46th ANNUAL REPORT

2018 – 19

Saroj Gupta Cancer Centre & Research Institute

(Formerly Cancer Centre Welfare Home & Research Institute) Mahatma Gandhi Road, Thakurpukur, Kolkata 700 063



This Institute was originally registered as Cancer Centre and Welfare Home on February 29, 1973 as a Registered Society under West Bengal Societies Registration Act XXVI of 1961. Subsequently, to cope up with increasing activity of the Society, its name was changed by re-registration on April1,1997 to Cancer Centre Welfare Home & Research Institute. After the sad demise of Dr Saroj Gupta, the founder Secretary and Director of this Institute, the name of the society was further changed and registered as Saroj Gupta Cancer Centre & Research Institute on December20, 2011. The society is a non- profit philanthropic body that is engaged in catering to the needs of the people suffering from cancer. The organization is a Comprehensive Cancer Institute that is actively involved in Treatment, Control and Research on Cancer.

Since its inception on 20th February 1973, it has received mass support and donations from people of this country and from abroad. It is the public support and aid that has transformed a 25–bed welfare home to one of the largest Comprehensive Cancer Institutes of the country. Donations to this Institute are exempted under section 80G of Income Tax Act, 1961.

The Ministry of Science & Technology, Government of India has recognized this Institute as a SIRO (Scientific & Industrial Research Organization). As such, donations to this organization are also exempted under section 35(1)(ii) of IncomeTaxAct, 1961.

We earnestly solicit your help to assist us in our fight against cancer

Registration No	: S/12687 of 1972-73
Registered Office	: Mahatma Gandhi Road, Thakurpukur, Kolkata 700 063
Telephone Nos	: +91-033-2467/-8001/ -8003; 2453-2781/82/83; 2438-3145
Mobile	: 98311-82951/-82904
Fax numbers	: +91- 033-2467- 8002; 2453-6711; 2453-4765
E-mail	: info@sgccri.org
	Research Division: research@sgccri.org,
	researchsgccri@gmail.com
Website	: www.sgccri.org, www.cancercentrecalcutta.org

This Annual Report is published by Mr.Anjan Gupta (Hony.Secretary) on behalf of Saroj Gupta Cancer Centre & Research Institute. Printed by Graphics Printers,7/16, Naktala Lane, Kolkata 700 047.

1



46th ANNUAL REPORT

2018 – 19

CONTENTS • Governing Body, Sub-Committees & List of Faculties • Notice for 46th Annual General Meeting

Part - 1 Report on the Institute

- I. Introduction
- II. Events in this institute
- III. Our activities

A. Medical & Allied Fields

- A.1 Departments & Personnel.
- A.2 Turnover of Patients & Break-ups
- A.3 Reports on Major Therapeutic Departments
- A.4 Reports on Diagnostic Departments
- A.5 Reports on Ancillary Services
- **A.6** Report on Environmental & Biomedical Waste Management, Solar Energy, Organic Farming.
- A-7 Library

B. Division of Research, Academic Affairs and Cancer Control

- **B.1** Report on Division of Research
- **B.2** Report on Academic Activities
- **B.3** Report on Cancer Control Program
- IV Tie-up arrangements
- V Acknowledgments
- VI Obituary

Members of Governing Body/ Managing Committee

President	: Mr Jayanta Chatterji
Vice-Presidents	: Mr Amit Kumar Sen (since deceased)
:	Mr Shib Sanker Mukherji
Secretary	: Mr Anjan Gupta
Joint Secretary	: Dr Radhe Shyam Majumder
Asst Secretary	: Dr Gautam Bhattacharjee
Treasurer	: Mr Kamakshya Prasad Sengupta
Members	: Mr Subhash Guha Niyogi
:	Dr Arnab Gupta
:	Dr Krishnendu Gupta
:	Mr Jayanta Kumar Paul
:	Mr Dipayan Choudhury
Advisors	: Dr Rabindra Nath Ghosh
	Mr Aniruddha Bose
Two Govt. Nominees	: Director of Medical Education,
	Department of Health & Family Welfare,
	Govt. of West Bengal Director,
	Chittaranjan National Cancer Institute, Kolkata



Members

FOUNDER MEMBERS

- 1 FM 9 Dr. Sunil Kumar Gupta
- 2 FM 37 Ms Gouri Mitra

LIFE MEMBERS

1	LM 4	Mr. Satya Narayan Khaitan
2	LM 5	Mr.Bachhraj Sethia
3	LM 7	Ms Sushila Devi Poddar
4	LM 8	Ms. Sharda Devi Poddar
5	LM 9	Mr. Ratan Chand Burman
6	LM 14	Ms. Debjani Dey
7	LM 15	Mr. Subhash Guha Niyogi
8	LM 18	Mr. Subir Chowdhury
9	LM 22	Mr. Monotosh Roy Choudhury
10	LM 24	Mr. Kanail Lall Dey
11	LM 26	Ms. Satiya Bai Saraogi
12	LM 27	Mr. Mihir Kumar Aditya
13	LM 28	Mr. Jitendra Nath Bose
14	LM 30	Mr. Ashoke K. Mukherjee
15	LM 38	Dr. Jyoti Rani Sen
16	LM 39	Mr. Swapan Kumar Bose
17	LM 41	Mr. Subhendu Basu
18	LM 42	Mr. Pijush Ranjan Sen Gupta
19	LM 46	Mr. Justice Manoj Kumar Mukherji
20	LM 47	Mr. Justice Ganendra Narayan Roy
22	LM 49	Ms Ratna Ghosh
23	LM 51	Mr. Debidas Ganguli
24	LM 52	Dr. Arun Sekhar Day
25	LM 56	Mr Sushil Kumar Ghosh
26	LM 57	Mr. Mrinal K Choudhury
27	LM 59	Mr. Amit Kumar Sen
28	LM 62	Mr. Biswanath Mitra
31	LM 65	Mr Bivas Roy Chowdhury

32	LM 68	Mr Shyam Sundar Roy
33	LM 69	Mr Sankar Nath Roy
34	LM 72	Dr Krishnendu Gupta
35	LM 73	Mr Surendralal Girdharilal Mehta
36	LM 74	Mr. Anjan Gupta
37	LM 78	Mr. Murari Lal Gupta
38	LM 80	Ms. Piya Sen
39	LM 81	Mr. Suvra Chandra
40	LM 82	Mr Jayanta Chatterji
41	LM 83	Mr. Samdev Das Gupta
42	LM 84	Mr. Indrajit Dass
43	LM 85	Mr. Gautam Ghosh
44	LM 88	Dr. Radhe Shyam Majumdar
45	LM 89	Dr. Saumitra Chakravarty
46	LM 91	Mr. Indrajit Bhattacharya
47	LM 93	Mr. Jayanta Kumar Paul
48	LM 97	Dr. GautamBhattacharjee
49	LM 98	Dr. Arnab Gupta
50	LM 99	Dr. Rabindra Nath Ghosh
51	LM 100	Mr. Kamakshya Prasad Sengupta
52	LM 101	Mr. Shib Sanker Mukherji
53	LM 102	Mr. Dipayan Choudhury
54	LM 103	Dr. Sankha SuvraMitra
55	LM 104	Dr. Bhaskar Banerjee
56	LM 106	Debarshi Dutta Gupta
57	LM 107	Dr. Samir Bhattacharyya
58	LM 108	Dr. Santanu Kumar Tripathi
59	LM 109	Dr. Susanta Roy Choudhury
60	LM 110	Mr. Aniruddha Bose
61	LM 111	Mr. Prakash Lohia
62	LM 112	Mr. Barun Kumar Chakravarty
63	LM 113	Ms. Satarupa Mukherjee

Honorary Members

HM 2 : Dr Bikash Sinha

- HM 3 : Dr Ashok K Ray (USA)
- HM 4 : Dr Kironmoy Das (USA)



Honorary Overseas Advisor

Dr. S. S. Legha. MD	Director of Melanoma Centre in the Texas Cancer Institute, Houston, USA
Dr. Sankha Suvra Mitra, MS, DNB, FRCS, FRCR	Consultant Oncologist of Royal Sussex County Hospital, Brighton, UK
Dr. Yajati Ghosh, FRCS Ed (Opth.)	Consultant Ophthalmic Surgeon, Birmingham, UK
Dr. Shilajit Ghosh, FRCS	Consultant Ophthalmic Surgeon, Birmingham, UK

Honorary Advisors

Dr. Asit Kr Bandyopadhyay MS, FRCS	Consultant General Surgeon, B P Poddar
(Glasgow, Edin)	Hospital & Research Institute. Past President,
	Association of Surgeons of India (WB Chapter)

Members who had been with us

FOUNDER MEMBERS

Dr. Saroj Kumar Gupta Mr. Sankar Prasad Mitra Mr. Mohon Kumar Mookherjee Dr. Mihir Kumar Mitter Mr. Suvash Chandra Mitter Mr. Akshay Kumar Datta Mr. Purnendu Gupta Mr. Mihir Kumar Gupta Mr. Chitta Ranjan Das Mr. Chira Ranjan Das Mr. Saroj Sen Mr. Sukhamay Chanda Mr. Nagendra Nath Guha Mr. BishnuLal Banerjee Mr. Satya Ranjan Das gupta Mr. Debabrata Banerjee Mr. Prokash Chandra Sinha Mr. Bhupati Sinha Mr Surendra Ranjan Sarkar Mr Bhupati Chowdhury Dr. Ananda Mohan Datta Dr. Kiran Chandra Mukherjee Dr. Amalendu Roy Dr. Anantalal Mishra Dr. Bimal Chakraborty Mr. Pratap Kumar Sen Dr. Debi Mohan Bhattacharjee Mr. Asim Kumar Sen Dr. Jyotirmoy Chatterjee Dr. Diptendu Mukherjee Mr. Prantosh Kumar Dutta

Mr. Subhamoy Dutta Dr. Sujit Kumar Banerjee Mr. Gour Chandra Paul Dr. Sobha Ghosh Dr Amiya Prasad Majumdar Dr Prabhash Chandra Sengupta Mr Niranjan Kumar Dutta

Life Members

Mr. Ramesh Prasad Agarwal Mr. Vinod Kumar Neotia Mr. Nani Gopal Mitra Dr. HaradhanBasak Mr. Lakshmi KantaGanguli Dr. Durga Prasad Bhattacharyya Mr. Sunil Dass Mr. Birendra Nath Dasgupta Mr. Sunil Kumar Sarkar Mr. Dwijendra Bhusan Sen Mr. Hirendra Nath Dutta Gupta Mr. Ardeshir H. Sethna Ms. Bithika Banerjee Mr. Premananda Rai Choudhuri Mr. Kanak Kumar Sengupta Mr. Amal Prakash Sur Mr. Ajit Kumar Chatterjee Mr. Bhaskar Bhattacharjee Mr. Sudhir Kumar Dutt Ms. Haima Bala Debi Choudhurani Dr. Bidhan Chandra Chatterjee Mr. Radha Bhusan Bose

Mr. Sushil Kumar Dey Mr. Suresh Ranjan Roy Dr. Anadi Nath Daw Ms. Nalini Pal Mr. Ashish Sengupta Mr. Ajoy Ghoshal Dr. Subhas Chandra Dutta Mr. Sebastian Joseph Mr. Kamal Kumar Mitra Mr. Tapan Kumar Bose Mr. Mahendra Swarup Mr. Dipankar Dutta Gupta Mr. Sudhir Kumar Gangopadhyay Mr. Susanta Kumar Das Dr. Sarada Prasanna Ghosh Mr. Himangshu Krishna Mitra Mr. Probir Gupta Mr. Sachindra Kumar Mitra Mr. Abhoy Kumar Chakravorty Mr. Rupchand Mullick Ms. Monika Basu Ms. Durga Rani Bhattacharjee Mr. Auravinda Roy Choudhury Mr. Tarak Nath Ghosh Mr. Hirak Das Sarma Mr. Harendra Nath Ghosh Dr. Niranjan Ghosh Ms. Monika Mitra Mr. Kallol Dutta Mr. Amit Kumar Sen Mr. Swapan Das Gupta Mr. Bhagwati Prasad Goenka

Honorary Member

Rev. Subir K. Biswas & Mr. Satya Narayan Ray (USA)

6



Management

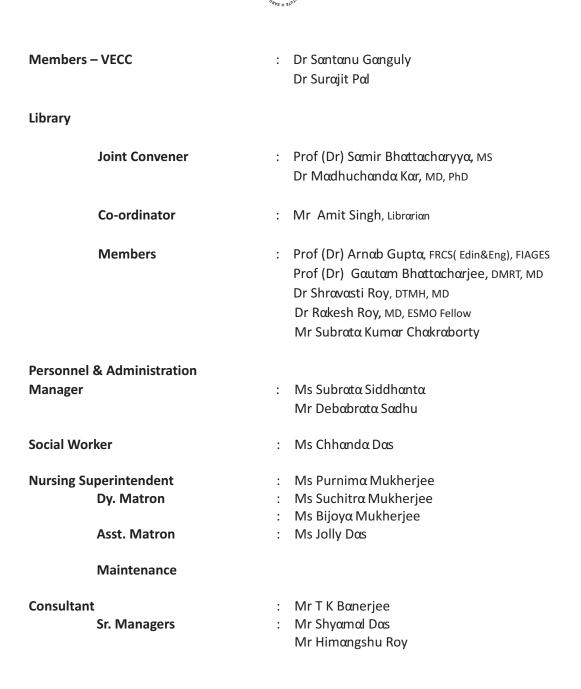
Secretary	:	Mr. Anjan Gupta, в Arch.(Са), MCP (IIT), M Arch.(USA)
Director	:	Prof (Dr) Arnab Gupta, FRCS (Edin, Eng), FIAGES
Medical Superintendent	:	Dr Partha Halder, мввs
Acting Dy. Medical Superintendent	:	Prof (Dr) Jnanabrata Sil, mbbs, dch, phd
Medical Administrator	:	Lt. Col. Dr. Rajarshi Sengupta, мввs, scgp, мва
Chief Coordinator,		
Communication & Development	:	Mrs. Ritα Dαs, ba, pgdbm
Sub-Committees		
Hospital Advisory	:	Mr. Anjan Gupta, Hony. Secretary Prof (Dr) Dr Arnab Gupta, Director Prof (Dr) Dr Gautam Bhattacharjee Dr. R.N. Ghosh
Finance Convenor Members	:	
Building		
Convenor	:	Mr. Jayanta Chatterji
Members	:	Mr. Anjan Gupta (Architect) Mr. Shib Sanker Mukherji Mr. B K Banerjee (Architect)
Representatives of Accounts	:	Mr. Santi Kumar Dey Mr. Subrata Kumar Chakraborty

Research Advisory Board :	 Mr. Anjan Gupta, B Arch (Cal).,MCP (IIT), M Arch.(USA) Prof. (Dr.) Arnab Gupta, FRCS (Edin. & Eng), FIAGES Prof. (Dr.) Gautam Bhattacharjee, DMRT, MD, Convener Prof. Bikash Sinha, BSc (CU), BA, MA (Cambridge), PhD, DSc (Lond), FINSA, FNAS, FNYAS, FIASc. Prof (Dr) Subir Dutta DCP, MD (Path), FIC Path, DBMS Prof (Dr) Manish S Chakraborty, MBBS, DCP, PhD Prof Sukhendu Bikash Bhattacharjee, Ph.D Dr Asok K. Ray, MD, FRCS, FACS, FICS, FAA, DEP Prof Siddhartha Roy, Ph.D, FNA, FASc Prof (Dr) Samir Bhattacharyya, Ph.D, FNA, FASc Prof Dr S C Pakrashi, PhD, D.Sc., FNA, FASc.T, FNASc (since deceased) Prof Runu Chakraborty, PhD Prof Bhabatosh Biswas, M.S, M.Ch ex-Vice Chancellor, WB Univ of Health Sciences Prof Partha P Majumder, PhD Prof ChitraMondal, PhD, FTWAS, FNA, FASc, FNASc, J.C. Bose National Fellow Prof. Samit Chattopadhyay, FTWAS, FNA, FASc, FNASc, J.C.Bose National Fellow
Research Sub-Committee :	Mr Anjan Gupta, B Arch. (Cal), MCP(IIT), M Arch. (USA) Prof (Dr) Arnab Gupta, FRCS (Edin. & Eng.), FIAGES Prof (Dr) Samir Bhattacharyya, MS Dr Rabindra Nath Ghosh, MRCPath Prof (Dr) Biman Chakraborty, FRCOG, FACS Prof (Dr) Gautam Bhattacharjee, DMRT, MD Prof (Dr) Gautam Bhattacharjee, DMRT, MD Prof (Dr) Saradindu Ghosh, MS Dr Shravasti Roy, DTMH, MD Dr Rahul Roy Chowdhury, FRCOG Dr Tanmoy Chatterjee, DGO, MD (O&G) Dr Nidhu Ranjan Mondal, DGO, MD Prof (Dr)Tamohan Chaudhuri, DMRT, MD Dr Dhrubajyoti Mukhopadhyay, DLO, MS Dr Rakesh Roy, MD Dr Sanjay Basu, MS,FRCS Prof Susanta Roychoudhury, Ph.D, FASe,FNASe, FASeT Dr. SomsubhraNath (Ph.D) Prof (Dr) JananbrataSil, MBBS, DCH, PhD

A CENTRE & AP

TO BAD DOWN A BIOLIS

Cancer Control	:	Prof (Dr) Arnab Gupta, FRCS (Edin. & Eng.), FIAGES
Palliative Care	:	Prof (Dr) Gautam Bhattacharjee, DMRT, MD Dr. Ramapati Sanyal, MD, DNB Dr. Rakesh Roy, MD, ESMO Fellow.
Institute Ethics Committee Chairperson Member Secretary Members	::	Honb'le Mr. Justice S.N.Talukdar Prof (Dr) Saradindu Ghosh, Medical Profession Prof (Dr) Arnab Gupta, Medical Profession Prof Dipak Kr. Nath, Person of Religion, Ethicist Prof (Dr) Samir Bhattacharyya, Medical Profession Prof Santanu Tripathi, Medical Profession, Pharmacologist Prof Susanta Roychowdhury, Basic Scientist Dr Madhuchanda Kar, Medical Profession Mrs Nupur Chakraborty, Social Workar Dr Adeline Basu, Medical Profession Prof (Dr) Krishnendu Gupta, Medical Profession Ms Soumi Banerji, Lay Person Ms Debjani Aich, Media Person Mr Krishnendu Halder, Legal Profession
Environment Monitoring Committee Chairman	:	Dr Arunabha Majumder
Members	:	Sri Subhash Guha Niyogi, Convenor Prof. (Dr) Tarak Mohan Das Prof. (Dr) Subhash Santra Dr R. K. Chakraborty Prof (Dr) Gautam Bhattacharjee Dr Pranabesh Sanyal, IFS Dr Partha Halder, Medical Superintendent, Dr Shravasti Roy, Dr Kalpana Karak(Paul) Representative of Local Body
Local Administrative Committee, RRMC		
Members - SGCCRI	:	Mr Anjan Gupta Prof (Dr) Arnab Gupta Prof (Dr) Gautam Bhattacharjee



(10)

Dote : 28.10.2019

Notice

Notice is hereby given to all the members of SAROJ GUPTA CANCER CENTRE AND RESEARCH INSTITUTE that **46th (Forty Sixtd) Annual General Meeting** of the Society will be held at our Centre at Mahatma Gandhi Road, Thakurpukur, Kolkata – 700 063 on December 22, 2019 (Sunday) at 10.30 A. M. to transact the following business.

SECRETARY

SAROJ GUPTA CANCER CENTRE

& RESEARCH INSTITUTE

AGENDA :

- 1. To confirm the minutes of the last Annual General Meeting.
- 2. To approve and adopt the report of the Governing Body / Managing Committee regarding working of the Society for the year ended on March 31, 2019.
- 3. To approve and adopt the audited accounts and report of the Auditors for the year ended March 31, 2019.
- 4. To appoint Auditors till conclusion of the next Annual General Meeting.
- 5. To transact any other business in the opinion of the members present, will be beneficial to the interest of the Society.



I. INTRODUCTION

The Governing Body/Managing Committee of Saroj Gupta Cancer Centre & Research Institute hereby presents its report of activities and audited accounts for the year ending on 31st March 2019.

The Governing Body/Managing Committee once again pledges its commitments towards pursuing the aims and objective of the Society. Saroj Gupta Cancer Centre & Research Institute has progressed further in Therapeutics, Academics, Prevention and Research on cancer.

All the Therapeutic, Diagnostic Departments and Ancillary Services of this Institute are running smoothly.

Due to our continuous efforts to upgrade our equipments and services, further tie-ups with various organizations continue.

In-house and Collaborative research activities with other Institutes and agencies continue successfully.



NABH Accreditation

The Institute has been granted Certification under Pre- Accreditation Entry-Level-Hospital program by National Accreditation Board for Hospitals for its services w.e.f October 2018.

Within a record period of 9 months, through intensive training, improved teamwork and regular workshops, with required infra-structural changes, the Accreditation process was completed.

The teamwork from employees of all categories helped in the process of this transition of quality awareness and service delivery.

With this Accreditation the Institute can now build upon its brand for further Quality Certifications in the National and International arena.



13

Events of 2019 for Annual Report

Biswabhara Praan (5th January 2019)

Like every year "Biswabhara Praan" was celebrated to commemorate the 13th Anniversary of Guru Shri Govindam Kutty in our auditorium on 5th of January 2019. The programme was graced by Dr (Prof) Mamata Roy, Principal of Bethune College as the Chief Guest, Ms Mandar Mukherjee of 'Antara', Aesthetic Therapy unit of Antara Psychiatric Centre, Gobindopur, & Mr Somnath Kutty of Kalamandalam. There were Classical dance performances by artists of Kalamandalam. The inmates of Therapy unit of Antara Psychiatric Centre, Gobindopur enthralled the audience with their performance.

World Cancer Awareness Day (4th February 2019)

On 4th February 2019, World Cancer Awareness Day was celebrated in our Institute auditorium. The theme this year was Survivors Meet for Head Neck & Ear Nose Throat (ENT), Cancers (Paediatric and Adults). There was a scientific discussion followed by an interactive session to encourage the patients and their families, diagnosed with ENT cancer and that it is curable with early detection & treatment. 50 survivors attended this event.

Some of our patients put up a cultural programme followed by **"Kabuliwala"**, a drama staged by **'Kromagoto Natya Sanastha**', directed by Mr. Gautam Bhattacharya and enacted by Dr B.D. Mukherjee and his team.

10th East Zonal Oncology Symposium (EZOS) 2019 (19th February, 2019)

In pursuit of academic excellence, like every year, Saroj Gupta Cancer Centre and Research Institute (SGCCRI) hosted the "10th East Zonal Oncology Symposium (EZOS)" under the ægis of Indian Association of Surgical Oncology (IASO), supported by the Bengal Obstetrics and Gynaecological Society (BOGS), on 19th January 2019, at the institute's auditorium. The theme of this year's symposium was "Clinical and Molecular Advances in Gynaecological Cancers". The conference focussed on the promising areas of clinical as well as basic research in the field of gynaecological cancers, and brought together researchers and clinicians in this field to foster exchange of ideas and establish collaborations. A large number of reputed scientists and clinicians from various organizations in India and abroad shared their knowledge in the field of gynaecological cancer. Of note, Prof Debabrata (Dev) Mukhopadhyay from Mayo Clinic, Florida, USA and Prof Nicola Curtin from Newcastle University, UK, delivered the prestigious "Dr. Saroj Gupta Oration" and "Mr. Henry Shaw Oration", respectively. Prof. Partha Basu from International Agency for Research on Cancer (IARC), France, Dr Subhra Biswas from A*STAR, Singapore and Dr. Chitta Ranjan Chowdhury from Queens Hospital, UK also graced the conference as the international invitees. Our national invitees from various parts of India also enlightened the conference with their vast knowledge and experience. Eminent clinicians and scientists of outstanding repute chaired various talks and discussions.

Thirty-four young researchers were selected for presenting their work in a poster format and displayed their novel findings in the clinical and basic cancer research; an expert panel of judges



selected three participants for "**Best Poster Presentation Award**" as well as "oral presentation". The conference also saw more than two-hundred participants from various Institutes, University and colleges from and around Kolkata. The organizing committee, comprising of Dr. Arnab Gupta, Director, SGCCRI and Prof. Biman Chakraborty, HOD, dept. of Gynaeoncology, SGCCRI as organizing chairmen and as organising Secretaries among others put their enthusiasm, effort, and expertise toward this symposium. Together, this symposium came out as a grand success.

Condolence meeting (5th April, 2019)

Condolence meeting in the memory of our Vice President, Mr Amit Sen was held in the Linac Seminar Hall on 5th of April, 2019. The Governing Body members & Staff of our hospital assembled to pay their last respect & homage to the departed soul. Members of the Governing body & Staff shared their experience of their association with Mr Sen.

Naboborsho (5th April 2019)

'**Naboborsho 1426**' was ushered in by a musical rendition by Smt Rageshri Das of CHETONA, a project of cultural outreach, of Shaili Academy of Music. This programme was followed by Poroshmoni", a drama by 'Belghoria Theater Academy', written by Shri Shyamakanta Das & directed and enacted by Dr Amitabha Bhattacharjee in the Hospital Auditorium on 5th April, 2019.

Mayo Clinic at SGCCRI (21 to 26th April, 2019)

The Governing Body of Saroj Gupta Cancer Centre & Research Institute, Thakurpukur, Kolkata hosted Dr Kabir Mody, Internationally renowned Medical Oncologist, Mayo Clinic, USA from 21st to 26th April, 2019. During the period of his stay, Dr Mody attended the Tumor Board and reviewed cases, attended Medical Oncology Clinic & Board, took Class for post graduate students. He delivered a popular talk on "The Challenges of Cancer in Present Day" at Radisson Hotel, Kolkata Meetings on Future collaboration in the field of Cancer Research & other fields.

International Nurse`s Day (13th May 2019)

Like every year, International Nurses Day was celebrated in the Nursing Block of SGCCRI on 13th May, 2019. Academic discussions, motivational speeches on the importance of modern nursing practices were highlights of the program. Our Nurses put up a very entertaining cultural programme.

9th Anniversary of Dr. Saroj Gupta (21st May, 2019)

9th Anniversary of our Founder Dr Saroj Gupta was observed on 21st May, 2019. A Blood Donation camp was held in-house. Many members of Management, Staff and patient-relatives voluntarily donated blood for our patients. There was a cultural programme by our Staff, paying tribute to our Founder.

Rath Yatra (4th July, 2019)

Like previous years the day was celebrated on 4th July, 2019 by our children who had decorated a chariot and pulled it inside our hospital premises. All patients were given Special diet to celebrate this auspicious day. Sweets were distributed to all the children and parents.



Inauguration of Female Paediatric Isolation Ward (31st July, 2019)

Rotary Club of Calcutta Presidency RI Dist 3291 & Governing Body of SGCCRI, Thakurpukur Jointly Inaugurated Female Paediatric Isolation ward at SGCCRI on 31st July, 2019. The old Swarup Down ward was reconstructed and upgraded with the help of the grant received from Rotary Club of Calcutta Presidency RI Dist 3291. The ward was Inaugurated by Smt Lata Devi Bajoria, DG Ajay Agarwal, Dist Governor, Dist 3291, Rtn P.K. Jain, President, Rotary Club of Calcutta Presidency. This was followed by a short programme at our Linac Seminar Hall, highlighting the charitable activities of SGCCRI.

Independence Day (15th August 2019)

Independence Day was celebrated like every year with Flag hoisting. Members of the Management, Staff and patient-relatives were present to commemorate the day.

Association of Radiation Oncology India, W.B Chapter Seminar (24th August, 2019)

Association of Radiation Oncology's West Bengal Chapter organized a half-day **CME on Gastrointestinal Malignancies** jointly with SGCC&RI on 24th August 2019 at the Linac Seminar Hall. Didactic lectures on Neuro-endocrine Carcinoma and latest evidences on treatment of Pancreatic cancer followed by case based Panel discussions. 53 Radiotherapists headed by the President of AROI (W.B) Dr Santanu Paul attended the CME along with Post Graduate trainees. This was followed by a hands-on-training on a Conventional Simulator for all the attending PGTs.

NATCON IASO 2019 (20th to 22nd September, 2019)

IASO was kind enough to give Saroj Gupta Cancer Centre & Research Institute (SGCCRI), Thakurpukur the opportunity to host the prestigious Annual National Conference NATCON for the 4th time. This was held in the brand new Hotel J W Marriott Kolkata from 20th to 22nd Sept, 2019 with a Pre-conference Live Workshop on 19th at SGCCRI itself.

The Highlights: 652 Registrations

- 13 Overseas Faculties (USA- James Howe, Chandrakanth Are, Amit Merchea, Donald Weaver, Edson Pontes, Ismail Jatoi; UK- Debasish Ghosh, Sumohan Chatterjee, Prokar Dasgupta, Talvinder Gill & Prem Thambi; Italy-Giuseppe Spriano; Japan-Takeshi Sano)
- Live Workshop: the following operations were done: D2 Gastrectomy by Dr Takeshi Sano, Partial Laryngectomee by Dr Giuseppe Spriano, Single Port Lap LAR by Dr Talvinder Gill & Dr Prem Thambi, 2 Oncoplastic Breast Surgeries by Dr Debasish Ghosh & Dr Sumohan Chatterjee, Videos on Chemoport by Dr Shuvro Roychoudhury & Lap Colo-rectal by Dr Amit Merchea. At the end there was a satellite Transmission from UK of Robotic Prostatectomy by Dr Prokar Dasgupta. The surgeries were all nicely demonstrated, the AV transmission was of High Quality and the Workshop was well attended. All the patients had uncomplicated recovery.
- The Main Conference (20th-22nd Sept) was divided into different halls on different days as per the specialty (H& N, Upper GI/ Thoracic, HPB/ Colo-rectal, Breast, Gynae, Urology & Orthopaedics) with options of single day registration so that many allied specialties could attend. Many of them became members of IASO.



- The Conference was inaugurated by Mayor Janab Firhad Hakim who also released the Souvenir. All the Overseas Faculties and IASO Past Presidents were felicitated by the Chief Guest. The cultural program that followed had the Children (undergoing treatment at SGCCRI) put up a festive theme based dance recital. This was followed by Ganesh Bandana by Dona Ganguly (wife of Sourav Ganguly) and her dance troupe Diksha Manjari. However, the Star attraction was Anjali Roy (17 yr old Cancer Survivor, an amputee) whose wonderful dances brought tears to the eyes of everyone present there.
- The following Orations were delivered: Motibhai Oration: Dr Takeshi Sano (Japan), Dr R S Rao Endowment lecture: Dr Giuseppe Spriano (Italy), Radhadevi Oration: Maj Gen Sanjay Kapoor, P B Desai Oration: Dr Ismail Jatoi (USA) and N C Misra Oration: Dr James Howe (USA).
- There were Award Videos, Keynote lectures, Debates and Panel discussions in each hall each day (theme based)
- In total there were 21 Award Videos, 34 Free Videos, 9 Award Papers, -26 Free Papers & 192 Posters
- After the GB meeting, the eminent young singer Kinjal got almost everyone on to the Dance floor with his popular Hindi songs
- The Gastronomic delights on all days, the Delegate & Faculty kits and mementos along with the Ambience of the Hotel were appreciated by all.

Inauguration of Solar Photovoltaic Power Plant (21st November, 2019)

Aiming towards making a "Green Hospital" and in order to keep up with the recent trends the hospital was in need of Solar Photovoltaic Power support. This was possible by the CSR Grant received from Exide Industries Limited. On 21st November, 2019, A 'Solar Photovoltaic Power Plant' was inaugurated by Shri Gautam Chatterjee, MD CEO of Exide Industries Limited along with Shri Samujjal Gaguly, CEO of Chloride Power Systems & Solutions Limited.

Children's Day (14th November, 2019)

The hospital has been celebrating Children's Day in a big way since 2002 to put smiles on the faces of children suffering from cancer. On 14th November, 2019 for the 19th consecutive year, a Sit & Draw competition was held for which all the participating children were given prizes. The competition was judged by eminent Artist Shri Somnath Chowdhury of Tulika Art School, who also spent time to teach the children how to sketch. The child patients put up a dance recital under the mentorship of Music therapist Ms Papri Saha. Members of Rotaract Club of Calcutta put up a musical performance followed by "Harbola" performance by Shri Ashutosh Senapati (a survivor). Eminent Singer Ms Somlata Acharya enthralled the audience with a musical extravaganza.

Founder's Day Celebration (5th December, 2019)

Like previous years, this year too Founder's day was observed on the 5th of December 2019, the 90th Birth Anniversary of our Founder Dr Saroj Gupta (46th Anniversary of SGCCRI). A Blood Donation Camp was organised in the morning for our In-patients. The programmed was marked with Garlanding the Statue of our Founder Late Dr. Saroj Gupta & Inauguration of our "**EKO-SGCCRI Nuclear Medicine Department**" was by the **Chief Guest, Dr Sashi Panja**, Hon'ble Minister of Women & Child Development Social Welfare (Independent Charge), Govt. of West Bengal. In the evening, Cultural Programme followed a Drama "**Varate Chai**" written by Sri Narayan Gangopadhyay, was staged by the members of the management & staff of this Institute.



iii. OUR ACTIVITIES

Α. **Medical & Allied Fields**

A.1. **Departments & Services**

This Comprehensive Cancer Institute has the following departments in the Medical and Allied fields:

1. **Major Therapeutic Divisions/Departments**

Radiation Oncology	Teletherapy- Linacs (with IMRT, IGRT,
	Rapid Arc, 3, DCRT),
	Brachytherapy
	Radio-lodine Therapy (with RRMC)
Surgical Oncology	
(Broad Division)	Gynecological Oncology
	Surgical Oncology
	 Head & Neck Surgery
	Peripheral Surgery
	• Breast Unit
	 Urology
	 Thorαcic Surgery
	G I & Hepatobiliary Surgery
	Orthopedic Surgery
	 Paediatric Surgery
	Plastic Surgery
	ENT Oncology
	Endoscopy Unit
	 Laparoscopy Unit
Medical Oncology	Chemotherapy
	Haemato-Oncology
	Paediatric Oncology
	Bone Marrow Transplant

2. Major Ancillary Departments

• Cardiology

- Nephrology
- Pulmonology
- Neurology
- General Medicine
- Dentαl



3. Major Diagnostic Departments:

Nuclear Medicine	Nuclear imaging
	Non-image based study unit
	In vitro diagnostic study unit
	Radio-nuclide therapy
Radiology	Conventional radiology including Digital Radiography
	Mammography
	Ultrasonology including Echocardiography, Color Doppler
	Computerized Tomography (CT Scan)
	PET-CT scan
	MRI,Dexascan (BMD)
	Image guided intervention
Pathology	Histopathology
	Cytopαthology
	Image guided core-needle biopsy
	Biochemistry & Marker Lab
	Immuno-Cyto- &Histo-chemistry Lab
	Microbiology
Molecular Diagnostics	Molecular Biomarkers

4. Major Ancillary Services

Nursing Service

Transfusion Medicine Service (Blood Bank)

Pain clinic and Palliative Care Service

Alaryngeal Speech Therapy Unit

Stoma Care Service

Breast Cancer Support Service

Psychological Support Service

Nutritional Assistance Service

Music & Art Therapy for Children

Stop Tobacco Clinic (NRT Clinic)

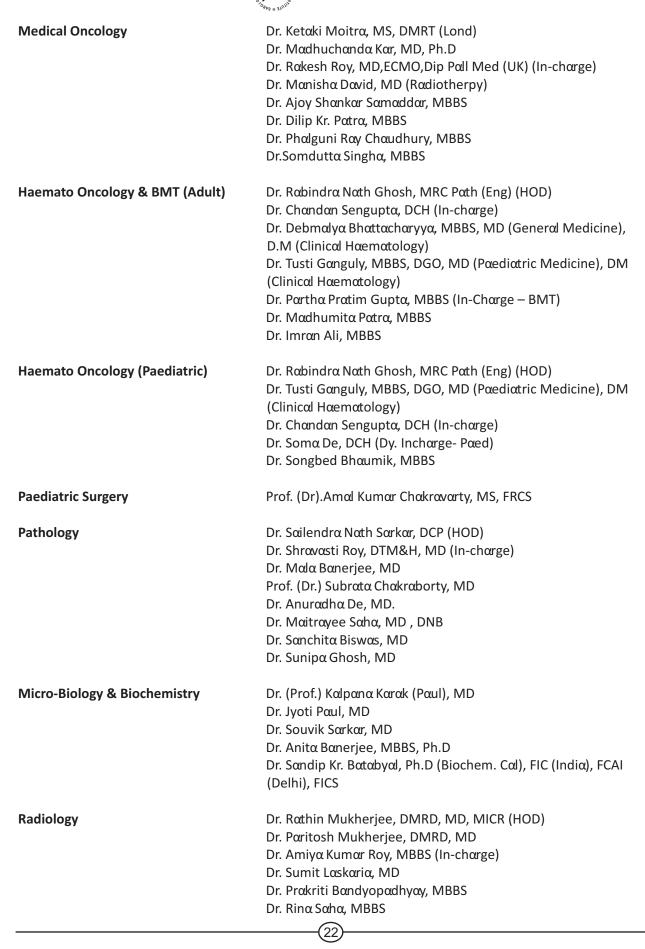


A.1. Departments & Personnel

Radiotherapy	Prof. (Dr.) Gautam Bhattacharjee, DMRT, MD (HOD) Prof. (Dr.) Tamohan Chaudhuri, DMRT, MD (Bom) (In-charge) Dr. Mahfuz Ariff, DMRT, MD (In-charge) Dr Sanmay Ganguly, DMRT (since deceased) Dr. Abhijit Sarkar, DMRT Dr. Somnath Sarkar, DMRT Dr. Soumadip Panda, MD
Surgical Oncology	Dr Samir Sen, MS (Advisor) Prof (Dr) Sarmir Bhattacharyya, MS (HoD) Prof (Dr) Saradindu Ghosh, MS (In-charge) Prof (Dr) Arnab Gupta, FRCS (Edin & Eng), FIAGES Dr Indranil Chatterjee, MS (Dy. In-charge) Dr Chayan Kr. Ray, MS, MCh Prof. (Dr.) Amal Kumar Chakravarty, MS, FRCS Dr Subhash Chandra De, MS Dr Sanjoy Basu, MS, FRCS Dr Sanjoy Basu, MS, FRCS Dr Arun Ganguly, MS, DNB, MCh Dr Adhish Basu, MS, MCh Dr Aditya Narayan Sen, FRCS Dr Subrata Kumar Sahu, MS, DNB (Surgical Oncology) Dr Syed Hassanujjaman, MS, DNB (Surgical Oncology) Dr Sudip Halder, MS (Gen.Surgery) Dr Shib Shankar Paul, MS (Addl RS) Dr Anubha Banerjee, MBBS Dr Soumitra Banerjee, MBBS Dr Bishakha Basu Roy, MBBS Dr Nirmal Chandra Barui , MBBS, DGO Dr Aishwarya Choudhury, MBBS
Orthopaedic Gastro Enterology	Dr. Dipak Roy Choudhury, D.Orth, MS (Orth) Prof. (Dr) Dhirendra Nath Guha Majumder, MD (Advisor) Dr. Indranil Saha, MD
Neurology / Neurosurgery	Consultants of CMRI, Kolkata
Endoscopy Unit	Prof. (Dr.) Arnab Gupta, FRCS(Edin), FRCS(Eng), FIAGES Dr. Indranil Saha, MD Dr. Sanjoy Basu, MS, FRCS Dr. Debanik Sarkar, MD (Physician) Dr. Shreyasi Maiti (Dhara), MBBS Dr. Saprativ Mondal, MBBS



Urology	Prof (Dr) Kalyan Kumar Sarkar, MS, FRCS (Edin) (Advisor) Dr. Sayak Roy, MS.,MCh.
	Dr. Sabyasachi Bose, DNB
Nephrology	Dr. D. N. Mishra, M.D., D.M., DNB (Advisor)
	Dr. Kaushik Das, MBBS, I.C.C.N (B.H.U.)
Anaesthesia	Dr. Anjali Sinha, DA (Lond) (HOD)
	Dr. Sudeshna Mondal, MD (In-charge)
	Dr. Subhasis Pradhan, MD
	Dr. Ajitesh Ghosal, FCCP DA
	Dr. Chinu Chowdhury, DA
	Dr. Sakuntala Chakraborty, DA., MD
	Dr. Paramita Sarkar, DA
	Dr. Kishore Kumar Bakshi, MBBS
ITU / MICU/ON-CALL	Dr Anjali Sinha, DA (Lond) (HOD)
	Dr Subhamoy Pal, MBBS (In-charge)
	Dr Subhasis Pradhan, MD (Anaesth)
	Dr Mrinmoy Mahato, MBBS
	Dr Avijit Pal, MBBS
	Dr Chandan Sarkar, MBBS
	Dr Debasish Bagchi, MBBS
	Dr Sanchita Sarkar, MBBS
	Dr Arka Raha, MBBS
	Dr Upasana Poddar, MBBS
	Dr Sourav Basu, MBBS
Gynaecology	Prof. (Dr.) Biman Chakraborty, FRCOG, FACS (HOD)
	Dr. Nidhu Ranjan Mondol, DGO, MD (In-charge)
	Dr. Tanmoy Chatterjee, DGO, MD (O&G)
	Dr. Rahul Roy Chowdhury, FRCOG
	Dr. Subhasish De, DGO
	Dr. Jaba Basak, MBBS
	Dr. Saswati Sorcar, DGO
	Dr. Upαsαnα Palo, MS.,DNB (O&G)
	Dr. Raparthy Mouna , MBBS
ENT	Dr. Dhrubα Jyoti Mukherjee, MS (ENT), In-chαrge
	Dr. Bhudeb Bhattacharyya, DLO, MS
	Dr. Indranil Chatterjee, MS.
	Dr. Md. Mamun, MS., Addl. RS.
Dental	Dr. Arun Kumar Mazumder, BDS (Cal)
Medicine	Dr. Debasish Roy, DTM&H (Cal) DTCD (Cal)
	Dr Buddhadeb Dasgupta, MD (Tuberculosis & Chest Diseases)
	Dr. Asim Kumar Karak,MD (Medicine)
	Dr. Pradip Paik, MD (Medicine)
	(21)





Interventional Radiology	Dr. Shubhro Roychowdhury, FRCS, FRCR European Board of Interventional Radiology
Nuclear Medicine (RRMC)	Dr. Santanu Ganguly, DRM (Section Head) Mr. Surajit Pal, M.Sc., DRP, Ph.D
Medical Physics	Mr A David Perianayagam , M Sc (Phys) DIP R P (BARC) YSF (TMH) DRSO Mrs Anisha Dey (Paul), MSc (Phys) Post MSc Dip (Med Phy) Ms Antara Saha, MSc (Phys) Post MSc Dip (Med Phy) Mr Subhash Halder,MSc (Phys) Post MSc Dip (Med) Phy)
Cardiology	Dr. Nirmalendu Nath, MD (Advisor) Dr. Prasanta Kumar Das, MD Dr. Gautam Das, Dip. Card Dr. Ankush Dutta, Dip. Card, FCCP, MRCP
Echo-Cardiography	Dr. Gautam Das, MBBS, Dip Card Dr. Prasanta Kumar Das, MD Dr. Ankush Dutta, Dip. Card, FCCP, MRCP
Palliative-Care & Pain Clinic	Dr. Sankha Suvra Mitra, MS, DNB, FRCS, FRCR (Overseas Advisor) Prof (Dr.) Gautam Bhattacharjee, DMRT, MD (HOD) Dr. Rakesh Roy, MD,ECMO,Dip Pall Med (UK) (In-charge) Dr. Suchanda Goswami, DMRT, MD (Bom) Dr. Ramapati Sanyal, MD, DNB (Anaes) Dr. Kuntal Ghosh, MBBS Dr. Asim Kumar Karak, MD,(Medicine) Dr. Dilip Kumar Patra, MBBS
Speech Therapist	Sri Ujjal Sinha Smt. Soma Sinha
Oncopsychology	Dr. Indrani Basu Mullick, Msc., Phd.
Blood Bank	Dr. Jnanabrata Sil, MBBS, DCH, Ph.D (Medicine) Dr. Ajit Kumar Pradhan, MBBS
Stoma Clinic	Cancer Fight Foundation
Breast Support Group	Hitaishini Ms. Bijoya Mukherjee (Past President) Ms Nupur Chakraborty (President) Ms Krishna Dutta (Hony Secy) Other Officers and members
Music Therapist	Smt. Papri Saha

Research Division



Prof. (Dr.) Samir Bhattacharyya, MS (HOD)

Prof. (Dr.) Arnab Gupta, FRCS (Edin & Eng), FIAGES (Chief , Cancer Control)

Prof. (Dr.) Gautam Bhattacharjee, DMRT. MD (Chief, Epidemiology & Registry)

Prof. Chitta Ranjan Chowdhury, PhD (Japan), MPH (UK), FFDRCS (Ire), BDS (DU), DND (DU) (Chief, Head Neck PHD & fellowship program)

Prof. Susanta Roychoudhury, Ph.D, FASc, FNASc, FAScT (Chief, Basic Research & Molecular Biology)

Prof. (Dr.) Saradindu Ghosh, MS (Member Secretary, Institute Ethics Committee)

Dr. Rahul Roy Chowdhury, MRCOG(Chief, Clinical Trial Site Administrator)

Dr. Tanmoy Chatterjee, DGO, MD (G&O) (Coordinator, Clinical Studies)

Prof. (Dr.) Biman Chakraborty, FRCOG, FACS

Dr. R N Ghosh, MRCP Path (Eng)

Dr. Sarbajit Das, MS

Dr. Nidhu Ranjan Mondal, DGO, MD

Dr. Tamohan Chaudhuri, DMRT, MD

Dr. Shravasti Roy, DTMH, MD

Dr. Dhruba Jyoti Mukhopadhyay, MS (ENT)

Mr. Somsubhra Nath (Ph.D) (Scientist)

Mrs. Fenella Simone Anthony(D'cruz) (Office Co-ordinator)

Ms. Srijoni Sarkar (Research Co-ordinator)

Medical Records & Statistics

Prof. (Dr.) Samir Bhattacharyya, MS (HOD) Dr. Gautam Dasgupta, MBBS, DCH (Medical Officer- Research) Dr. Soumitra Banerjee,MBBS Mr. Debashis Banerjee Mr. Shambhu Das Mr. Chanchal Sarkar

Cancer Control

Prof. (Dr.) Arnab Gupta, FRCS (Edin & Eng), FIAGES



DNB Students		
Radiotherapy	Dr. Sourav Banerjee, MBBS	
	Dr. Krishnα Tejα M, MBBS	
	Dr. Himanshu Pruthi, MBBS	
Surgical Oncology	Dr. Madhabathula Santosh, MS	
	Dr. P. Bharath Kumar, MS	
	Dr. Ranveer Singh Rana, MS	
	Dr. Dhananjay Mansing Patil, MS	
	Dr. Parth Ketan Kumar Shah, MS	
	Dr. Manish Kaushik, MS	



A.3 Turnover of Patients

The following table gives an overview of the turnover of patients (male, female and children) at this Institute during the year 2018-2019

A.3.1. Out-Patient Service

Parameter	Total
New Patients Registered (Male 5,666; Female 5,606)	11,272
Total Number of OPD Consultation (New11,272; Old Follow-up 35,580) (Male 22,535; Female 24,317)	46,852

YEAR	OPD Consultation	Total
	NEW + OLD	
2016-17	11,087 + 43,234	54,321
2017-18	10,453 + 44,748	55,201
2018-19	11,272 + 35,580	46,852

A.3.2.Out-Patient Service: Department-wise Registration

		DECICEDATION	DECISTRATION	TOTAL
	DEPARTMENT	REGISTRATION	REGISTRATION	TOTAL
		(MALE)	(FEMALE)	
Radiation C	Dncology	852	596	1448
ENT		467	103	570
Gynecology	/	00	730	730
Hemato-on	icology	590	322	912
Palliative C	are	32	21	53
Medical Or	ncology	193	140	333
Surgical	Head & Neck	441	171	612
Oncology	Breast	19	781	800
	Gastro Intestinal	783	544	1327
	Urosurgery	360	38	398
	Orthopedic	100	61	161
	Others	575	520	1095
Miscellane	ous +RRMC=2,140 + 693	1,254	1,579	2,833
TOTAL		5,666	5,606	11,272



D	EPARTMENT	2015-16	2016-17	2017-18
Radiation O	ncology	1414	1085	1,448
ENT		599	594	570
Gynecology		720	718	730
Hemato-ond	cology	871	783	912
Palliative Ca	are 21	43	53	
Medical Ond	cology	287	261	332
	Head & Neck	653	630	612
[Breast	783	780	800
Curreical	GI	1385	1331	1327
Surgical Oncology	Urosurgery	408	395	398
Checkey	Orthopedic	196	196	161
	Others	980	1326	1095
Miscellaneo	us+ RRMC	2,770	2311	2,833
TOTAL		11,087	10,453	11,272

A.3.3 Our Progress Out-Patient service: Department-wise Registration

A.3.4 In-Patient Service (Admission)

Age Group	Male	Female	TOTAL
Pediatric (0-14 yrs)	602	403	1,005
Adult (15+ yrs)	8,174	8,449	16,623
TOTAL	8,776	8,852	17,628

A 3.5 Our Progress In-Patient (Admission) Service:

YEAR	Age Group	TOTAL	Age group	TOTAL	GRAND
					TOTAL
2016-17	Pediatric (0-14 yrs)	1,135	Adult (15+ yrs)	15,886	17,021
2017-18	Pediatric (0-14 yrs)	1,296	Adult (15+ yrs)	15,674	16,970
2018-19	Pediatric (0-14 yrs)	1,005	Adult (15+ yrs)	16,623	17,628

A.3.6 In-Patient Death

During the period, 450 admitted patients (2.55%) have expired out of 17,628 admitted patients. Most were in advanced terminal stage.

A.3.7 Total Indoor Beds

At present, this Institute h α s 311 indoor beds.

A.3.8 Comparative study of detected and treated cases of past three years at our Centre is furnished below in form of Table and Bar Chart.

Year	New Cases Registered	Malignancy Detected
2016-17	11,087	6,603
2017-18	10,453	6,379
2018-19	11,272	8,326

ANALYSIS OF MALIGNANT CASES DETECTED AND TREATED IN SGCCRI



A.4 Important activities of Major Therapeutic Divisions/Departments

A.4.1. Department of Radiation Oncology

Radiation oncology department is equipped with various state of the art machines such as :

- 1. Two Telecobalt units (Theratron Elite 80 and Panacea Bhabhatron II)
- 2. Two linear accelerator units (Simens Primus 6X (3D CRT) and 3 Electrons & Varian Unique Performance 6X (3D CRT, Dy-IMRT, MV-IGRT, RapidArc) \
- 3. One remote after loading Ir-192 HDR Brachytherapy unit (Microselectron HDR) Elekta
- 4. 3D-Treatment planning systems
 - Eclipse V13.7 EBRT-6MV Photon -commissioned for Varian Unique
 - 3D Conformal Radiotherapy (3D CRT)
 - Dynamic Intensity Modulated Radiotherapy (Dy-IMRT)
 - Image Guided Radiotherapy (MV-IGRT)
 - Volumetric Modulated Arc-therapy VMAT (RapidArc)
 - OncentrαV4.5–EBRT- Only commissioned for Siemens Primus
 - 3D Conformal Radiotherapy (3D CRT)
 - Palliative RT
 - Conventionαl RT
 - Oncentra V4.6-3D Image Based HDR Brachytherapy
 - CT Image based 3D ICRT(Intracavitary)
 - CT Image based Vaginal Cylinder
 - CT Image based ILRT (Introluminal)
 - CT Image based 3D ISBT (Interstitial Brachytherapy)
- 5. Machine QA & Patient Specific QA Dosimetric Equipements PTW, Germany
 - 0.6cc Thimble/Farmer type Ionization Chamber 2nos
 - 0.05cc PPC, Markus Ionization Chamber 1no
 - Well type Ionization Chamber 1 no
 - Unidose E Elecktrometer 2nos
 - 3D RFA with 0.125cc solid State Chambers for Beam Parameter Measurements

28



- TPR20/10 Daily QA phantom
- Quickcheck Daily QA Device
- 2D LDA with Octavius 4D Phantom for Patient Specific QA of IMRT & RapidArc
- EPID Dosimetry for Patient Specific QA of IMRT & RapidArc
- Water Phantom for absolute dose measurements
- One conventional treatment simulator Panacea Conventional Simulation Patients Simulated during April 2018 to March 2019 is 151 (Apr-34, May-20, June-21, July-15, Aug-13, Sep-13, Oct-05, Nov-07, Dec 02, Jan-01, Feb-03, Mar-17)
- 7. CT Simulator Diagnostic CT (Siemens-Somotom) machine is used for Simulating all advanced treatment techniques

Of these machines, the Varian Unique Linear Accelerator is the latest which was installed on 5th December 2016. This machine can deliver radiation using the latest available techniques like IMRT, MV-IGRT & Rapid Arc conformal methods. With these sophisticated radiations modalities, our centre is now at par with any other modern Radiation Oncology Centre in India.

- 8. Gamma Irradiation Chamber with Cs-137 source (3049 Ci on 2nd June 2018) is installed by BRIT (11th July 2019) and commissioned for Blood component Irradiation.
- 9. Moving LAP Laser has been installed and used for patient alignment during CT Simulation.

Turnover of patient (April 2018-March 2019)

Telecobalt units: 330 (Cobalt II) + 574 (Cobalt I) = 904 Conventional Simulation: 151 Linac units: 654 (3DCRT – 353, IMRT – 190, Conventional – 98, Rapid Arc – 07, IGRT - 06) Brachytherapy unit : 207 Total: Radiotherapy Department: 1765 Last Three Years Patient Turnover

Therapy Units	2015-16	2016-17	2017-18	2018-19
Linear Accelerator Units	474	487	491	654

Academic activities:

- We are a recognized DNB (Radiotherapy) teaching centre. This year three of our students Dr. Rupesh Reddy, Dr. Vishnu Reddy and Dr. Sanchayan Mandal have cleared DNB final (theory & practical) examination. We run a 2 year diploma course for Radiotherapy technicians (DRT course) under the supervision of WB State Medical Faculty
- 2. Doctors and Medical physicists regularly present their activities in different scientific forums. Scientific papers & reports were already published or under review (for publication in near future) for publication in peer reviewed journals.
- 3. Our medical physics unit is recognized by BARC & AERB (Atomic Energy Regulatory Board) for one year internship program for newly graduated medical physicists.
- 4. We upgraded our Brachytherapy Treatment planning system from version 4.3 to 4.5.3
- 5. We started CT based 3 Dimensional Treatment Planning of Intracavitary Brachytherapy for cervical cancer patients.
- 6. We provide three months training programme for the M.Sc & B.Sc students of Medical physics (Gano University, Bangladesh & Anna University, Tamil Nadu).
- 7. We provide one/three months training program for the B.Sc students of Radiotherapy Technology (TripuraInstitute of ParaMedical Science).
- 8. Our department is attached with an International Trial Collaboration with University College of London Hospital (UCLH) & Cancer Research UK (CRUK). The title of the Interlace trial is "A phase 111 multicenter trial of weekly induction chemotherapy followed by standard chemoradiation versus standard chemoradiation alone in patients with locally advanced cervical cancer"



Future plans:

- 1) Two high-end Linac machines have been proposed to replace our old Siemens Linac machines to introduce state-of-art technology in Stereotactic Radiotherapy as well as other modern protocols in Radiation Oncology. CSR funding has been approached from large corporates in order to avail of this technology.
- 2) Since our existing model version of MicroSelectron HDR Ir-192 is outdated and the vendor stopped the model for the future use, we are in a position to purchase a new model of HDR Brachytherapy equipment. Our HDR bunker is constructed for Co-60 Source, we can have the option for purchasing Co-60 based HDR Brachytherapy unit. The currently available model from Elekta is Flexitron and Multisource & Gynesource from Eckert & Ziegler BEBIG. The main advantage of Co-60 based HDR unit is one source can be used up to 5years, so there won't be any frequent source import & export documentation and delays.
- 3) The Radiotherapy department must have its own CT scan unit or CT Simulator for simulating all 3D image based treatment.



A.4.2 Department of Surgical Oncology

The new state of the art OT complex consists of 5 advanced Operation Theatres and an annexed 8-bedded ITU. The Surgical Oncology Department is equipped with ultra-modern gadgets like Operating microscope, CUSA, Harmonic Scalpel, Intra-operative Ultrasonography, Radio Frequency Ablation and Tissue Link. We can now perform a number of Complex Surgeries, such as that of liver, pancreas, esophagus, and also other advanced oncologic surgeries.

With procurement of technologies like the operating microscope and the oscillating saw, the number of reconstructive and endolaryngoscopic procedures have got a boost. Our surgeons have been trained in reputed centresin India and abroad and the outcomes of such surgeries are encouraging.

With the full set up for advanced Liver surgery including CUSA (which was donated by Rotary Club of Calcutta Metropolitan, Singapore and The Rotary Foundation), Harmonic Scalpel, Intra-operative Ultrasonography, Radio Frequency Ablation and Tissue Link, Liver surgery has become much easier and is routinely performed with good results.

Laparoscopic surgeries are now done for GI, Urology and Gynaecological cases, enabling patients a quick, painless recovery with HD Laparoscopic setup (Courtesy: Indian Oil Petronus)

With the regular use of LASER surgery, especially for early cancers of Head & Neck region, patients are able to avail of a new modality of surgical service.

Radio Frequency Ablation is performed for inoperable Liver and Lung cancers.

Endoscopy:

The activities in the Endoscopy department are increasing each year. The numbers of cases and the types of procedures have significantly increased over the past few years. We are now routinely performing Upper GI Endoscopy, Colonoscopy, Bronchoscopy, Fibre-optic Laryngoscopy, Nasal Endoscopy and ERCP. All kinds of therapeutic procedures are now performed, including biliary, esophageal, pyloro-duodenal and colonic stenting, dilatation, polypectomies, PEG etc.



Overall Performance during 2018-19

	TYPES OF PROCEDURES	Nos
BIOPSIES	General TRUS guided biopsy	250
MINOR OPERATIONS	Various minor operations under L/A or G/A	<u> </u>
	HEAD & NECK SURGERY (includes radical procedures for different oral cancers, plastic reconstructions, laryngectomies, thyroidectomies, radical neck dissection,)	218
	BREAST SURGERY (Includes Breast conservation and Oncoplastics , Radical and Modified Radical procedures)	202
MAJOR & SPECIAL OPERATIONS	GASTRO INTESTINAL SURGERY (Includes different operative procedures for cancers of the digestive organs mainly stomach, esophagus, pancreas, liver, intestine inclusive of rectum and other abdominal tumors – both open and laproscopic)	214
	GENITO URINARY SURGERY (Includes operations for male genitalia, kidney, urinary bladder, prostate and transurethtral procedures)	57
	GYNAECOLOGICAL SURGERY (includes surgeries for uterus, cervix, οναry αnd vulvα)	80
	OTHERS (Includes various others procedures like Thoracic Surgery, wide excision of tumour, amputations, plastic operations for skin cancers etc.)	52
	Intracavitary Brachytherapy	42
	TOTAL	865

32)

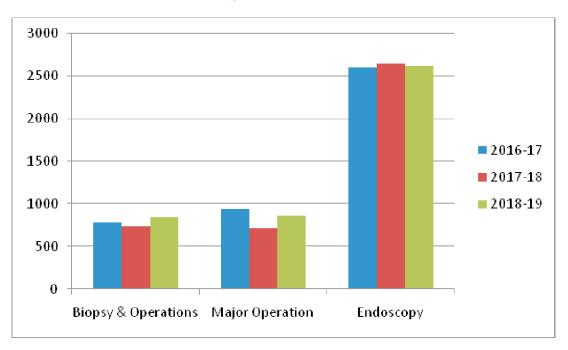


	TYPES OF PROCEDURES	Nos
ENDOSCOPY	Cystoscopy	270
	Colposcopy	36
	Broncoscopy	94
	Colonoscopy	438
	UGI Endoscopy	558
	Laryngoscopy	740
	Nasal Endoscopy	142
	E.R.C.P. stenting	120
	Endoscopy Guided Stenting	00
	Oesophageal (08), Duodenal (18)	29
	Endoscopy guided Ryles Tube Insertion	69
	FOL Ryle's Tube Insertion	92
	Polypectomy	11
	Colonoscopic dilatation	08
	UGI Dilatation	18
	TOTAL	2625
GRAND TOTAL	MINOR & MAJOR SURGERIES & ENDOSCOPY	3470

Performance of 3 years of Surgical Oncology Dept.

Parameter	2016-17	2017-18	2018-19
Biopsy & Minor Operation	787	739	845
Major Operation	939	721	865
Endoscopy	2602	2655	2625





WHAT'S NEW

- 1. Micro-vascular free flap reconstruction for Head & Neck cancer surgeries. Plan to extend it in other ablative cancer surgeries.
- 2. More extensive R0 resections for ovarian cancers.

Future Plan:

- 1 Increase patient turn-over by optimizing bed and operation theatre utilization.
- 2 Increasing presentations and publications from the department.

Renovation of OPD Building

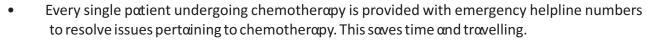
The Out Patient Dept. inaugurated in 1977, has recently been renovated providing a comforting ambience with central air conditioning for patients. This was made possible with the help of **Indian Oil Petronas**. This includes expansion of Medical Oncology Day Care Unit, Admission Office and Surgical OPD. An elevator has also been installed for the easy ambulation of sick patients. A **Second pharmacy** has also been created for the outpatients.

34



Department Of Medical Oncology

- The Medical Oncology department comprises of the DAYCARE centre, Outpatient and Indoor admission facilities.
- The DAYCARE centre deals with patients who are discharged on the same day after completion of chemotherapy. The DAYCARE centre is equipped to perform emergency procedures like ascitic fluid and pleural fluid drainage. An average of 70 patients is seen daily, 6 days a week. The patient pool comprises of new patients, patients currently undergoing chemotherapy and patients on follow up. Medical Oncology team decides what chemotherapy is to be given, the schedule and the number of cycles. The line of management is decided by Multidisciplinary Tumour Board.
- A Specialist Sister In-charge has been deputed in order to facilitate the chemotherapy administration. Queries of patients and caregivers regarding timings, appointments, investigations are being dealt very nicely. This has definitely increased patient and caregiver satisfaction.
- An important and patient-friendly strategy is the administration of ultra short duration of chemotherapy drugs, growth factors, bisphosphonates, hormonal analogues in the second half, thereby reducing long waiting hours.
- Extending day care hours has made it possible to administer some very long and intense protocols (> 5 hours) on a single day. However the charges have been kept nominal. This has led to a greater availability of Indoor beds for surgical and emergency patients and is immensely saving time of the attendants and caregivers who accompany the patients for chemotherapy.
- Overall the comfort level of the patients has definitely improved. It is now a centrally airconditioned unit with soft relaxing music running in the background. Recently a small library has been installed within the day-care centre to keep patients engaged during chemotherapy. Books on improving patient awareness and care during treatment of cancer, written in very simple language are readily available.
- Thanks to the free counseling offered by Group called "Hitaishini" for breast cancer affected patients. There are numerous breast cancer survivors who have health-related issues. All these are addressed by Hitaishini, The Dept of Psychology offers counseling for patients of all categories. The anxieties related to adverse effects of chemotherapy are effectively dealt with. This really has boosted the spirit and determination of patients.
- Regular dietary counseling for patients on chemotherapy has been initiated. Nutrition is an important part of treatment which oncologists tend to ignore. Additional nutritional advice has definitely improved the body weight and physical well being of some of the patients.
- The Medical Oncology dept works in α very coordinated fashion with the Dept of Pain & Palliative Care for quick symptom relief even if the patients are in early stage.
- Hand-held printouts depicting the DO's and DONT's for patients undergoing chemotherapy are being distributed to every single patient from the Day Care. This has taken care of most of the queries from patients and caregivers.



- The department designs protocols for adult patients having solid tumours and a few pediatric patients with refractory non-hematological malignancies.
- Periodically the department has been involved in "Train the Sisters" program. The sisters are taught basics of anticancer drugs, how to improve chemotherapy administering skills and combat spillage of toxic drugs.
- Apart from chemotherapy Biologics, targeted agents and iron infusion are also being given from the DAYCARE facility.
- Holiday rounds are prefixed to avoid inconvenience to the patients.
- Greater number of patients with stage IIIA Non Small Cell Lung Cancer are getting concurrent chemo-radiation. Thanks to the joint effort of the Dept of Radiation Oncology and Medical Oncology. The numbers were much less in the previous years.
- Greater use of chemoport devices. This device is mainly used for patients who need long infusions and long term chemotherapy.
- Once monthly departmental meetings are conducted to improve quality of service and better evidence based management. Case based discussions and short Oncology presentations are carried out every month.
- The department has access to continuous supply of latest edition of Peer Reviewed Journals. Common journals being Annals of Oncology, Lancet and Journal of Clinical Oncology.
- Dr M Kar, Dr Maitra and Dr R Roy have been invited as Speaker or Panelist in several national Cancer Symposiums. They also serve as active members of different prestigious advocacy bodies. The department are currently pursuing cancer treatment based research.
- The Medical Oncology department has also been involved in Global Clinical Trials in Lung Cancer.

WHAT'S NEW ?

- *i.* Biosafety Cabinet: ensures mixing and preparation of chemotherapeutic agents in a safe and sterile environment.
- *ii.* Compartmentalization of the Day Care area: Consultation area and drug administration area are separated with a glass partition ensuring constant monitoring of patients undergoing chemotherapy.
- *iii.* Specialized automatized and adjustable couches for easier administration of chemotherapy have been installed. These couches save space and facilitate higher number of procedures.
- iv. Updated AJCC staging charts and chemotherapy manuals are available.
- v The department has been involved in high quality clinical research work which has received recognition in the form of acceptance for oral presentation national symposiums.
- *iv.* The latest addition in treatment of cancer care " Immunotherapy" has been recently initiated. Immunotherapy is the future of cancer chemotherapy.



Total number of patients receiving chemotherapy at DayCare 2018-2019

April 2018	440
Μαγ 2018	380
June 2018	500
July 2018	501
August 2018	475
September 2018	384
October 2018	310
November 2018	554
December 2018	463
Jan 2019	542
February 2019	520
March 2019	440
Total	5709

Total number of new patients registered under Medical Oncology 2018-2019

April 2018	32
May 2019	28
June 2018	33
July 2018	18
August 2018	26
September 2018	34
October 2018	32
November 2018	22
December 2018	32
Jan 2019	24
February 2019	22
March 2019	38
Total	341



Total	6830
March 2019	628
February 2019	422
Jan 2019	682
December 2018	615
November 2018	500
October 2018	472
September 2018	528
August 2018	578
July 2018	610
June 2018	618
May 2018	615
April 2018	570

Total number of patients (new and old) consulting Medical Oncology 2018-2019

Paediatric Oncology Unit :

Majority of the children presented with Haemato-Lymphoid malignancies, followed by bone tumours (Ewings / PNET, Osteosarcoma), Retinoblastoma, Neuroblastoma, Wilms tumour and brain tumours. The survival data of the Haemato-Lymphoid group is good whereas, the prognosis of the solid tumours are dismal as they present mostly with distant metastasis. The survivorship of Retinoblastoma patients has improved as the awareness programmes and support from Cankids- Kidscan has been very strong and they are carrying this initiate to the next level. Now the RB patients are presenting early and therefore are surviving.

Future plans for the Paediatric Oncology Unit.

- 1. Comprehensive long-term follow-up clinic with multiple specialities like Endocrinology, Paediatric Neurology, Paediatric Cardiology, Psychology, Dentistry, Audiometry.
- 2. CTVS services.
- 3. Rehabilitation Clinic for the survivors needing special assistances (psychological / physical).
- Enrollment in multicentre trials / studies. Currently SGCC&RI is enrolled in the Trusty hospital category of Nation-wide study involving children 0-18 years of age- in The "ACCESS" study from September 2019.

Notable activities in Paediatric Oncology (2018-2019)

- 1. Bengali New Year celebration 16.04.2018 attended by children and their families, department staff and NGO staffs.
- 2. Nurses Day and Rabindra Jayanti 12.05.2018
- 3. 1st Quarter Parent Support Group (PSG) Forum 29.06.2018 attended by all treatment ongoing families, New patient families Doubt-clearing sessions, Do's and Don't's from family members' point



of view, as also psychological support and letting the family members know that they are not alone.

- 4. Doctors Day 02.07.2018
- 5. Rath Yatra 14.07.2018. Unique feature of our programme: Children from all religious beliefs take part freely every year, providing an atmosphere of joy and communal harmony.
- 6. Independence Day 16.08.2018 marked by patriotic songs and dances, children from Bangladesh and other neighboring countries also took part.
- 7. Raksha Bandhan 27.08.2018. Commemorating friendship and brotherhood amongst children and their families.
- Janmastami 03.09.2018. Programme with song and dance depicting Raash Lila of Krishna and Radha. Children were decked up as Krishna, Radha and their Sahachari. Goodies were distributed by Cankids.
- 9. Teacher's day 05.09.2018 organised by the in-house teachers of Cankids emphasizing the values of education for children.
- 10. 2nd Quarter of PSG Forum meeting 07.09.2018
- 11. Nutrition Week (01-07.09.2018) organized by Cuddles foundation (looking after the year-long nutritional needs and evaluation of children with cancer)
- 12. Durgα Pujα 15.10.2018 before the festival commenced, α mini Durgα idol prepared by our childhood cancer survivors, was worshipped in full splendor. This was to enlighten those who could not leave hospital during the festival due to the treatment
- 13. Diwali and Bhaiya Day 6.11.2018 There was a bright programme complete with release of fire lanterns from the lawn in the Children's Park. The entire building was decked up with lights ushering in good health and cheer
- 14. Children's Day 14.11.2018 day-long programme for children complete with drama, songs, play activities, drawing competitions, prize distributions and goodies hampers distribution
- 15. Christmas Eve 24.12.2018 to usher in the joy and spirit of Christmas carols, magic shows, fun activities were arranged
- 16. 3rd Quarter of PSG Forum 28.12.2018
- 17. Republic Day Celebration 26.01.2019
- 18. Basant Panchami 09.02.2019 Saraswati Puja Celebration
- 19. ICCD 15.02.2019 International Chilhood Cancer Day Celebration. Spreading the message of Hope that childhood cancer is curable. Prioritising childrens' health issues were emphasized , families educated and question and answer session held
- 20. 4th Quarter PSG Forum 08.03.2019 unaddressed issues were discussed. Areas of next budget priorities were identified by Cankids organization
- 21. Besides these musical programmes, magic shows, puppet shows, origami sessions, Birthday parties are regular source of entertainment for our children with cancer.

Parameters Age(0-14)	Male	Female	Total
Indoor admission	602	403	1005
New Registration	105	66	171
Follow-up	586	396	1005
Total Patients In OPD			
(New & Follow-up)	691	462	1176



Attendance in the Paediatric Oncology Day Care Centre.

Months	Patients
April-18	105
Μαγ-18	95
June-18	169
July-18	166
August-18	163
September-18	120
October-18	130
November-18	118
December-18	89
January-19	148
February-19	124
March-19	106
TOTAL	1533

Total number of patients (new & old) consulting Pediatric Oncology 2018-19

April-18	84
May-18	105
June-18	123
July-18	102
August-18	99
September-18	89
October-18	88
November-18	86
December-18	97
January-19	99
February-19	108
March-19	96
TOTAL	1176

WEST BENGAL	NEIGHBOURING States (NBS)	NEIGHBOURING COUNTRIES(NBC)	STATE TOTAL
81	28	62	171



Bone Marrow Transplant Unit:

The bone marrow transplant is functional since August 2012. Till date a total of 58 cases of Autologous Transplant have been done in this unit (Multiple Myeloma – 46, Relapsed NHL – 4, Acute Promyelocytic Leukemia – 1, Relapsed HL – 5 and Plasma Cell Leukemia – 1). 9 BMTs have been performed between November 2018 to October 2019 (Multiple Myeloma 7, Hodgkin Disease 1 and NHL 1). Majority of Multiple Myeloma patients are doing very well and 34 out of 44 Multiple Myeloma patients are found to be in complete remission at the last follow up. It is also important to note that during this period, the BMT unit has been well utilized for isolation and barrier nursing for the management of high risk patients like AML and Aplastic anemia. There are many more patients lined up for Autologous Transplantation to be done early next year. Our goal is to keep up the good work and to start working on allotransplant program that is where the future of Bone Marrow transplantation lies.

We remain grateful to Mr. S.S.Mukherjee for funding our BMT Unit in memory of his wife Mrs. Bithika Mukherjee . We also acknowledge the support of Indo-American Cancer Association for training Dr. Partha P. Gupta in Gujarat Cancer Research Institute & thereafter in the USA.

In order to advance & further to equip the unit we have already procured another Cell Separator from the grant we received from S.S.Mukherjee. We also have received grant for a Blood irradiation from DAE.

We organized an awareness programme through a Press Meet in Press Club on 28th June 2016 after completion of 25 consecutive successful Autologous Bone Marrow Transplants which was well covered in different Print and Electronic Media. Joining of 2 DMs in Haemato oncology – Dr Debmalya Bhattacharyya and Dr Tusti Ganguly has given a major boost to Haemato oncology Department both Adults and Children.

We hope that very soon our centre will become a recognized referral centre in Eastern India for BMT.

41



ACTIVITIES OF THE REGIONAL RADIATION MEDICINE CENTRE, VECC, YEAR-2018-19

Introduction:

The Regional Radiation Medicine Centre (VECC), Kolkata was set up by the Department of Atomic Energy in the year 1989, in collaboration with the CCWHRI, Thakurpukur.

The present activities of the RRMC include Nuclear Imaging, I-131 Uptake and Radionuclide Therapy.

Nuclear Imaging:

At the RRMC Nuclear Imaging is performed on the Dual Head Gamma Camera (INFINIA).

Routine static imagings performed include Whole Body Skeletal, Thyroid, Liver, Renal cortical and Large Dose I-131 Scans.

Routine dynamic imagings being performed include Renal Dynamic study,

Hepato-biliary, GI bleeding study, 3-phase skeletal imaging, etc.

SPECT studies of the skeletal system are also being performed sometimes.

Occasionally more sophisticated studies like, Parathyroid Imaging and Neuro-Endocrine Tumor Imaging are also being carried out.

Iodine I-131 Uptake :

Thyroidal lodine -131 uptake studies for various diseases of the thyroid gland are being performed regularly at the RRMC.

Around 10 no, of patients underwent i-131 Uptake Studies every month.

Radio Nuclide Therapy:

- I) Low dose I-131 therapy of Thyrotoxicosis (up to 15mCi of I-131)[on OPD basis] is being carried out regularly.
- ii) Around 121 no. of patients underwent I-131 Therapy of thyrotoxicosis during this year.
- iii) High Dose I-131 therapy for Cancer Thyroid patients is, also being carried out regularly.
- iv) A total of 20 no. of patients of Cancer of Thyroid were administered I-131 therapy at RRMC during this year (on IPD basis).

EKO Xray in collaboration with SGCCRI has set up another Nuclear Medicine Dept. in the 1st floor of EKO-SGCCRI PET-CT building. Latest generation SPECT machine has been installed which can undertake radio isotope scan of thyroid, bone, kidney etc. This dept. also houses Radio-Iodine therapy facility (both high and low doses). This was essential to reduce the waiting time of patients needing these services.

Research and Academic Activities :

Beside its routine activities,RRMC also carries out some research and acamedic devlopment activities. At present, we carry out collaborative research projects with the Indian Institute of Chemical Biology, Kolkata, involving animal imaging using various newly developed radiopharmaceuticals 1 no of research papers based on this collaborative studies involving the RRMC has been published in an international



journal. We also imparted training in nuclear Thyroidology for 2wks to 2 no. of final year (post – graduate) students in D.M (Endocrinology) from Medical College Kolkata.

No. of patients who underwent various types on nuclear imaging at RRMC during the FY year 2018-19 is presented in the following table

Name of Scan	No. of Scans
Bone	187
Renogram	356
Thyroid	162
I-131 Large dose	131
Hepato-Biliary	31
DMSA	123
Other	20
Total	1010

ACTIVITIES OF THE REGIONAL RADIATION MEDICINE CENTRE, VECC, YEAR-2017-18

Introduction:

The Regional Radiation Medicine Centre (VECC), Kolkata was set up by the Department of Atomic Energy in the year 1989, in collaboration with the CCWHRI (now SGCCRI), Thakurpukur.

The present activities of the RRMC include in-vivo nuclear imaging, in-vivo non- imaging studies, and radionuclide therapy.

Nuclear Imaging:

At the RRMC Nuclear Imaging is performed on the Dual Head Gamma Camera with SPECT facilities (INFINIA).

Routine static imagings performed include Whole Body Skeletal, Thyroid, Liver, Renal cortical and Large Dose I-131 Scans.

Routine dynamic imaging being performed include Renal Dynamic study,

Hepato-biliary, GI bleeding study, 3-phase skeletal imaging, etc.

SPECT studies of the skeletal system are also being performed sometimes.

Occasionally more sophisticated studies like, Breast Imaging, Parathyroid Imaging, Neuro-Endocrine Tumor Imaging are also being carried out.

Radio Nuclide Therapy:

- Low dose I-131 therapy of Thyrotoxicosis (up to 30 mCi of I-131)[on OPD basis] is being carried out regularly.
- High Dose I-131 therapy (upto 150 Mci) for Cancer Thyroid patients is, also being carried out regularly.
- A total of 52 no. of patients of Cancer of Thyroid were administered I-131 therapy at RRMC during this year (on IPD basis).
- No. of patients who underwent various types of nuclear imaging at RRMC during the FY year 2017-18 is presented in the following table:

Name of scan	No. of Scans
Bone	192
Renogram	324
Thyroid	158
I-131 Large dose	137
Hepato-Biliary	38
DMSA	112
Other	17
Total	981



4.5 Department of Radiology:

The volume of all imagings (USG, CT Scan, Digital X-rays, Mammography, Color Doppler, Echocardiography etc) has increased. Interventional Radiology in the form of Image Guided RFA, PTBD, Core Needle biopsies, and Pigtail catheter insertions are routinely done.

A PET-CT Scan and an MRI unit became functional from September 2014. Addition of these two units has in collaboration with M/s EKO completed the list of radio-diagnostic equipments that befits a comprehensive Tertiary Cancer Center.

Recently our old CT Scan Machine has been replaced by 16 Slice Siemens make Somatom Spiral C.T. Scan Machine through CSR Grant from Indian Oil Petronas Pvt. Ltd

SERVICES	No of Patients
Conventional Radiology	7459
Ultrasonography	3439
Echocardiography	5429
CT Scan	4899
PET-CT Scan	1535
MRI	1216
Mammography	1800
Dexascan(newly started)	70

The following table shows the work-load of the services of this department for the year 2018-19.

The CT Scan unit of our Institute needs special mention. Apart from Diagnostic CT Scans, it also performs all the RTplanning and CT-Guided FNAC &Trucut (Core-Needle) Biopsy procedures. The work load of the CT scan unit is shown in the following table.

Month/Year	CT Scan	CT Guided FNAC & Tru - cut	RadiotherapeuticPlanning
April/2018	371	75	51
May/2018	410	67	70
June/2018	435	61	65
July/2018	396	52	69
August/2018	378	54	69
September/2018	414	60	69
October/2018	350	46	43
November/2018	448	63	56
December/2018	466	47	61
January/2019	409	59	62
February/2019	407	36	70
March/2019	415	51	65
TOTAL	4899	671	750



CT Scan	4899
CT guided FNAC &Tru-cut	671
Radiotherapeutic Planning	750
TOTAL	6320

Month/Year	X-I	RAY	USG	ECHO
	Patients	Exposure	-	
April-2018	662	892	274	527
May-2018	712	942	292	531
June-2018	625	908	296	449
July-2018	643	876	260	405
August-2018	606	807	365	440
September-2018	666	939	276	487
October-2018	502	664	247	363
November-2018	625	921	286	494
December-2018	611	861	280	425
January-2019	609	894	318	469
February-2019	598	853	265	425
March-2019	600	818	280	414
TOTAL	7459	10375	3439	5429

4.6 Department of Pathology:

Highlights

- 1) Two automatic tissue processors LEICA TP1020&HISTOCORE PEARL were introduced in the histopathology section resulting in improved turnaround time and quality of biopsy.
- 2) Regular EQAS samples were run in biochemistry, hematology, immunohistochemistry (IHC) & histopathology departments with commendable results testifying laboratory accuracy & interlaboratory corroboration
- 3) The Immunohistochemistry section has increased its workload as well as the number of markers tested. We are now able to offer a comprehensive panel of diagnostic markers especially for lymphomas and soft tissue tumorsNew markers were introduced in IHC leading to more accurate sub-classification of tumors which is especially needed in view of new targeted therapies.



Hæmætology	92,600
Clinicalpathology	3,890
Histopathology	16,155
Microbiology	8,603
Serology	17,302
ImmunoHistoChemistry	8,130
Biochemistry (including tumor markers)	2,35,843
FNAC(Direct-484; CT guided-234; USG guided-233)	970
Slide Review	8,652
Cytology(Gynæ/Non-Gynæ	519

A.5. Important activities of our major ancillary services

A.5.1. Nursing Services

Nursing department plays an important role in health care delivery system and is an essential part of the health care team. The main objective of the department is to provide holistic nursing care (Preventive, Curative, Promotive and Rehabilitative) to ailing patients with unflinching dedication. This is done through proper planning, organizing and co-ordination.

The department maintains good liaison with various departments like diagnostic, therapeutic and supporting wing for smooth and flawless functioning of the hospital.

Supervisory efforts of the department are directed towards patient's bedside nursing care, hygiene and sanitation, biomedical waste management, infection control, linen and laundry, store indent, inventory control, Patients` diet and proper distribution of staff nurses and other categories of healthcare workers in all the departments and wards.

Counseling of patients and their family members, rendering co-operation and co-ordination in organizing customary social functions are some of the aspects of nursing services. This department imparts oncological nursing orientation training to student nurses of different schools and colleges of Kolkata and other parts of W.B.

Our own nurses of all categories receive orientation and continuous nursing education program regularly. The nurses attend many in-house training on infection control, bio-medical waste disposal, HMIS, NRT Clinic, Fire Safety, Chemotherapy and blood transfusion, Palliative Care, BMT and Hemato-oncology.

The below mentioned Nursing Annual Reports provides information on nursing departments future plans and accomplishment.

Nursing – Quality and safety

- 1. Quality & safety overview.
- 2. Purposeful Rounding.
- 3. Bed side Nursing
- A. 1. Quality improvement initiatives The nursing department is actively involved in quality improvement initiative focus on measuring and improving the patients outcome.
 - 2. Purposeful rounding Purposeful rounding seeks to improve the patient experience through the use of structured hourly rounding routine. Staff nurse and manager from several units review the best

practices Literature in this areas, examine existing internal practices and developed the purposeful rounding protocol. The concept of purposeful rounding is introduced to the patient and family members upon admission in order to set expectations for the hospital stay.

- B. Research on hourly rounding in hospital revealed impressive improvement which was corroborated by justified by feedback form.
- C. On 4th February 2019 we faced problems due to shortage of staff as they joined the Government Service, But at present after some staff joining in August 2019, this problem is less.
- D. Events –events observed in nursing department include
 - 1. 13th May (2019) Nurses Day.
 - 2. 5th December Dance Drama-some nursing staffs.
 - 3. ACLS(Advance Cardiac Life Support) done by 3 sister-in-charge.
 - 4. Hospital Infection Control Certification program done by 3 sister in-charge.
- E. 33 colleges of nursing students attend SGCCRI for oncology nursing education.
- F. 3 staffnurses went to other hospitals for Continuous Nursing Education program.
- G. Regular in-service classes are going on.

H. Nursing Quality and safety

- 1. Safe Patient handling.
- 2. Nursing improvement.
- 3. Purposeful Rounding.
- 4. Bedside patient handling
- 5. Giving nursing reports per day/weekly/monthly basis.
- 6. Term Infection control.

SL.NO.	DESIGNATION	HEADS
01	Nursing Superintendent(N.S.)	1
02	Deputy Nursing Superintendent(D.N.S.)	0
03	Matron	0
04	Deputy Matron	2
05	Assistant Matron	1
06	Night Supervisor	33
07	Sister In charge	17
08	Staff Nurses (GNM/BSC)	143
09	Sevika (IPD+OPD)	83
10	Nursing Aid	42
11	Trainee GNM	9
TOTAL		301

A.5.2 Transfusion Medicine Service (Blood Bank)

The Blood Bank is fully operational now. The following table gives a glimpse of the activities of our Blood Bank.

Banking Blood Services for FY 2018 – 19

(All figures are in Units)

	In-	Total		Comp	Component Prepared	pared		Reject	Balance		Issue'	Issue To Patient		
	House								after rejection					
	Colln	Colln	ΜB	PRBC	ĿЕР	LTd	Total	Total	Total	WB	PRBC	FFP	PLT	Total
587	1	588	0	585	585	292	1168	82	1380	0	574	521	285	1380
327	3	330	0	330	330	160	1427	66	721	0	318	269	134	721
490	2	492	0	486	486	184	1458	157	666	0	479	404	116	666
219	4	223	0	222	222	130	634	383	240	0	89	80	71	240
467	5	472	0	463	463	278	1868	85	1119	0	447	439	233	1119
384	0	384	0	371	371	176	194	31	288	0	364	353	170	887
439	2	441	0	432	432	163	1508	38	686	0	417	410	162	989
648	1	649	0	641	641	228	1510	55	1455	0	622	609	224	1455
658	2	660	0	650	650	406	1706	102	1604	0	629	603	372	1604
675	1	676	0	665	299	158	1488	38	1450	0	651	618	135	1404
468	0	468	0	458	458	236	1152	58	1094	0	416	434	223	1073
909	0	909	0	009	009	300	1500	42	1458	0	581	555	290	1426
5968	21	5989	•	5903	5903	2760	14566	1170	13396	•	5587	5295	2415	13297

49

B) Special Procedures

	Apr- 18	May	Jun	Ju I	V n ou	p Se	t Oc	No v	Dec- 18	Jan- 19	Feb- 19	Mar- 19	Tota I
Blood Grouping	208	223	195	78	- ~ -	182	182 122	193	225	204	149	128	2028
Platelet-pheresis(SDP)	0	0	0	1	7	0	1	2	1	1	0	1	6
Coomcs Test(DCT/ICT)	1	2	3	0	7	1	1	2	3	2	5	3	25
Stem-cell Harvest Autologous	0	2	0	0	1	1	0	1	1	1	0	2	6



SAROJ GUPTA CANCER CENTRE & RESEARCH INSTITUTE



A.5.3 Pain Clinic and Palliative Care Services.

Concept of Palliative Care existed in this Institute since its inception. The original name of this Institute – Cancer Centre & Welfare Home, the brain-child of Late Dr Saroj Gupta, the founder of this Institute bears testimony to the fact that the entire endeavor of this Welfare Home was oriented towards reaching the facilities of Cancer Treatment and Palliative Care to the cancer patients.

A 4-bed "Cottage of Peace" was established in our premises in the very early period of its development. This was truly a "Hospice". Mother Teresa in augurated this Unit on 3rd November 1979

Dr Gautam Bhattacharjee, one of our radiation oncologists was sent to Oxford – the abode of Palliative Care, where he received extensive training. The Palliative Care service in this center started in 1995 after his return. This is the earliest organized palliative care service for cancer patients in Eastern India. It provides free consultation for acute and chronic pain relief in accordance to WHO guidelines. This Institute initially obtained license for procurement (MD-3) and stocking and distribution (MD-6) of oral morphine from the Drug Controller and Central Excise Departments. Later (April 2018) this Institute has upgraded itself to a RMI (Registered Medical Institute) status which allows direct purchase of morphine from the private vendors without Excise Department permission. It provides services of pain control and makes oral morphine available free of cost to our out-patients and in-patients. Our department of Anesthesia is involved to relieve intractable neuropathic pains whwn required with the help of spinal and local blocks under C-arm image guidance. Neurophysicians and Neurosurgeons from various centers are consulted as and when required.

This unit was upgraded on 2nd August 2010 to the status of a department with new recruitment of staff and their further training. The patronage came from Indo – American Cancer Association. Dr Rakesh Roy, the acting in charge of this department was bestowed with the prestigious Commonwealth Scholarship for completing his Diploma in Palliative Medicine in 2012 and was also selected for the renowned IDEA Award in Palliative Care at Chicago in the same year. In October 2018 we successfully renewed our Palliative Care membership with European Society of Medical Oncology (ESMO). Subsequently in December 2018 our Institute was registered with Indian Association of Palliative Care (IAPC) providing us more recognition and prominence. Furthermore in January 2019 our in-charge Dr Rakesh Roy was recognized as a national faculty by IAPC. Finally we successfully trained 18 Community Health Workers workers from Budge Budge Municipality on Palliative Care between January 2019 till may 2019 thereby helping the local community to look after their advanced cancer patients in a more scientific and caring way.

Since then this department has gone from strength to strength. The existing services were improved. The number of referrals from other departments and hospitals increased. Palliative care became more acceptable to a larger proportion of patients and their relations.

At the moment, The Palliative Care Departments has following spheres of activities:

- OPD Service
- Indoor Service
- Free Domiciliary Care Service.

Bed charge of the Palliative Care Department has been kept at a nominal rate. Patient consultation is free. We aim to stabilize the patient and try to send them back home with necessary instructions. In a few cases we try to continue the good care by extending services to home.

We started a free domiciliary palliative care service within a radius of 25-30 km since 2013. This endeavor was



initially supported by "Helpage India" which provided the Domiciliary Service Ambulance, and by GCCI (Global Cancer Concern India) that supplied free fuel for the domiciliary visits.

We acknowledge the extensive support this department received in the initial stages from Indo-American Cancer Association and Dr Shankhasuvra Mitra in conceptualizing and establishment of the service.

The success story of this department lies in the fact that the morphine usage continues to increase over the last few years and there has been a dramatic change in the community's approach to morphine.

Month/Year	OPD Turnover (1)	Indoor Turnover (2)	Narcotic Drugs Turnover(3)	Home Visits
Apr-2018	143	74	Morphine 10 mg- 105 Morphine 30 mg- 43 Inj. Fentanyl 25 mg- Nil Inj. Morphine 15 mg- Nil	Nil
May-2018	106	65	Morphine 10 mg- 94 Morphine 30 mg- 34 Inj. Fentanyl 25 mg- Nil Inj. Morphine 15 mg- 01	Nil
Jun-2018	126	46	Morphine 10 mg- 115 Morphine 30 mg- 22 Inj. Fentanyl 25 mg- 19 Inj. Morphine 15 mg- 01	Nil
July-2018	128	57	Morphine 10 mg- 75 Morphine 30 mg- 47 Inj. Fentanyl 25 mg- 7 Inj. Morphine 15 mg- 12	Nil
Aug-2018	160	62	Morphine 10 mg- 47 Morphine 30 mg- 82 Inj. Fentanyl 25 mg- Nil Inj. Morphine 15 mg- 05	Nil
Sep-2018	158	58	Morphine 10 mg-59 Morphine 30 mg- 70 Inj. Fentanyl 25 mg- 29 Inj. Morphine 15 mg- 04	Nil
Oct-2018	146	31	Morphine 10 mg- 78 Morphine 30 mg- 42 Inj. Fentanyl 25 mg- 10 Inj. Morphine 15 mg- 02	Nil
Nov-2018	211	61	Morphine 10 mg- 72 Morphine 30 mg- 49 Inj. Fentanyl 25 mg- 69 Inj. Morphine 15 mg- Nil	04
Dec- 2018	128	37	Morphine 10 mg- 58 Morphine 30 mg- 34 Inj. Fentanyl 25 mg- 25 Inj. Morphine 15 mg- Nil	03
Jan-2019	158	66	42 Morphine 10 mg- 80 Morphine 30 mg- 28 Inj. Fentanyl 25 mg- 75 Inj. Morphine 15 mg- Nil	02
Feb-2019	142	43	Morphine 10 mg- 84 Morphine 30 mg- 22 Inj. Fentanyl 25 mg- 69 Inj. Morphine 15 mg- 02	02
Mar-2019	152	45	Morphine 10 mg- 115 Morphine 30 mg- 21 Inj. Fentanyl 25 mg- 50 Inj. Morphine 15 mg- 13	02
TOTAL			Morphine 10 mg- 982 Morphine 30 mg- 494 Inj. Fentanyl 25 mg- 353 Inj. Morphine 15 mg- 40	13



Month/Year	OPD	Indoor	Total Turnover	Home Visits
	Turnover (1)	Turnover (2)	(1+ 2)	
Apr-2017	121	71	192	04
May-2017	155	95	250	06
Jun-2017	148	58	206	08
Jul-2017	128	101	229	05
Aug-2017	145	97	242	07
Sep-2017	107	68	175	07
Oct-2017	134	78	212	06
Nov-2017	148	108	256	02
Dec- 2017	140	117	257	08
Jan-2018	117	140	257	00
Feb-2018	143	52	195	00
Mar-2018	127	38	165	00
TOTAL	1613	1023	2636	53



Month/Year	OPD Turnover (1)	Indoor Turnover (2)	Total Turnover (1+ 2)	Home Visits
Apr-2017	121	71	192	04
May-2017	155	95	250	06
Jun-2017	148	58	206	08
Jul-2017	128	101	229	05
Aug-2017	145	97	242	07
Sep-2017	107	68	175	07
Oct-2017	134	78	212	06
Nov-2017	148	108	256	02
Dec- 2017	140	117	257	08
Jan-2018	117	140	257	00
Feb-2018	143	52	195	00
Mar-2018	127	38	165	00
TOTAL	1613	1023	2636	53

A.5.4 Cardiology Services

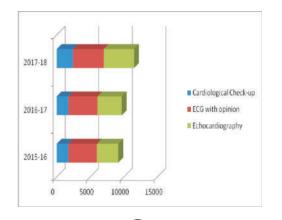
The Cardiology Department of our Institute renders an untiring service to this Institute. Almost all the adult patients are routinely referred for cardiological work-up. The OPD consultations are Free like most of our OPD services. The work-load of the cardiology department during 2017-18 is shown in the following table.

SERVICES	No. of Patients
Cardiological Check-up	2,407
ECG with opinion	4,590
Echocardiography	4,519

The department also takes active part in the overall management of patients admitted in ITU and Pediatric ITU.

3 Years Cardiology Services

Services	2015-16	2016-17	2017-18
Cardiological Check-up	1744	1748	2,407
ECG with opinion	4238	4323	4,590
Echocardiography	3182	3616	4,519



53



Library Information

Our Institute's Central Library is located in the Audio-Visual Complex. The service is computerized. Readers have access to Internet from this library. It stocks books and journals on Oncology and allied subject including nursing and medical technology. The library operates on the norms as laid down by the National Board of Examinations (NBE). The representatives of National Board of Examinations (NBE). The representatives of National Board of Examinations (NBE) regularly inspect it. Apart from the Central Library, different departments also stock books and journals for regular day-to-day reference. The Central Library also stocks popular books (fiction and non-fiction) for the use of the patients. There are two reading sections in the central Library.

Library Facilities:

- Computer with Internet facility
- Photocopier and printing facility
- Access to National Cancer Grid (NCG) Library e-Resources (OVID and Clinical Key)
- Access to Online Journal facility provided The Clinics of North America, Elsevier

Library Documentations:

- Printer, Scanner and Photo-copier
- Medical Books (Printed Books and e-Books)
- Medical Journals (Printed and Online)
- DVDs of Radiotherapy and Surgery provided by National Board of Examinations (NBE)
- DVDs and CDs on different medical subjects
- Fiction, Non-fiction Books and Magazines (Bengali, English & Hindi)
- Daily newspaper in English & Bengali

Books:

2016-17+20 Medical B		T	otal Fiction and Non-fict	ion Books
Printed Books	e-Books	Bengali	English	Hindi
1445	2486	3027	1524	88

New Medical Books purchased 2017-18 :

Acc No	Call No	Author/editor name	Book Title	Edition	Publisher	Year
1445	616.9	Swerdlow, Steven H	WHO classification of	4 th ed.	IARC	2017
	WHO		tumours of			
			haematopoietic and			
			lymphoid tissues			

Medical Journals:

Printed Journals		Online Journals		
Indian Journals	Foreign Journals	The Clinics	NCG (OVID and Clinical Key)	
05	07	51	84	

Medical DVDs/ Cds:

Radiotherapy (NBE)	Surgery (NBE)	Others Medical Related Subject
18	08	66



A.5.5 Alaryngeal Speech Therapy Unit

"Ashar Aalo Maa Saroda Cancer Help Line, Jamshedpur is a not profit Organization help to cancer patients and their family members. Conduct awareness camp of various places. The need of the patients of the cancer is limited to good medical treatment. The patients also need non-medical support and care for their physical, emotional and cosmetic rehabilitations.

Ujjal Sinha & Soma Sinha teaches esophagus speech treated successfully by total removal of the larynx. From April 2016 to March 2017

No of potients =15(New + Follow up)

A.5.6 Stoma Care Services

Cancer Fight Foundation, started conducting a Free Stoma clinic atSaroj Gupta Cancer Hospital in April 2016 after the previous Stoma clinic had closed down after the sad demise of Mr K C Banerjee who had been rendering free stoma care services for more than 3 decades. Members of CFF conduct a clinic once a week on Friday from 2.00pm-4.00pm where our patients are registered and given total support, advice and counseling on how to lead their lives after their Stoma operation as this requires adaptation of a new way of life. Patients with stomas are seen in an outpatient clinic where much needed training and advice is given on Stoma care and bag maintenance. Hands-on training is given by Ms Nabanita Mukherjee, who is a full time Stoma Consultant with CFF and herself a colorectal cancer survivor.

Other CFF staffs see patients both in the clinic and during ward rounds to do any counselling or give any advice to patients such as diet and lifestyle changes which are required for those who live with stomas.

Regular nurse training sessions are conducted where both the theory of colorectal cancer and practical hands on training is given to nursing staff. Stoma care and device/ bag maintenance is a highly specialised area of nursing which is much needed as many nurses do not have this training. These training sessions are certified allowing the nurse to teach stoma care to other nurses.

In addition to CFF's stoma clinic, the organisation is also involved in providing entertainment to the Paediatric wards in the hospital.

Puppet and magic shows are arranged and at Christmas, Santa Claus comes to visit the children which put a smile on their faces.

This is a much needed service and the clinic has assisted many patients in its first year. Cancer Fight Foundation looks forward to continuing with this form of support in collaboration with the hospital staff.

A. 5.7 Breast Cancer Support Services

"HITAISHINI" is avoluntary non-profit Breast Cancer Support Network in Eastern India. It is a forum member of Reach-to-Recovery International, Australia, and one of the founder members of Cancer Care India, New Delhi. Its member-volunteers are either breast cancer survivors or socially committed women. It runs breast clinics attached to hospitals and Cancer Centres in and around Kolkata, to provide psychological, emotional, medical and rehabilitation support to women with breast cancer.Hitaishini also conducts Awareness camps, seminars, workshops and "Walks" to propagate knowledge about breast cancer among the masses.

"Hitaishini" has been rendering its free social services to the patients of this Institute for more than a decade. The following table gives an overview of the functioning of this unit during 2017-18



A.5.4 Cardiology Services

The Cardiology Department of our Institute renders an untiring service to this Institute. Almost all the adult patients are routinely referred for cardio logical work-up. The work-load of the cardiology department during 2018-19 is shown in the following table.

SERVICES	No. of Patients
CardiologicalCheck-up	3451
ECG with opinion	4655
Echocardiography	5429

A,5.5NRT CLINIC

The Nicotine Replacement Therapy clinic runs in conjunction with the Head and Neck and Dental Department. This specially caters to people who want to quit tobacco habits. Many patients attendants walk in for counseling and we also counsel cancer survivors to avoid resumption of tobacco habits. World No tobacco day was observed in the OPD lobby premises where the ill effects of tobacco use was highlighted and pamphlets and information sheets were handed out to patients.

A.5.5 Alaryngeal Speech Therapy Unit

Pre and postoperative laryngeal and head neck patients counseling is done with emphasis on food habit, neck exercise to patients and their family members at SGCCRI Kolkata, OPD No 209. 2 sittings per month every alternate Saturday for Esophegeal speech is regularly done. In the year of 2018-2019, there were 34 patients who attended during this period for such help. Patients and their families both are satisfied with our work and their improvement.

A.5.6 StomaCare Services

It has been over two years now that Cancer Fight Foundation has been conducting a clinic for Stoma patients every Friday at Saroj Gupta's Cancer Hospital at Thakurpukur. Patients with stomas are seen in an outpatient clinic where much needed training and advice is given on Stoma care and bag maintenance. Hands on training are given by MsNabanita Mukherjee, who is a full time Stoma Consultant with CFF and herself a Colorectal Cancer survivor. Other CFF staff sees patients both in the clinic and during ward rounds to do any counseling or give any advice to patients such as diet and lifestyle changes through our organization brochure, which are required for those who live with stomas. Till date we could counsel approximately 60-75 Colon Cancer Patients at your hospital. Regular Nurses Training sessions are conducted where both the theory of Colorectal Cancer and practical hands on training is given to nursing staff. Stoma care and device/ bag maintenance is a highly specialized area of nursing which is much needed as many nurses do not have this training. These training sessions are certified allowing the nurse to teach stoma care to other nurses. In addition to CFF's stoma clinic, the organization is also involved in providing entertainment to the Pediatric wards in the hospital. Puppet and magic shows are arranged and at Christmas, Santa Claus comes to visit the children which puts asmile on their faces of the child suffers.



A. 5.7 Breast Cancer Support Services

HITAISHINI is a voluntary non-profit Breast Cancer Support Network in Eastern India. It is a Forum member of Reach-to-Recovery International, Australia, and one of the founder members of Cancer Care India, New Delhi. Its member-volunteers are either breast cancer survivors or socially committed women. It runs breast clinics attached to hospitals and Cancer Centres in and around Kolkata to provide psychological, emotional, medicinal and rehabilitative support to women with breast cancer. Hitaishini also conducts Awareness camps, seminars, workshops and 'Walks' to propagate knowledge about breast cancer among the masses. Hitaishini has been rendering free social services to the patients of this Institute for more than a decade. The management of this Institute appreciates the noble services of this benevolent group.

The following table gives an overview of the functioning of this unit during 2018-2019.

1)	Total Patients attended and counseled	252
2)	Medicinal Support	35
3)	Providing Breast Accessories	50
4)	Providing machine massage for lymphedema patients	4

A 5.8 Psychological Support Service

We have a special OPD service for psychological counseling for patients and their close relations. This is relevant both in cases of early and advanced cancers. Many patients avail the service over the year and the need for such counseling is being increasingly appreciated and felt.

A.5.9 Nutritional Support Service

"NUTRITION" is a word, which is very much important for everyone's life, without nutrition we can do nothing. Among the cancer patients Nutrition play a major role to survive the patient more fast and reduce physical, mental, economical stress and also reduce patient's hospital stay. Nutritional Status of a patient often becomes a decisive factor in determining the therapeutics and treatment outcome. With the active help of our expert nutritionists, this renowned institute helps lots of patients who develop their nutritional problems before, during and after surgery, chemotherapy, radiation therapy and others process of treatment by regular follow up under supervision of our Dieticians. Not only that, we use MODIFIED NUTRITION THERAPY(MNT) for treating our cancer patients. With the help of many renowned nutritional companies, we have arranged NUTRITION CAMP with live sample demonstration, arrange chart poster presentation to inform the patients about proper & right nutritional foods according to their nutritional needs. We also have arranged on quarterly basis CME for discussing the new nutrition related topic with our expert doctors. we have also a dedicated dietician for our child patients supported by CUDDLES FOUNDATION(NGO based in Mumbai) which also provides nutritional supplements free to all the children both IPD & OPD child patients. We also get nutritional support for children from CAN-KIDS(Delhi).

A.6 Important activities of our Environmental Monitoring and Biomedical waste Management-"solar energy & organic farming."

A-6.1 Environmental monitoring & Biomedical waste management system

A benevolent group of social activists formed the society in 1973. From the very beginning, they had shown keen interest of the environment of this welfare home. The soothing environment would be such that the patients could perceive it as their home away from home.

The architecture is eco-friendly and energy-efficient. The modern day concept of "Green Architecture" was followed in the premises of this institute from the very beginning-long before the very term was coined.

The architecture was very much there but it made the natural background more omnipresent. Health, Sanitation, Drainage, Disposal – everything was there and par excellence – only that they melted silently behind the whispers of nature. It meant taking a lot of extra care. However, the management never compromised with its original idea of a welfare home. We always walked the extra mile.

When the relevant Acts of environment were enacted, this Centre welcomed the proposals of the Government and became a model of Environment Monitoring and Biomedical Waste Disposal System in Eastern India. A committee headed by Prof. (Dr.) S.P. Mukhopadhyay and other qualified members was established a number of years back to monitor the parameters. After sad demise of Prof. (Dr.) S.P. Mukhopadhyay, Prof (Dr.) ArunavaMajumder, Former Professor& Head, Department of Sanitary Engineering, AIIH & PH, Govt. of India succeeded him. In this committee there are many eminent scientists of this discipline and under their guidance we deal with the issues of Biomedical Waste Management, status of water quality & supply, Waste water management, vector control, noise status, plantation and gardening as well as beautification of the Hospital Campus.

The Hospital generated garbage and waste are segregated and disinfected by an in-house system that follows the Government guidelines. The Final disposal is made through an authorized disposal agency (Previously done by SembRamkey, which was later replaced by

M/S Greentech Environment Management Pvt. Ltd. – both are authorized by W.B.P.C.B.)

We also periodically monitor exhaust gases, ambient air, sound level, waste water and drinking water to ensure a pollution- free environment. We have put an extra effort of microbiological monitoring of all our Operation Theaters, Intensive Therapy Units and Wards, the resultant micro- lab map of the sanctity of the environment of this center and proudly show to those who visit, that SGCCRI is a phenomenon rather than a medical establishment.

A-6.2 Harvesting Solar Energy

Our institute has taken an initiative to install Photovoltaic Cells (PV) / solar panels on building roof tops of the buildings in our campus for generating power from Solar energy. The objective of this initiative is to reduce the carbon footprint by not only saving the environment but also saving electricity and cost. The savings due to this installation would be used for the treatment of the poor patients at our institute.

We have come a long way since 2012 with the help of CSR grants received from different corporate organizations, the Ministry of New and Renewable energy (MNRE), the West Bengal Renewable Energy Development Agency (WBREDA) which are government bodies and also some generous individuals. Following are the details:



DESCRIPTION	INSTALLED AT	DATE OF INSTALLATION	INSTALLED BY	FUNDED BY
50 KWP solar photovoltaic power plant	Auditorium building	February,2014	Suncraft Solar	MNRE Project
20 KWP solar photovoltaic power plant	Special Cabin Block	July,2018	AVO Engineering	Mrs.Bharati Mukherjee &Dr.Sanjeev Mukherjee
50 KWP solar photovoltaic power plant	CSB & OPD Block	November,2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
50 KWP solar photovoltaic power plant	Pet CT Block	November,2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
20 KWP solar photovoltaic power plant	Linac Block	November,2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
20 KWP solar photovoltaic power plant	IMCH Block	November,2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
20 KWP solar photovoltaic power plant	Dear Block	November,2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
16.42 KWP solar photovoltaic power plant	Swarup Block	December,2019	Dharitri Solar	Mr.Bani Prasad Nandy
17.08 KWP solar photovoltaic power plant	Nursing Hostel	December,2019	Dharitri Solar	Mr.Bani Prasad Nandy

Total 263.50 KWP solar photovoltaic power plant installed at SGCCRI at different buildings mentioned as above. Total average generation of power is 700 units per day. Average generation of power per month is 21000 units .Average cost savings per month= 21000 units x Rs. 8.00 / unit (as per existing CESC special concessional 'P' rate) Therefore total savings per year= 700 units x 365 days x Rs.8.00 = Rs. 20,44,000.00

SOLAR ENERGY

Solar energy is the conversion of energy from sunlight into electricity using photovoltaic cell. Photovoltaic cells are initially used as a source of electricity and may be used for domestically and commercially depending on the type of generation.

ADVANTAGES OF SOLAR ENERGY

- Renewable energy source: It can be harnessed in all areas of the world and is available every day. Solar energy will be accessible as long as we have the sun.
- 2. Reduces electricity bill: We need electricity to run various equipments, gadgets, machineries etc. for smooth functioning of hospital. Generation of solar power electrical energy through PV cells installed at our hospital helps to reduce the consumption of electrical power from CESC supply. Grid tie connection also helps us for exporting surplus energy. Hence, it will reduce the cost of electricity.
- Low maintenance cost: Solar energy systems generally do not require lot of maintenance. It needs only regular cleaning of solar panels for getting maximum output from the solar PV source of energy. As there is no



moving parts, there is no wear and tear of the plant.

4. Protection of environment:

Renewable energy will clean the air, stave off global warming, help to save the fossil fuels and protect the environment to avoid the generation of greenhouse gases like CO2, CO etc.

5. Technology Development:

Technology in solar power industry is constantly advancing and improvement will intensify in the future.

We have also begun to install solar powered street lights in some parts of the campus. Our aim is to make all the street lighting in the campus solar powered and are on the lookout for receiving further donations/funding to make this side mission possible.

Also, we have been able to introduce Electric carts funded by some organizations/individuals and they are being used for the transportation of patients, their families and the elderly within the campus.

A-6.3 Organic Farming

The quality of food in India is inferior due to the massive, unregulated use of chemical fertilizers. This has resulted in soil depletion which affects crop yield and diminishes the nutritive value of fresh fruits and vegetables and, thereby, livestock who also consume chemical laden crops. This project aims to increase crop quality and yield translating into higher incomes in geographic area (villages) where the majority of the population are farmers uneducated on nutritional food and alternative methods of farming with the help of a renowned organization, Maple Orgtech India, Ltd under Rotary Global Grant sponsored by Rotary Club of Calcutta Metropolitan (District 3291) and Rotary Club of Thousand Oaks (District 5240). The prime objective is not only to help farmers to adopt eco agriculture and organic farming to emerge a better and healthier community, but also to provide the patients of SGCCRI a chemical free, healthy and nutritious diet.

A-7 Library Information

The Central Library is located in the Audio-Visual Complex with computerized access. The library is well equipped with modern facilities and resources(print and electronic) in the form of CDROMs, DVD-ROM, online databases,video cassettes, books, journals, theses, reports etc. It has also developed into a full-fledged digital Library equipped with necessary modem equipment in order to provide various digital mode Library services. Readers have access to internet from this library. It stocks book and journals on Oncology and allied subject including nursing and medical technology. The library operates on the norms as laid down by the National Board of Examinations (NBE). The representatives of National Board of Examination(NBE) regularly inspect it. Apart from the Central Library, different departments also stock books and journals for regular day-to-day reference. The Central Library also stocks popular books (fiction and non-fiction) for the use of the patients. There are two reading sections in the central Library.

Library Facilities:

- Computer with Internet facility
- Photocopier and printing facility
- Access to National Cancer Grid (NCG) Library e-Resources (OVID and Clinical Key)
- Access to Online Journal facility provided "The Clinics of North America" Elsevier.
- Access to Online Journal facility provided "International Journal of Radiation Oncology, Biology, Physics" Elsevier.



Library Documentations:

- Medical Books (Printed Books and e-Books)
- Medical Journals (Printed and Online)
- Project and Thesis
- DVDs of Radiotherapy and Surgery provided by National Board of Examinations (NBE).
- Some nos. of DVDs and CDs on different medical subjects
- Fiction and Non-fiction Books (Bengali, English & Hindi)
- Magazines in Bengali i.e. Suswastha, Sananda, Bhraman etc.
- Daily newspaper i.e. Anandabazar Patritika, The Telegraph

Books:

Total Medica	Medical Books To		al Fiction and Non-fie	ction Books
Printed Books	e-Books	Bengali English Hindi		Hindi
1447	2486	3027	1524	88

New Medical Books purchased 2018-19 :

Acc No	Call No	Author/editor name	Book Title	Edition	Publisher	Year
1446	616.9	Lloyd, Ricardo	WHO classification	4 th ed.	IARC	2017
	WHO	Veds.	of tumours of			
			endocrine organs			
1447	616.9	Moch, Holger ed.	WHO classification	4 th ed.	IARC	2016
	WHO		of tumours of the			
			urinary system and			
			male genital organs			

Medical Journals:

Printed Jou	urnals		Online Journals
Indian Journals Foreign Journals		The Clinics	NCG (OVID and Clinical Key)
05	07	51	84

Medical DVDs/ CDs:

Radiotherapy (NBE)	Surgery (NBE)	Others Medical Related Subject
18	08	105

61

PAEDIATRIC [0-14] PATIENTS SERVICES FOR THE YEAR 2018-2019

jen.

PARAMETRES	AGE [0-14]	MALE	FEMALE	TOTAL
INDOOR ADMISSION		602	403	1005
NEW REGISTRATION		105	66	171
TOTAL PATIENTS IN OPD (NEW & FOLLOW UP)		691	462	1176

WEST	NEIGHBOURING	NEIGHBOURING	STATE
BENGAL	(NBS)	COUNTRIES(NBC)	TOTAL
81	28	62	171

TOTAL NUMBER OF PATIENTS (NEW & OLD) CONSULTING MEDICAL ONCOLOGY 2018-19

TOTAL	1176
Mar-19	96
Feb-19	108
Jan-19	99
Dec-18	97
Nov-18	86
Oct-18	88
Sep-18	89
Aug-18	99
Jul-18	102
Jun-18	123
May-18	105
Apr-18	84



DIVISION OF RESEARCH, ACADEMICS& CANCER CONTROL

The Division of Research consists of:

Academic Section:

Records Section Molecular Biology section 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.

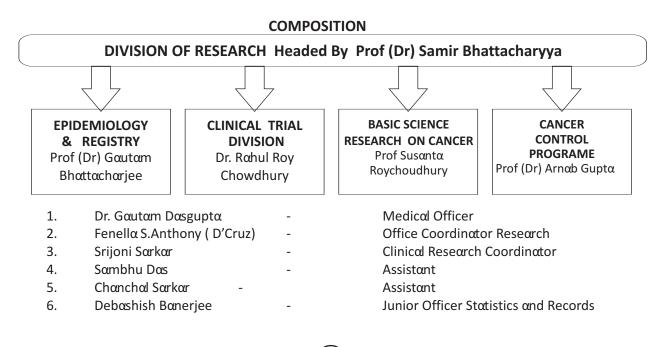
Recognition:

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.



63



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 welldesigned 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 16th 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 22nd April 2013.

There are 13 members on this reconstituted committee at present.

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.

Outline of Activities in Different Sections of Research Divisions/ Activities

In this institute the Division of Research, academic affairs and cancer control programmes are amalgamated together. The broad subdivisions are as follows:

a. **RESEARCH ACTIVITIES**

- i. Activities on cancer epidemiology & cancer registry
- Development of an Atlas of Cancer in India (NCRP, ICMR)
- Hospital Based Cancer Registry (HBCR), SGCCRI
- Population Based Cancer Registry (PBCR), Kolkata
- Activities of Special Cell for PBCRs of NE India
- Activities under clinical studies: In house investigator initiated trials, DNB thesis, PhD thesis with IICB, Calcutta University, IIT Kharagpur
- Multicentric Studies involving other cancer centers and Basic science institutes
- Case Control Studies with Breast Cancer: With CFI
- Evaluation of degree of association of various parameters in Breast Cancer: With CNCI

64

• Global Atlas Project: With CRT, Oxford, UK



ii. Basic and Molecular Research on Cancer

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 withdifferent 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 α 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 a Extra Mural Research Grant from Dept of Higher Education, Science, Technology and Biotechnology, Govt. of West Bengal
- Dr. Damayanti Das Ghosh received the grant under the scheme of DST-Woman Scientist A
- Dr. Poulomi Khan has been awarded DBT-Research Associateship
- Ms. Stuti Roy has been awarded Junior Research Fellowship from University Grants Commission-National Eligibility Test (UGC-NET)
- Mr. Suryendu Sαhα has been awarded Junior Research Fellowship from DST-INSPIRE scheme, Govt. of India

Conferences hosted in the year 2018-2019:

- 9th East Zonal Oncology CME 2018, 13th January 2018
- 10th East Zonal Oncology CME 2018, 19th January 2019

Molecular Diagnostic services:

Under the supervision of the Basic Research and Molecular Biology division, this institute is offering the following molecular diagnostic tests In-house for cancer affected individuals:

- Qualitative and quantitative analysis of BCR-ABL fusion transcript (for CML and ALL)
- Qualitative and quantitative analysis of PML-RARa fusion transcript (for AML)
- EGFR mutation detection (for lung adenocarcimoma)
- K-RAS, N-RAS and B-RAF mutation detection (for lung/colorectal adenocarcimona) Other molecular tests are done in collaboration with other nationally reputed Laboratories.

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 program in Cancer Cell and Molecular Biology

Our team

Research Investigators

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

Lab Members

- 1. Dr Damayanti Das Ghosh (PhD, DST-Woman Scientist A)
- 2. Dr Poulomi Khan (PhD, DBT-Research Associate)
- 3. Ms Stuti Roy (Junior Research Fellow)
- 4. Mr Suryendu Saha (DST INSPIRE Junior Research Fellow)
- 5. Ms Mahasweta Acharjee (Junior Research Fellow)
- 6. Mrs Koyel Banerjee (Lab Technician)
- 7. Ms Swarnali Banik (Lab Technician)
- 8. Ms Rajeswari Dutta (Project Assistant)

Research Trainees (Year 2018-2019)

Name	Affiliation			
Ms Ankita Rath	B-Tech (5th semester student), University of Engineering & Management, Kolkata			
Mr Sayantan Ghosh	M.Sc, Dept of Microbiology, Vidyasagar University			
Ms Kanika Saha	M.Sc., Dept of Biotechnology, Kalyani University			
Ms Jhilmil Tewari	M.Sc., Dept. of Microbiology, St. Xavier's College			
Ms Bidisha Mondal	M.Sc., Dept. of Genetics, University of Calcutta			
Mr Anubhab Chakraborty	B.Tech Biotechnology, Amity Institute of Biotechnology, Amity University of Calcutta			
Ms Swikriti Majum der	B.Tech Biotechnology, Amity Institute of Biotechnology, Amity University of Calcutta			
Mr Sachin G Swamy [Awarded Summer Research Fellowship 2018 of Science Academies' of India]	M.ScIntegrated (2 nd yr), Yuvaraja's College, Mysore			



2019			
Name	Affiliation	Project title	
Mr. Sukalpa Kundu	M.Tech (6 th Sem), School of Biotechnology, KIIT, Orissa	Analysis of the expression and regulation of the spindle assembly checkpoint genes, MAD2 and BUBR1, in breast cancer	
Ms. Somdutta Saha	B.Tech, Dept of Biotechnology, University of Engineering and Management, Kolta	Quantitative analysis of BCR- ABL in chronic myeloid leukemia	
Ms. Bidisha Dey [Nominated for Summer Research Programme, 2019 by 'Indian academy of Science']	M.Tech (4 th Sem), School of Biotechnology, KIIT, Orissa	Role of frequently found p53 Gain-of-Function mutations in ovarian carcinoma, in inducing stemness	
Mr. Rounak Kr. Saha	M.Sc., Dept. of Biochemistry, University of Calcutta	Molecular analysis of CUEDC2 variants between receptor- positive and receptor-negative breast cancers	
Mr. Biswadeep Ghosh Roy	M.Sc., Dept. of Zoology, Ashutosh College, University of Calcutta		

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

 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

- 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
- 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



- 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 onTP53 mutation and protein biomarkers
- from blood plasma of high grade serous ovarian carcinoma for diagnosis and treatment monitoring: α 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

2019			
Name	Affiliation	Project title	
Mr. Sukalpa Kundu	M.Tech (6 th Sem), School of Biotechnology, KIIT, Orissa	Analysis of the expression and regulation of the spindle assembly checkpoint genes, MAD2 and BUBR1, in breast cancer	
Ms. Somdutta Saha	B.Tech, Dept of Biotechnology, University of Engineering and Management, Kolta	Quantitative analysis of BCR- ABL in chronic myeloid leukemia	
Ms. Bidisha Dey [Nominated for Summer Research Programme, 2019 by 'Indian academy of Science']	M.Tech (4 th Sem), School of Biotechnology, KIIT, Orissa	Role of frequently found p53 Gain-of-Function mutations in ovarian carcinoma, in inducing stemness	
Mr. Rounak Kr. Saha	M.Sc., Dept. of Biochemistry, University of Calcutta	Molecular analysis of CUEDC2 variants between receptor- positive and receptor-negative breast cancers	
Mr. Biswadeep Ghosh Roy	M.Sc., Dept. of Zoology, Ashutosh College, University of Calcutta		



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 1st 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 (Radiotherpy - 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:

- i. Diploma in Laboratory Technology (DMLT-Tech)
- ii. Diploma in Radiography (DRD Tech)
- iii. Diploma in Radiation Therapy Technology (DRT –Tech)
- iv 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-

TARGET AREA/CASE	2016-2017	2017-2018
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:

SI No.	Study Name	Principal Investigator (PI)	Current Status
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 pharmacokinctic characteristics of intravenous influsion 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 Pharmaccuticals Limited, Biopharma Division, Ahmedabad, India) in comparison with Reference Biologic (Trastuzumab, Marketed by Roche) in the patients with IIER2-Overexpressing Metastatic Breast Cancer	Dr Tamohan Chaudhuri	Study closed out
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

70



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, α suitable PI for the study will be suggested. If PI directly is approached, he/she will forward all information to the Clinical Studies Division.

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)

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.

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

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.

PeriodNo of CMEs	
March 20065	
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



SL.NO.	DATE	PLACE	CO-ORGANISOR	TARGE POPULATION	DOCTOR
1	07.01.18	Thakurpukur	Anwesha	Awareness Lecture	Arnab Gupta
2	07.01.18	Potuli	Kolkata Vivek	Awareness Lecture	Indranil Chatterjee
3	07.01.18	Anwar Shah Road	Kolkata Ekatma	Awareness Lecture	Arnab Gupta
4	26.01.18	Behala Primary School	St. Berchmjen's	Oral Screening	Indranil Chatterjee
5	02.02.18	Rotary Sadan International	Rotary International & Rotary Club	Awareness Lecture	Arnαb Guptα
6	04.02.18	SGCCRI	Kolkata Ekatma Awareness	Oral Health	Indranil Chatterjee
7	04.02.18	Alipur Commαnd Hospitαl	Chetana Foundation	Awareness Lecture	Tanmoy Chatterjee
8	10.02.18	Barasat	Rusrrection	Awareness Lecture	Indranil Chatterjee
9	15.02.18	Charu Avenue	Sevapith Matri Mandir	Awareness Lecture	Arnab Gupta
10	16.02.18	Kolkata	Bidyasagar College	Awareness Lecture	Arnαb Guptα
11	04.03.18	Najrul Mancha	CESC	Awareness Lecture	Arnab Gupta Soma De
12	06.03.18	Salt Lake	G.S.I	Awareness Lecture	Indranil Chatterjee
12	07.03.18	Gariahat	Muralidhar College	Awareness Lecture	Sanmoy Ganguly
13	08.03.18	Joka	Genex Valley	Awareness Lecture	Arnαb Guptα
14	10.03.18	Pandua	Local Committee	Awareness Lecture	Soma De
15	13.03.18	Garden Reach	GRSE	Awareness Lecture	Saswati Sorcer
16	25.03.18	Brahmapur	Bondhumahal Club	Awareness Lecture	Arnαb Guptα
17	31.03.18	Kakdwip College	Globsyin Engineering	Awareness Lecture	Sanmoy Ganguly
19	22.04.18	Rashbehari	Anubhav	Awareness Lecture	Arnαb Guptα
20	28.04.18	Kolkata Kolkata Municipal Corporation	Dept. of Health	Awareness Lecture	Arnαb Guptα
21	31.05.18	SGCCRI	Kolkata Ekatma	Anti Tobαcco Lecture Arnαb Guptα	Indranil Chatterjee
22	26.06.18	Kolkata Kolkata Police	"Bhαlo Achhi",	World Anti Drugs Day	Arnab Gupta
23	27.06.18	Burdwan	IMA, Burdwan	Awareness Camp	Soumdip Panda
24	11.08.18	Kolkata	La Martinere School	Awareness Camp	Arnαb Guptα
25	12.08.18	Hatibagan, Kolkata	Swadhinata Dibash Ujjapan Committee	Awareness Camp	Arnab Gupta
26	19.08.18	Mysore Hall, Kolkata	Rashbehari Residents' Forum	Awareness Camp	Arnab Gupta
27	24.08.18	Uttam Mancha CBO 15	LICI Agents' Forum	Awareness Camp	Arnab Gupta
28	28.09.18	КМС	MANT	Awareness Lecture	Arnαb Guptα
29	06.10.18	Agartala Cancer Centre	Agartala Regional	Awareness Camp Soumadip Panda	Arnab Gupta
30	07.10.18	Liluαh	Dr.Sajjan Sharma	Awareness Camp	Arnαb Guptα
31	11.11.18	Maheshtala	Maheshtala College	Quit Tobacco Camp	M.Ariff
32	11.11.18	Madhyamgram	Rotary Club	Awareness Camp	Arnαb Guptα
33	22.11.18	Sarat Sadan, Kolkata	LIC	Awareness Lecture	Arnab Gupta
34	06.12.18	Medinipur	Math Bishnupur	Awareness camp Rakesh Roy	Subhasish De



SL.NO.	DATE	PLACE	CO-ORGANISOR	TARGE POPULATION	DOCTOR
35	13.01.19	Kidderpore	SAAHAS	Awareness Camp	Arnab Gupta
36 37	13.01.19 21.01.19	Barrackpore Fulia	Srijan Sewa Bharat	Awareness Lecture Awareness Camp	Arnab Gupta Jaba Basak &
38	05.02.19	Rajarhat	Tata Medical Centre	Saswati Sorcer Awareness Lecture	Arnab Gupta
39	06.02.19	Sodepur	Sri Sri Baba Loknath Brahamchari Ashram	Awareness Lecture	Arnab Gupta
40	02.02.19	Kolkata	Lions Club Behala	Awareness Camp	Arnab Gupta
41	6.02.19	Sodepur	Muragachha Club	Awareness Camp	Arnab Gupta
42	9.02.19	Salt Lake	Club Friday	Awareness Camp	Arnab Gupta
43	3.03.19	Tiljala	Bijoynagar Suprabhat Sangha	Awareness Camp	Abhijit Sarkar
44	103.19	Kolkata	Bakultala Sathi Unnayan Samity	Awareness Lecture	Syed Hassanujjaman
45	24.03.19	Barasat	Golden Horizen Camp	Awareness & Screening Tanmoy Chatterjee	Tusti Ganguly &
46	03.04.19	Kolkata	Nobel Mission School	Awareness Lecture	Arnab Gupta
47	03.04.19	Behala	Blind School	Awareness Lecture	Arnab Gupta
48	19.04.19 to	Siliguri & Neighbouring	Siliguri IMA Branch	Awareness Lecture	Indranil Chatterjee & Debmalya
49 50	21.4.19 24.05.19	Areas Rubi Hospital	MANT	Awareness of Anti	Bhattacharjyya Arnab Gupta
51 52	01.06.19 09.06.19	Behala 24 Pgs- south	Tobacco Kurnish Rasapunja Azad Sangha	Awareness Lecture Awareness Camp	Subrato Kr. Sahu M. Ariff
53	15.06.19	Kolkata	Rash Behari Avenue Traders' Association	Awareness Lecture	Arnab Gupta
54	24.06.19	Salt Lake	Sarani	Awareness Lecture	Arnab Gupta
55	13.07.19	Dumdum	Kishore Bharti High School	Awareness Lecture	Debmalya Bhattacharyya
56	26.07.19	Uttam Mancha	MANT & Kolkata Municipal Corporation	Awareness of Anti Tobacco Lecture	Arnab Gupta
57	07.08.19	Kolkata	Marwari Relief Hospital	Awareness Lecture Tusti Ganguly	Indranil Chatterjee &
58	10.08.19	Kalighat	Holy Family Convent School	Awareness Lecture	Tusti Ganguly
59	14.08.19	Kolkata	South Point School	Awareness Lecture	Arnab Gupta
60 61	16.08.19 16.08.19	Chetla Liluah	Rakhi Sangha Club Resurrection	Awareness Camp Awareness Lecture	Soma De Debmalya
01	10.08.19	Liluan	Resurrection	Awareness Lecture	Bhattacharyya
62	24.08.19	Kolkata	Rash Behari Resident Forum	Awareness Lecture	Indranil Chatterjee
63	25.08.19	Jadavpur	Kathjunagar Trinimul Congress Unit	Awareness Lecture	Abhijit Sarkar
64	11.09.19	Behala	Bakultala Sathi Unnayan Samity	Awareness Lecture	Arnab Gupta
65	11.09.19	Hatibagan	Swadhinata Dibas Udjapan Committee Ward - 11	Awareness Lecture	Gautam Bhattacharyya Debmalya Bhattacharyya
66	16.11.19	Netaji Nagar	Rishita Memorial	Awareness Lecture	Arnab Gupta
67	30.11.19	Howrah	Resurrection	Awareness Lecture	Debmalya Bhattacharyya
68	07.12.19	Rahbehari Kolkata	Help Us To Help You	Awareness Lecture Shibsankar Paul	Arnab Gupta
69	08.12.19	Rashbehari Kolkata	Help Us To Help You	Awareness Lecture Saswati Sorcer	Abhijit Sarkar



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.

- 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.
- Bhαkαt 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.



- 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
- 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-cateninY654 are associated withbreast carcinoma: Clinical and prognostic significance. Biochim Biophys Acta. 2016 May 18. pii: S0925-4439(16)30117-X. doi: 10.1016/j.bbadis.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 IncRNA 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
- Senguptα 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.
- 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)
- 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.
- 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. Sαhα S.Sweta, **Chowdhury R. Rahul, Mondal R. Nidhu**, Roy Sudipta, Sengupta Sharmila. Expression signatures of HOX cluster genes in cervical cancer pathogenesis: Impact oh 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.
- 17. **Nath Somsubhra**, Roychoudhury Shrabasti,Kling Matthew, Song Heyu, Biswas Pranjal, Shukla Ashima, Band Hamid, Joshi Shantaram, Bhakat Kishor K, The extracellular role of DNA damage re[pair protein APE1 in regulation of IL-6 expression, Cellular Signalling (2017), doi:10.1016/j.cellsig.2017.07.019
- 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 Dhrubajyoti, Chatterji Urmi. Modulation of SOX2 expression delineates an end-point for paclitaxel-effectiveness in breast cancer stem cells. Scientific Reports/7:9170/DO1:10.1038/s41598-017-08971-2.2017.08.23
- 20. Haldar Sudip, Mishra Ipseet, Sahu Subrata Kr, Gupta Arnab. Solitary scalp metastasis following gastrectomy in α case of carcinomα stomαch- 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

- Jena S. Axillary Reverse Mapping in Patients Undergoing Axillary Lymph Node Dissection for Breast Cancer: A Feasibility Study in Indian Scenario. 69th 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 : α single centre experience in eastern India . UGICON-2017, Upper GI Cancer Surgery Conference and live workshop (April: 14-16) Ahmedabad
- 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
- 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 α Tertiary Cancer Centre in Eastern Indiα over α Period of 10 Years (2008-2017).33 rd Annual Conference. AICC RCOG. Kolkata 2019. Book Of Abstracts

CATEGORY H

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.
- 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

 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.



OBITUARY

Shri Amit Kumar Sen (Lm59)



Born: April 6th, 1943 Died: March 23rd, 2019

Shri Amit Kumar Sen, Vice-President of Saroj Gupta Cancer Centre & Research Institute Thakurpukur for more than two decades passed away on Saturday March 23rd 2019 around 4.30p.m.. His valuable experience as the Managing Director of East India Pharmaceuticals Works Ltd. helped this Institute to grow in various ways. The

governing body took various suggestions from him and his ability to steer discussion and build up practical strategies guided all the members at each step of decision making. His humanitarian nature touched all hearts of the staff and his dedication in the field of Cancer supported many rural cancer detection programmes in West Bengal. His popularity in the social world attracted many donors to contribute generously towards the charitable work of this hospital. His death has been an irreparable loss to this Centre.

CB CB CB CB CB CB CB

Swapan Das Gupta (LM 48)



Born: 26.08.1925 Died: 30.05.2019

Late Swapan Das Gupta, son of Rai Bahadur Late Promode Ranjan Das Gupta and maternal great grand son of poet Nabin Chandra Sen breathed his last on 30th of May 2019 after a prolonged illness. Originally from Chittagong, he graduated with Economics Honours from the Presidency College in the year 1947. He was a dynamic

entrepreneur, philanthropist, a doyen/visionary of Indian

 ${\it Shipping} and \ {\it Director} \ of \ {\it Sinclairs} \ {\it Group} \ of \ {\it Companies}.$

He was a devotee of Sri Sri Ramakrishna Paramhansa Dev.

SGCCRI fondly remembers his association with and patronage for the Institute, and we pray for his eternal peace.

 $(\mathcal{B}) (\mathcal{B}) (\mathcal{B})$



Mr. Bhagwati Prasad Goenka (LM 6)

We have received information from that our Life Member (LM 6) Mr. Bhagwati Goenka expired. May his soul rest in peace.

C3 C3 C3 C3 C3 C3 C3

Prof. SATYESH PAKRASHI Ph.D



Born: Died: 26th Jan 2019

Prof. Pakrashi was a dear friend of Dr Saroj Gupta since a very long period and acted both as a constant source of encouragement and advisor to him. Dr Pakrashi's contribution in building up the Research Wing of this Hospital from its inception was extremely profound and deep-rooted. It was with his help that this hospital could tie up with Indian Institute of Chemical Biology (IICB), Jadavpur for collaborative research work in basic

biology. The Research Advisory Board of this hospital had been formed more than two decades back under the guidance of Dr Saroj Gupta and under the stewardship of late Prof Satyesh Pakrashi, Padmashree, Ex-Director of IICB and former President of Indian Science Congress it played a vital role in guiding exclusive research work for all its in-house scientists and scholars.

C3 C3 C3 C3 C3 C3 C3



TIE – UP ARRANGEMENTS

Group - 1.

- 1.1 Central Govt. Heath Scheme (CGHS)
- 1.2 Ex-Servicemen Contributory Health Scheme (ECHS)
- 1.3 Employees State Insurance Corporation.
- 1.4 SashashtraSeemaBal, Ministry of Home Affairs, Govt. of India
- 1.5 CISF, NE Zonal Headquarters, Kolkata.
- 1.6 Border Security Force, 18th Battalion Headquarters, Kolkata.
- 1.7 Airport Authority of Indiα.
- 1.8 South Eastern Railway.
- 1.9 Easter Railway, B.R. Singh Hospital.
- 1.10 ChittaranjanLocomotive Works.,
- 1.11 Indian Institute of Chemical Biology
- 1.12 Indian Association for the Cultivation of Science.
- 1.13 RRMC, Kolkota.
- 1.14 Joint Council of Action of Associations, Income Tax Dept, West Bengal (JCA,WB)

Group – 2.

- 2.1 Indian Oil Corporation.
- 2.2 Steel Authority of Indiα ltd.
- 2.3 Oil & Natural gas Corporation Ltd.
- 2.4 Haldia Dock Complex, Kolkata Port Trust.
- 2.5 Hindustan Copper Ltd.
- 2.6 Shipping Corpotation of India.
- 2.7 Coal India Ltd.
- 2.8 Garden Reach Ship builder & Engineers Ltd.
- 2.9 Kolkata Port Trust and Haldia Dock Complex

Group – 3.

- 3.1 CESC Ltd.
- 3.2 Hindustan Lever Ltd.
- 3.3 Woodland Multispecialty Hospital Ltd.
- 3.4 Tata Motors Ltd.

Group – 4

- 4.1 Preferred Provider Network (PPN) system of Health Insurance.
- 4.2 Family Health Plan Ltd.
- 4.3 Gennins Indiα Ltd.
- 4.4 Medicare TPA Services (I) Pvt. Ltd.
- 4.5 MD India Health Care Services (TPA) Pvt. Ltd.
- 4.6 Heritage health Care (TPA).



- 4.7 Medi Assist.
- 4.8 HDFC ERGO
- 4.9 ICICI Lombαrd
- 4.10 Medsave
- 4.11 Paramount TPA
- 4.12 E-Meditek
- 4.13 Dedicated Health Care Service
- 4.14 HDFC Cancer Care
- 4.15 TATA AIG
- 4.16 Kotαk Mαhindrα
- 4.17 Vipul Med Corp
- 4.18 Health India TPA
- 4.19 United Health Care TPA
- 4.20 Star health & Allied Insurance
- 4.21 Grand health TPA
- 4.22 Universal Shampoo
- 4.23 Health Insurance TPA
- 4.24 Alankit Health TPA.



ACKNOWLEDGEMENT

- We thank Pallium India, Dr Sankha Suvra Mitra (UK), Indo-American Cancer Association, Global Cancer Concern India (GCCI), Global Access to Pain Relief Initiative (GAPRI), Help Age India and others who helped us for our Palliative Care Initiative. We thank Dr S Qanungo and Dr Kathleen Cartnell and researchers from Medical University of South Carolina for beginning collaborative research projects with us. We thank American Society of Clinical Oncology (ASCO) for conducting a workshop on palliative care.
- We acknowledge the patronage and spirit of cooperation from several Institutes with whom we carry out our Research Initiative. Notable among them are National Centre for Disease Informatics & Research (NCDIR) of Indian Council of Medical Research (ICMR), National Institute of Biomedical Genomics (NIBMG), Kalyani, Indian Institute of Chemical Biology, Calcutta, University of Calcutta, Cancer Foundation of India, University of Oxford (UK), Indian Institute of Technology, Kharagpur etc.
- The Regional Radiation Medicine Centre (RRMC) of Variable Energy Cyclotron Centre (VECC), Department of Atomic Energy (DAE) that operates in close cooperation with this Institute (SGCCRI & RI) renders the Nuclear Medicine Services to our patients. The management acknowledges the service with thanks.
- Our Institute is grateful to Indian Oil Petronas Pvt Ltd. (IPPL) for their continuing patronage by providing generous grants for various purposes. Earlier, CSR committee of IPPL has funded a 16-slice CT Scan machine and state of the art surgical equipments. This year also they are kind enough to donate three equipments such as DexaScan, Lap Laser for CT scan and i-Breast for screening purpose at various medical camps. Apart from the above mentioned equipments, their CSR committee has granted funds for the much needed renovation work for OPD block for providing better care and comfort to the huge number of patients attending daily.
- Previously, α Radiotherapy Simulator & α new Cobalt-60 Teletherapy Unit (Bhabatron II) [manufactured under Bhabha Atomic Research Centre (BARC)] along with its source was donated by BARC, Department of Atomic Energy (DAE), Govt. of India. DAE has provided grant for replacing the source Theratron Cobalt-60 machine. We acknowledge with thanks this noble gesture of the DAE.
- We regularly receive support from UK residents like Dr. Sankha Suvra Mitra, Dr. Yajati Ghosh, Dr. Chandrani Ghosh, Dr. Shilajit Ghosh, Mr. Nirmal Dasgupta, Mrs. Christine Basu, Dr. Chittaranjan Choudhury and Dr. Ansu Barik for their regular contributions.
- Ladies Study Group with the initiative of Mrs. Namrata Surekha, past President alongwith other committee members donated generously for the modernization of Patients' kitchen for better hygiene and care of the patients.
- We are grateful to Exide Industries Ltd. for Grant under CSR Scheme, Ms. Bharati Mukherjee Mr. Bani Prasad Nandy Majumder for Donations for installation of Solar Photovolatic Power Projects at our campus.
- We are also grateful to L&T and Volkart Foundation, Mrs. Ananda Swapur Rotary Foundation Bengal NRI complex, Ms. Madhulavi Majumder, Mr. Biswanath Dutta Sharma & Prof. Dwarka Nath Bose for their Donations.
- Our BMT unit, which was funded by our Trustee Mr. S. S. Mukherjee, in memory of his wife is running successfully and till date 50 transplants have been done with 100 % success rate. We are grateful to him and his family for this major contribution.



- Various organization and groups help the children of our pediatric oncology department. Notable among them are Jiv Daya Foundation (an NGO in Texas, USA), Rotaracts and different Rotary Clubs of Dist 3291, Lions' Club, Hitaishini, Ashar Alo, Make a Wish Foundation, Pepsico, Resurrection, Suchetana, Bansi Vidya Charitable Trust, Indian Cancer Society, Cankids, Sarani, Anavi, MCKV food for hungry foundation, Innerwheel Club, AIWC and members of Sri Sri Mohonananda Brahmachari Trust.
- We are grateful to Dr. Krishnendu Gupta, our member as well as the immediate past president of Rotary Club of Calcutta Victoria and Mr. B.G. Kundu, immediate past Dist. Governor (D- 3291) for arranging global grant for the installation of much needed Auto Tissue Processor in our pathology laboratory in collaboration with Rotary Club of Moorpark, USA (D-5240). Our sincerest thanks to Mr. Jayanta Chatterjee, our President and member of Rotary Club of Calcutta Metropolitan for facilitating this grant.
- We thankfully acknowledge the patronage of different concerns, pharmaceutical and medical equipment companies who actively participated in various seminars, conferences and CMEs organized by this Institute.
- We would also like to extend our thanks to various Government Ministries, Directorate, Departments, Local Bodies and agencies that help for the welfare of this Institute.
- Our poor patients have been regularly getting financial aids from Governor, Chief Minister, Ministry of Health, Govt. of West Bengal & more recently from our Prime Minister's office, New Delhi.
- Thousands of individuals have voluntarily donated blood to our Blood Bank to help the ailing cancer patients. We are overwhelmed with the continuous support of the voluntary donors who stand by our side in our fight against cancer.
- Since our inception, we had been receiving donations in cash or in kind from hundreds of individuals and concerns from the society. The patronage continues. We extend our heartfelt thanks to them.
- It will be inappropriate if we fail to thank all the employees of this Institute who work tirelessly to help the patients and their relations with smiling faces and helping hands.
- Our Institute is grateful to Anjan Gupta Architects for rendering voluntary services over the years and making this centre unique in its ambience and architecture.
- Finally, we express our deep appreciation for the support of the patients and their relations who made our endeavor meaningful.

Place: Kolkαtα Dated : 27.09.2019 Mr Jayanta Chatterji President Mr Anjan Gupta Secretary