depression and Work-Impairment. Dig Dis Sci. 2022 Aug;67(8):3612-3622. doi: 10.1007/s10620-021-07255-0. Epub 2021 Sep 28. PMID: 34581905.
- 4. Ray S, Khamrui S, Ansari Z, Gupta A, Das S, Biswas J. Outcome of reoperative surgery for late failure of post-cholecystectomy bile duct injury repair. Updates Surg. 2022 Oct;74(5):1543-1550. doi: 10.1007/s13304-022-01325-2. Epub 2022 Jul 16. PMID: 35840791.
- 5. Guha P, Patra PS, Misra D, Ahammed SM, Sarkar R, Dhali GK, Ray S, Das K. An Open-Label Randomized Controlled Trial Comparing Effectiveness of Aggressive Hydration Versus High-dose Rectal Indomethacin in the Prevention of Post-endoscopic Retrograde Cholangiopancreatographic Pancreatitis (AHRI-PEP). J Clin Gastroenterol. 2022 Apr 21. doi: 10.1097/MCG.00000000001712. Epub ahead of print. PMID: 35470300.
- Dhali A, Ray S, Ghosh R, Misra D, Dhali GK. Outcome of Whipple's procedure for Groove pancreatitis: A retrospective cross-sectional study. Ann Med Surg (Lond). 2022 Jun 17;79:104008. doi: 10.1016/j.amsu.2022.104008. PMID: 35860048; PMCID: PMC9289339.
- 7. Ray S, Basu C, Dhali A, Dhali GK. Frey procedure for chronic pancreatitis: A narrative review. Ann Med Surg (Lond). 2022 Aug 4;80:104229. doi: 10.1016/j.amsu.2022.104229. PMID: 36045829; PMCID: PMC9422204.
- 8. Biswas J, Rathna RB, Dhali A, Ray S. Hilar tuberculosis versus Klatskin tumour: a diagnostic challenge. BMJ Case Rep. 2022 Nov 4;15(11):e252511. doi: 10.1136/bcr-2022-252511.
- 9. Dhali A, Ray S, Mandal TS, Das S, Ghosh R, Khamrui S, Dhali GK, Sarkar A. Surgical Outcome of Brunner's Gland Hamartoma: A Single-Centre Experience. Surg J (N Y). 2022 Jan 17;8(1):e14-e18. doi: 10.1055/s-0041-1741510.
- 10. Ray S, Dhali A, Ansari Z, Gupta A, Mukherjee S, Das S, Das S, Mandal TS, Biswas J, Khamrui S, Dhali GK. Predictors of 90-day morbidity and mortality after Frey procedure for chronic pancreatitis. Am J Surg. 2022 Oct 13:S0002-9610(22)00643-2. doi: 10.1016/j.amjsurg.2022.10.013. Epub ahead of print. PMID: 36266135.
- 11. Dhali A, Ray S, Dhali GK, Khamrui S, Ghosh R. Extrahepatic mucinous biliary cystadenoma: A rare cause of gastric outlet obstruction. Clin Case Rep. 2022 Mar 1;10(3):e05531. doi: 10.1002/ccr3.5531. PMID: 35251654; PMCID: PMC8886638.
- 12. Dhali A, Ray S, Mandal TS, Das S, Sarkar A, Khamrui S, Dhali GK. Outcome of surgery for chronic pancreatitis related pancreatic ascites and pancreatic pleural effusion. Ann Med Surg (Lond). 2022 Jan 20;74:103261. doi: 10.1016/j.amsu.2022.103261. PMID: 35111305; PMCID: PMC8790598.
- 13. Dhali A, Mandal TS, Das S, Ray G, Halder P, Bose D, Pal SK, Ray S, Chowdhury A, Dhali GK. Clinical profile of hepatoblastoma: experience from a tertiary care centre in a resource-limited setting. Cureus. 2022 Jul 1;14(7):e26494. doi: 10.7759/cureus.26494. PMID: 35919215; PMCID: PMC9339225.
- 14. Dhali A, Ray S, Sarkar A, Khamrui S, Das S, Mandal TS, Biswas DN, Dhali GK. Peripancreatic arterial pseudoaneurysm in the background of chronic pancreatitis: clinical profile, management, and outcome. Updates Surg. 2022 Aug;74(4):1367-1373. doi: 10.1007/s13304-021-01208-y. Epub 2021 Nov 23. PMID: 34816352.
- 15. Dhali A, Ray S, Das S, Mandal TS, Khamrui S, Gupta A, Ansari Z, Ghosh R, Dhali GK. Clinical profile and outcome of solid pseudopapillary neoplasm of the pancreas: A retrospective study on 28 patients. Int J Surg. 2022 Aug;104:106708. doi: 10.1016/j.ijsu.2022.106708. Epub 2022 Jun 11. PMID: 35700958.
- 16. Khatun M, Kumar K, Baidya A, Mondal RK, Baszczyňski O, Kalčic F, Banerjee S, Dhali GK, Das K, Chowdhury A, Janeba Z, Chakrabarti S, Datta S. Variability in the Responses of Hepatitis B Virus D-Subgenotypes to Antiviral Therapy: Designing Pan-D-Subgenotypic Reverse Transcriptase Inhibitors. J Virol. 2022;96(2):e0180021. Impact factor: 5.103.

- 17. Pal S, Dey D, Chakraborty BC, Nandi M, Khatun M, Banerjee S, Santra A, Ghosh R, Ahammed SM, Chowdhury A, Datta S. Diverse facets of MDSC in different phases of chronic HBV infection: Impact on HBV-specific T-cell response and homing. Hepatology. 2022;76(3):759-774. Impact factor: 17.42.
- 18. Baidya A, Khatun M, Mondal RK, Ghosh S, Chakraborty BC, Mallik S, Ahammed SKM, Chowdhury A, Banerjee S, Datta S. Hepatitis B virus suppresses complement C9 synthesis by limiting the availability of transcription factor USF-1 and inhibits formation of membrane attack complex: implications in disease pathogenesis. J Biomed Sci. 2022;29(1):97.
- 19. Dey D, Pal S, Chakraborty BC, Baidya A, Bhadra S, Ghosh R, Banerjee S, Ahammed SKM, Chowdhury A, Datta S. Multifaceted Defects in Monocytes in Different Phases of Chronic Hepatitis B Virus Infection: Lack of Restoration after Antiviral Therapy. Microbiol Spectr. 2022;29:e0193922.
- 20. Tripathi S, Pal A, Ghosh S, Goel A, Agarwal R, Banerjee S, Das S. LncRNA NEAT1 regulates HCV-induced Hepatocellular Carcinoma by modulating the miR-9-BGH3 Axis. J Gen Vir. 2022; 103, 12.

## Accepted articles (In press)

- Differentiating biliary atresia from other causesof infantile cholestasis: An appraisal of the histomorphological changes on liver biopsy. [Original Article] Aniket Halder, Sabita Patra, Bappa Mandal, Gautam Ray, Ranajoy Ghosh, Suchandra Mukherjee, Uttara Chatterjee.
- Primary hepatic leiomyosarcoma masquerading as focal nodular hyperplasia of liver: A wolf in sheep's clothing. [Case report] Ranajoy Ghosh, Aniket Halder, Ranjit K. Nim, Sukanta Ray, Uttara Chatterjee

## **FACULTY NEWS**

## Invited Lectures in the meeting/conference by Faculties:

- 1. **Prof. Soma Banerjee** was invited for a lecture in the Society of Biological Chemists (India), Kolkata Chapter, at Kolkata, January 19, 2022. The title of the deliberation was "Two-way control mechanism on tiny RNAs by hepatic Oncovirus: a prerequisite for tumor initiation and progression".
- 2. **Prof. Simanti Datta** was invited for a lecture in the Society of Biological Chemists (India), Kolkata Chapter, at Kolkata, July 14, 2022. The title n was "Insights into the immunoregulatory role of myeloid derived suppressor cells (MDSC) in different phases of chronic HBV infection".

## Oral and Poster presentation in national meeting by Students:

Oral presentation (PhD Scholar section) in the 66th Foundation Day celebration of the Institute held on 10<sup>th</sup>-11<sup>th</sup> March 2022 by the following students:

- A. **Sayantani Bhowmik** had presented "Transcriptionally active Scavenger Receptor Class B Type 1(SCARB1) transcript variant promotes hepatocellular carcinoma".
- B. **Swagata Majumdar** had presented "LncRNA KCNQ1OT1 sponges multiple tumor-suppressor microRNAs and promotes proliferation and stemness in Hepatocellular Carcinoma".
- C. **Satabdi Biswas** had presented "Monocyte derived galectin-9 causes impairment of adaptive and innate immune response in chronically HBV infected patients and promotes epithelial-to-mesenchymal transition (EMT) of hepatoma cells"
- "Hepatitis B virus suppresses complement C3 expression by limiting the availability of transcription factor C/EBPβ and its implication on immune cell functions and disease pathogenesis". Oral Presentation by **Ayana** Baidya. Society of Biological Chemists (I), Kolkata Chapter held at Sister Nivedita University on April 9, 2022".
- "Monocyte-derived galectin-9 causes impairment of adaptive and innate immune response in chronically HBV infected patients and its expression remain unaltered after antiviral therapy". Poster presentation by **Debangana Dey**. Society of Biological Chemists (I), Kolkata Chapter held at Sister Nivedita University on April 9, 2022.
- 3. "Serine/Arginine-rich Splicing Factor 9 (SRSF9) mediated enrichment of splice variant of Scavenger Receptor Class B Type 1(SCARB1) promotes Hepatocellular Carcinoma" Oral Presentation by **Sayantani Bhowmik**. Society of Biological Chemists (I), Kolkata Chapter held at Sister Nivedita University on April 9, 2022.
- 4. "MicroRNA-126-5p induces proliferation by inhibiting APAF1/Card16/Caspase3 of
- 5. apoptosome pathway and promotes chemo-resistance of hepatocellular carcinoma cells by impeding GSK3β/APC/AXIN of β-catenin destruction complex and inhibitor DKK1". Poster presentation by **Anannya**

- **Chakraborty.** 12th East Zonal Oncology Symposium held at Saroj Gupta Cancer Center and Research Institute on 3rd December 2022.
- 6. "Molecular level analysis of Telomeric Proteins leading to Hepatitis B Virus induced Hepatocellular Carcinoma of aggressive class". Poster presentation by **Soumyabrata Chatterjee**. 12th East Zonal Oncology Symposium held at Saroj Gupta Cancer Center and Research Institute on 3rd December 2022.
- 7. "Attenuation of complement C3 synthesis by Hepatitis B virus during chronic HBV infection: implications on immune cell functions and disease pathogenesis." Poster presentation by **Ayana Baidya**. 91st Annual Meeting of the. Society of Biological Chemists (India) at Biswa Bangla Convention Center, Kolkata. 8-11 December, 2022.
- 8. "Investigating the influence of cancer cell derived exosomes on phenotypic shift of macrophages towards M2 in the tumor milieau of hepatocellular carcinoma". Poster presentation by **Indrashish Dey**. 12th East Zonal Oncology Symposium held at Saroj Gupta Cancer Center and Research Institute on 3rd December 2022.
- 9. "MicroRNA-126-5p restricts APAF1-CARD16-CASPASE 3 mediated apoptosis, and triggers WNT signaling by impeding β-catenin destruction complex GSK3β-APC-AXIN and DKK1 in Hepatocellular Carcinoma". Poster presentation by **Anannya Chakraborty.** 91st Annual Meeting of the. Society of Biological Chemists (India) at Biswa Bangla Convention Center, Kolkata. 8-11 December, 2022
- 10. "Molecular Dissection of Shelterin Proteins Pertaining to Aggressiveness of Hepatitis B Virus Related Hepatocellular Carcinoma". Poster presentation by **Soumyabrata Chatterjee**. 91st Annual Meeting of the. Society of Biological Chemists (India) at Biswa Bangla Convention Center, Kolkata. 8-11 December, 2022.
- 11. "Investigating the mechanism of M2 polarization of macrophages in the tumour milieu triggered by cancer cell derived exosomes in hepatocellular carcinoma". Poster presentation by **Indrashish Dey**. 91st Annual Meeting of the. Society of Biological Chemists (India) at Biswa Bangla Convention Center, Kolkata. 8-11 December, 2022.

#### Oral and Poster presentation in the international meeting by students

- 1. "Hepatitis B virus inhibits complement C3 synthesis and promotes immune dysfunction and disease progression during chronic infection". Poster Presentation by **Ayana Baidya**. AASLD The Liver Meeting 2022 held at Washington DC, USA from 4 to 8 November 2022.
- 2. "Variability in the expression of Gal-9 and PD-L1 on monocytes in different phases of chronic HBV infection: distinct impact on innate and adaptive immune response". Poster Presentation by **Debangana Dey**. 2022 International HBV Meeting, Paris, France from 18 to 22 September 2022.
- "Serine/Arginine-rich Splicing Factor 9 (SRSF9) mediated enrichment of a functionally novel splice variant of Scavenger Receptor Class B Type 1 (SCARB1) promotes hepatocellular carcinoma." Poster Presentation by Sayantani Bhowmik. AASLD The Liver Meeting 2022 held at Washington DC, USA from 4 to 8 November 2022.

## **Awards received by students**

- 1. **Sayantani Bhowmik** had received the first prize for Oral presentation (PhD Scholar section) in 66th Foundation Day celebration of I.P.G.M.E.& R held on 10<sup>th</sup>-11<sup>th</sup> March 2022.
- 2. **Swagata Majumdar** had received the third prize for Oral presentation (PhD Scholar section) in 66th Foundation Day celebration of I.P.G.M.E.& R held on 15th January 2021.
- 3. **Soumyabrata Chatterjee** had received the second prize for Poster presentation in 12<sup>th</sup> East Zonal Oncology Symposium held on 3rd December 2022.