

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

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. Sukanta Ray
- Dr. Sumit Sanyal
- Dr. Somak Das

GI Anaesthesia

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

GI Radiology

Dr. Avik Sarkar

Students / Trainees / Fellows

- Senior Residents (Medical + Surgical GE) 4
- Senior research Fellow 1
- DM (Medical Gastroenterology & Hepatology): 20
- MCh (Surgical Gastroenterology): 1
- Students pursuing PhD: 10
- Students submitted PhD thesis: 5

Medical officers

4

ACADEMIC ACTIVITIES

Publications from SDDL in 2016

1. Ghosh S, Nandi M, Pal S, Mukhopadhyay D, Chakraborty BC, 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 contribute to hepatic injury and help in viral persistence during progression of hepatitis B e-antigen-negative chronic hepatitis B virus infection. *ClinMicrobiol Infect.* 2016; 22(8): 733.e9-733.e19.
2. Roy N, Dasgupta D, Mukhopadhyay I, Chatterjee A, Das K, Bhowmik P, Das S, Basu P, Santra AK, Datta S, Dhali GK, Chowdhury A, Banerjee S. Genetic Association and Gene-Gene Interaction Reveal Genetic Variations in ADH1B, GSTM1 and MnSOD Independently Confer Risk to Alcoholic Liver Diseases in India. . *PLoS One.* 2016 Mar 3;11(3):e0149843.
3. Amit Ghosh, Alip Ghosh, Somenath Datta, Debanjali Dasgupta, Soumyajit Das, Sukanta Ray, Subash Gupta, Simanti Datta, Abhijit Chowdhury, Raghunath Chatterjee, Saroj Kant Mohapatra and Soma Banerjee Hepatic miR-126 is a Potential Plasma Biomarker for Detection of Hepatitis B Virus Infected Hepatocellular Carcinoma.. *International Journal of Cancer,* February 8, 2016.
4. Ghosh A, Ghosh S, Dasgupta D, Ghosh A, Datta S, Sikdar N, Datta S, Chowdhury A, Banerjee S.

Hepatitis B Virus X Protein Upregulates hELG1/ ATAD5 Expression through E2F1 in Hepatocellular Carcinoma. *Int J Biol Sci.* 2016;12(1):30-41.

5. Outcome of surgery for recurrent pyogenic cholangitis: a single center experience. Sukanta Ray, Sumit Sanyal, Kshaunish Das, Ranajoy Ghosh, Somak Das, Sujan Khamrui, Avik Sarkar, Gautam Chattopadhyay. *HPB (Oxford)* 2016 Oct; 18(10): 821–826. Published online 2016 Jun 28
6. Falciform ligament flap for the protection of the gastroduodenal artery stump after pancreaticoduodenectomy: A single center experience. Ray S1, Sanyal S2, Ghatak S2, Sonar PK2, Das S2, Khamrui S2, Chattopadhyay G2. *J Visc Surg.* 2016 Feb;153(1):9-13. doi: 10.1016/j.jviscsurg.2015.10.007. Epub 2015 Oct 29.

Manuscripts communicated/Accepted or under revision

1. MicroRNA-199a-3p Suppresses Tumor Growth, Migration, Invasion and Angiogenesis in Hepatocellular Carcinoma by Targeting VEGFA, VEGFR1, VEGFR2, HGF and MMP2. Alip Ghosh, Debanjali Dasgupta, Amit Ghosh, Shrabasti Roychoudhury, Sukanta Ray, Simanti Datta, Abhijit Chowdhury, Thomas Schmittgen and Soma Banerjee under revision in *Cell death and diseases*.
2. Oncogenic Potential of Hepatitis B Virus Subgenotype D1 Surpasses D3: Significance in the development of Hepatocellular carcinoma”, Somenath Datta, Debanjali Dasgupta, Alip Ghosh, Alak Manna, Simanti Datta, Mitali Chatterjee, Abhijit Chowdhury and Soma Banerjee Submitted in *Oncotarget*.
3. Characterization of a Novel microRNA Identified by Small RNA Deep Sequencing and Its Implication in the Development of Hepatocellular carcinoma. Suchandrima Ghosh, Joyeeta Chakraborty, Priyanka Kumari, Amit Ghosh, Alip Ghosh, Debanjali Dasgupta, Shaleen Agarwal, Subash Gupta, Simanti Datta, Abhijit Chowdhury, Raghunath Chatterjee and Soma Banerjee. Submitted in *Scientific Report*.
4. HBV quasispecies composition in Lamivudine-failed chronic hepatitis B patients and its influence on virological response to Tenofovir-based rescue therapy. Priyanka Banerjee, Abhijit Chakraborty, Rajiv Kumar Mondal, Miss Mousumi Khatun, Somenath Datta, Kausik Das, Pratap Pandit, Souvik Mukherjee, Soma Banerjee, Saurabh Ghosh, Saikat Chakrabarti, Abhijit Chowdhury and Simanti Datta. Submitted in *Scientific Reports*.
5. Synergistic impact of mutations in coding and regulatory regions of HBV contribute to its occult phenotype in chronic HCV carriers. Rajiv Kumar Mondal, Mousumi Khatun, Priyanka Banerjee, Alip Ghosh, Sumanta Sarkar, Amal Santra, Kausik Das, Abhijit Chowdhury, Soma Banerjee and Simanti Datta. Submitted in *Scientific Reports*.
6. Percutaneous drainage may not be necessary in a significant subset of patients with complicated liver abscess. Saptarishi Bishnu, P. S. Patra, Das K, accepted in *tropical gastroenterology*.

ONGOING PROJECTS

SN	Title / Investigators	Duration
1	“Assessment of the burden of metabolic syndrome linked disease in general population: Organization of cohort for future studies” PI: Dr. Abhijit Chowdhury	2 years
2	“ Study to explore the risk of chronic liver injury and liver fibrosis in patients treated with anti tubercular drugs” PI : Dr Rajib Sarkar	3 years
3	“ Assessment of liver disease burden in among tribal children : A community based clinic-epidemiological and biochemical study” PI: Dr. Debashis Misra	3 years

4	"Crohn's disease in India : A multicentre study from country where intestinal tuberculosis as well as crohn's disease is endemic" PI : Dr. G. K. Dhali	3 years
5	Integrative analysis of miRNA and miRNA in liver tissues and exosomes from blood of hepatitis C virus (HCV) related hepatocellular carcinoma (HCC) patient to identify biomarker and regulators of HCC. # BT/PR11971/MED/29/890/2014 Funding Agency : DBT PI : Dr. Soma Banerjee	2015- 2018.
6	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. #75/ST/P/S&T/9G-21/2012. Funding Agency : West Bengal State DST PI : Dr Soma Bannerjee	May, 2013- April, 2016
7	Study to understand the importance and contribution of telomere, telomeric proteins and telomerase in the development of hepatocellular carcinoma. #27(0305)/14/EMR-II Funding Agency: CSIR PI : Dr. Soma Banerjee	January, 2015- December, 2018
8	Insight into the pathogenic potential of prevalent hepatitis B virus (HBV) genotypes/subgenotypes associated with the development liver cirrhosis and hepatocellular carcinoma in Eastern India and its molecular analysis to understand the disease severity. Funding Agency : WB DST PI : Dr Soma Banerjee	2016-2019
9	Identification of a non-invasive biomarker to distinguish patients with Intestinal tuberculosis (ITB) and Crohn's disease (CD) from integrated mRNA and microRNA transcriptome sequencing. Funding Agency : WB DB PI : Dr Soma Banerjee	2016-2019
10	Biology of Hepatitis B virus of genotype D in an integrated clinico-virological perspective Funding Agency : DBT PI : Dr. Abhijit Chowdhury	2013-2016
11	Viral quasispecies diversity and associated peripheral and intrahepatic immunological events in Indian patients during different phases of chronic HBV infection- an insight into disease evolution Funding Agency : WB DST PI : Dr. Simanti Datta	2015-2018
12	Tracing the role of Myeloid Derived Suppressor Cells in HBV immunopathogenesis. Funding Agency :WB DBT PI : Dr. Simanti Datta	2015-2018

Meetings attended and awards received

National meeting

Presented posters

1. Poster presented by Rajiv Kumar Mondal in Symposium on 'Biology and Molecular Pathogenesis of Viruses', 2016, IISc Bangalore. Title: "Mutations in coding & regulatory regions of HBV synergistically contribute to its occult phenotype in chronic HCV carriers."
2. Poster presented by Debanjali Dasgupta in Symposium on 'Biology and Molecular Pathogenesis of Viruses', 2016, IISc Bangalore. Title: "Oncogenic Potential of Hepatitis B Virus Subgenotype D1 Surpasses D3: Significance in the development of Hepatocellular carcinoma"
3. Poster presented by Suchandrima Ghosh in 24th Annual Conference of Indian National Association for Study of the Liver (INASL), 2016, Gurgaon, Delhi, India, on "Investigation of Therapeutic Potential of microRNA-509-5p for HCV infection."

4. Poster presented by Suchandrima Ghosh in 24th Annual Conference of Indian National Association for Study of the Liver (INASL), 2016, Gurgaon, Delhi, India, on "Characterization of a Novel microRNA Identified by Small RNA Deep Sequencing and Its Implication in the Development of Hepatocellular carcinoma."

Awarded posters and talks

5. Best poster award received by Debanjali Dasgupta in 24th Annual Conference of Indian National Association for Study of the Liver (INASL), 2016, Gurgaon, Delhi, India. Title of the poster: "MicroRNA-124 ameliorates alcohol induced liver injury by restricting multiple components involved in intracellular cross talk."
6. Best poster award received by Sourina Pal in Symposium on 9th TCS Annual Event on Flow Cytometry Workshop, Flow Application in Basic Applied and Clinical Biology (FABACTCS 2016), November 3-5, 2016. Title: "Monocytic—Myeloid Derived Suppressor Cells accumulate in patients with chronic Hepatitis B and mediate immunosuppression via induction of Regulatory T cells."
7. 2nd prize awarded for oral presentation to Debanjali Dasgupta in 24th Annual Conference of Indian National Association for Study of the Liver (INASL), 2016, Gurgaon, Delhi, India, for presenting "Oncogenic Potential of Hepatitis B Virus Subgenotype D1 Surpasses D3: Significance in the development of Hepatocellular carcinoma".
8. 3rd prize awarded for oral presentation to Debanjali Dasgupta at CCHuGe one day symposium November, 2016 at Jhargram, West Bengal, for presenting "MicroRNA-124 ameliorates alcohol induced liver parenchymal injury by targeting multiple components involved in kupffer cell-hepatocyte cross talk."

International meetings

Presented posters

1. Poster presented by Madhuparna Nandi in 18th Annual International Meeting of The Institute of Human Virology, September 19-22, 2016, Baltimore, USA, on "CD8+ CD28- T Cells : A major T cell subset with diverse functions in chronic HBV infection."
2. Poster presentation by Dr Guurubasava Lakamaji in APDW2016 , Kobe , Japan titled "Assessment of health related quality of life in Indian patients with ulcerative colitis"

Awarded Posters

3. Registration Fee Waiver Award received by Mousumi Khatun in 2016 International Meeting on Molecular Biology of Hepatitis B Viruses, Seoul, South Korea, September 21-24, 2016, for poster presentation on "Insights into the pathogenic potentials of subgenotypes D1, D2, D3 & D5 of Hepatitis B Virus."
4. Mousumi Khatun was Awarded DST Travel Grant under ITS Scheme for attending '2016 International Meeting on Molecular Biology of Hepatitis B Viruses' at Seoul, South Korea, September 21-24, 2016
5. Travel Award received by Debanjali Dasgupta in 2016 International Meeting on Molecular Biology of Hepatitis B Viruses, Seoul, South Korea, September 21-24, 2016, for poster presentation on "Oncogenic Potential of Hepatitis B Virus Subgenotype D1 Surpasses D3: Significance in the development of Hepatocellular carcinoma."

Students Awarded Ph.D. Degree

1. Dr. Alip Ghosh
2. Dr. Somenath Datta
3. Dr. Priyanka Banerjee
4. Dr. Rajiv Kumar Mondal
5. Dr. Debosree Bishnoo

Awards and Membership received by faculty

- Dr. Soma Banerjee has received ICMR International Fellowship for Biomedical Scientist, 2016.

- Dr. Simanti Datta is elected as Member of The National Academy of Sciences, India, 2016.

Invited lectures

By Dr. Soma Banerjee:

- 2nd International Conference on Translational Research at KIIT, Bhubaneswar-2016. Title of the talk was "Evaluation of therapeutic potential of miRNA-124 in alcohol induced liver diseases (ALD)"
- Symposium on 'Biology and Molecular Pathogenesis of Viruses' at Indian Institute of Science, Bangalore-2016. Title of the talk was "Significance of Genotype and Subgenotype of Hepatitis B Virus on Hepatocellular carcinoma Development: A Molecular Insight".
- Two days symposium on next generation sequencing organized by Bioserve biotechnology and Centre for Cellular and Molecular Biology (CCMB), Hyderabad-2016. Title of the talk was "MicroRNAs: Potential Biomarker, Therapeutics and Gene Regulator in Hepatocellular carcinoma identified from genome wide analysis".
- International conference on translational research, Bose Institute, Kolkata-2016. Title of the talk was "MicroRNA-199a-3p Suppresses Tumor Growth, Migration, Invasion and Angiogenesis in Hepatocellular Carcinoma by Targeting VEGFA, VEGFR1, VEGFR2, HGF and MMP2"
- BITS conference on gene and genome regulation, BITS Pilani, Rajasthan -2016. Title of the talk was "Identification of a molecular therapeutic for hepatocellular carcinoma (HCC) from genomic study".
- 17th all India congress of cytology and genetics and international symposium on exploring genomes: The new frontier. Indian Institute of Chemical Biology, Kolkata, 2015. Title of the talk was "Identification of a molecular therapeutic for hepatocellular carcinoma (HCC) from genomic study".

SERVICE INFORMATION

OPD and in-patient service

	New Patients	Old Patients	Total patients
OPD service			
GE OPD	55509	23752	79261
Hepatology OPD	7129	11743	18872
Pediatric GE OPD	1164	1014	2178
GI Surgery OPD	1544	2826	4370
Indoor admission			
GE Indoor admission	-	-	1503
Hepatology Indoor admission	-	-	849
GI Surgery Indoor admission	-	-	396

Endoscopy service

Procedure	Number
Upper GI Endoscopy Diagnostic	9463
Upper GI Endoscopy Therapeutic	1252
Colonoscopy	1913
Sigmoidoscopy	365
ERCP	1114
SVE	115
APC	154
Esophageal Dilatation	589
Fibro Scan	702
Liver Biopsy	338
Endoscopic Ultrasound	256
Double Balloon Enteroscopy	34

Capsule Endoscopy	32
Manometry (esophageal + rectal)	28

Radiology service

Procedure	Number
Diagnostic Ultrasound	7464
PTBD	30
PCD	92
NJ tube insertion	2
HVPG	1
PAIR	3
Fistulogram	3
Ba swallow	4
Ba enteroclysis	1

Pathology service

Procedure	Number
Biopsy	1447
FNAC	210
Review biopsy	150

Liver ITU service

	Number
Admitted	184
Death	59

Gastro-surgery service

Operative procedures	Number
Stomach & Esophagus	27
Small and large bowel	58
Gall Bladder	50
Bile Ducts	64
Pancreas	108
Liver	39
Shunting for PHTN	19
Others	1
Liver Transplant	2
Total	368