

## **DIVISION OF RESEARCH, ACADEMICS & CANCER CONTROL**

The Division of Research consists of:

Academic Section:

Records Section

Basic and Translational Research Division

Epidemiological Research section

Clinical Studies Division

The Research Sub-Committee, composed of research-oriented persons of this institute, discuss on the merits and demerits of proposed studies, and make recommendations to the Institute Ethics Committee. The Research Advisory Board, composed of eminent personalities (from major institutes in India) in different fields of cancer research, is the guiding body of the Research activities of this institute.

### **Recognition:**

The Department of Scientific & Industrial Research (DSIR), Government of India recognizes this Institute as a “**Scientific & Industrial Research organization (SIRO)**”. As a result of this recognition, **donation to the scientific activities of this Institute qualifies for exemption u/s 35(i)(ii) of Income Tax Act, 1961.**

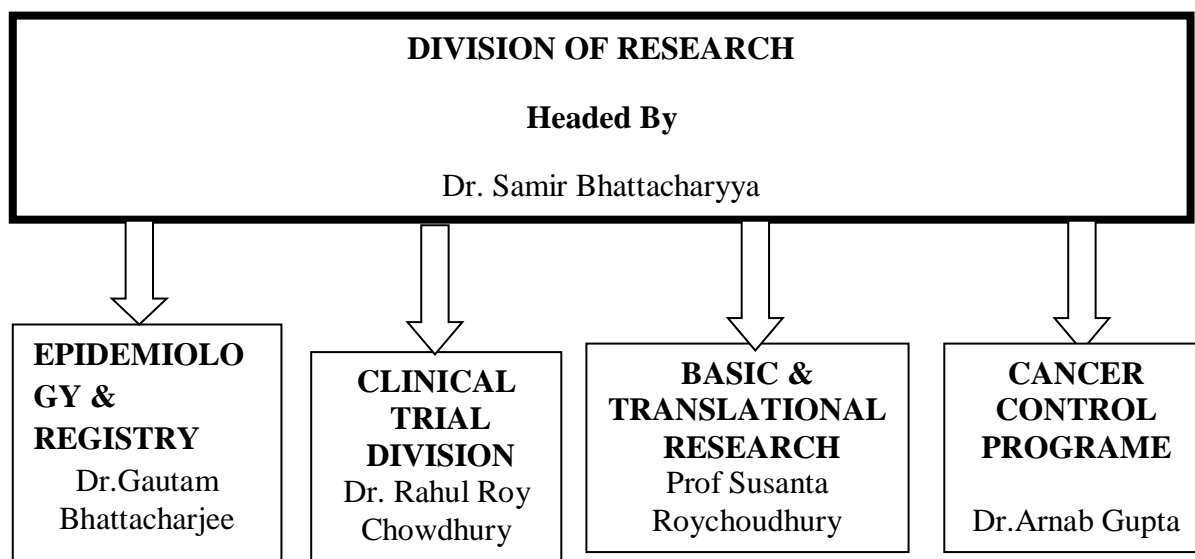
SGCCRI is a member of **Star Alliance of National Institute of Biomedical Genomics (NIBMG), Kalyani** – an Institute under Division of Biotechnology, Govt of India. A HPV DNA Lab has been established as a result of this alliance at the premises of SGCCRI in recognition of its Research Potential on HPV and HPV-related cancers.

SGCCRI has an **MOU with IICB** (Indian Institute of Chemical Biology) for active collaborative Research.

The Institutional Ethics Committee of SGCCRI is registered with the **CDSCO**, Drug Controller General of India, Govt of India.

This institute is an accredited member of the **National Cancer Grid (NCG)**, an umbrella organization of all the major cancer centers in India, under the aegis of the Atomic Energy Commission, Govt of India. The purpose of NCG is collaborative research, development of guidelines suitable for Indian patients, and better teaching facilities. This institute is a very active member of it.

## COMPOSITION



### **RESEARCH ADVISORY BOARD**

It is the apex body for research activities in this institute. The Board meets periodically and reviews Research activity undertaken here.

### **Research Subcommittee**

The Research Subcommittee has 18 members and includes clinical and basic scientists. The RSC has a well-designed standard operating procedure based on the regulations laid down by DCGI (Drug Controller General of India). This subcommittee meets on every Thursday and discusses research proposals from external as well as in house researchers as also administrative issues.

### **Institutional Ethics Committee**

Institutional Ethics Committee (IEC) was reconstituted on the advice of the Governing Body/ Managing Committee of SGCCRI, Thakurpukur, in January 2011.

An SOP for the Institutional Ethics Committee (IEC) was drafted in the first meeting of the committee, in keeping with the ICMR (Indian Council of Medical Research) and Good Clinical Practice (GCP) guidelines. The SOP was further revised in March 2013 (ver1.1) and May 2014 (ver 1.2).

In the meeting of IEC on 16<sup>th</sup> March 2013, it was unanimously decided that the IEC would have to be affiliated to CDSCO in keeping with the advice from the Drug Controller General of India under Ministry of Health and Family Welfare, Govt of India. The IEC of SGCCRI was granted approval by the CDSCO on 22<sup>nd</sup> April 2013.

There are 13 members on this reconstituted committee at present.

## **Epidemiology and Registry Division**

### **Activities on cancer epidemiology & cancer registry:**

- Development of an Atlas of Cancer in India (NCRP, ICMR)
- Population Based Cancer Registry (PBCR), Kolkata
- Activities of Special Cell for PBCRs of NE India.
- Development of Hospital based Cancer Registry

## **Clinical Trial Division**

The Clinical Trial Division was constituted to deal with issues arising from regulatory trials (Drug Trials). It is entrusted with ensuring that the hospital site remains compliant with the rules laid down by the DCGI. This includes registration of sites and Principal Investigators with DCGI as well as ensuring that all research staff and PI are trained in good clinical practice, basics of clinical research, and ethics in clinical research, research management and quality assurance, and data management in clinical research.

### **Activities under clinical studies**

- In house – investigator initiated trials, DNB theses
- Multicentric studies – involving other cancer centers and Basic science institutes.
- Global Atlas Project: With CRT, Oxford, UK
- Case Control Studies with Breast Cancer: With CFI
- Evaluation of degree of association of various parameters in Breast Cancer: With CNCI

## **Basic and Translational Research Division**

The Basic Research and Molecular Biology division of Saroj Gupta Cancer Centre and Research Institute, largely, deals with Genetics, Genomics, Epidemiology, and Cell and Molecular Biology of Cancer. We are developing translational research program in the area of cancer. The emphasis has been given on the participation of both clinical and basic scientists in the research programs. Research projects with specific clinical questions are being addressed using advanced research tools. Also, collaborative research programs with different research institutions and universities have been initiated. The funding of the research activities is being made through both extramural and intramural funds.

Going with the advancement of molecular testing for various biomarkers in the diagnosis as well as prognosis of cancer, this division is also actively involved in implementing molecular diagnostics for affected individuals. Presently, we are offering various molecular diagnostic tests to serve the sufferers of different types of cancers.

### **Highlights of recent achievements**

- SGCCRI has been recognised as a “Sister Institute” of University of Calcutta for conducting PhD programme
- Prof. Susanta Roychoudhury, Chief, Basic Research, has been elected as a J.C. Bose National Fellow of Dept of Science and Technology, Govt. of India
- Prof. Susanta Roychoudhury has been elected as a Fellow of the India National Science Academy
- Dr. Somsubhra Nath, Scientist, Basic Research, received Early Career Research Award from Science and Engineering Research Board, Govt. of India
- Dr. Somsubhra Nath received an Extra Mural Research Grant from Dept of Higher Education, Science, Technology and Biotechnology, Govt. of West Bengal
- Dr. Somsubhra Nath received Shri Ramnath Jaju Award for Best Oral Presentation for Mid-level Scientists at 39<sup>th</sup> Annual Conference of Indian Association of Cancer Research (IACR), 2020
- Dr. Damayanti Das Ghosh received the grant under the scheme of DST-Woman Scientist A
- Ms. Stuti Roy has been awarded Junior Research Fellowship from University Grants Commission-National Eligibility Test (UGC-NET)
- Mr. Suryendu Saha has been awarded Junior Research Fellowship from DST-INSPIRE scheme, Govt. of India

### **Molecular Diagnostic services:**

Under the supervision of the Basic and Translational Research division, this institute is offering the following molecular diagnostic tests for cancer effected individuals:

- Qualitative and quantitative analysis of BCR-ABL fusion transcript (for CML and ALL)
- Qualitative and quantitative analysis of PML-RAR $\alpha$  fusion transcript (for AML)
- EGFR mutation detection (for lung adenocarcinoma)
- K-RAS, N-RAS and B-RAF mutation detection (for lung/colorectal adenocarcinoma)
- FISH for BCR-ABL and HER2/Neu analysis

### **Academic activities:**

- PhD programme in Cancer Cell and Molecular Biology (registration from University of Calcutta/ West Bengal University of Health Science)
- Short- and long-term summer training programme in Cancer Cell and Molecular Biology
- East Zonal Oncology CMEs

### Our team

#### **Research Investigators**

1. Dr. Susanta Roychoudhury (PhD, FNA, FASc, FNASc, FASc&T)
2. Dr. Somsubhra Nath (PhD)

#### **Lab Members**

1. Dr. Damayanti Das Ghosh (DST-Woman Scientist A)
2. Dr. Paulomi Khan (DBT-Research Associate)
3. Ms. Stuti Roy (Junior Research Fellow)
4. Mr. Suryendu Saha (DST INSPIRE Junior Research Fellow)
5. Ms. Puja Chakraborty (Junior Research Fellow)
6. Mrs. Koyel Banerjee (Lab Technician)
7. Ms. Soumi Basu (Project Assistant)
8. Mr. Samya Dey (Lab Technician)
9. Ms. Rajeswari Dutta (Project Assistant)
10. Mr. Anindya Mukhopadhyay (Project Assistant)

#### Research Trainees (April,2019-March, 2020)

Name	Affiliation	Project title
Mr. Rounak Saha	M.Sc., Dept. of Biochemistry, University of Calcutta	Molecular analysis of CUEDC2 variants between receptor-positive and receptor-negative breast cancers
Ms. Bidisha Dey [Awarded Summer Research Fellowship 2019 of Science Academies' of India]	M.Tech, Dept. of Biotechnology, Kalinga Institute of Industrial Technology	Role of frequently found p53 Gain-of-Function mutations in ovarian carcinoma in inducing stemness
Mr. Arijit Samanta	M.Sc., Dept. of Biotechnology, St. Xavier's College	Elucidating the role of CUEDC2-Hormone Receptor crosstalk in the maintenance of ploidy level in breast cancer
Ms. Kalpaja Acharya	M.Sc., Dept. of Biotechnology, St. Xavier's College	Determining the expression levels of Cdc20 and UbcH10 in case of oral cancer and elucidating the role of APC/C-Cdc20 complex in chromatin remodelling

**Ongoing research grants:**

- 1. J.C. Bose Fellowship grant** (awarded to **Prof. Susanta Roychoudhury** from SERB, GOI)  
**PI:** Prof Susanta Roychoudhury  
Duration: **2.5 yrs (2018-2021)**; Sanctioned amount: **Rs. 46,00,000**
- 2. Delineating a novel transcriptional regulatory role of APC/C-Cdc20 complex and its impact on chromosomal instability in oral cancer** (Awarded to **Prof. Susanta Roychoudhury** from SERB, GOI)  
**PI:** Prof. Susanta Roychoudhury; **Co-PI:** Dr. Somsubhra Nath, Dr. S. Bhattacharyya, Dr. Saradindu Ghosh  
Duration: 3 years (2019-2022); Sanctioned amount: 43,70,982
- 3. Deciphering CUEDC2-mediated molecular crosstalk between aneuploidy and receptor status of breast tumors** (Early Career Award to **Dr. Somsubhra Nath** from SERB, GOI)  
**PI:** Dr. Somsubhra Nath; **Co-PI:** Prof S Roychoudhury, Dr. S Bhattacharyya, Dr. Arnab Gupta  
Duration: **3 yrs (2016-2019)**; Sanctioned amount: **Rs. 41,22,360**
- 4. Impact of BCR-ABL mutations on front-line tyrosine kinase inhibitor therapy: an Eastern Indian cohort study** (Sanctioned under Dept of Higher Education, Science, Technology, and Biotechnology, Govt of WB)  
**PI:** Dr. Somsubhra Nath; **Co-PI:** Prof Susanta Roychoudhury, Dr. R.N. Ghosh  
Duration: **3 yrs (2018-2021)**; Sanctioned amount: **Rs. 27,45,284**
- 5. Efficacy of spindle assembly checkpoint among breast cancer subtypes: a crosstalk driven by hormone receptors** (DST-INSPIRE fellowship awarded to **Mr. Suryendu Saha**)  
**PI:** Dr. Somsubhra Nath, **Co-PI:** Prof Susanta Roychoudhury  
Duration: **5 yrs (2018-2023)**; Sanctioned amount: **Rs. 19,60,000**
- 6. Study on relationship between Gain-of-Function mutant P53 and stemness as an underlying cause of chemoresistance in ovarian cancer** (DST-Women Scientist A, awarded to **Dr. Damayanti Das Ghosh**)  
**PI:** Dr. Damayanti Das Ghosh; **Mentor:** Prof. Susanta Roychoudhury  
Duration: **3 yrs**; Sanctioned amount: **Rs. 29,00,000**
- 7. Development of an algorithm based on TP53 mutation and protein biomarkers from blood plasma of high grade serous ovarian carcinoma for diagnosis and treatment monitoring: a liquid biopsy approach** (DBT-Research Associateship awarded to **Dr. Poulomi Khan**)  
**Mentor:** Prof. Susanta Roychoudhury; Duration: **2 yrs**; Sanctioned amount: **Rs. 12,54,400**

**Future work plan:**

1. Developing a project on “Rectal cancer: molecular determinants of resistance to neo-adjuvant chemoradiation”
2. Characterisation of cancer stem cells from breast and ovarian cancers
3. Development of organoid culture from ovarian cancers

4. Creation of tissue bank repository and patient-derived cell line
5. Implementing liquid biopsy in breast and ovarian cancers

***Publications (April, 2019 – March, 2020):***

1. Roychowdhury A, Samadder S, Indra Mazumder D, Das P, Basu M, Mondal R, Roy A, **Roychoudhury S**, Panda CK. IGF2 is Deregulated During the Development of Uterine Cervical Carcinoma in Indian Patients. **Biochem Genet.** **57: 638-651(2019) doi: 10.1007/s10528-019-09917-1.**
2. Datta, A., Das, P., Dey, S.,Ghuwalewala, S.,Ghatak, D.,Alam, S.K., Chatterjee, R. and **Roychoudhury, S.** Genome-Wide Small RNA Sequencing Identifies MicroRNAs Deregulated in Non-Small Cell Lung Carcinoma Harboring Gain-of-Function Mutant p53. **Genes 10: 852(2019)**
3. Roychowdhury A, Samadder S, Das P, Mazumder DI, Chatterjee A, Addya S, Mondal R, Roy A, **Roychoudhury S**, Panda CK. Deregulation of H19 is associated with cervical carcinoma. **Genomics. 112: 961-970 (2020)**
4. Islam MS, Dasgupta H, Basu M, Roy A, Alam N, **Roychoudhury S** and Panda CK. Reduction of nuclear Y654-p- $\beta$ -catenin expression through SH3GL2-mediated downregulation of EGFR in chemotolerance TNBC: Clinical and prognostic importance. **J Cell Physiol. 2020;1–15. <https://doi.org/10.1002/jcp.29466>**
5. D. Bhattacharyya, R. Ghosh, P. Gupta, A. Gupta, S. Roychoudhury, **S. Nath**. 1098P - Incidence of imatinib resistance in chronic myeloid leukemia (CML) patients: Experience from resource poor center of eastern India. **Annals of Oncology. Volume 30, Supplement 5, October 2019, Page v445, doi:10.1093/annonc/mdz251**

**Ongoing research work in collaboration:**

<b>Collaborating Institute</b>	<b>PI</b>	<b>Co-PI from SGCCRI</b>	<b>Project keywords</b>
CSIR-Institute of Genomics and Integrative Biology (IGIB)	Dr. Shantanu Chowdhury (Senior Scientist, IGIB)	Prof. S Roychoudhury, Dr. S Nath, Dr. Arnab Gupta, Dr. S Bhattacharyya	Breast cancer/ Liquid biopsy/ Circulating tumor DNA
University of Calcutta	Dr. Mainak Sengupta (HOD, Dept. of Genetics, CU)	Prof. S Roychoudhury, Dr. S Nath, Dr. Goutam Bhattacharjee	Lung cancer/ Tobacco smoke/ Xenobiotic metabolism/ DNA repair/Polymorphism
Bose Institute	Dr. Moitri Basu (DST-INSPIRE Faculty Fellow)	Prof. S Roychoudhury, Dr. S Nath	Breast cancer/EMT/ Fibroblast growth factor
National Institute of Bio-Medical Genomics (NIBMG)	Dr. Sharmila Sengupta (Director-in-charge, NIBMG)	Prof. S Roychoudhury, Dr. R Roy Chowdhury, Dr. N R Mondal	Cervical cancer/ HPV-16/ E7
University of Calcutta	Dr. Sougata Roy Chowdhury (DST-INSPIRE Faculty Fellow)	Dr. Arnab Gupta	Breast cancer/ Infiltrating T cells/ Chemokine signalling
Presidency University	Dr. Susmita Mondal (Assistant Professor, Dept of Life Sc)	Dr. Koushik Das	Prostate Cancer, Glucose metabolism, PTEN



## **DNB (Diplomate National Board) Program**

The National Board of Examinations (NBE) recognizes this Institute for training in Radiation Therapy and Surgical Oncology.

DNB (Surgical Oncology – Super Specialty): This centre is one of the 1<sup>st</sup> few centres in India to start this course in 2005. 2 students are admitted to the course each year. This year, 3 students, Dr Subrata Sahu, Dr Sor Prasad Totaram and Dr Inderdip Singh passed theory and practical examinations.

DNB (Radiotherapy – Specialty): One student is enrolled to the course each year.

## **Paramedical Courses**

This Institute conducts 2-years + 6 months internship diploma courses in Paramedical sciences recognized by the State Medical Faculty of West Bengal (WBSMF). We conduct the following 4 courses:

- Diploma in Laboratory Technology (DMLT-Tech)
- Diploma in Radiography (DRD –Tech)
- Diploma in Radiation Therapy Technology (DRT –Tech)
- Diploma in Operation Theatre Technology (DoTT)

In the current year, 10 DMLT-Tech, 4 DRD-Tech and 4 DRT-Tech and 4 DOTT students have been admitted. All the courses are running smoothly.

## **Other Academic Activities:**

- i. CME Programme: weekly on every Thursday. Guest faculties (local, national, and international) and in-house faculties take part in different cancer-related issues.
- ii. Publication of Scientific Bulletin
- iii. Activities regarding holding scientific conferences/seminars/Palliative Care courses

## **WHAT'S NEW**

Efforts are being made to start a PhD programme under the leadership of Dr. Chitta Ranjan Choudhury, in the field of Head & Neck Oncology.

## **CLINICAL STUDIES DIVISION**

### **INTRODUCTION:**

The Clinical Studies Division of Saroj Gupta Cancer Centre & Research Institute has been operational since 2012. Over the years, the department has seen numerous commercial clinical trials, both national and global, to completion. The site also carries out investigator-initiated studies. This site is approved by **Cervix Cancer Research Network (CCRN) of the Gynecologic Cancer InterGroup (GCIG)**. The division is headed by Dr Rahul Roy Chowdhury who is a gynaecological oncologist by profession, the Clinical Trials Administrator of Saroj Gupta Cancer Centre & Research Institute and a GCP-certified Principal Investigator himself. The division also has on employment, an experienced full-time clinical research coordinator to ensure smooth and timely conduct of all clinical research activities.

### **WHY DO CLINICAL TRIALS IN SGCC&RI?**

This site is considered one of the premier institutes for conducting clinical research in eastern India, owing to continuous patient in-flow which ensures adequate participant population. The recent statistics depicting these are given here-

<b>TARGET AREA/CASE</b>	<b>2016-2017</b>	<b>2017-2018</b>
Lung cancer	659	606
Breast cancer	756	780
Head and neck cancer	650	630
Uterine cancer	64	62
Cervical cancer	380	379
Ovarian cancer	166	158
Urological cancers	400	377

High patient volume along with availability of all modern and up-to-date investigative and therapeutic equipment under one roof, reasonable cost of therapy, a dedicated team of GCP qualified clinicians and support staff and a stringent Institutional Ethics Committee (IEC) ensures high quality clinical research conduct. Clinical Studies Division also specializes in translating essential documents from English to regional language (Bengali and Hindi).

#### **PAST AND ONGOING CLINICAL TRIALS:**

<b>Sl No.</b>	<b>Study Name</b>	<b>Principal Investigator (PI)</b>	<b>Current Status</b>
1.	Phase II clinical study to evaluate the efficacy and safety of NRC-AN-019 in cancer patients failing prior standard therapies	Dr Samir Bhattacharyya	Study closed out
2.	A randomized, multiple dose, multi centre, comparative parallel study to evaluate the efficacy, safety and pharmacokinetic characteristics of intravenous infusion of Rituximab (Hetero) and Reference, Medicinal Product (Rituximab, Roche) in Indian patient of Non-Hodgkin's Lymphoma (HERILY Study)	Dr Rabindranath Ghosh	Study closed out
3.	A prospective, multicentric, randomized, open label, parallel group, comparative, two arms, safety, efficacy and pharmacokinetic study of Trastuzumab, (Manufactured by Intas Pharmaceuticals Limited, Biopharma Division, Ahmedabad, India) in comparison with Reference Biologic (Trastuzumab, Marketed by Roche) in	Dr Tamohan Chaudhuri	Study closed out

	the patients with HER2-Overexpressing Metastatic Breast Cancer		
4.	A multi-center, randomized open label study to assess the systemic exposure, effectiveness and safety of taking 450 mg Ceritinib with low-fat diet and 600 mg Ceritinib with low-fat diet as compared with 750 mg Ceritinib in fasting condition in adult patients with ALK rearranged (ALK positive) metastatic non-small cell lung cancer (NSCLC)	Dr Rakesh Roy	Study closed out
5.	A Multi-Centre, Randomized, Double Blind, Parallel-Group, Comparative Clinical Trial to evaluate the Safety and Clinical Equivalence of Generic Clotrimazole Troche/Lozenges USP, 10mg (Unique Pharmaceutical Laboratories, India) to Clotrimazole Troche/Lozenges ® 10mg (Roxane Laboratories Inc., USA) in subjects with Oropharyngeal Candidiasis	Dr Dhrubajyoti Mukhopadhyay	Study closed out
6.	A phase III multicentre trial of weekly induction chemotherapy followed by standard chemoradiation versus standard chemoradiation alone in patients with locally advanced cervical cancer	Dr.Rahul Roy Chowdhury	Open to recruitment
7.	An observational, multicentre, Prospective study to evaluate concordance of detecting EGFR mutation by circulating tumour free DNA versus tissues biopsy in NSCLC (CONCORDANCE)	Dr Rakesh Roy	Recruitment completed

### HOW TO GET CLINICAL TRIALS APPROVED & STARTED IN SGCC&RI?

Approach either PI or Clinical Studies Division/Research Coordinator with study proposal. If approaching the Clinical Studies Division, a suitable PI for the study will be suggested. If PI directly is approached, he/she will forward all information to the Clinical Studies Division.

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The PI will then present the case to the Research Subcommittee (RSC). Should the RSC approve the study, the same shall be tabled in the next Institutional Ethics Committee meeting (IEC meeting is held every 3 months)

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All EC dossiers must be submitted to the IEC at least 21 days prior to the scheduled meeting date. The EC dossiers must include all essential documents. Special emphasis is given on site-specific Informed Consent Forms for the regional languages i.e. Bengali and Hindi. The translations of the English ICFs

must be lucid enough for the lay person to understand, without compromising on the actual content of the document.

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Once the IEC approval for a study is received, the Clinical Trial Agreement (CTA) is finalized.

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After the CTA is in place, proceed for site initiation and recruitment.

### **CME Program**

Since, March 2006, this institute is organizing CME programs regularly on every Thursday for the benefit of Faculty and DNB trainees. Apart from in-house faculty members, several guest speakers have delivered lectures on various topics on advanced oncology. The following table gives the number of such CMEs since its inception.

Period	No of CMEs
March 2006	5
April 2006-March 2007	46
April 2007 – March 2008	48
April 2008 – March 2009	43
April 2009- March 2010	43
April 2010 – March 2011	45
April 2011 – March 2012	49
April 2012 – March 2013	49
April 2013 – March 2014	46
April 2014 – March 2015	46
April 2015 – March 2016	49
April 2016 – March 2017	48
April 2017-March 2018	48
April 2018-March 2019	49

### **Cancer Control Programme:**

**AWARENESS CAMP / SCREENING PROGRAME FROM APRIL 2017 - 2018**

SL.NO.	DATE	PLACE	CO-ORGANISOR	TARGE POPULATION	DOCTOR
1	07.01.18	Thakurpukur	Anwasha	Awareness Lecture	Arnab Gupta
2	07.01.18	Patuli	Kolkata Vivek	Awareness Lecture	Indranil Chatterjee
3	07.01.18	Anwar	Kolkata Ekatma	Awareness Lecture	Arnab Gupta
		Shah Road			
4	26.01.18	Behala	St. Berchmjen's	Oral Screening	Saikat Deb
			Primary School		
5	02.02.18	Rotary	Rotary International	Awareness Lecture	Arnab Gupta
		Sadan	& Rotary Club		
			International		
6	04.02.18	SGCCRI	Kolkata Ekatma	Oral Health	Saikat Deb
				Awareness	
7	04.02.18	Alipur	Chetana Foundation	Awareness Lecture	Tanmoy Chatterjee
		Command			
		Hospital			
8	10.02.18	Barasat	Ressuruction	Awareness Lecture	Indranil Chatterjee

9	15.02.18	Charu	Sevapith Matri	Awareness Lecture	Arnab Gupta
		Avenue	Mandir		
10	16.02.18	Kolkata	Bidyasagar College	Awareness Lecture	Arnab Gupta
11	04.03.18	Najrul	CESC	Awareness Lecture	Arnab Gupta
		Mancha			Soma De
11	06.03.18	Salt Lake	G.S.I	Awareness Lecture	Indranil Chatterjee
12	07.03.18	Gariahat	Muralidhar College	Awareness Lecture	Sanmay Ganguly
13	08.03.18	Joka	Genexx Valley	Awareness Lecture	Arnab Gupta
14	10.03.18	Pandua	Local Committee	Awareness Lecture	Soma De
15	13.03.18	Garden	GRSE	Awareness Lecture	Saswati Sorcer
		Reach			
16	25.03.18	Brahmapur	Bondhumahal Club	Awareness Lecture	Arnab Gupta
17	31.03.18	Kakdwip	Globsyin Engineering	Awareness Lecture	Sanmoy Ganguly
			College		
19	22.04.18	Rashbehari	Anubhav	Awareness Lecture	Arnab Gupta

20	28.04.18	Kolkata	Dept. of Health	Awareness Lecture	Arnab Gupta
			Kolkata Municipal		
			Corporation		
21	31.05.18	SGCCRI	Kolkata Ekatma	Anti Tobacco Lecture	Indranil Chatterjee
					Arnab Gupta
22	26.06.18	Kolkata	"Bhalo Achhi",	World Anti Drugs Day	Arnab Gupta
			Kolkata Police		
23	27.06.18	Burdwan	IMA, Burdwan	Awareness Camp	Soumadip Panda
24	11.08.18	Kolkata	La Martiniere School	Awareness Camp	Arnab Gupta
25	12.08.18	Hatibagan,	Swadhinata Dibash	Awareness Camp	Arnab Gupta
		Kolkata	Ujjapan Committee		
26	19.08.18	Mysore Hall,	Rashbehari Residents'	Awareness Camp	Arnab Gupta
		Kolkata	Forum		
27	24.08.18	Uttam Mancha	LICI Agents' Forum	Awareness Camp	Arnab Gupta
			CBO 15		

28	28.09.18	KMC	MANT	Awareness Lecture	Arnab Gupta
29	06.10.18	Agartala	Agartala Regional	Awareness Camp	Arnab Gupta
			Cancer Centre		Soumadip Panda
30	07.10.18	Liluah	Dr.Sajjan Sharma	Awareness Camp	Arnab Gupta
31	11.11.18	Maheshtala	Maheshtala College	Quit Tobacco Camp	M.Ariff
32	11.11.18	Madhyamgram	Rotary Club	Awareness Camp	Arnab Gupta
33	22.11.18	Sarat Sadan,	LIC	Awareness Lecture	Arnab Gupta
		Kolkata			
34	06.12.18	Medinipur	Math Bishnupur	Awareness camp	Subhasish De
					Rakesh Roy

**AWARNNESS PROGRAM / SCREENING CAMP FROM JANUARY 2019 - DECEMBER 2019**

SL.NO	DATE	PLACE	CO-ORGANISOR	TARGET POPULATION	DOCTOR
1	13.01.19	Kidderpore	SAAHAS	Awareness Camp	Arnab Gupta
2	13.01.19	Barrackpore	Srijan	Awareness Lecture	Arnab Gupta



3	21.01.19	Fulia	Sewa Bharat	Awareness Camp	Jaba Basak & Saswati Sorcer
4	05.02.19	Rajarhat	Tata Medical Centre	Awareness Lecture	Arnab Gupta
5	06.02.19	Sodepur	Sri Baba Loknath Brahamchari Ashram	Awareness Lecture	Arnab Gupta
5	02.02.19	Kolkata	Lions Club Behala	Awareness Camp	Arnab Gupta
6	06.02.19	Sodepur	Muragachha Club	Awareness Camp	Arnab Gupta
7	19.02.19	Salt Lake	Club Friday	Awareness Camp	Arnab Gupta
8	03.03.19	Tiljala	Bijoyagar Suprabhat Sangha	Awareness Camp	Abhijit Sarkar
9	10.03.19	Kolkata	Bakultala Sathi Unnayan Samity	Awareness Lecture	Syed Hassanujjaman
10	24.03.19	Barasat	Golden Horizen	Awareness Screening & Camp	Tusti Ganguly & Tanmoy Chatterjee
11	03.04.19	Kolkata	Nobel Mission School	Awareness Lecture	Arnab Gupta
12	03.04.19	Behala	Blind School	Awareness Lecture	Arnab Gupta
13	19.04.19 to 21.04.19	Siliguri & Neighbouring Areas	Siliguri IMA Branch	Awareness Lecture	Indranil Chatterjee & Debmalya Bhattacharjyya
14	24.05.19	Rubi Hospital	MANT	Awareness of Anti Tobacco	Arnab Gupta
15	01.06.19	Behala	Kurnish	Awareness Lecture	Subrato Kr. Sahu
16	09.06.19	24 Pgs- south	Rasapunja Azad Sangha	Awareness Camp	M. Ariff

17	15.06.19	Kolkata	Rash Behari Avenue Traders' Association	Awareness Lecture	Arnab Gupta
18	24.06.19	Salt Lake	Sarani	Awareness Lecture	Arnab Gupta
19	13.07.19	Dumdum	Kishore Bharti High School	Awareness Lecture	Debmalya Bhattacharyya
20	26.07.19	Uttam Mancha	MANT & Kolkata Municipal Corporation	Awareness of Anti Tobacco Lecture	Arnab Gupta
21	07.08.19	Kolkata	Marwari Relief Hospital	Awareness Lecture	Indranil Chatterjee & Tusti Ganguly
22	10.08.19	Kalighat	Holy Family Convent School	Awareness Lecture	Tusti Ganguly
23	14.08.19	Kolkata	South Point School	Awareness Lecture	Arnab Gupta
24	16.08.19	Chetla	Rakhi Sangha Club	Awareness Camp	Soma De
25	16.08.19	Liluah	Resurrection	Awareness Lecture	Debmalya Bhattacharyya
26	24.08.19	Kolkata	Rash Behari Resident Forum	Awareness Lecture	Indranil Chatterjee
27	25.08.19	Jadavpur	Kathjunagar Trinimul Congress Unit	Awareness Lecture	Abhijit Sarkar
28	11.09.19	Behala	Bakultala Sathi Unnayan Samity	Awareness Lecture	Arnab Gupta
29	11.09.19	Hatibagan	Swadhinata Dibas Udjapan Committee Ward - 11	Awareness Lecture	Gautam Bhattacharyya Debmalya Bhattacharyya
29	16.11.19	Netaji Nagar	Rishita Memorial	Awareness Lecture	Arnab Gupta

30	30.11.19	Howrah	Resurrection	Awareness Lecture	Debmalya Bhattacharyya
31	07.12.19	Rahbehari	Help Us To Help You Kolkata	Awareness Lecture	Arnab Gupta Shibsankar Paul
32	08.12.19	Rashbehari	Help Us To Help You Kolkata	Awareness Lecture	Abhijit Sarkar Saswati Sorcer

**Research articles published in National and International Journal:**

**CATEGORY- A**

**Original work in form of presentation paper in various conferences.**

*Printed abstract/summary in proceedings of conference are mostly available.*

**CATEGORY- B**

**Presentation paper of the nature of Review Article.**

**CATEGORY- C**

**Case presentation in form of Presentation paper in a conference**

*Printed abstract/summary in proceedings of conference is mostly available.*

**CATEGORY- D**

**Original work published in journals.**

**CATEGORY- E**

**Oration Lectures in the form of Review articles/subjects.**

**CATEGORY- F**

**Published Review articles.**

**CATEGORY- G**

**Original work in form of poster presentation.**

**CATEGORY- H**

**Ph.D Thesis/MD/ MSc/ DNB Dissertation**

**CATEGORY- I**

**Project works.**

**CATEGORY- J**

**Case presentations published in journals**

**Category K**

**Book Chapters**

## **CATEGORY- A**

*Original work in form of presentation paper in various conferences. Printed abstract/summary in proceedings of conference is mostly available. The list is in chronological order.*

## **CATEGORY B**

*Presentation papers of the nature of review article. The list is in chronological order.*

## **CATEGORY C**

*Single case presentation in form of Presentation paper. Printed abstract/summary in proceedings of conference is mostly available. List is in chronological order.*

## **CATEGORY D**

*Original work published in journals. The list is in chronological order.*

1. Mandal P, Bhattacharjee B, Sen S, Bhattacharya A, Roy Chowdhury R, Mondal NR, Sengupta S. 2016. Complete genome sequences of eight human papillomavirus type 16 Asian American and European variant isolates from cervical biopsies and lesions in Indian women. *Genome Announc* 4(3):e00243-16. doi:10.1128/genomeA.00243-16.
2. Bhakat KK, Sengupta S, Adeniyi VF, Roychoudhury S, Nath S, Bellot LJ, Feng D, Mantha AK, Sinha M, Qiu S, Luxon BA. Regulation of limited N-terminal proteolysis of APE1 in tumor via acetylation and its role in cell proliferation. *Oncotarget*. 2016 Mar 10. doi: 10.18632/oncotarget.8026.
3. Bajaj S, Alam SK, Roy KS, Datta A, Nath S, Roychoudhury S. E2-ubiquitin Conjugating Enzyme, UBE2C, is Reciprocally Regulated by Wild-type and Gain-of-function Mutant p53. *J Biol Chem*. 2016 Apr 28. pii: jbc.M116.731398
4. Mukherjee N, Dasgupta H, Bhattacharya R, Pal D, Roy R, Islam S, Alam N, Biswas J, Roy A, Roychoudhury S, Panda CK. Frequent inactivation of MCC/CTNNBIP1 and overexpression of phospho-beta-catenin Y654 are associated with breast carcinoma: Clinical and prognostic significance. *Biochim Biophys Acta*. 2016 May 18. pii: S0925-4439(16)30117-X. doi: 10.1016/j.bbdis.2016.05.009.
5. Sharma Saha S, Roy Chowdhury R, Mondal NR, Chakravarty B, Chatterjee T, Roy S, Sengupta S. Identification of genetic variation in the lncRNA HOTAIR associated with HPV 16-related cervical cancer pathogenesis. *Cell Oncol*. 2016 Sep 28
6. Das Ghosh D, Mukhopadhyay I, Bhattacharya A, Roy Chowdhury R, Mondal NR, Roy S, Sengupta S. (2017). Impact of Genetic variations and transcriptional alterations of HLA class I genes on cervical cancer pathogenesis. Accepted article. Doi:10.1002/ijc.30681

7. Sengupta S, Mantha AK, Song H, Roychoudhury S, Nath S, Ray S, Bhakat KK. Elevated level of acetylation of APE1 in tumor cells modulates DNA damage repair. *Oncotarget*. 2016 Sep 19. doi: 10.18632/oncotarget.12113.
8. Biman Chakrabarti, Nidhu Ranjan Mondal, Tanmoy Chatterjee and Rahul Roychowdhury (2017) Analysis of 58 Cases of GTT from 2000-2013 at A Tertiary Cancer Center in India. *BAOJ Gynaec* 1:010.
9. Chakraborty C, Roychowdhury A, Samadder S, Roy A, Mandal RK, Basu P, Roychoudhury S, Panda CK. Association of P16-RBSP3 inactivation with phosphorylated-RB1 over-expression in basal-parabasal layers of normal-cervix unchanged during CACX development. *Biochem J*. 473:3221-36 (2016)
10. Dasgupta H, Mukherjee N, Islam S, Bhattacharya R, Alam N, Roy A, Roychoudhury S, Biswas J, Panda CK. Frequent alterations of homologous recombination repair pathway in primary and chemotolerant breast carcinomas: clinical importance. *Future Oncol*. 2017 Jan;13(2):159-174.
11. Roychowdhury A, Samadder S, Das P, Mandloi S, Addya S, Chakraborty C, Basu PS, Mondal R, Roy A, Chakrabarti S, Roychoudhury S, Panda CK. Integrative genomic and network analysis identified novel genes associated with the development of advanced cervical squamous cell carcinoma. *Biochim Biophys Acta*. 2017 Jan;1861(1 Pt A):2899-2911. doi: 10.1016/j.bbagen.2016.09.014.
12. Roychowdhury A, Samadder S, Islam MS, Chaudhury K, Roy A, Banerjee D, Mandal R, Basu PS, Roychoudhury S, Panda CK. Identification of Changes in the Human Papilloma Virus 16 (HPV16) Genome During Early Dissemination of Cervical Cancer Cells May Complement Histological Diagnosis of Lymph Node Metastasis. *Pathol Oncol Res*. 2017 Jan 19. doi: 10.1007/s12253-017-0189-3
13. Ray U, Roy Chowdhury S, Vasudevan M, Bankar K, Roychoudhury S, Roy SS. Gene regulatory networking reveals the molecular cue to lysophosphatidic acid-induced metabolic adaptations in ovarian cancer cells. *Mol Oncol*. 2017 Feb 25. doi: 10.1002/1878-0261.12046.
14. Islam S, Dasgupta H, Roychowdhury A, Bhattacharya R, Mukherjee N, Roy A, Mandal GK, Alam N, Biswas J, Mandal S, Roychoudhury S, Panda CK. Study of association and molecular analysis of human papillomavirus in breast cancer of Indian patients: Clinical and prognostic implication. *PLoS One*. 2017 Feb 28;12(2):e0172760. doi:10.1371/journal.pone.0172760.
15. Saha S, Sweta, Chowdhury R, Rahul, Mondal R, Nidhu, Roy Sudipta, Sengupta Sharmila. Expression signatures of HOX cluster genes in cervical cancer pathogenesis: Impact of human papillomavirus type 16 oncoprotein E7. *Oncotarget, Advance Publications* 2017 Mar 28.
16. Ghosh Das Damayanti, Mukhopadhyay Indranil, Bhattacharya Amrapali, Chowdhury Roy Rahul, Mandal Ranjan Nidhu, Roy Sudipta, Sengupta Sharmila. Impact of genetic variations and transcriptional alterations of HLA class I genes on cervical cancer pathogenesis. *International Journal of Cancer*, 23 Feb 2017.

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18. Mandal Palash Kumar, Biswas Subir, Mandal Gunjan, Purohit Suman, Gupta Arnab, Majumdar (Giri) Amita, Chowdhury Sougata Roy, Bhattacharyya Arindam. CCL2 conditionally determines CCL22-dependent Th2-accumulation during TGF-B-induced breast cancer progression. <http://dx.doi.org/10.1016/j.imbio.2017.10.031>
19. Mukherjee Pritha, Gupta Arnab, Chattopadhyay Dhruvajyoti, Chatterji Urmi. Modulation of SOX2 expression delineates an end-point for paclitaxel-effectiveness in breast cancer stem cells. Scientific Reports/7:9170/DOI:10.1038/s41598-017-08971-2. 2017.08.23
20. Halder Sudip, Mishra Ipseet, Sahu Subrata Kr, Gupta Arnab. Solitary scalp metastasis following gastrectomy in a case of carcinoma stomach- A rare presentation. Paripex- Indian Journal of Research. Volume-6/Issue-7/July-2017/ISSN-2250-1991
21. Gunjan Mandal, Subir Biswas, Sougata Roy Chowdhury, Annesha Chatterjee, Suman Purohit, Poulomi Khamaru, Sayan Chakraborty, Palash Kumar Mandal, Arnab Gupta, Jo-Anne de la Mare, Adrienne Lesley Edkins, Arindam Bhattacharyya. Heterodimer formation by Oct4 and Smad3 differentially regulates epithelial-to-mesenchymal transition-associated factors in breast cancer progression. <https://doi.org/10.1016/j.bbadis.2018.03.010>

## **CATEGORY E**

*Oration (Subject /Article Review Type). Listing is in chronological order.*

1. Bhattacharyya S, Dr Saroj Gupta Oration at Gastrocon, CMRI, Nov.2017

## **CATEGORY F**

*Published Review articles. The list is in chronological order.*

## **CATEGORY G**

*Original work in form of poster presentation*

1. Jena S. Axillary Reverse Mapping in Patients Undergoing Axillary Lymph Node Dissection for Breast Cancer: A Feasibility Study in Indian Scenario. 69<sup>th</sup> Annual Cancer Symposium of the Society of Surgical Oncologist. March 2-5,2016- Boston, Massachusetts USA

2. Manjare Rahul Ramrao. Palliative endoscopic stenting of the advanced esophageal malignancy : a single centre experience in eastern India . UGICON-2017, Upper GI Cancer Surgery Conference and live workshop (April: 14-16) Ahmedabad
3. Singha S, Maity M,Roy.R.Cardiac Safety of Trastuzumab Biosimilars In HER2NEU Amplified Breast Cancer Patients – Experience From Eastern India. ISMPOCON 2018, Jaipur – Abstracts. November 16 to 18, at Hotel Clarks Amer, Jaipur
4. Haldar Sudip, Bhattacharyya Samir, Gupta Arnab, Roy Shravasti. Clinocopathological Study Of Extra Osseous and Osseous Ewing’S sarcoma / Primitive Neuroectodermal Tumors ( PNET ): Our Experience. NATCON IASO 2018
5. Chowdhury R. Rahul, Chatterjee T, Chakrabarti B, Mondal N R, Das P. An Overview of Epidemiology of Cervical Cancer in a Tertiary Cancer Centre in Eastern India over a Period of 10 Years ( 2008-2017).33 rd Annual Conference. AICC RCOG. Kolkata 2019. Book Of Abstracts

## **CATEGORY H**

*Ph.D/ MD/ DNB/ MSc Thesis / Dissertation. The list is in chronological order*

## **CATEGORY I**

*Project work. List in chronological order.*

## **CATEGORY J**

*Published work: Single case presentation*

1. Roy S, Das I, Sil S B, Chakraborty S. Solid Papillary Carcinoma of Breast : A Rare Case Report IOSR-JDMS Volume 15, Issue 6 Ver.XV ( June 2016 ). PP 58-60
2. Mondal NR, Chakrabarti B, Chatterjee T, Roy Chowdhury R (2018). Synovial Sarcoma of the Vulva- A Case Report. BAOJ Gynaec 2:018.
3. Kumar PB, Gupta A, Madhabathula S, Bhattacharya S. Burner gland hyperplasia of duodenum: A rare case mimicking malignancy with obstruction. Indian J Case Reports.2018;September 22
4. Karak Kalpana, Banerjee Anita, Roy Shravasti (2019). Nosocomial Infection Caused By Sphingomonas Paucimobilis – A Rare Pathogen. BAOJ Microbiology 5:037.

## **Category K**

### ***Book Chapter***

1. Chakraborty B.Kr, Mondal N.R, Chowdhury Roy R, Chatterjee T. Fertility Following Gynecological Cancer: Book Chapter in Practical Guide in Assisted Reproductive Technology: GG Mukherjee, G.Khastgir, S.Chatterjee eds: 2018 Jaypee Brothers Medical Publishers (P) Ltd:293-301.