

School of Digestive and Liver Diseases

FACULTY

Medical Gastroenterology

- Prof. Gopal Krishna Dhali
- Dr. Kshaunish Das
- Dr. Rajib Sarkar
- Dr. Partha Sarathi Patra
- Dr. Debashis Misra
- Dr. Arka Banerjee (On Deputation)
- Dr. Kaushik BPN (Senior Resident)

Pediatric Gastroenterology

- Dr Gautam Ray

Hepatology and Center for Liver Research

- Prof. Amal Santra
- Prof. Abhijit Chowdhury
- Dr. Soma Banerjee
- Dr. Kausik Das
- Dr. Simanti Datta
- Dr. Mahiuddin Ahammed
- Dr. Suparna Pal

GI and Liver Pathology

- Dr Ranajoy Ghosh
- Dr Aniket Halder

GI Surgery

- Prof. Gautam Chattopadhyay
- Prof. Sukanta Ray
- Dr. Sumit Sanyal
- Dr. Purnendu Dutta
- Dr. Jayanta Biswas (On Deputation)
- Dr. Suman Saha (Senior Resident)

GI Anaesthesia

- Dr. Tapas Ghosh
- Dr. Dibyendu Ghrai
- Dr. Saikat Bhattacharya

GI Radiology

Dr. Avik Sarkar

Students / Trainees / Fellows

- Senior Residents: 2
- DM (Medical Gastroenterology & Hepatology): 21
- DM Students submitted Thesis: 5
- Students pursuing PhD: 15
- Students submitted PhD thesis: 5

Medical officers

- Dr. Dilip Bhattacharya
- Dr. Sujjan Khamaru
- Dr. Jabaranjan Hembram

ACADEMIC ACTIVITIES

Thesis submitted by DM residents

1. Prevalance of anxiety, depression and obsession in patients with irritable bowel syndrome – **Dr Arka Banerjee**
2. Clinico-epidemiological study to estimate the burden of liver disease in children (1-12 years) – **Dr Trayambak Samanta**
3. A Clinico-virological study to explore the dynamics of chronic hepatitis B virus infection in the immunotolerant phase – **Dr Gautam Ray**
4. Prospective and dynamic analysis of health related quality of life, depression and anxiety, diet, nutrition and employment status in patients with idiopathic chronic calcific pancreatitis in India – **Dr Pankaj Singh**
5. Thiopurines in Inflammatory bowel disease, safety profile, predictors of response and their role in long term maintenance therapy – **Dr Kaushik BPN**

Publications from SDLD in 2015

1. Extraintestinal manifestations in inflammatory bowel disease: Prevalence and predictors in Indian patients. Bandyopadhyay D, Bandyopadhyay S, Ghosh P, De A, Bhattacharya A, Dhali GK, Das K. *Indian J Gastroenterol.* 2015 Sep;34(5):387-94. doi: 10.1007/s12664-015-0598-8. Epub 2015 Nov 28. PMID:26614005
2. Ray S, Khamrui S. Ruptured jejunal artery aneurysm. *Am Surg.* 2015 Mar;81(3):E130-1. PubMed PMID: 25760192.
3. Ray S, Khamrui S. Inadvertent ligation of the main pancreatic duct: an extremely rare complication of choledochal cyst excision. *Indian J Surg.* 2015 Apr;77(Suppl 1):92-3. doi: 10.1007/s12262-014-1168-5. Epub 2014 Sep 25. PubMed PMID: 25972658; PubMed Central PMCID: PMC4425752.
4. Ray S, Sanyal S, Ghatak S, Khamrui S, Biswas J, Saha S, Mandal TS, Chattopadhyay G. Frey procedure for chronic pancreatitis in children: A single center experience. *J Pediatr Surg.* 2015 Nov;50(11):1850-3. doi: 10.1016/j.jpedsurg.2015.07.012. Epub 2015 Jul 26. PubMed PMID: 26297313.
5. Ray S, Khamrui S, Kataria M, Biswas J, Saha S. Valproic Acid-Induced Severe Acute Pancreatitis with Pseudocyst Formation: Report of a Case. *Cureus.* 2015 Aug 8;7(8):e297. doi: 10.7759/cureus.297. eCollection 2015 Aug. PubMed PMID: 26366333; PubMed Central PMCID: PMC4564375.
6. Ray S, Sanyal S, Ghatak S, Sonar PK, Das S, Khamrui S, Chattopadhyay G. Falciform ligament flap for the protection of the gastroduodenal artery stump after pancreaticoduodenectomy: A single center experience. *J Visc Surg.* 2015 Oct 29. pii: S1878-7886(15)00135-6. doi: 10.1016/j.jvisurg.2015.10.007. [Epub ahead of print] PubMed PMID: 26526210
7. Datta S, Ghosh A, Dasgupta D, Ghosh A, Roychoudhury S, Roy G, Das S, Das K, Gupta S, Basu K, Basu A, Datta S, Chowdhury A, Banerjee S. Novel point and combo-mutations in the genome of hepatitis B virus-genotype D: characterization and impact on liver disease progression to hepatocellular carcinoma. *PLoS One.* 2014 Oct 15;9(10):e110012. doi: 10.1371/journal.pone.0110012.
8. Datta S, Roychoudhury S, Ghosh A, Dasgupta D, Ghosh A, Chakraborty B, Roy S, Gupta S, Santra AK, Datta S, Das K, Dhali GK, Chowdhury A, Banerjee S. Distinct distribution pattern of hepatitis B virus genotype C and d in liver tissue and serum of dual genotype infected liver cirrhosis and hepatocellular carcinoma patients. *PLoS One.* 2014 Jul 17;9(7):e102573.
9. Banerjee P, Mondal RK, Nandi M, Ghosh S, Khatun M, Chakraborty N, Bhattacharya S, RoyChoudhury A, Banerjee S, Santra A, Sil S, Chowdhury A, Bhaumik P, Datta S. A rare HBV subgenotype D4 with unique genomic signatures identified in North- Eastern India-an emerging clinical challenge? *PLoS One.* 2014; 9(10): e109425. doi:10.1371/journal.pone.0109425.
10. Mondal RK, Khatun M, Ghosh S, Banerjee P, Datta S, Sarkar S, Saha B, Santra A, Banerjee S, Chowdhury A, Datta S. Immune-driven adaptation of hepatitis B virus genotype D involves preferential alteration in B-cell epitopes and replicative attenuation-an insight from human immunodeficiency virus/hepatitis B virus coinfection. *Clin Microbiol Infect* 2015; 21: 710.e11–710.e20.
11. Ghosh A, Ghosh S, Ghosh A, Datta S, Dasgupta D, Sikdar N, Datta S, Chowdhury A, and Banerjee S. Hepatitis B Virus X Protein Upregulates hELG1/ ATAD5 Expression through E2F1 in Hepatocellular Carcinoma. *Int J Biol Sci.* Accepted on Oct 2015.

Manuscript under review

1. Ghosh A, Ghosh A, Datta S, Dasgupta D, Das D, Ray S, Gupta S, Datta S, Chowdhury A, Chatterjee R, Mohapatra SK and Banerjee S. Hepatic miR-126 is a Potential Plasma Biomarker for Detection of Hepatitis B Virus Infected Hepatocellular Carcinoma. *Int. J Cancer.* Manuscript ID: IJC-15-0971
2. Ghosh S, Nandi M, Pal S, Mukhopadhyay D, Chakraborty B, Khatun M, Bhowmick D, Mondal RK, Das S, Das K, Ghosh R, Banerjee S, Santra A, Chatterjee M, Chowdhury A, Datta S. Natural Killer cells by

enhanced cytolytic activity and negative immunoregulatory effect on CD4+T-cells influence disease pathophysiology during progression of HBeAg-negative chronic HBV infection. Under Review in the Journal of Immunology.

3. Ghosh A, Dasgupta D, Ghosh A, Roychoudhury S, Ray S, Datta S, Agarwal S, Gupta S, Chowdhury A, Schmittgen T and Banerjee S. Curbing Multiple Components of Tumor Microenvironment miR-199a-3p Impedes Cell to Cell Crosstalk to prevent Hepatocellular Carcinoma.
4. Roy N, Dasgupta D, Mukhopadhyay I, Chatterjee A, DasK, BhowmikP, DasS, BasuP, MajumderPP, SantraAK, DattaS, Dhali GK, ChowdhuryAandBanerjeeS. Genetic Variations in ADH1B, GSTM1 and MnSOD Independently Confer Risk to Alcoholic Liver Diseases in India. Under Review in PLoS one.

CURRENT PROJECTS RUNNING

1. **West Bengal State DST sponsored project** entitled as "Viral Quasispecies diversity and associated peripheral and intrahepatic immunological events in Indian Patients during different Phases of chronic HBV infection with an insight into disease evolution", Project No.- **1267(Sanc.)/ST/P/S&T/9G- 7/ 2014**.
2. **Department of Biotechnology (DBT), Govt. of India** sponsored project entitled as "Biology of Hepatitis B virus of genotype D in an integrated clinico-virological perspective", Project No. - **BT/PR7807/MED/29/693/2013**.
3. **West Bengal State DST** sponsored project entitled as "Identification of Hepatitis B virus DNA integration site in liver tissue of HBV related Cirrhosis and Hepatocellular carcinoma patients to understand the mechanism of Hepatocarcinogenesis." **Project No: 924(Sanc.)/ST/P/S&T/9G-21/2012**
4. **Council OF Scientific and Industrial Research (CSIR)** sponsored project entitled as "Study to understand the importance and contribution of telomere, telomeric proteins and telomerase in the development of hepatocellular carcinoma" **Project No: 27(0305)/14/EMR-II**
5. **DBT, Govt. of India** sponsored project entitled as " Integrative analysis of microRNAs and mRNAs in liver tissue and exosomes from blood of hepatitis C virus (HCV) related hepatocellular carcinoma (HCC) patient to identify biomarker and regulators of HCC" **Project No: BT/PR11971/MED/29/890/2014**
6. **Council OF Scientific and Industrial Research (CSIR)** sponsored project entitled as " Functional characterization of a new putative tumour suppressor gene, hELG1/ATAD5 and its correlation with hepatitis B virus (HBV) infection." **Project no: 27(0234)/10/EMR-II**
7. **DBT** sponsored project entitled as "Determination of genetic susceptibility of Alcoholic Liver Disease by studying polymorphisms of selected candidate genes in North-East Indian population." **Project no: BT/242/NE/TBP/2011**
8. **West Bengal- DBT** sponsored project entitled as "Tracing the role of Myeloid Derived Suppressor Cells in HBV immunopathogenesis", Project No.- **BT (Estt)/RD-10/2015**.
9. **Council OF Scientific and Industrial Research (CSIR)** sponsored project entitled as "Insight into the distribution and pathogenic potential of diverse Hepatitis B Virus (HBV) subgenotypes underlying different clinical outcomes of chronic infection", Project No.- **27(0273/12emr-II)**.

Meetings attended and awards received

National meeting

1. Oral presentation by **Priyanka Banerjee** at One Day Symposium on Biological Chemistry, IICB, Kolkata, April 26, 2014. Title: "A rare HBV D4 subgenotype with unique signatures identified in North East India- An emerging clinical challenge?"
2. Poster presentation by **Madhuparna Nandi** in Adaptive immune response section of International meeting on the Molecular Biology of Hepatitis B Virus held at University of California, Los Angeles, USA, 3rd -6th September, 2014. Title: "A predominant T cell lineage with functional dichotomy in chronic HBV infection".
3. Oral presentation by **Amit Ghosh** at Society of Biological Chemist, Kolkata Chapter, 2014. Title: "Novel miRNA signatures in Tissue and plasma of Hepatitis B infected hepatocellular carcinoma patients: its diagnostic potential."
4. Oral presentation by **Amit Ghosh** at CCHUGeone day symposium October, 2014 at Deulti, West Bengal. Title: "Promising candidate microRNA biomarker in both tissue and plasma for early detection of hepatocellular carcinoma among high-risk chronic hepatitis B virus infected patients."
5. Poster presentation by **Amit Ghosh** at RNA Biology meeting, Kolkata on "Novel miRNA signatures in Tissue and plasma of Hepatitis B infected hepatocellular carcinoma patients: its diagnostic potential." 2014.
6. Best oral presentation award received by **Suchandrima Ghosh** at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India for presenting "Hepatitis B Virus X Protein Upregulates hELG1/ ATAD5 Expression through E2F1 in Hepatocellular Carcinoma"
7. 2nd Best oral presentation award received by **Suman Santra** at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India.
8. Special prize awarded for oral presentation to **Amit Ghosh** in 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India. for presenting "Hepatic miR-126 is a Potential Plasma Biomarker for Detection of Hepatitis B Virus Infected Hepatocellular Carcinoma."
9. Best poster award received by **Alip Ghosh** at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India. for presenting "Hsa-miR-199a-3p by targeting VEGFA, VEGFR1, VEGFR2, HGF and MMP2 impedes intercross-talks between malignant hepatocyte and tumor microenvironment that drives in Hepatocellular carcinoma".
10. 2nd Best poster award received by **Debanjali Dasgupta** at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India for presenting "Differential Binding ability of NF κ B to the Functional SNP in the Promoter of TNF α (-238G/A) Increases the Risk of Alcoholic Liver Diseases (ALD)".
11. Poster award received by Suman Santra at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India.
12. Poster presented by **Madhuparna Nandi** at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India. CD8+CD28-T cells: "A major T cell subset with diverse functions in chronic HBV infection".
13. Poster presented by **Rajiv K Mondal** at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India. "Immune driven adaptation of HBV genotype D involves preferential alteration in B-cell epitopes and replicative attenuation- an insight from HIV-HBV co-infection".
14. Poster presented by **Debosree Bishnu** at 23rd Annual Conference of Indian National Association for Study of the Liver (INASL) & Current Perspective in Liver Diseases, 2015, New Delhi, India. "

15. Oral presentation by **Amit Ghosh**. 2015 at 34th Annual Convention of Indian Association for Cancer Research, Jaipur, India. On "Promising candidate microRNA biomarker in both tissue and plasma for early detection of hepatocellular carcinoma among high-risk chronic hepatitis B virus infected patients."
16. Poster presentation by **Alip Ghosh**. 2015 at 34th Annual Convention of Indian Association for Cancer Research, Jaipur, India. "miR-199a-3p suppresses VEGFA, VEGFR1, VEGFR2, HGF, PDGFRA and MMP2 to block crosstalks between malignant hepatocyte and tumor microenvironment in Hepatocellular carcinoma".

International meetings

1. Poster presented by **Madhuparna Nandi** at 50th Annual Meeting of the European Association for the Study of Liver, 22nd – 26th April, 2015, Vienna, Austria. "Reduced T cell activation, Regulatory T-cell mediated suppression and compromised natural killer cell function characterize immune tolerant phase of chronic HBV infection". **Abstract awarded for registration Bursary and presented as poster.**
2. Poster presented by **Amit Ghosh**. 2015 at American Association for Cancer Research, Pennsylvania Convention Center Philadelphia, Pennsylvania, April. Title: "Hepatic miR-126 as a potential plasma biomarker for detection of hepatitis B virus infected hepatocellular carcinoma."
3. **Amit Ghosh** awarded travel grant by DST for attending AACR annual meeting 2015.
4. **Amit Ghosh** awarded travel support award by CICS for attending AACR annual meeting 2015.
5. **Rajiv K Mondal** awarded ICMR Travel Grant for attending "2015 International Meeting on Molecular Biology of Hepatitis B Viruses" from 04/10/15 to 08/10/15 in Germany.
6. **Rajiv K Mondal** was selected for oral presentation in International Meeting on the Molecular Biology of Hepatitis B Viruses, Bad Nauheim, Germany from October 4-8, 2015. Title: "Synergistic effects of mutations in different coding and transcriptional regulatory regions of Hepatitis B Virus (HBV) of genotype D contribute to its occult phenotype- an insight from chronic hepatitis C patients with occult HBV infection"
7. **Rajiv K Mondal** awarded DST Travel Grant under ITS Scheme for attending "2015 International Meeting on Molecular Biology of Hepatitis B Viruses" from 04/10/15 to 08/10/15 in Germany.
8. **Rajiv K Mondal** awarded CICS Travel support for attending "2015 International Meeting on Molecular Biology of Hepatitis B Viruses" from 04/10/15 to 08/10/15 in Germany.

Invited lectures

Gautam Ray – Recurrent abdominal pain in children at international conference of pediatric gastroenterology (BASP GHAN 2015) at Dhaka, Bangladesh

Presentation in International meetings

Poster presented by DM residents

- **At Falk Symposium 196:** Critical evaluation of current concepts and moving to new horizons in the management of IBD, **Frankfurt, Germany.**
- Natural history of Azathioprine therapy in Crohn's disease patients: an Indian study – **Kaushik BPN**, Kshaunish Das, Guru Basava, Rajib Sarkar, Gopal K Dhali

At The Liver Meeting 2015, San Francisco, USA

- Atorvastatin and propranolol combination cause greater reduction of HVPG than propranolol alone in patients of cirrhosis with portal hypertension – **Saptarshi Bishnu**, Avik Sarkar, Saswata

Chatterjee, Sk Mahiuddin Ahammed, Kshaunish Das, Kausik Das, Gopal K. Dhali, Abhijit Chowdhury

Presentation in National meetings

Poster presented by DM residents

INASL 2015, New Delhi

- Percutaneous drainage may not be necessary in a significant subset of patients with complicated liver abscess, **Saptarshi Bishnu**, Saswata Chatterjee, Sk M Ahammed, Kausik Das, Abhijit Chowdhury

Natural course of compensated cryptogenic cirrhosis: evidence of phenotypic diversity, **Saptarshi Bishnu**, Saswata Chatterjee, Sk M Ahammed, Kausik Das, Abhijit Chowdhury

Abstracts submitted

DDW 2016, San Diego, USA

- Post Operative Crohns disease maintainene: Is Azathioprine a better option – an Indian Study – **Kaushik BPN**, Kshaunish Das, Rajib Sarkar, Gopal K Dhali

SERVICE INFORMATION

OPD and in-patient service

	New Patients	Old Patients	Total patients
OPD service			
GE OPD	52876	26186	79062
Hepatology OPD	8677	13040	21717
GI Surgery OPD	1628	3134	4762
Indoor admission			
GE Indoor admission	-	-	1842
Hepatology Indoor admission	-	-	776
GI Surgery Indoor admission	-	-	338

Endoscopy service

Procedure	Number
Upper GI Endoscopy Diagnostic	10431
Upper GI Endoscopy Therapeutic	1524
Colonoscopy	2295
ERCP	1087
SVE	129
APC	82
Esophageal Dilatation	602
Fibro Scan	768
Liver Biopsy	225
Endoscopic Ultrasound	209
Double Balloon Enteroscopy	63

Radiology service

Procedure	Number
Diagnostic Ultrasound	6690
PTBD	11
PCD	66

Diagnostic/therapeutic vascular intervention	1
NJ tube insertion	7
HVPG	5
PAIR	1

Pathology service

Procedure	Number
Surgical Biopsy	256
Endoscopic Biopsy	1925
FNAC	271
Review biopsy	224

Liver ITU service

	Number
Admitted	238
Death	81

Gastro-surgery service

Operative procedures	Number
Stomach & Esophagus	26
Small and large bowel	51
Gall Bladder	47
Bile Ducts	58
Pancreas	63
Liver + PHTN	26
Others	22
Total	293
