# 47<sup>th</sup> ANNUAL REPORT

# 2019 – 20

# 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 20<sup>th</sup> 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

<b>Registration No</b>	S/12687 of 1972-73	
<b>Registered Office</b>	Mahatma Gandhi Road, Thakurpukur, Kolk	ata 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; 2453-47	65
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.

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# 47th ANNUAL REPORT

# 2019 – 20

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# Members of Governing Body/ Managing Committee

President	: Mr Jayanta Chatterji
Vice-Presidents	: 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

l			·
	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

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

# 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 Mr. Bachhraj Sethia Mr. Subir Chowdhurv Mr. Mrinal K Choudhury

Honorary Member

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

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# Management

Secretary Director Medical Superintendent Acting Dy. Medical Superintendent Medical Administrator & Advisor Quality Assurance Chief Coordinator Communication & Development	<ul> <li>Mr. Anjan Gupta, B Arch.(Cal), MCP (IIT), M Arch.(USA)</li> <li>Prof (Dr) Arnab Gupta, FRCS (Edin,Eng), FIAGES</li> <li>Dr Partha Halder, MBBS</li> <li>Prof (Dr) Jnanabrata Sil, MBBS, DCH, PhD</li> <li>Col. Dr. Amit Mukhopadhyay, MBBS,DH &amp; HM, PGDHM, QM &amp; AHO, M.Phil</li> <li>Mrs. Rita Das, BA, PGDBM</li> </ul>
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	: Mr Anjan Gupta
Members	: Mr Kamakshya Prasad Sengupta Mr Jayanta Kumar Paul
Building	
Convenor	: Mr. Jayanta Chatterji
Members	: Mr. Anjan Gupta (Architect) Mr. Shib Sanker Mukherji Mr. B K Banerjee (Architect)
Advisor of Finance	: Mr. Amit Roy, CA
Representatives of Accounts	: 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) Samir Bhattacharyya, Ph.D, FNA, FASc Prof Runu Chakraborty, PhD Prof Dhirendra Nath Guha Majumder, MD, DM Dr Rita Banerjee, Scientist FSERC Cell, DST Govt of India Prof Bhabatosh Biswas, M.S, M.Ch ex-Vice Chancellor, WB Univ of Health Sciences 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) 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 Prof Susanta Roychoudhury, Ph.D, FASe, FNASe, FASeT Dr. Somsubhra Nath (Ph.D) Prof (Dr) JnanbrataSil, MBBS, DCH, PhD
Cancer Control	:	Prof (Dr) Arnab Gupta, FRCS (Edin. & Eng.), FIAGES
Palliative Care	:	Prof (Dr) Gautam Bhattacharjee, DMRT, MD Dr. Rakesh Roy, MD, ESMO Fellow.

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### SAROJ GUPTA CANCER CENTRE & RESEARCH INSTITUTE

Institute Ethics Committee	
Chairperson : Member Secretary : Members	<ul> <li>Honb'le Mr. Justice S.N. Talukdar</li> <li>Prof (Dr) Saradindu Ghosh, Medical Profession</li> <li>Prof (Dr) Arnab Gupta, Medical Profession</li> <li>Prof Dipak Kr. Nath, Person of Religion, Ethicist</li> <li>Prof (Dr) Samir Bhattacharyya, Medical Profession</li> <li>Prof Santanu Tripathi, Medical Profession, Pharmacologist</li> <li>Prof Susanta Roychowdhury, Basic Scientist</li> <li>Dr Madhuchanda Kar, Medical Profession</li> <li>Dr Adeline Basu, Medical Profession</li> <li>Prof (Dr) Krishnendu Gupta, Medical Profession</li> <li>Ms Soumi Banerji, Lay Person</li> <li>Ms Debjani Aich, Media Person</li> <li>Mr Krishnendu Halder, Legal Profession</li> </ul>
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 Mr. Anjan Gupta, Hony. Secretary & Architect Prof (Dr) Gautam Bhattacharjee Dr Pranabesh Sanyal, IFS Dr Rajarshi Mitral Dr Partha Halder, Medical Superintendent, Dr Shravasti Roy, Dr Kalpana Karak (Paul) Representative of Local Body
Local Administrative Committee, RRI	МС
Members - SGCCRI :	Mr Anjan Gupta Prof (Dr) Arnab Gupta Prof (Dr) Gautam Bhattacharjee
Members – VECC	Dr Santanu Ganguly Dr Surajit Pal
Library	
Joint Convener :	Prof (Dr) Samir Bhattacharyya, MS Dr Madhuchanda Kar, MD, PhD
Co-ordinator :	Mr Amit Singh, Librarian



Members	:	Prof (Dr) Arnab Gupta, FRCS( Edin&Eng), FIAGES Prof (Dr) Gautam Bhattacharjee, DMRT, MD Dr Shravasti Roy, DTMH, MD Dr Rakesh Roy, MD, ESMO Fellow Mr Subrata Kumar Chakraborty
Personnel & Administration Manager	:	Ms Subrata Siddhanta Mr Debabrata Sadhu
Social Worker	:	Ms Chhanda Das
Nursing Superintendent Dy. Matron	:	Ms Purnima Mukherjee Ms Suchitra Mukherjee
Asst. Matron	:	Ms Jolly Das
Maintenance		
Consultant Sr. Managers	:	Mr T K Banerjee Mr Shyamal Das Mr Himangshu Roy

(10)

Date : 19.11.2020

# Notice

Notice is hereby given to all the members of SAROJ GUPTA CANCER CENTRE AND RESEARCH INSTITUTE that **47th (Forty Seventh)** Annual General Meeting of the Society will be held at our Centre at Mahatma Gandhi Road, Thakurpukur, Kolkata – 700 063 on December 23, 2020 (Wednesday) 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, 2020.
- 3. To approve and adopt the audited accounts and report of the Auditors for the year ended March 31, 2020.
- 4. To appoint Auditors till conclusion of the next Annual General Meeting.
- 5. To declare result of election of members to the Governing Body / Managing Committee for the year 2020-2021 and 2021-2022
- 6. 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 2020.

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 even during this pandemic.

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

# Our Services during Covid 19 Pandemic:

When the whole world was taken by surprise by this pandemic, our Hospital geared up from the very early days of Lockdown to maintain its services to the cancer patients, maintaining all safety protocols. Our Doctors & staff were brave enough to carry on with all essential services- both diagnostic and therapeutic. However, in the middle of April, 2020, when the 1st Covid case was detected, there was an acute manpower crisis due to the fear created amongst all the staff and also the stiff resistance our staff faced from their neighbours while reporting to their duties. With the support that the hospital got from different levels after an appeal on the social media, the situation soon normalized. Many of our doctors, staff and members of management got infected, either at their workplace or from outside. We lost one Senior Sevika but thankfully all the others recovered without any major consequence.

The hospital, however, is going through a financial challenge for less footfall of patients during this pandemic, less donations and increased additional expenses in the form of PPEs, sanitizers etc.

We are hopeful that normalcy will be restored throughout the world in the near future.



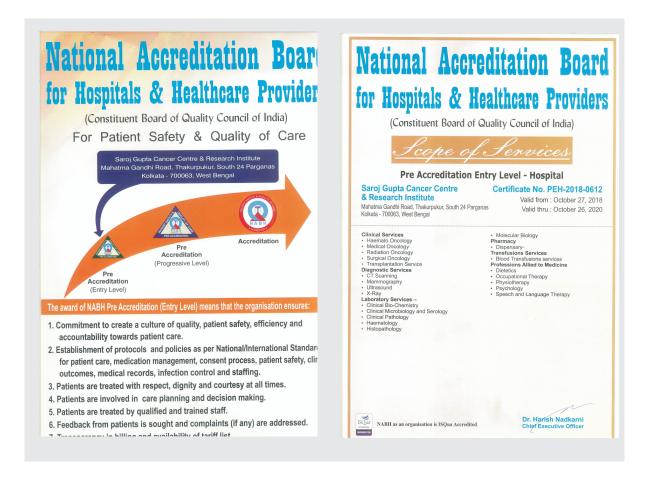
# **NABH Accreditation**

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.

In its pursuit to deliver Quality Services to the patients the Institute has re-iterated its commitment by registering for NABH Full Accreditation after successful Entry level certification.

Our team of Doctors, Nurses, Front line Health Care Workers, Non Clinical Staff have Il come together to fulfill this commitment towards the delivery of Quality Services to the patients at large.



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# Events of 2020 for Annual Report

### Biswabhara Praan (6<sup>th</sup> January 2020)

To commemorate the 14<sup>th</sup> Anniversary of Guru Shri Govindam Kutty "Biswabhara **Praan**" was celebrated in our auditorium on 6<sup>th</sup> of January 2020. The programme was graced by **Rev. Anish Skariah**, Principal- St. Thomas Mar Thoma School, Dakshin Jagaddal as the Chief Guest, **Dr. Mathew P. John**, Hon. Secretary, **Mr. Thomas John**, C.E.O along with **Ms. Mandar Mukherjee**, of 'Antara Psychiatric Centre' Gobindopur. **Mr Somnath Kutty of Kalamandalam**, Classical dance performance was also present. The artists of Kalamandalam & the inmates of Antara Psychiatric Centre, Gobindopur enthralled the audience with their brilliant performance

#### Inaugurations:

#### Inauguration of Modernized OPD Complex (9<sup>th</sup> January, 2020)

With the initiative of Mr Anjan Gupta, our Hony Secretary also Hony Architect, the Out Patient Department, which was inaugurated in 1995, was also architect and totally revamped to a modern centrally Air-conditioned OPD complex complete with beautiful interiors, Elevator, Board Room, Day Care Chemotherapy Unit etc. This was required for the comfort of the ailing patients and their families. All these were possible for the support; we received from **Indian Oil Petronas Private Limited**. They had previously supported our CT scan department and OT with their CSR grants. The modernized OPD complex was ceremoniously inaugurated on 9<sup>th</sup> January, 2020 jointly by Mr Abhijit Dey (Chief GM, LPG IOCL, Board of Director, IPPL), Mr P K Jha (CEO, IPPL), Mr Haza Raijal Borhan (FC, IPPL), Mr Soumitra Chakraborty (GM, Marketing & Operations, IPPL).

#### World Cancer Awareness Day (4<sup>th</sup> February 2020)

Tuesday, 4<sup>th</sup> February 2020, **World Cancer Awareness Day** was celebrated in our Institute auditorium. The theme this year was interactive session with **Survivors in the department of Haemato-Oncology and Paediatric Cancers.** To encourage the patients and their families, the consultants of the department interacted with patients regarding strategies to combat cancer after discharge from the hospital. An interactive session followed regarding life style disorders, nutritional suggestions and FAQs on various types of cancers affecting children.

The session was followed by dance recitals of Ms Preeti Quiry & Ms Anjali Roy, both child survivors (amputee) of our Institute. A musical extravaganza presented by Ms Mekhla Dasgupta, eminent singer of Sa Re Ga Ma Pa fame was the special attraction.

#### 11th International Childhood Cancer Awareness Day (15<sup>th</sup> February, 2020)

This year **CanKids KidsCan** an NGO celebrated International **'Childhood Cancer Awareness Day' with SGCCRI.** They celebrated the day with child patients & their mothers in SGCCRI Child Care Centre. The highlights of the programme were drawing competition, Prize distribution, Cake cutting & Gift distribution for children. The programme aimed at building awareness to promote deeper understanding of the



challenges faced by children and adolescents suffering from cancers along with their care givers.

# 11<sup>th</sup> East Zonal Oncology Symposium (EZOS) 2020 (22<sup>nd</sup> February, 2020)

In pursuit of academic excellence, like every year, Saroj Gupta Cancer Centre and Research Institute (SGCCRI) hosted the "11<sup>th</sup> East Zonal Oncology CME (EZOCME)" under the aegis of Indian Association of Surgical Oncology (IASO) and Association of Surgeons of India (ASI) – WB Chapter, on 22<sup>nd</sup> February 2020, at the Institute's auditorium. The theme of this year's symposium was "Clinical and Molecular Advances in Breast Cancer". The conference focused on the promising areas of clinical as well as basic research in the field of breast cancer, and brought together researchers and clinicians in this field to foster exchange of ideas and establishes collaborations. A large number of reputed scientists and clinicians from various organizations in India and abroad shared their knowledge in the field of Breast cancer. Of note, Dr. Kabir Mody from Mayo Clinic, Jacksonville, USA and Prof Partha P Majumder from National Institute for Bio-Medical Genomics (NIBMG), Kalyani, West Bengal, delivered the prestigious "Dr Saroj Gupta Oration" and "Mr. Henry Shaw Oration", respectively. Dr Sagar Sengupta from National Institute of Immunology, New Delhi, also graced the conference as the national invitee. Other invitees from various organizations in and around Kolkata also enlightened the conference with their vast knowledge and experience. Eminent clinicians and scientists of outstanding repute chaired various talks and discussions delivered.

Thirty-seven 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". The conference also had award video session on 'surgical updates in breast cancer' as well as a well-executed quiz on oncology, led by Prof. Ramanuj Mukherjee, RG Kar Medical College, Kolkata. ASI (WB) was represented by its President Prof (Dr) Bitan Chatterjee while IASO by its President Prof (Dr) Arnab Gupta (also the Organising Co-chairman). The conference also saw more than hundred participants from various institutes, university departments, and colleges from and around Kolkata. The organizing committee, comprising of Prof. (Dr) Biman Chakraborty, Head, Dept. of Gynaeoncology, SGCCRI, Anjan Gupta (Hony Secy, SGCCRI), Prof Susanta Roychoudhury, Dr Somsubhra Nath and others, put their enthusiasm, effort, and expertise toward this symposium. Together, this symposium came out as a grand success.

# Blood Donation for patients in Lockdown Period (2<sup>nd</sup> April, 2020)

Amidst the COVID Lockdown from March onwards there was a **huge shortage of Blood** at all Blood Banks in the city including our hospital, affecting the safety of the patients especially the children. A group of individuals who work with '**Project Life Force' with Mobile Van came forward in response to our distress call on the Social Media.** Many individuals including our own Staff also came forward to help our patients by donating blood

## 10<sup>th</sup> Anniversary of Dr Saroj Gupta (21<sup>st</sup> May, 2020)

10<sup>th</sup> Anniversary of our Founder Dr Saroj Gupta was observed on 21<sup>st</sup> May, 2020, although the spirit was dampened by the super cyclone (Amphan) the day before, which had caused severe damages to our civil structures and large number of trees in our campus.

# In House Blood Donation Camps in support of Patients at our Hospital on 14<sup>th</sup> June, 2020, 16<sup>th</sup> June, 2020 & 01<sup>st</sup> July, 2020

To meet the acute shortage of Blood for our In-patients, **SGCCRI Blood Bank** organized in-house Blood Donation Camps in its own- premises. Many of our staff came forward to donate "the gift of life" (Blood) for the Paediatric & adult patients admitted in this Institute.

**On Doctor's Day, 1st of July 2020, Rotary International Dist 3291** responding to the call for 'Blood Donation' organized a very successful Blood Donation Camp in SGCCRI premises with active participation from its members along with RI Dist Governor Rtn Sudip Mukherjee.

A total number of 30 units of blood were collected from this camp.

# Tree plantation by 'Rotary Club of Calcutta Charnock City' (14<sup>th</sup> August, 2020) & Rotary Club of Joka (15<sup>th</sup> August, 2020)

Due to the cyclone 'Amphan' a huge number of trees were uprooted at SGCCRI and it caused severe damage to its natural ambience. To replenish the green cover of SGCCRI two Rotary Clubs of Dist 3291- **the Rotary Club of Calcutta Charnock City & Rotary Club of Joka** came forward and hosted a sapling plantation project.

### Independence Day (15<sup>th</sup> August 2020)

Independence Day was celebrated like every year with Flag hoisting. Members of Management, Staff and patient-relatives were present there to pay tribute to our Freedom fighters.

Inauguration of RT-PCR Laboratory Equipment- 'Rocking Platform'(14<sup>th</sup> September, 2020)

Inauguration of Two Fowlers Bed & RT-PCR Laboratory Equipment (-20° Freezer) donated by Ms. Sankari Nag (17<sup>th</sup> September, 2020)

Inauguration of RT PCR Laboratory (17<sup>th</sup> September, 2020)

Project 'Gold Light up' at SGCCRI by CanKids (28<sup>th</sup> September, 2020)

'Gold' has been selected as the color of Childhood Cancer. The colour embodies strength, courage and resilience of all the children diagnosed with cancer and their families. In recognition of the children fighting child hood cancers CanKids KidsCan organized a



programme in the SGCCRI Child Care Centre on September 28, 2020 as part of Childhood Cancer Awareness Month.

The children along with their care givers participated with Gold Ribbons in recognition of their strength to fight Cancer. The Child Care Centre was illuminated with Golden coloured lights creating a very special ambience against the night sky.

Inauguration of Blue Star Water Cooler donated by Inner Wheel Club of Kolkata Disha (9<sup>th</sup> October, 2020)

Equipment donated by Inner Wheel Club of Kolkata Greens Inauguration of Dry Bath, RT-PCR Laboratory (19<sup>th</sup> October, 2020)

## International Day of Medical Physics (IDMP) 2020 (7<sup>th</sup> November, 2020)

**International Day of Medical Physics (IDMP)** was introduced by the International Organization of Medical Physics (IOMP) on the Birthday of 20<sup>th</sup> Century great scientist & physicist Marie Skłodowska Curie.

In recognition of her major contribution towards medical field as a Physicist, the **Department of Radiation Oncology & Physicist**, celebrated her birthday on 7<sup>th</sup> November 2020 to create a public awareness about the noble profession and contribution in Diagnostics Radiology, Radiation Therapy & Radiation Safety.

**Dr. Gautam Bhattacharjee, HOD** gave an introductory speech followed by a power point presentation on "**Radiotherapy Journey from Conventional to Unconventional (EBRT)**" by, **Mr. A. David Perianayagam, Chief Medical Physicist & RSO**.

## Children's Day Celebration (14<sup>th</sup> November, 2020)

The Hospital has been celebrating Children's Day in a big way since 2002 to bring back smiles on the faces of children suffering from cancer. On 14th November, 2020 for the 19th consecutive year, we have celebrated Children's day with **Rotary Club Dist 3291 on the 1**<sup>st</sup> **floor of the Child Care Centre.** Eminent Bengali Singer & Actor **Sri Arindam Ganguly,** the Chief Guest for the day captivated the children with his performance. Members of Rotary Clubs & many individuals made personal donations to the Institute.

## Founder's Day (5<sup>th</sup> December 2020)

Founder's day was observed on **5th December**, **2020**, **the 91**<sup>st</sup> **Birth anniversary of our Founder Dr Saroj Gupta**. Blood Donation Camp was organised in the morning where members of the Management and many staff donated blood. **Dr Biman Chakraborty (HOD Gynae Oncology, MRCOG, FRCOG) was awarded the "Dr Saroj Gupta Life Time Achievement Award " in recognition of his dedicated service to this Institute. This is the first time the Institute has introduced this Award**.



#### **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
	Thoracic 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
- General Medicine
- Neurology
- Dental



#### 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		
	Image guided intervention		
Pathology	Histopathology		
	Cytopathology		
	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.2. 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. Abhijit Sarkar, DMRT Dr. Somnath Sarkar, DMRT Dr. Soumadip Panda, MD Dr. Arpan Jana, MD
Surgical Oncology	Dr Samir Sen, MS (Advisor) Prof (Dr) Samir Bhattacharyya, MS (HoD) Prof (Dr) Saradindu Ghosh, MS (In-charge) Prof (Dr) Arnab Gupta, FRCS (Edin & Eng), FIAGES Dr Indranil Chatterjee, MS Dr. Shib Sankar Paul, MS (Ent.) (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 Subhash Chandra De, MS Dr Arun Ganguly, MS, DNB, MCh Dr Adhish Basu, MS, MCh Dr Adhish Basu, MS, MCh Dr Aditya Narayan Sen, FRCS Dr Subrata Kumar Sahu, MS, DNB (Surgical Oncology) Dr Sudip Halder, MS, DNB (Surgical Oncology) 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 Medica Super Speciality Hospital, Kolkata
Endoscopy Unit	Prof. (Dr.) Arnab Gupta, FRCS(Edin), FRCS(Eng), FIAGES Dr. Indranil Saha, MD Dr. Debanik Sarkar, MD (Physician) Dr. Shreyasi Maiti (Dhara), MBBS
Urology Nephrology	Prof (Dr) Kalyan Kumar Sarkar, MS, FRCS (Edin), (Advisor) Dr. Sayak Roy, MS.,MCh. Dr. Sabyasachi Bose, DNB 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. Paramita Sarkar, DA Dr. Kishore Kumar Bakshi, MBBS

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ITU / MICU/ON-CALL	Dr Anjali Sinha, DA (Lond) (HOD) Dr Subhamoy Pal, MBBS (In-charge) Dr. Dibyadip Mukhopadhyay, MD (Anaesth & Critical Care), PDCC (Pain Management) Dr Subhasis Pradhan, MD (Anaesth) Dr Arka Raha, MBBS Dr Upasana Poddar, MBBS Dr. Upasana Poddar, MBBS Dr. Antara Mukherjee, MBBS Dr. Lisa Bose, MBBS Dr. Bidisha Bhattacharya, MBBS Dr. Aditya Gupta, MBBS Dr. Anuj Paul, MBBS Dr. Shafaque Mariam, 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. Upasana Palo, MS.,DNB (O&G)
ENT	Dr. Dhruba Jyoti Mukherjee, MS (ENT), In-charge Dr. Bhudeb Bhattacharyya, DLO, MS Dr. Indranil Chatterjee, MS. Dr. Shib Sankar Paul, MS.
Dental	Dr. Arun Kumar Mazumder, BDS (Cal)
Medicine	Dr. Debasish Roy, DTM&H (Cal) DTCD (Cal) Dr Buddhadeb Dasgupta, MD (Tuberculosis & Chest Diseases) Dr. Pradip Paik, MD (Medicine)
Medical Oncology	Dr. Ketaki Moitra, MS, DMRT (Lond) Dr. Madhuchanda Kar, MD, Ph.D Dr. Rakesh Roy, MD,ECMO,Dip Pall Med (UK) (In-charge) Dr. Manisha David, MD (Radiotherpy) Dr. Ajoy Shankar Samaddar, MBBS Dr. Dilip Kr. Patra, MBBS Dr. Phalguni Ray Chaudhury, MBBS Dr. Snehangi Prasad, MBBS Dr. Ankita Gupta, MBBS
Haemato Oncology & BMT (Adult)	Dr. Rabindra Nath Ghosh, MRC Path (Eng) (HOD) Dr. Chandan Sengupta, DCH (Jt. In-charge) Dr. Tusti Ganguly, MBBS, DGO, MD (Paediatric Medicine), DM (Clinical Haematology) (Jt. In-charge) Dr. Sisir Kumar Patra, MBBS, MD, Pathology, Fellowship in Clinical in Hematology,DNB Super Speciality in Clinical Heamotology. Dr. Partha Pratim Gupta, MBBS (In-Charge – BMT) Dr. Madhumita Patra, MBBS

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Haemato Oncology (Paediatric)	Dr. Rabindra Nath Ghosh, MRC Path (Eng) (HOD) Dr. Tusti Ganguly, MBBS, DGO, MD (Paediatric Medicine), DM (Clinical Haematology), (Jt. In-charge) Dr. Chandan Sengupta, DCH (In-charge) Dr. Soma De, DCH (Dy. Incharge- Paed)
Paediatric Surgery	Prof. (Dr).Amal Kumar Chakravarty, MS, FRCS
Pathology	Dr. Shravasti Roy, DTM&H, MD (In-charge) Dr. Mala Banerjee, MD Prof. (Dr.) Subrata Chakraborty, MD Dr. Anuradha De, MD. Dr. Sanchita Biswas, MD Dr. Sunipa Ghosh, MD
Micro-Biology	Dr. (Prof.) Kalpana Karak (Paul), мо Dr. Abhilekha Biswas, мо Dr. Anita Banerjee, мввѕ, рь.о
Biochemistry	Dr. Jyoti Paul, MD Dr. Souvik Sarkar, MD Dr. Sandip Kr. Batabyal, Ph.D (Biochem. Cal), FIC (India), FCAI (Delhi), FICS
Radiology	Dr. Rathin Mukherjee, DMRD, MD, MICR (HOD) Dr. Subhra Shankha Roy, MD Dr. Amiya Kumar Roy, MBBS (In-charge) Dr. Sumit Laskaria, MD Dr. Prakriti Bandyopadhyay, MBBS Dr. Rina Saha, MBBS Dr. Deepshikha, MBBS, DMRD
Interventional Radiology	Dr. Shubhro Roychowdhury, FRCS, FRCR European Board of Interventional Radiology
Nuclear Medicine (RRMC)	Dr. Santanu Ganguly, DRM (Section Head) Mr. Surajit Pal, м.sc., DRP, Ph.D
Medical Physics	Mr A David Perianayagam, M Sc (Phys) DIP R P (BARC) YSF (TMH) DRSO Mr Subhash Halder,MSc (Phys) Post MSc Dip (Med) Phy) RSO Mrs Anisha Dey (Paul), MSc (Phys) Post MSc Dip (Med Phy) Mr. Purnendu Adak, MSc (Phys) Post MSc Dip (Med Phy) RSO.



Cardiology	Dr. Nirmalendu Nath, MD (Advisor) Dr. Gautam Das, Dip. Card Dr. Ankush Dutta, Dip. Card, FCCP, MRCP Dr. Bishakha Basu Roy, MBBS
Echo-Cardiography	Dr. Gautam Das, MBBS, Dip Card 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. 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. Durba Biswas, MD, (I.H.B.T.)
Stoma Clinic	Cancer Fight Foundation
Breast Support Group	Hitaishini Ms. Bijoya Mukherjee (Past President) Ms Nupur Chakraborty (President) Other Officers and members
Music Therapist Research Division	Smt. Papri Saha Prof. (Dr.) Samir Bhattacharyya, мs (нор)
	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)

CER CENTRE & PRO	
O VISA	
Son Ollis	

Dr. Tanmoy Chatterjee, DGO, MD (G&O) (Coordinator, C	Clinical Studies)
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Prof. (Dr.) Biman Chakraborty, FRCOG, FACS

- Dr. R N Ghosh, MRCP Path (Eng)
- Dr. Sarbajit Das, мs
- Dr. Nidhu Ranjan Mondal, DGO, MD
- Dr. Tamohan Chaudhuri, DMRT, MD
- Dr. Shravasti Roy, DTMH, MD

Mr. Dèbashis Banerjee Mr. Shambhu Das Mr. Chanchal Sarkar

Dr. Dhruba Jyoti Mukhopadhyay, MS (ENT)

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

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

- Mr. Somsubhra Nath (Ph.D) (Scientist)
- Mrs. Fenella Simone Anthony(D'cruz) (Office Co-ordinator)

**Medical Records & Statistics** 

**Cancer Control** 

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DNB Students		
Radiotherapy	Dr. Sourav Banerjee, MBBS	
	Dr. Himanshu Pruthi, MBBS	
	Dr. Tarun S, MBBS	
Surgical Oncology	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 4,829; Female 4,655)	9,484
Total Number of OPD Consultation (New 9,484; Old Follow-up 38,080) (Male 22,211; Female 25,353)	47.564

YEAR	OPD Consultation	Total
	NEW + OLD	
2017-18	10,453 + 44,748	55,201
2018-19	11,272 + 35,580	46,852
2019-20	9,484 + 38,080	47,564

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

	DEPARTMENT	REGISTRATION (MALE)	REGISTRATION (FEMALE)	TOTAL
Radiation C	Dncology	701	453	1154
ENT		390	91	481
Gynecology	/	00	636	636
Hemato-on	icology	587	327	914
Palliative C	are	16	19	35
Medical On	ncology	217	141	358
Surgical	Head & Neck	381	152	533
Oncology	Breast	10	686	696
	Gastro Intestinal	691	542	1143
	Urosurgery	273	45	318
	Orthopedic	119	75	194
	Others	491	401	892
Miscellane	ous +RRMC=2,140 + 693	953	1177	2130
TOTAL		4,829	4,655	9,484



D	EPARTMENT	2017-18	2018-19	2019-20
Radiation O	ncology	1085	1448	1154
ENT		594	570	481
Gynecology		718	730	636
Hemato-ond	cology	783	912	914
Palliative Ca	are 21	43	53	35
Medical Ond	cology	261	332	358
	Head & Neck	630	612	533
[	Breast	780	800	696
Curreical	GI	1331	1327	1143
Surgical Oncology	Urosurgery	395	398	318
Choology	Orthopedic	196	161	194
	Others	1326	1095	892
Miscellaneo	us+ RRMC	2311	2,833	2130
TOTAL		10,453	11,272	9484

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

### A.3.4 In-Patient Service (Admission) 2019-20

Age Group	Male	Female	TOTAL
Pediatric (0-14 yrs)	797	371	1,168
Adult (15+ yrs)	7,449	8,577	16,026
TOTAL	8,246	8,948	17,194

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

YEAR	Age Group	TOTAL	Age group	TOTAL	GRAND
					TOTAL
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
2019-20	Pediatric (0-14 yrs)	1,168	Adult (15+ yrs)	16,026	17,194

#### A.3.6 In-Patient Death

During the period, 355 admitted patients (2.06%) have expired out of 17,194 admitted patients. Most were in advanced terminal stage.



#### A.3.7 Total Indoor Beds

At present, this Institute has 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.

#### ANALYSIS OF MALIGNANT CASES DETECTED AND TREATED IN SGCCRI

Year	New Cases Registered	Malignancy Detected
2017-18	10,453	6,379
2018-19	11,272	8,326
2019-20	9,484	7,006



## 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
  - Siemens Primus 6X (3D CRT) and 3 Electrons Energies (8,10,12 MeVs)
  - 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)
  - Oncentra V4.5-EBRT- Only commissioned for Siemens Primus
    - 3D Conformal Radiotherapy (3D CRT)
    - Palliative RT
    - Conventional RT
  - Oncentra V4.6-3D Image Based-HDR Brachytherapy
    - CT Image based 3D ICRT (Intracavitary)
    - CT Image based Vaginal Cylinder
    - CT Image based ILRT (Intraluminal)
    - 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 1no
  - Unidose E Elecktrometer 2nos
  - 3D RFA with 0.125cc solid State Chambers for Beam Parameter Measurements
  - 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
- 6. One conventional treatment simulator Panacea Conventional Simulation Patients Simulated during April 2018 to March 2019 is 59
- 7. CT Simulator Diagnostic CT (Siemens-Somatom) machine is used for simulating al
  - 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 modality, our centre is now at par with any other modern Radiation Oncology Centre in India.

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- 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: 315 (Cobalt II) + 437 (Cobalt I) = 752

Conventional Simulation: 59

Linac units: 642 (3DCRT-302, IMRT-283, Conventional-54, Rapid Arc-03,)

Brachytherapy unit: 204

Total: Radiotherapy Department: 1598

Therapy Units	2019-2020
Telecobalt Units	752
Linear Accelerator Units	642
Intracavitory Brachytherapy Unit	204
Intraluminal Brachytherapy Unit	
Interstitial Brachytherapy Unit	
Conventional Simulation	59

#### Academic activities:

- 1. 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 curse 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 Chief Medical Physicist **A. David Perianayagam** has given the presentation on
- DaRT-Diffusing Alpha-emitters Radiation Therapy in Feb' 2020 which has been proposed for a clinical Trial in Future in collaboration with Alpha-TAU, Israel. If adopted the technology, our Institute will be the First in East India to Practice the Alpha RT.



- 4. Our medical physics unit is recognized by BARC & AERB (Atomic Energy Regulatory Board) for one year internship program for newly graduated medical physicists.
- 5. Our Medical Physics Unit Celebrated the International Day of Medical Physics (IDMP) on 7th Nov' 2019 and dedicated the event to the Women working in the field of Radiation. **#WomenWhoCurie**
- 6. Our Medical Physicist & RSO, **Mr Subhas Haldar**, has attended the Fellowship program at UMM, Mannheim, Germany from Sept' 2019 to Nov'2019 and awarded **DAAD** Fellowship. He has been given training in various areas of Medical Physics which involved Modern Radiotherapy Treatment modalities.
- 7. We started CT based 3 Dimensional Treatment Planning of Intracavitary Brachytherapy for cervical cancer patients.
- 8. We have provided two months training program for the B.Sc students of Medical physics (Gono University, Bangladesh) to Mr Bahalul Hasan, Mr Pritom Ghosh from 19th Dec' 2019 to 12th Feb' 2020.
- 9. 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 III multicenter trial of weekly induction chemotherapy followed by standard chemo-radiation versus standard chemo-radiation alone in patients with locally advanced cervical cancer"

#### Future plans:

- 1) A high-end Linac machine has been proposed to replace our old Siemens Linac machine 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. 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 dedicated CT scan unit or CT Simulator for simulating all 3D images based treatment planning. At present we are depending on CT unit installed at Diagnostic Radiology department.



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 other advanced oncologic surgeries.

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 centres in 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 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 2019-20**

	TYPES OF PROCEDURES	Nos
BIOPSIES	Trucut Biopsy TRUS guided biopsy	605 2
MINOR OPERATIONS	Various minor operations under L/A or G/A + Biopsy	216
	HEAD & NECK SURGERY (includes radical procedures for different oral cancers, plastic reconstructions, laryngectomies, thyroidectomies, radical neck dissection,)	220
	<b>BREAST SURGERY</b> (Includes Breast conservation and Oncoplastics, Radical and Modified Radical procedures)	185
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)	220
	GENITO URINARY SURGERY (Includes operations for male genitalia, kidney, urinary bladder, prostate and transurethtral procedures)	52
	<b>GYNAECOLOGICAL SURGERY</b> (includes surgeries for uterus, cervix, ovary and vulva)	102
	OTHERS (Includes various others procedures like Thoracic Surgery, wide excision of tumour, amputations, plastic operations for skin cancers etc.) Intracavitary Brachytherapy	83 24
	TOTAL	886



	TYPES OF PROCEDURES	Nos
	Cystoscopy	240
	Colposcopy	19
	Broncoscopy	111
	Colonoscopy	387
	UGI Endoscopy	452
	Laryngoscopy	738
	Nasal Endoscopy	98
	E.R.C.P.	61
ENDOSCOPY	Oesophageal (04), Duodenal (11) Stenting	15
	Endoscopy guided Ryles Tube Insertion	65
	FOL Ryle's Tube Insertion	64
	Polypectomy	14
	Colonoscopic dilatation	08
	UGI Dilatation	34
	TOTAL	3405
GRAND TOTAL	MINOR & MAJOR SURGERIES & ENDOSCOPY	4012

#### Performance of 3 years of Surgical Oncology Dept.

Parameter	2017-18	2018-19	2019-20
Biopsy & Minor Operation	739	845	823
Major Operation	721	865	886
Endoscopy	2655	2625	2303

#### 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 Plans:**

- Increase patient turn-over by optimizing bed and operation theatre utilization.
- Increasing presentations and publications from the department.
- Further up gradation of Operating Rooms (OR) & CSSD



## A. 4.3 DEPARTMENT OF MEDICAL ONCOLOGY

The Medical Oncology department comprises of the Daycare Centre, Outpatient Consultation Department and Indoor Admission facilities.

Daycare Centre deals with patients who are discharged on the same day after completion of chemotherapy. Outpatients comprise of new registrations, those undergoing chemotherapy and patients on follow up.

After chemotherapy decision by the Multidisciplinary Tumour Board, patients are referred to the Department of Medical Oncology to discuss type of chemotherapy, the schedule, number of cycles along with intent of treatment (neoadjuvant, adjuvant, life prolonging or palliation) as well as adverse effects.

The Revamped Medical Oncology Daycare department was inaugurated in the first week of January 2020. Renovation was done as per National Accreditation Board of Hospitals (NABH) guidelines and standards. The daycare department is now a centrally air-conditioned unit. Large glass windows have been constructed to allow adequate ventilation and natural illumination. Beds have now been replaced with automated reclining couches. A small library is maintained for patients to encourage reading habits. Gentle soothing music is played in the daycare area as diversion technique. An elevator has been installed to help the wheelchair bound patients to reach the point of consultation, comfortably, at the daycare unit. Pharmacy, adjoining the daycare has been created to shorten the transit time for delivery of medicines.

#### Special Features of the Daycare Unit:

- The Daycare layout has been expanded to include large number of separate cubicles or units for individual patients to maintain utmost safety and privacy.
- Each cubicle consists of automated couches for comfortable positioning of patients during infusion, and a TV monitor.
- Chemotherapy administering area and the doctor's consultation area are demarcated by glass partition for patient monitoring during chemotherapy.
- There is a central sister station along with a data entry desk. An emergency crash table equipped with pulse oxymeter, glucometer, Ambou bag, thermal gun, sphygmomanometer, antidotes and lifesaving medications are kept next to the sister station.
- There is a separate room with a Biosafety cabinet for preparing infusion bottles under complete aseptic measures.
- Refrigerator with advanced technology has been provided for stringent storage of anticancer medications.
- Variety of antineoplastic medications are administered. The Medical Oncology team has immense expertise and experience in handling Targeted therapy, immunotherapy, biologics, growth factors and a wide range of cytotoxics. There has been greater use of chemo port devices.
- The DAYCARE centre is also equipped to perform emergency procedures like ascitic fluid and pleural fluid drainage. Intrathecal chemotherapy is also administered maintaining asepsis and under strict precautions.
- 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 ultrashort duration chemotherapeutic agents, growth factors, bisphosphonates, hormonal analogues in the second half thereby reducing long waiting hours.
- Extending the day care hours has made it possible to administer some very long and intense
  protocols (> 5hours) 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 timesaving for the attendants and caregivers who accompany the patients for
  chemotherapy.
- Patient information booklet, patient education booklet and a manual depicting DO's and DON'T's for patients undergoing chemotherapy are provided to each family.
- 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 have 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.
- Every single patient undergoing chemotherapy is provided with emergency helpline number to resolve issues pertaining to chemotherapy. This saves time and travelling.
- Periodically the department has been involved in "**Train the Sisters**" program. The sisters are taught basics of anticancer drugs, chemotherapy administering skills and how to combat spillage of toxic drugs.
- An antibiotic and chemotherapy formulary is maintained in the department to aid uniform practice. Chemotherapy protocols and schedules are in accordance with latest international guidelines.
- The department also has access to continuous supply of updated Oncology Manuals and latest edition of Oncology Journals with high Impact Factor to facilitate "Evidence based Practice". Common Journals are Lancet, Journal of Clinical Oncology and Annals of Oncology.
- Dr M Kar, Dr K 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 Medical Oncology department has also been involved in Global Clinical Trial in Lung Cancer and is currently pursuing cancer treatment based research.

Modifications and treatment customizations during lockdown:

- Patients and caregivers undergo two successive screenings with thermal gun, once at the point of entry in the outpatient area and second at the point of entry to the department.
- Patient waiting area has been expanded to maintain social distancing norms.
- There is a separate donning and doffing corner for Personal Protective Equipment (PPE).
- Chemotherapy naïve patients are being screened routinely with RT-PCR for SARS COVID 2 virus before the start of treatment. They are subsequently tested only if they experience



symptoms for coronavirus. Once a patient is tested positive for COVID, chemotherapy is temporarily stopped and later on resumed if repeat test results are negative. However hormonal treatments continue.

- Adequate distance is being maintained in the consultation area. Doctors and nurses are being provided a fresh set of gloves, face masks, face shields, gowns and goggles each day. Sanitizers are available in plenty.
- The nurses and the paramedics are administering drugs wearing PPE kits as per the guidelines.
- Greater emphasis is given to chemotherapy administration on daycare basis. This includes patients with solid tumors as well as hematological malignancies. As per international guidelines intensive long duration protocols mandating admission are being replaced with less intensive protocols without compromising efficacy.
- Use of biologics, immunotherapy and targeted therapy have certainly gone up. Recommendations from International bodies like ASCO, ESMO, ICON suggest – wider use of non cytotoxic regimens during COVID 19 outbreak. Neo-adjuvant chemotherapy is being encouraged for surgical eligible patients to reduce long waiting periods.
- There has been liberal use of growth factors in order to reduce the frequency of the hospital visits.
- Flexibility has been provided to patients enabling them to carry out necessary investigations from validated laboratories. This facilitates a single day visit for consultation or treatment.
- A comprehensive plan was created for the treating team to facilitate uninterrupted services during cyclone and lockdown in order to reduce exposure. The Department has to its credit an article titled "perception of Oncologists from developing nation" published which has been accepted for E-poster presentation at ESMO Asia Virtual Congress 2020. Hospital management provided drop off facilities on lockdown days for the working teams.
- Additional helpline numbers were created for patients undergoing chemotherapy to resolve issues pertaining to chemotherapy in order to save time and prevent unnecessary travelling. Special appointment letters and transport passes are being provided to patients including one attendant to facilitate their travel during complete lockdown.
- Admissions allowed only for emergency patients. They are initially kept in isolation and once tested negative for COVID 19, they are shifted to non COVID ward.
- A research work conducted by Dept. of Medical Oncology during COVID outbreak received recognition from ESMO. Same to be presented at ESMO ASIA 2020.
- Common protocols and agents administered during lockdown : CAPOX, CAPIRI, GEMCAP, CAPTEM, Capecitabine monotherapy, Fulvestrant, Leuprolide, bisphosphonates, monoclonal antibodies, growth factors etc.

NUMBER OF PATIENTS RECEIVING CHEMOTHERAPY FROM DAYCARE :



\_\_\_\_\_

2019-2020	On Followup	New Patients	Chemo Recd.
April	337	17	475
May	452	22	519
June	520	16	418
July	428	12	489
August	515	17	480
September	317	11	485
October	301	10	402
November	405	15	409
December	593	15	426
Jan 2020	504	13	400
February 2020	410	21	385
March 2020	450	19	303
Total	5232	188	5191

#### Total number of patients receiving chemotherapy at Day Care 2019-2020



## A. 4.4 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 is 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 specialties like Endocrinology, Paediatric Neurology, Paediatric Cardiology, Psychology, Dentistry, Audiometry.
- 2. Paediatric Oncology unit including CTVS services.
- 3. Rehabilitation Clinic for the survivors needing special assistances (psychological / physical).
- 4. 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 (2019-2020)

06th January, 2020 - Biswa Bhara Praan

18th January, 2020 - Maloy Ghosh-Joy ride by Tram from Sahid Minar & Back to SGCCRI

**27th January, 2020** - Prize distribution for Sit & Draw Competition at 'Falguni Sangha' for our child patients

**4th February, 2020 -** On World Cancer Awareness Day a drawing competition was held among the child patients organized by 'Plasmagen Biosciences'. Magic show for Children was organized by 'Varian' followed by a gift distribution programme.

**15th February, 2020 -** 11th International Childhood Cancer Awareness Day was celebrated by CanKids

16th June, 2020 - In House Blood Donation Camp

30th June, 2020 - The Children of SGCCRI celebrate Doctor's Day organized by Mrs Malua



Pal Chowdhury, Ms Parpri Saha & Mrs Kakali Mondal

01st July, 2020 - Children of SGCCRI celebrated Doctor's Day organized by CanKids

**11thAugust, 2020 -** On Independence Day 'Janmastami' was celebrated with child patients by CanKids & SGCCRI

14th August, 2020 - Tree plantation by 'Rotary Club of Calcutta Charnock City'

**13thAugust, 2020 -**'Rakhi Purnima' & 'Pre Independence Day' celebration was organized by CanKids for Children

**28th September, 2020 -** Light up SGCC&RI Child Care Centre in Gold to celebrate 'Childhood Cancer Awareness Month' organized by CanKids

**22th October, 2020** - Durga Puja Celebration with Child patients by CanKids & SGCCRI at Child Care Unit

12th November, 2020 - Diwali was celebrated by CanKids with Children

**14th November, 2020 -** Children's Day was celebrated by Rotary Dist 3291 & SGCCRI at Child Care Centre, SGCCRI

Parameters Age(0-14) 2019-20	Male	Female	Total
Indoor admission	797	371	1168
New Registration	115	62	177
Follow-up	2588	1484	4072
Total Patients In OPD (New & Follow-up)	2703	1546	4249

## Attendance in the Paediatric Oncology Day Care Centre 2019-20

Months	Patients
April-19	122
May-19	129
June-19	102
July-19	155
August-19	113
September-19	119
October-19	99
November-19	213
December-19	111
January-2020	102
February-20	69
March-20	69
TOTAL	1403



## Total number of patients (new & old) consulting medical oncology 2019-20

Months	Patients
April-19	366
May-19	326
June-19	318
July-19	429
August-19	343
September-19	373
October-19	370
November-19	388
December-19	372
January-2020	338
February-20	345
March-20	281
TOTAL	4249

WEST BENGAL	NEIGHBOURING (NBS)	NEIGHBOURING COUNTRIES(NBC)	STATE TOTAL
96	69	12	177

## A. 4.5 Bone Marrow Transplant Unit:

The bone marrow transplant is functional since August 2012. Till date a total of 64 cases of Autologous Transplant have been done in this unit (Multiple Myeloma – 51, Relapsed NHL – 4, Acute Promyelocytic Leukemia – 1, Relapsed HL – 6 and Plasma Cell Leukemia – 1). 6 BMTs have been performed between December 2019 to November 2020 (Multiple Myeloma 5, Hodgkin Disease 1). Majority of Multiple Myeloma patients are doing very well and 34 out of 51 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 Irradiator 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 Sisir Patra and Dr Tusti Ganguly have given a major boost to Haemato oncology Department for both Adults and Children.

We hope that very soon our centre will become a recognized referral centre in Eastern India for BMT- both Autologous and Allogenic.



# A.4.6 ACTIVITIES OF THE REGIONAL RADIATION MEDICINE CENTRE, VECC, YEAR-2019-20

#### Introduction:

The Regional Radiation Medicine Centre (RRMC), Kolkata was set up by Variable Energy Cyclotron Centre (VECC), the Department of Atomic Energy in the year 1989, in collaboration with the CCWHRI, Thakurpukur. This is an attempt by the DAE to bring the benefits of nuclear science to the common man of Eastern India for the diagnosis and treatment of human diseases.

The activities of the RRMC during this year include Nuclear Imaging and I-131 Therapy.

#### Nuclear Imaging:

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

Routine static imaging being performed regularly includes Whole Body Skeletal, Thyroid, Liver, Renal cortical and Large Dose I-131 Scans.

Routine dynamic imaging being performed regularly include Renal Dynamic study, Hepato-biliary, GI bleeding study, 3-phase skeletal imaging, etc.

Around 70 no. of patients underwent various Nuclear Imaging Studies every month.

#### I-131 Therapy:

Low dose I-131 therapy of Thyrotoxicosis (up to 15mCi) [on OPD basis] is being carried out regularly. Around 9 no. of patients received I-131 toxic therapy every month.

## Research and Academic Activities:

Besides its routine activities, RRMC also carries out some research and academic development 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.

The number of patients who underwent various types on nuclear imaging at RRMC during the FY year 2019-20 is presented in the following table:

Name of scan	No. of Scans
Bone	89
Renogram	258
Thyroid	73
I-131 Large dose	95
Hepato-Biliary	37
DMSA	69
Other	03
Total	624



## A. 4.7 Department of Radiology:

The volume of all imaging (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.

Our Old CT Scan Machine was replaced by 16 Slice Siemens make Somatom Spiral C.T Scan Machine through CSR Grant from Indian Oil Petronas Pvt. Ltd.

The addition of Auto-Injector has enabled us to do Triphasic CT scan regularly to know the detailed Vascular anatomy of Organs like Liver Pancreas before Surgery. Moving LASER has also been installed for CT Simulation for precise Radiotherapy Planning

The following table shows the work- load of the services of this department for the year 2019-20.

Month/Year	Total Patient	CT Scan	CT Guided FNAC& Trucut Biopsy	RT Planning
April, 2019	330	405	47	49
May, 2019	373	480	40	59
June, 2019	363	449	45	64
July, 2019	370	489	50	57
August, 2019	356	424	56	54
September, 2019	311	424	49	33
October, 2019	284	393	32	34
November, 2019	346	450	50	56
December, 2019	283	327	41	50
January, 2020	325	408	41	65
February, 2020	333	445	40	55
March, 2020	231	268	43	36
TOTAL	3905	4962	534	612

## CT Scan (April, 2019 to March, 2020):



SERVICES	No of Patients
Conventional Radiology	6217
Ultrasonography	2882
Echocardiography	4572
CT Scan	4962
PET-CT Scan	1683
MRI	1027
Mammography	2305
Dexascan(newly started)	107

CT Scan	4962
CT guided FNAC &Tru-cut	534
Radiotherapeutic Planning	612
TOTAL	6108

Month/Year	X-I	RAY	USG	ECHO
	Patients	Exposure		
April, 2019	525	564	282	396
May, 2019	480	534	250	365
June, 2019	443	576	215	370
July, 2019	563	650	343	522
August, 2019	506	561	266	427
September, 2019	462	508	211	390
October, 2019	414	462	210	306
November, 2019	498	552	242	402
December, 2019	410	438	215	375
January, 2020	447	494	235	387
February, 2020	470	499	228	405
March, 2020	341	363	185	227
TOTAL	5559	6141	2882	4572



### 4.8 Department of Pathology:

#### Lab Services Performance Update 2019-2020

- Continuing diagnostic services in hematology and biochemistry with accurate and precise analytical results
- Histopathology reporting was done according to AJCC protocols with improved TAT due to adequate manpower and faster tissue processing done on the two automated processors
- Immunohistochemistry testing continued to do very well with addition of new markers
- The Microbiology showed excellent performance in all testing parameters. The Molbio PCR unit was added enabling PCR testing for HCV HBV and HPV and tuberculosis with Rifampicin sensitivity.
- All departments showed excellent performance in EQAS programmes

Haematology	108356
Histopathology	15200
Microbiology	7112
Serology	15951
Immuno Histo Chemistry	7593
Biochemistry	355135
FNAC(Direct-414; CT guided- 126; USG guided-280)	820
Slide Review (Total patient : 890, total Slide : 6536	6536
РАР	465

#### Year : 2019 - 2020

#### A.5. Important activities of our major ancillary services

#### A.5.1. Nursing Services

Nursing department plays an important role in any health care organization. Clinical management of patients along with dedicated nursing services makes the Institute unique in Cancer care. The main objective is to provide Preventive, Curative, Promotive and Palliative care to the ailing patients with utmost dedication.

This is done through proper planning, developing, checking and acting, in coordination with the Diagnostics & Therapeutic departments. With increasing stress on patient bed-side care and continuous monitoring of Infection control methods along with diet & nutrition services, the nursing supervisors keep a strict vigil on the quality parameters of service delivery to the patients.

Counseling of patients & their family members, rendering co-operation and co-ordination, maintaining the National Patient Safety Goals in patient care and organizing customary social and educative functions are some of the aspects of the hospitals nursing services. The department also imparts oncological nursing orientation training programs to student nurses of different schools & colleges of other parts of West Bengal.

This year being a 'pandemic year' for COVID 19, Intensive Nursing Training was given to all categories of staff on Hospital Infection Control, education & awareness about management of COVID 19 positive patients as per laid down Govt. notification. The Nursing Department took Special initiative to impart training to all category of staff on procedures of Donning & Doffing of Personal Protective Equipment (PPE) & hand-washing. Special training were given to the nurses in the procedures of management of patients suffering from COVID 19.

Intensive training programs on induction of new staff and sessions on updation of nursing techniques, along with continuous nursing education program was scheduled and planned for development and up gradation of nursing skills. The nurses also attended sessions on Advanced Cardiovascular Life Support techniques, Bio Medical Waste Disposal, HMIS, Fire Safety, Chemotherapy, Blood Transfusion, Palliative Care, BMT and management of Haemato Oncology patient.

#### Training & Development Program by Nursing Department:

Hospital Quality Management Certification program done by 3 staff.

Working towards full accreditation for NABH, the nursing department is actively involved in quality improvement initiatives. A few of the programs are undertaken under Quality Improvement Initiative are:

**Purposeful rounds** to improve patient experience through the use of structured hourly supervision.

**Regular audits** of patient service delivery & rightful use of protocols by peer groups & regular assessment of feedback forms.

#### Events observed this year in nursing department include following:-

- Saraswati Puja followed by Dance drama by our staff
- · Advanced Cardiovascular Life Support (ACLS) training given to 4 of our staff
- · Hospital Quality Management Training to 3 of our staff.
- Intensive training on a regular basis on Donning & Doffing of PPE, HIC
- Intensive Induction training to new joiners for better nursing outcomes

SL.NO.	DESIGNATION	HEADS
01	Nursing Superintendent(N.S.)	1
02	Deputy Nursing Superintendent(D.N.S.)	1
03	Assistant Matron	1
04	Night Supervisor	3
05	Sister In charge 11+1 (OPD)	12
06	Staff Nurses (BSC/GNM/ANM)	43
07	Trainee Staff Nurse (BSC/GNM)	61
08	Sevika (IPD+OPD)	97
09	Nursing Aid	36
TOTAL		256



#### A.5.2 Transfusion Medicine Service (Blood Centre):

The Department has been functioning for nearly 2 decades now. Many of our cancer patients, especially the children frequently require Blood and blood products for which our In House department, with all the Modern machineries has been of great help. For our Apharesis machines, we can harvest Stem cells for BMT patients and also Platelets from a Single donor. Many NGOs, Clubs and individuals including our Staff and Management have come forward to donate blood regularly for our patients.

The following table gives a glimpse of the activities of our Blood Bank.

Banking Blood Services for FY 2019 - 20

(All figures are in Units)

Y/M	Outsid	e	inhouse	total		compo	nent pr	eparati	on	reject	balanc e after rejectio n		l	ssue to p	atient	
	Cam p	donor	colin	colin	W B	PRBC	FFP	PLT	Total	to tal	Total	W B	PRB C	FFP	PLT	Total
19-Apr	6	426	2	428		423	423	297	1143	69	1074		414	92	258	764
19-May	4	219	61	280		275	275	214	764	30	734		386	43	207	636
19-Jun	9	702	12	714		711	711	281	1703	88	1615		475	211	233	793
19-Jul	6	259	3	262		259	259	220	738	36	702		433	1278	221	1932
19-Aug	15	759	0	759		743	743	3 30	1816	100	1716		547	101	253	903
19-Sep	7	496	2	498		496	496	241	1233	56	1177		461	56	242	762
19-Oct	10	620	15	635		602	602	1 12	1316	40	1276		448	114	97	6 59
19-Nov	6	398	5	403		412	412	287	1111	220	891		553	142	281	980
19-Dec	11	516	11	527		518	518	274	1310	56	1254		441	2354	215	3010
20-Jan	15	866	4	870		861	861	314	2036	60	1976		500	119	312	931
20-Feb	8	512	6	518		514	514	312	1340	32	1308		746	1225	346	2317
20-Mar	6	286	45	331		326	326	194	846	44	802		577	72	189	838
TOTAL	103	60 59	166	6225		6140	6140	3076	153 56	831	14525		5981	5807	2854	14525

	19-	19	19-	19-	19-	19-	19-	19-	19-	20-	20-	20-	
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	total
Blood grouping	127	138	141	168	146	162	109	139	134	132	133	111	1640
Platelet- pheresis (SDP)	1	0	0	2	3	3	8	1	4	1	2	2	27
Coomb's test (DCT/ICT)	7	5	2	2	1	1	2	1	2	2	2	0	27
Stem-cell harvest (autologous)	0	0	0	2	1	1	1	1	2	0	2	0	10



## 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 inaugurated 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 outpatients and in-patients. Our department of Anesthesia is involved to relieve intractable neuropathic pains when 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. We are indebted to **Pallium India in Kochi**, headed by

Dr Rajagopal for training our staff and the regular support in organizing workshops at our centre.

This unit was upgraded on 2nd August 2010 with the initiative of **Dr Sankha Suvra Mitra (UK)** 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 IDEAAward 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 recognized as a national faculty by IAPC. Finally we successfully trained 18 Community Health 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 grown 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 patients and try to send them back home with necessary instructions. In a few cases we try to continue the 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 Shankha Suvra 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.

Apr-19         165         20         185         Morphine 10mg-5670 Morphine 30mg-2900 Inj, Fentanyl 25mg-84. Inj. Morphine 15mg-0         Nil           May-19         98         15         113         Inj. Morphine 30mg-2400 Inj. Fentanyl 25mg-94. Inj. Fentanyl 25mg-94. Inj. Fentanyl 25mg-94. Inj. Fentanyl 25mg-94. Inj. Fentanyl 25mg-99. Inj. Morphine 30mg-1500 Inj. Fentanyl 25mg-130         Nil           Jun-19         89         36         125         10         Nil           Jun-19         89         36         125         Nil         Nil           Jun-19         89         36         125         Nil         Nil           Jul-19         146         19         165         Scin, In, Morphine 10mg-8300 Morphine 30mg-1650 Inj. Fentanyl 25mg-13         Nil           Jul-19         146         19         165         Scin, In, Morphine 30mg-1650 Morphine 30mg-1650 Inj. Fentanyl 25mg-13         Nil           Jul-19         146         19         165         Nil         Morphine 10mg-7           Sep-19         152         35         187         Morphine 10mg-7         Nil           Morphine 10mg-7         103         16         189         15mg-7         Nil           Morphine 30mg-2300 Inj. Fentanyl 25mg- 162. Inj. Morphine         Nil         Morphine 30mg-2310 Inj. Fentanyl 2	Month/Year	OPD Turnover(1)	Indoor Turnover (2)	Total Turnover(1+2)	Narcotic Drugs Turnover (3)	Home Visits
May-19         98         15         113         Morphine 30mg-2420 Inj. Fentanyl 25mg-94 Inj. Morphine 15mg-6         Nil           Jun-19         98         15         113         Morphine 15mg-6         Nil           Jun-19         89         36         125         10         Nil           Jun-19         89         36         125         10         Nil           Jun-19         89         36         125         10         Nil           Jul-19         146         19         165         15mg-3         Nil           Jul-19         146         19         165         15mg-3         Nil           Aug-19         122         42         164         15mg-1         Nil           Aug-19         122         42         164         15mg-1         Nil           Sep-19         152         35         187         Morphine 15mg-0         Nil           Morphine 30mg-7         Nil         Morphine 30mg-000         Nil         Nil           Jul-19         152         35         187         Morphine 30mg-00         Nil           Morphine 30mg-1500         Inj. Fentanyl 25mg-10         Nil         Nil         Nil	Apr-19	165	20	185	Morphine 30mg- 2900 Inj. Fentanyl 25mg- 84 .	Nil
Nov.19         June 19         June 19         B9         36         125         Morphine 10mg-6540 Morphine 30mg-1140 Inj. Fentanyl 25mg-99 Inj. Morphine 10mg-8350 Morphine 30mg- 900i, Fentanyl 25mg- 136. Inj. Morphine 900i, Fentanyl 25mg- 136. Inj. Morphine 900i, Fentanyl 25mg- 136. Inj. Morphine 900i, Fentanyl 25mg- 131. Inj. Morphine 900i, Fentanyl 25mg- 132. Inj. Morphine 900i, Fentanyl 900i, Fen	Mar. 40		15	112	Morphine 30mg- 2420 Inj. Fentanyl 25mg- 94 .	A.(1
Jun-19         89         36         125         10         Nil           Jul-19         146         19         165         Morphine 10mg-8350 Morphine 30mg- 90inj. Fentanyl 25mg- 131. Inj. Morphine 15mg -3         Nil           Aug-19         146         19         165         15mg -3 Morphine 30mg- 131. Inj. Morphine 131. Inj. Morphine 2020 Inj. Fentanyl 25mg - 103. Inj.         Nil           Aug-19         122         42         164         15mg -1 Morphine 10mg- 7400 Morphine 30mg- 2020 Inj. Fentanyl 25mg - 103. Inj.         Nil           Sep-19         152         35         187         Morphine 15mg -0 Morphine 30mg-2000 Inj. Fentanyl 25mg- 133. Inj. Morphine 139. Inj. Morphine 1305. Morphine 1307. Inj. Fentanyl 25mg- 130. Inj. Fentanyl 25mg - 130. Inj.	May-19	98	15	113	Morphine 10mg- 6540 Morphine 30mg- 1140	NII
Jul-19         146         19         165         90inj. Fentany 25mg- 136. Inj. Morphine 15mg -3         Nil           Aug-19         122         42         164         15mg -3         Nil           Aug-19         122         42         164         15mg -1         Nil           Sep-19         122         42         164         15mg -1         Nil           Sep-19         152         35         187         Morphine 10mg- 7400 Morphine 30mg- 2020 Inj. Fentanyl 25mg- 132. Inj. Morphine         Nil           Oct-19         173         16         189         15mg -0         Nil           Morphine 10mg- 7300 Morphine 10mg- 5800         Nil         Morphine 10mg- 5800         Nil           Nov-19         173         16         189         15mg -7         Nil           Nov-19         273         22         295         15mg -4         Nil           Morphine 10mg- 102. Inj. Morphine         Nil         Morphine 10mg- 102. Inj. Morphine         Nil           Jan-20         85         14         99         15mg -4         Nil           Morphine 10mg- 10050 Morphine         30mg-1560 lnj. Fentanyl 25mg- 122. Inj. Morphine         Nil           Jan-20         85         14         99	Jun-19	89	36	125	10 Morphine 10mg- 8350	Nil
Aug-19         122         42         164         15mg-1         Nil           Morphine 10mg- 7400 Morphine 30 mg- 2020 lnj, Fentanyl 25mg-103. lnj.         Morphine 10mg- 5300         Nil           Sep-19         152         35         187         Morphine 10mg- 5300         Nil           Morphine 30mg-2000 Inj. Fentanyl 25mg-103. lnj.         Nil         Morphine 30mg-2000 Inj. Fentanyl 25mg- 139. lnj. Morphine         Nil           Oct-19         173         16         189         15mg -7         Nil           Nov-19         273         22         295         15mg -4         Nil           Morphine 30mg-22300 Inj. Fentanyl 25mg- 162. lnj. Morphine         Nil         Morphine 30mg-2230 Inj. Fentanyl 25mg- 162. lnj. Morphine         Nil           Nov-19         273         22         295         15mg -4         Nil           Morphine 30mg-2250 Inj. Fentanyl 25mg- 122. lnj. Morphine         Nil         Morphine 10mg- 8510 Morphine 30mg-1290         Nil           Jan-20         85         14         99         15mg -2         Nil           Jan-20         85         14         99         15mg -0 Norphine 10mg-1750 Norphine 10mg-1750         Nil           Mar-20         104         64         168         Inj. Morphine 15mg -0 Nil         Nil <td>Jul-19</td> <td>146</td> <td>19</td> <td>165</td> <td>90Inj. Fentanyl 25mg- 136 . Inj. Morphine 15mg -3 Morphine 10mg- 6690 Morphine 30mg- 1650</td> <td>Nil</td>	Jul-19	146	19	165	90Inj. Fentanyl 25mg- 136 . Inj. Morphine 15mg -3 Morphine 10mg- 6690 Morphine 30mg- 1650	Nil
Sep-19         152         35         187         Morphine 30mg- 2020 lnj. Fentanyl Z5mg-103. lnj.           Sep-19         152         35         187         Morphine 15mg-0         Nil           Morphine 15mg-0         Nil         Morphine 15mg-0         Nil         Morphine 30mg-2000           0         139. lnj. Morphine         15mg-7         Nil         Norphine 30mg-2310           0         15mg-7         Nil         Morphine 30mg-2310         Nil           Nov-19         273         22         295         15mg-4         Nil           Nov-19         273         22         295         15mg-4         Nil           Dec-19         165         28         193         15mg-2         Nil           Jan-20         85         14         99         15mg-4         Nil           Jan-20         85         14         99         15mg-4         Nil           Morphine 10mg- 10050 Morphine         30mg-1560 lnj.         Nil         Morphine 10mg- 10050 Morphine         Nil           Jan-20         85         14         99         15mg-4 10050 Morphine         Nil           Morphine 15mg-0         Nil         Morphine 15mg-0 10050 Morphine         Nil           <	Aug-19	122	42	164		Nil
Oct-19         173         16         189         Morphine 30mg-2000 lnj. Fentanyl 25mg- 139. lnj. Morphine           Nov-19         173         16         189         15mg-7         Nil           Nov-19         273         22         295         15mg-7         Nil           Nov-19         273         22         295         15mg-7         Nil           Dec-19         165         28         193         15mg-2         Nil           Jan-20         85         14         99         15mg-4         Nil           Jan-20         120         47         167         Morphine 10mg-1730 Morphine 10mg-1900 Inj. Fentanyl 25mg-104. Inj. Morphine 10050 Morphine         Nil           Feb-20         120         47         167         Morphine 10mg-1750 Morphine 10mg-1750 Inj. Fentanyl 25mg-20. Nil           Mar-20         104         64         168         Inj. Morphine 15mg-0         Nil	Sep-19	152	35	187	7400 Morphine 30 mg- 2020 Inj. Fentanyl 25mg- 103 . Inj.	Nil
Nov-19         273         22         295         Morphine 10mg- 5680 Morphine 30mg-2310 Inj. Fentanyl 25mg- 162. Inj. Morphine           Nov-19         273         22         295         15mg -4         Nil           Morphine 10mg- 8510 Morphine 30mg- 2250 Inj. Fentanyl 25mg- 122. Inj. Morphine         Nil         Morphine 30mg- 2250 Inj. Fentanyl 25mg- 122. Inj. Morphine         Nil           Dec-19         165         28         193         15mg - 2         Nil           Jan-20         85         14         99         15mg -4         Nil           Morphine 10mg- 10050 Morphine         30mg-1560 Inj.         Fentanyl 25mg- 104. Inj. Morphine         Nil           Feb-20         120         47         167         Morphine 10mg- 30mg-1750 Inj.         Nil           Mar-20         104         64         168         Inj. Morphine 15mg -0         Nil	Oct-19	173	16	189	Morphine 30mg-2000 Inj. Fentanyl 25mg- 139 . Inj. Morphine	Nil
Dec-19         165         28         193         Morphine 10mg- 8510 Morphine 30mg- 2250 Inj. Fentanyl 25mg- 122. Inj. Morphine           Jan-20         85         14         99         15mg - 4 15mg - 4         Nil           Jan-20         85         14         99         15mg - 4 104. Inj. Morphine         Nil           Feb-20         120         47         167         Morphine 10mg- 9030 Morphine 10mg- 9030 Morphine 10mg- 9030 Morphine 30mg- 1750 Inj. Fentanyl 25mg-71.         Nil           Mar-20         104         64         168         Inj. Morphine 15mg -0         Nil			22	295	Morphine 10mg- 5680 Morphine 30mg-2310 Inj. Fentanyl 25mg- 162. Inj. Morphine	Nil
Jan-20         85         14         99         Morphine 10mg- 7730 Morphine 30mg- 1900 Inj. Fentanyl 25mg- 104. Inj. Morphine 15mg -4         Nil           Feb-20         120         47         167         Morphine 10mg- 10050 Morphine 30mg-1560 Inj. Fentanyl 25mg-80. Inj. Fentanyl 25mg-80. Inj. Morphine 10mg-0030 Morphine 10mg-9030 Morphine 30mg- 1750 Inj. Fentanyl 25mg-71.           Mar-20         104         64         168         Inj. Morphine 15mg -0         Nil	NOV-15	213	22	233	Morphine 10mg- 8510 Morphine 30mg- 2250 Inj. Fentanyl 25mg-	NI
Jan-20         85         14         99         Inj. Fentanyl 25mg- 104 . Inj. Morphine           Jan-20         85         14         99         15mg -4         Nil           Morphine 10mg- 10050 Morphine         30mg-1560 Inj.         Nil         Nil           Feb-20         120         47         167         Morphine 10mg-9030 Morphine 10mg-9030 Morphine 30mg-1750 Inj. Fentanyl 25mg-71 .           Mar-20         104         64         168         Inj. Morphine 15mg -0         Nil	Dec-19	165	28	193		Nil
Feb-20         120         47         167         10050 Morphine 30mg-1560 Inj. Fentanyl 25mg-80 . lnj. Morphine 15mg -0         Nil           Mar-20         104         64         168         Inj. Morphine 15mg -0 Inj. Fentanyl 25mg-71 . Inj. Morphine 15mg -0         Nil	Jan-20	85	14	99	Inj. Fentanyl 25mg- 104 . Inj. Morphine 15mg -4	Nil
Mar-20         104         64         168         Inj. Morphine 15mg -0         Nil	Feb-20	120	47	167	10050 Morphine 30mg-1560 Inj. Fentanyl 25mg-80 . Inj.	Nil
					Morphin e 10mg-9030 Morphin e 30mg- 1750 Inj. Fentanyl 25mg- 71	
	Mar-20 Total	104 1,692			Ing. Worphille Tollig -0	0

#### Details of services provided:



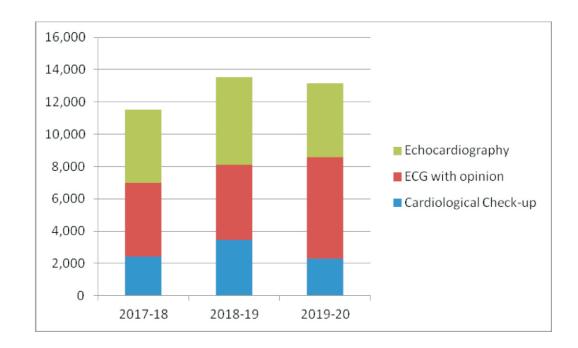
#### A.5.4 Cardiology Services

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 before amy major cancer therapy or for any suspicion of any cardiac complication. The workload of cardiology department during 2019-20 is shown below :

SERVICES	No. of Patients
Cardiological Check- up	2,279
ECG with opinion	6.279
Echocardiography	4,572

The department also takes active part in the overall management of patients admitted in ITU and Pediatric ITU. **3 Years Cardiology Services** 

Services	2016-17	2018-19	2019-20
Cardiological Check- up	2407	3451	2279
ECG with opinion	4590	4655	6279
Echocardiography	4519	5429	4572





Tobacco, which contains more than 3000 chemicals, is known to be the silent killer accounting for more than 30% of all Cancers. The addiction to tobacco is mainly because of its constituent `Nicotine`. To help people quit Tobacco, The Nicotine Replacement Therapy clinic (NRT Clinic) was set up with the initiative of **Prof (Dr) Chittaranjan Choudhury**, based in UK. This clinic runs in conjunction with the Head and Neck and Dental Department, catering to people who want to quit tobacco habits. Many patients' attendants are counselled and we also counsel cancer survivors to avoid resumption of tobacco habits. The effects of tobacco use are highlighted and pamphlets and information sheets are handed out to patients and attendants on a regular basis. Many Training sessions were conducted by Prof Choudhury over the last few years to take this Tobacco cessation campaign to grass root level.

#### A.5.6 Alaryngeal Speech Therapy Unit

Suitable cases of Cancer of Larynx can be treated successfully by total surgical removal of the larynx (the voice-box situated in the neck). However, the patients become alaryngeal (mute) for the rest of their lives as a result of such operations. The Laryngectomee Club (previously headed by Mr Bibhuti Chakraborty – himself a laryngectomee) runs a clinic every alternate Saturday to teach patients to talk satisfactorily by manipulating air gulped in the upper part of the esophagus (the food-pipe). 30 patients were managed in the Laryngectomee club during the year. Apart from attending the laryngectomized patients, this unit also takes part in cancer awareness programmes, and in the Tobacco Free campaigns.

Mr Chakraborty used to run the service voluntarily at our center to the patients for over 35 years. Recognitions of his voluntary services have come from various sources. We thankfully acknowledge his contribution.

After the sad demise of Mr Chakraborty, the unit is run presently by two volunteers– Mr Ujjal Sinha and Ms Soma Sinha from Jamsedpur. The management of this Institute appreciates their untiring benevolent work.

Pre and post patients counseling with food habit, neck, exercise to patients and their family members at SGCCRI Kolkata, OPD No 209, 2 sittings alternate Saturday for Esophegeal speech for the year of 2019-2020. Total there were 34 patients who attended during this period. Patients and their families both are satisfied with our work and their improvement.

#### A.5.7 Stoma Care Services

Our hospital has been the first center in Eastern India to run a free Stoma Clinic for last three decades under the leadership of Mr. KC Banerjee (a survivor). The clinic got a major boost with the joining of our trained nursing staff Ms Atreyee Acharya. After their sad demise recently, **Cancer Fight Foundation**, an N.G.O, has taken up the responsibility of managing the Stoma Clinic. The free clinic runs every Friday between 2-4 P.M.

It has been over two years now that Cancer Fight Foundation has been conducting a clinic for Stoma patients every Friday. 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 Ms Nabanita 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 they have counseled 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 smiles on the faces of the child victims.

## A. 5.8 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 Centers 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 2019-2020.

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

## A 5.9 Psychological Support Service

We have a special OPD service for psychological counseling for patients and their close relations. Many patients avail the service over the years.

## A.5.10 Nutritional Support Service

Good nutrition is especially important if you have cancer because both the illness and its treatments can change the way you eat. They can also affect the way your body tolerates certain foods and uses nutrients.

Nutrition is an important element to consider when you're getting cancer treatment. Eating healthy foods before, during, and after treatment can help you feel better and stay stronger. But cancer and its treatment can sometimes cause problems that can make it hard to eat.

With the active help of our expert nutritionists, the institute helps lots of patients who develop their nutritional problems before, during and after surgery, chemotherapy; radiation therapy and others process of treatment. Regular follow up under supervision of our Dieticians we use **MODIFIED NUTRITION THERAPY (MNT)** for treating our cancer patients. Regular pre & post nutritional assessments on patients are done to evaluate proper diet plans.

With the help of many renowned nutritional companies, we have arranged NUTRITION CAMPs with live sample demonstration, chart, and poster-presentation to inform the patients about proper & right nutritional food according to their nutritional needs. Quarterly CMEs by our expert doctors for discussing the new nutrition related topics are undertaken.

A dedicated dietician for our child patients, supported by CUDDLES FOUNDATION (NGO based in Mumbai) also provides nutritional supplements free to all the children both IPD & OPD in our Paediatric Wards. We also get nutritional support for children from CAN-KIDS (Delhi). Regular counseling programs on nutritional needs of child patients are taken up in parent counseling sessions.



# A.6. Important activities of our Environmental Monitoring and 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, conceived by our Founder Dr Saroj Gupta and given shape by Mr Anjan Gupta (Hony Architect and now Hony Secretary).

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.) Arunava Majumder, 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 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.

Prof A Majumder, chairman of the Environmental Monitoring Committee expressed his desire to upgrade the existing water waste stabilization pond in order to use the treated water for gardening, car & road washing etc. which was unanimously approved by the committee. 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-6.1 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 K WP solar photovoltaic power plant	Auditorium building	February,2014	Suncraft Solar	MNRE Project
20 K WP solar photovoltaic power plant	Special Cabin Block	July ,2018	AVO Engineering	Mrs Bharati Mukherjee & Dr Sanjeev Mukherjee
50 K WP solar photovoltaic power plant	CSB & OPD Block	November, 2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
50 K WP solar photovoltaic power plant	PET CT Block	November, 2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
20 K WP solar photovoltaic power plant	Linac Block	November, 2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
20 K WP solar photovoltaic power plant	IMCH Block	November, 2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
20 K WP solar photovoltaic power plant	DR Block	November, 2019	Chloride Power System & Solution Pvt. Ltd.	Exide Industries
16.42 K WP solar photovoltaic power plant	Swarup Block	December, 2019	Dharitri Solar	Mr Bani Prasad Nandy
17.08 K WP solar photovoltaic power plant	Nursing Hostel	December, 2019	Dharitri Solar	Mr. Bani Prasad Nandy
7 Street Light Lamp post	IMCH, Out Side	2019-2020	Dharitri Solar	Ms Sharmila Chakravarti (2), Lions Club of Calcutta Sunrise (4), Rotary Club of Calcutta South Circle (1)

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.

We are also grateful to CESC for considering our Institute for 'P' tariff rate. We have been able to save Rs 2,00,000.00 (Approx) per month for this concessional rate and the savings amount is being used for further Charitable aspects.





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

Our Institute's Central Library is located in the Audio-Visual Complex. The service is computerized. The Library is well equipped with modem facilities and resources (print and electronic) in the forms of CDROMs, DVD-ROM, online databases, video cassettes, books, journals, theses, reports, etc. It has also developed 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 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) 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, Clinical Key and Cochrane Library)
- Access to Online Journal facility provided "The Clinics of North America", 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 Patrika, The Telegraph

#### Library Collections:

Total Medica	al Books	Total I	Fiction and Non-fict	tion Books
Printed Books	e-Books	Bengali	English	Hindi
1447	2486	3027	1524	88



## New Medical Books Purchase 2019-20

Acc. No.	Call No.	Author/ Editor		Book Title		Edition	Publisher	Year
1446	616.9WHO	Lloyd, Ricardo V eds.	WHO tumo orga	classification ours of endoc ms	of rine	4 <sup>th</sup> ed.	IARC	2017
1447	616.9WHO	Moch, Holger ed.		classification ours of the unit em and male get uns	-	4 <sup>th</sup> ed.	IARC	2016

#### •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
18	08	105



#### A.8 DIVISION OF RESEARCH, ACADEMICS& CANCER CONTROL

The Division of Research consists of the following divisions:

- Academic
- Records
- Molecular Biology
- Epidemiological Research
- Clinical Studies

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:**

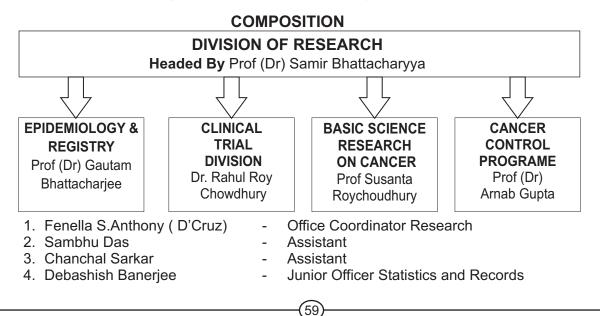
The Department of Scientific & Industrial Research (DSIR), Government of India recognizes this Institute as a "Scientific & Industrial Research organization (SIRO)". As a result of this recognition, donation to the scientific activities of this Institute qualifies for exemption u/s 35(i)(ii) of Income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

This institute is an accredited member of the National Cancer Grid (NCG), an umbrella organization of all the major cancer centres 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.





## **RESEARCH ADVISORY BOARD**

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

#### **Research Subcommittee**

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

## Institutional Ethics Committee

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

An SOP for the Institutional Ethics Committee (IEC) was drafted in the first meeting of the committee, in keeping with the ICMR (Indian Council of Medical Research) and Good Clinical Practice (GCP) guidelines. The SOP was further revised in March 2013 (ver1.1) and May 2014 (ver 1.2). October 2015 (Vol 1.3), and May 2014 (ver 1.2) March 2017 (Vol1.4). A new version of the SOP is now in process.

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.

As per Government guidelines IEC is accredited with CDSCO under the Drug Controller General of India, of the Ministry of Health & Family Welfare. and also with the Department of Health Research.

#### 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:

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## a. RESEARCHACTIVITIES

- i. Activities on cancer epidemiology & cancer registry
  - Development of an Atlas of Cancer in India (NCRP, ICMR)
  - Population Based Cancer Registry (PBCR), Kolkata (NCDIR, ICMR)
  - Hospital Based Cancer Registry (NCDIR, ICMR)
  - 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.
- Global Atlas Project: With CRT, Oxford, UK
- Case Control Studies with Breast Cancer: With CFI
- Evaluation of degree of association of various parameters in Breast Cancer: With CNCI

#### ii. Basic and Molecular Research on Cancer

#### Basic and Translational Research Division

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

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

#### Highlights of recent achievements

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

#### Molecular Diagnostic services:

- Under the supervision of the Basic Research and Molecular Biology division, this institute is offering the following molecular diagnostic tests for cancer effected individuals:
- Qualitative and quantitative analysis of BCR-ABL fusion transcript (for CML and ALL)
- Qualitative and quantitative analysis of PML-RAR  $\alpha$  fusion transcript (for AML)
- EGFR mutation detection (for lung adenocarcimoma)



- K-RAS, N-RAS and B-RAF mutation detection (for lung/colorectal adenocarcimona)
- FISH for BCR-ABL and HER2/Neu analysis

#### Academic activities:

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

#### Our team Research Investigators

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

#### Lab Members

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

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

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



## Ongoing research grants:

- 1. J.C. Bose Fellowship grant (awarded to Prof. Susanta Roychoudhury from SERB, GOI) PI: Prof. Susanta Roychoudhury
  - Duration: 2.5 yrs (2018-2021); Sanctioned amount: Rs. 46,00,000
- 2. Delineating a novel transcriptional regulatory role of APC/C-Cdc20 complex and its impact on chromosomal instability in oral cancer (Awarded to Prof. Susanta Roychoudhury from SERB, GOI) PI: Prof. Susanta Roychoudhury; Co-PI: Dr. Somsubhra Nath, Dr. S. Bhattacharyya, Dr. Saradindu Ghosh

Duration: 3 years (2019-2022); Sanctioned amount: 43,70,982

- 3. Deciphering CUEDC2-mediated molecular crosstalk between aneuploidy and receptor status of breast tumors (Early Career Award to Dr. Somsubhra Nath from SERB, GOI) PI: Dr. Somsubhra Nath; Co-PI: Prof S Roychoudhury, Dr. S Bhattacharyya, Dr. Arnab Gupta Duration: 3 yrs (2016-2019); Sanctioned amount: Rs. 41,22,360
- 4. Impact of BCR-ABL mutations on front-line tyrosine kinase inhibitor therapy: an Eastern Indian cohort study (Sanctioned under Dept of Higher Education, Science, Technology, and Biotechnology, Govt of WB) PI: Dr. Somsubhra Nath; Co-PI: Prof Susanta Roychoudhury, Dr. R.N. Ghosh

Duration: 3 yrs (2018-2021); Sanctioned amount: Rs. 27,45,284

- 5. Efficacy of spindle assembly checkpoint among breast cancer subtypes: a crosstalk driven by hormone receptors (DST-INSPIRE fellowship awarded to Mr. Suryendu Saha) PI: Dr. Somsubhra Nath, Co-PI: Prof Susanta Roychoudhury Duration: 5 yrs (2018-2023); Sanctioned amount: Rs. 19,60,000
- 6. Study on relationship between Gain-of-Function mutant P53 and stemness as an underlying cause of chemoresistance in ovarian cancer (DST-Women Scientist A, awarded to Dr. Damayanti Das Ghosh)

PI: Dr. Damayanti Das Ghosh; Mentor: Prof. Susanta Roychoudhury Duration: 3 yrs; Sanctioned amount: Rs. 29,00,000

7. Development of an algorithm based on TP53 mutation and protein biomarkers from blood plasma of high grade serous ovarian carcinoma for diagnosis and treatment monitoring: a liquid biopsy approach (DBT-Research Associateship awarded to Dr. Poulomi Khan)

Mentor: Prof. Susanta Roychoudhury; Duration: 2 yrs; Sanctioned amount: Rs. 12,54,400

## Future work plan:

- 1. Developing a project on "Rectal cancer: molecular determinants of resistance to neo-adjuvant chemoradiation"
- 2. Characterization of cancer stem cells from breast and ovarian cancers
- 3. Development of organoid culture from ovarian cancers
- 4. Creation of tissue bank repository and patient-derived cell line
- 5. Implementing liquid biopsy in breast and ovarian cancers

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

- 1. Roychowdhury A, Samadder S, Indra Mazumder D, Das P, Basu M, Mondal R, Roy A, Roychoudhury S, Panda CK. IGF2 is Deregulated During the Development of Uterine Cervical Carcinoma in Indian Patients.Biochem Genet. 57: 638-651(2019) doi: 10.1007/s10528-019-09917-1.
- 2. Datta, A., Das, P., Dey, S., Ghuwalewala, S., Ghatak, D., Alam, S.K., Chatterjee, R. and

Roychoudhury, S. Genome-Wide Small RNA Sequencing Identifies MicroRNAs Deregulated in Non-Small Cell Lung Carcinoma Harboring Gain-of-Function Mutant p53. Genes 10: 852(2019)

3. Roychowdhury A, Samadder S, Das P, Mazumder DI, Chatterjee A, Addya S, Mondal R, Roy A, Roychoudhury S, Panda CK. Deregulation of H19 is associated with cervical carcinoma.

#### Genomics. 112: 961-970 (2020)

- Islam MS, Dasgupta H, Basu M, Roy A, Alam N, Roychoudhury S and Panda CK. Reduction of nuclear Y654-p-β-catenin expression through SH3GL2-meditated downregulation of EGFR in chemotolerance TNBC: Clinical and prognostic importance. J Cell Physiol. 2020;1–15. https://doi.org/10.1002/jcp.29466
- D. Bhattacharyya, R. Ghosh, P. Gupta, A. Gupta, S. Roychoudhury, S. Nath. 1098P Incidence of imatinib resistance in chronic myeloid leukemia (CML) patients: Experience from resource poor center of eastern India. Annals of Oncology. Volume 30, Supplement 5, October 2019, Page v445, doi:10.1093/annonc/mdz251

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

#### Ongoing research work in collaboration:



#### 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, 4 students Dr Sudip Haldar, Dr Suman Udatha, Dr P Bharath Kumar and Dr M Santosh 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:

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

In the current year, 21 DMLT-Tech, 6 DRD-Tech and 8 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	2017-2018	2018-2019	2019-2020
Lung cancer	606	563	510
Breast cancer	780	800	699
Head and neck cancer	630	613	536
Uterine cancer	62	83	78
Cervical cancer	379	411	303
Ovarian cancer	158	136	141
Urological cancers	377	263	330
GI Cancers	169	214	1,148

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:

Sl 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 pharmacokinetic characteristics of intravenous infusion of Rituximab (Hetero) and Reference, Medicinal Product (Rituximab, Roche) in Indian patient of Non-Hodgkin's Lymphoma (HERIL Y Study)	Dr Rabindranath Ghosh	Study closed out
3.	A prospective, multicentric, randomized, open label, parallel group, comparative, two arms, safety, efficacy and pharmacokinetic study of Trastuzumab, (Manufactured by Intas Pharmaceuticals Limited, Biopharma Division, Ahmedabad, India) in comparison with Reference Biologic (Trastuzumab, Marketed by Roche) in the patients with HER2-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



HOW TO GET CLINICAL TRIALS APPROVED & STARTED IN SGCC&RI? Approach either PI or Clinical Studies Division/Research Coordinator with study proposal. If approaching the Clinical Studies Division, a suitable PI for the study will be suggested. If PI directly is approached, he/she will forward all information to the Clinical Studies Division. ↓

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.

Period	No of CMEs
March 2006	5
April 2006-March 2007	46
April 2007 – March 2008	48
April 2008 – March 2009	43
April 2009- March 2010	43
April 2010 – March 2011	45
April 2011 – March 2012	49
April 2012 – March 2013	49
April 2013 – March 2014	46
April 2014 – March 2015	46
April 2015 – March 2016	49
April 2016 – March 2017	48
April 2017-March 2018	48
April 2018-March 2019	49
April 2019-March 2020	47



SL.NO.		DATE	PLACE	CO-ORGANISOR	TARGET POPULATION	DOCTOR
	1	04.01.20	North	Rotary Club	Awareness lecture	Amab Gupta
			Calcutta	Calcutta Sutanati		
	2	05.01.20	Kulpi	Oisik, Kulpi	Awareness lectre	Tanmoy Chattererjee
	2	19.01.20	Barasat	Bara sat Na wpa ra	Awareness speech	Shibsankar Paul
				Bibek Bani seva Kendra		
	3	22.02.20	Budge	Rotary Club of	Awareness lecture	Upasona Palo
	J	22.02.20	Budge	Budge Budge	Awareness lecture	Falu
	4	29.02.20	Tollygunge	Ramakrishna Sarada Mission, Siriti	Awareness Lecture	M. Ariff
	5	27.08.20	Virtual	Swasthya Jagriti Sangstha	Awareness Lecture	Amab Gupta
	6	08.11.20	Virtual	I CanCaRe	Awareness lecture	Amab Gupta
	0	08.11.20	VIITUAI	IASO	Awareness lecture	
				SGCCRI Rotary International		
				Innerwheel District		
				Diabetes Awareness & You		
				Green Valley Durga Puja Samiti		
7		04.12.20	Vinture	Cankids- Paediatric Cancer & Covid	NGOs, Healthcare workers, patients & caregivers	Amab Gupta



## Research articles published in National and International Journal: Publications 2016 Onwards

#### 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.
- Bhakat KK, Sengupta S, Adeniyi VF, Roychoudhury S, Nath S, Bellot LJ, Feng D, Mantha AK, Sinha M, Qiu S, Luxon BA. Regulation of limited N-terminal proteolysis of APE1 in tumor via acetylation and its role in cell proliferation. Oncotarget. 2016 Mar 10. doi: 10.18632/oncotarget.8026
- 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, RoyA, **Roychoudhury S**, PandaCK.Frequent inactivation of MCC/CTNNBIP1 and overexpression of phosphobetacateninY654are associated withbreast carcinoma: Clinical and prognostic significance. Biochem Biophys Acta. 2016 May 18. pii: S0925-4439(16)30117-X. doi: 10.1016/j.bbadis.2016.05.009.
- 2. 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
- 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. Int J Cancer. 2017 Jun 1;140(11):2498-2508.doi: 10.1002/ijc.30681.Epub 2017 Mar 24.
- 4. Sengupta S, Mantha AK, Song H, Roychoudhury S, **Nath S**, Ray S, Bhakat KK. Elevated level of acetylation of APE1 in tumor cells modulates DNA damage repair. Oncotarget. 2016 Sep 19. doi: 10.18632/oncotarget.12113.
- 5. 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.
- 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)
- 7. 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.
- 8. 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 PtA):2899-2911. doi: 10.1016/j.bbagen.2016.09.014.

- 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
- 10. 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.
- 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.
- 12. Saha 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.
- 13. **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.
- 14. **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
- 15. 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
- 16. 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



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- 18. 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
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#### Published Review articles.

1. S. P. Somashekhar, Rudra Acharya, Avinash Saklani, Devendra Parikh, Jagdishwar Goud, Jagannath Dixit, K. Gopinath, M.Vijay Kumar, Rajesh Bhojwani, Sandeep Nayak, Subramaneswar Rao, Kiran Kothari, K. Chandramohan, Sharad Desai,



**Arnab Gupta**. Adaptations and Safety Modifications to Perform Safe Minimal Access Surgery (MIS: Laparoscopy and Robotic) During the COVID-19 Pandemic: Practice Modifications Expert Panel Consensus Guidelines from Academia of Minimal Access Surgical Oncology (AMASO). Indian Association of Surgical Oncology 2020.

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

- Bhattacharyya S, Dr Saroj Gupta Oration at Gastrocon, CMRI, Nov.2017
- Dr Sunil Chandra Bose (brother of Netaji Subhash Ch Bose) 125th Birth Centenary Oration at NICED in Kolkata, Nov, 2019. Topic: `Recent Advances in Cancer Surgery`.

#### Original work in form of poster presentation

- 1. **Jena S**. Axillary Reverse Mapping in Patients Undergoing Axillary Lymph Node Dissection for Breast Cancer: A Feasibility Study in Indian Scenario. 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 : a single centre experience in eastern India . UGICON-2017, Upper GI Cancer Surgery Conference and live workshop (April: 14-16) Ahmedabad
- Epidemiology of Neuro Endocrin Cancer Cervix in a Tertiary Care Centre in India. Chakrabarti B,Mondal N.R, Chatterjee T, Basak J, RoyChowdhury R, De S. Accepted for Poster presentation on the 17th Biennial Meeting of International Gynecologic Cancer Society. September 14-16, 2018, Kyoto, Japan
- 4. **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
- 5. 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
- 6. Roy R.( SGCCRI Thakurpukur, Kolkata, India) ERIBULIN USE IN MBC IN RESOURCE LIMITED SETTING.
- 7. **Chowdhury R. Rahul, Chatterjee T, Chakrabarti B, Mondal N R**, Das P. An Overview of Epidemiology of Cervical Cancer in a Tertiary Cancer Centre in Eastern India over a Period of 10 Years (2008-2017).33rd Annual Conference. AICC RCOG. Kolkata 2019. Book Of Abstracts
- 8. **Roy Rakesh**: `Covid Era Perception of Oncologists from a developing Nation` in virtual ESMO Asia Congress held in Singapore in 2020.

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

- Jena S (2013-2016)DNB Thesis under Surgical Oncology (Super speciality). "Prospective study of common morbidities following axillary lymph node dissection in female breast cancer (ALND)". Saroj Gupta Cancer Centre & Research Institute. Thakurpukur, Kolkata-700063
- Malhotra M (2013-2016) DNB Thesis under Surgical Oncology (Super speciality). "Blue

dye Sentinel Lymph Node biopsy in Clinically negative neck node (cN0) in Oral Squamous cell Carcinoma (OSCC)- A validation study ".Saroj Gupta Cancer Centre & Research Institute. Thakurpukur, Kolkata-700063

- Reddy Y.V.V (2013-2016) DNB Thesis under Radiotherapy, "Observational study of response and toxicity of concurrent chemo-radiotherapy (CTRT) followed by consolidation chemotherapy (CT) in locally advanced non small cell lung carcinoma (NSCLC)". Saroj Gupta Cancer Centre & Research Institute. Thakurpukur, Kolkata-700063
- Sor Prasad Totaram (2014-2017) DNB Thesis under Surgical Oncology (Super Speciality) Assessment of Role of Induction Chemotherapy in management of Locally Advanced Squamous Cell Carcinoma of Oral Cavity" Saroj Gupta Cancer Centre & Research Institute. Thakurpukur, Kolkata-700063
- Subrata Kumar Sahu (2014-2017) DNB Thesis under Surgical Oncology (Super Speciality) "A Clinico-Pathological study of operable carcinoma Gall bladder with special emphasis on correlation of nodal involvement to T-Stage" Saroj Gupta Cancer Centre & Research Institute. Thakurpukur, Kolkata-700063
- Manjare Rahul Ramrao (2015-2018) DNB Thesis under Surgical Oncology (Super Speciality). To study the importance of USG Neck, Serum Thyroglobullin, Iodine 131 uptake scan in postoperative differentiated Thyroid Cancer. Saroj Gupta Cancer Centre & Research Institute. Thakurpukur, Kolkata-700063
- Syed Hassannjjaman (2015-2018) DNB Thesis under Surgical Oncology (Super Speciality). Expression of ki67 level and receptor status ER, PR, Her2/neu in breast cancer- A Clinicopathological study. Saroj Gupta Cancer Centre & Research Institute. Thakurpukur, Kolkata-700063

#### Case presentations published in Journals

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- Mondal NR, Chakrabarti B, Chatterjee T, Roy Chowdhury R (2018). Synovial Sarcoma of the Vulva-ACase 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
- Karak Kalpana, Banerjee Anita, Roy Shravasti (2019). Nosocomial Infection Caused By Sphingomonas Paucimobilis A Rare Pathogen. BAOJ Microbiology 5:037.
- Sahu SK, Mishra I, Haldar S, Bhattacharyya S. Primary squamous cell carcinoma of the sigmoid colon. Indian J Case Reports.2019;18-Oct (Epub ahead of print)
- Paul SS, Sahu SK, Chatterjee I. Non-recurrent laryngeal nerve- a surgical challenge.J.EVID.BasedMed.Healthc.2020:7(30),0000-0000.DOI: 10.18410/jebmh/2020/000



#### **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.

#### Academic Achievements:

- 1. Dr Biman Chakraborty, Head of our GynaeOncology Dept was awarded `Dr Saroj Gupta Lifetime Achievement Award` on our Founder's Day, 5th Dec, 2020 for his dedicated service even at the age of 90 yrs including his zeal in academics, Research, Clinics and Surgery.
- 2. **Dr Mala Banerjee** received a Reviewer Appreciation Certificate for her outstanding contribution in reviewing articles in in 2019 for Indian Journal of Pathology & Microbiology.
- 3. **Dr Avijit Sarkar & Dr Rakesh Roy** successfully completed Diploma in Medical Law & Ethics from National Law School India University, Bengaluru.
- 4. **Dr Rakesh Roy r**eceived Executive Alumni status from IIM Calcutta for completing with distinction the prestigious management course on Stategy & Leadership. He also completed a certified course on `Mechanical Ventilation in Covid 19` from Harvard University and `Essentials of Global Health` from Yale University, both in 2020.
- 5. **Dr Arnab Gupta** became the uncontested President of Indian Association of Surgical Oncology in Sept, 2019. His term has been extended for another year upto Sept, 2021.

He was also invited for **Dr Sunil Chandra Bose (**brother of Netaji Subhash Ch Bose) **125th Birth Centenary Oration** at NICED in Kolkata, Nov, 2019. Topic: `Recent Advances in Cancer Surgery`.

- 6. **Dr Shravasti Roy** was invited as Examiner for PDCC Oncopathology course at TMC 2020.
- 7. Dr Himanshu Pruthi, our Final Year DNB trainee in dept of Radiotherapy won 1st Prize & 2nd prizes in Quizzes organized by AROI West Bengal chapter in June, 2020 & 11th East Zonal Oncology CME in Feb, 2020 respectively. The latter was along with Dr Sourav Banerjee, another DNB trainee in the same department.
- 8. **Mr Subhas Halde**r, one of our Medical Physicists, successfully completed 3 months training (Sept- Nov, 2019) in various areas of Medical Physics at University of Medicine Mannheim, Heidelberg. This was supported by the German Academic Exchange Service (DAAD).
- 9. Our Centre was selected as the Centre for DNB Final Examination for Radiotherapy, 1st time in Eastern India in the new OSCE format during the Covid times. Dr Gautam Bhattacharya was the Convener.



## OBITUARY

## Mrinal Kanti Chowdhury: (LM 57)



Born: 1st May, 1938

Died: 1stAugust, 2020

Born in a village called Chaitanyapur in Burdwan, he went to UK in early 1960s to pursue his higher education. While staying as a paying Guest in London he met Dr Saroj Gupta and became very good friends. He did his Master of Science in Computer Information Technology and worked as an Electrical Engineer in a reputed company. The friendship only became stronger over the years and motivated by the philanthropic work at Cancer

Centre & Welfare Home at Thakurpukur, as it was known then, he became a Life Member of the Institute. He was a very popular person in the Bengali community in London and was one of the Founders of London Kali Bari. He went onto become the Mayor of Harrow in 2011, one of the few Indians to have this honour. His passion for poetry led to the release of a book `Kabita Guchha`. He passed away recently from Heart failure. His sad demise will be felt by all of us for a very long time.

May his soul rest in eternal peace

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## Dr (Col) Sailendra Nath Sarkar



#### Born: 13th October, 1930 Died: 28th December, 2019

Dr Sarkar graduated from R.G.Rak Medical College along with Dr Saroj Gupta our founder in 1955. He joined Armed Medical Corps the year after. He passed Diploma in Clinical Pathology (DCP) from University of Pune in 1966 and worked in this specialty in different hospitals in India. While on deputation in Ghana Armed Forces in 1971, he set up a Pathology Department at Military Hospital in Accra.

Prematurely retiring from the Services in Army in 1982 he came back to India and joined the Pathology Department of our Institute on 1st October, 1990 of which he became the Head later on. He continued his service to the hospital even with his failing health. He left for his heavenly abode after a massive CVA on 28th December, 2019. His dedication and sincerity for serving the cancer patients will be an example for many of us.

May his soul rest in eternal peace

C3 C3 C3 C3 C3 C3 C3



## Bachhraj Sethia

Mr Bachhraj Sethia was one of our early life member (LM-5). We have received information from his son that Mr Sethia expired in 2017. We are grateful to him for the support that our Institute received from the very early days. Our heartfelt condolences for his family.

May his soul rest in eternal peace

## C3 C3 C3 C3 C3 C3 C3

## Subir Chowdhury (LM 18)

We got the information from his family recently that Mr. Chowdhury passed away in 2017. The Institute owes to him for the support we got from him as one of our initial life members.

May his soul rest in eternal peace

C3 C3 C3 C3 C3 C3 C3



## OBITUARY

## Sarbani Sarkar



Born: 14th October, 1962 Died: 9th September, 2020 She had joined our Institute as a Sevika on 1st October, 1986. She had worked sincerely over the years and was promoted to the rank of Senior Sevika. Her last posting was in the department of CT Scan. Unfortunately she and her only daughter lost their long battle with Covid 19. Our sincerest condolences to her husband.

May the souls of Ms Sarbani & her daughter rest in eternal peace.

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## Minati Banerjee



Born: 19th August, 1966 Died: 31st August, 2020

She joined our Institute on 1st March, 1982 as Sevika. A very pleasant personality with a smiling face all the time, she used to be liked wherever she had worked. She was promoted to the rank of Sevika Technician and her last posting was in the Department of Pathology. She succumbed to chronic ailments recently. May her soul rest in eternal peace.

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## **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 India.
- 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, Kolkata.
- 1.14 Joint Council of Action of Associations, Income Tax Dept, West Bengal (JCA,WB)
- 1.15 C.R.P.F. Govt. of Mizoram
- 1.16 Kolkata Police
- 1.17 West Bengal Police
- 1.18 Govt. of Sikkim
- 1.19 Govt. of Jharkhand
- 1.20 Govt. of Tipura
- 1.21 IRCTC

## Group – 2.

- 2.1 Indian Oil Corporation.
- 2.2 Steel Authority of India 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.

#### Group – 3.

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

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#### Group – 4

- 4.1 Preferred Provider Network (PPN) system of Health Insurance.
- 4.2 Family Health Plan Ltd.
- 4.3 Gennins India 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 Lombard
- 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 Kotak Mahindra
- 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 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.
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- 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. Last year also they are kind enough to donate three equipments such as Dexa Scan, Lap Laser for CT scan and i-Breast for screening purpose at various medical camps. Apart from the above mentioned equipments, their CSR committee also granted funds for the much needed renovation and modernization work for OPD block for providing better care and comfort to the huge number of patients attending daily.
- Previously, a Radiotherapy Simulator & a 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 for Theratron Cobalt-60 machine. We extended our heartfelt thanks for their continuing support from DAE for the noble cause.
- We regularly receive support from UK residents like Dr. Yajati Ghosh, Dr Chandrani Ghosh, Dr Shilajit Ghosh, Mr Nirmal Dasgupta, Dr Chittaranjan Choudhury, Essex Indians & Sudeshna Beacon of Hope (USA) for their regular Contribution.
- We regularly receive support from Dr Ansu Barik, Dr Aditi Munmun Sengupta, Smt Esha Bandyopadhyay, Ms Namrata Nagrecha (Panama Tea Company), M/s. Kalidas Mullick no 1 Charitable Trust, M/s. Sri Hara Kasturi Memorial Trust, M/s. Renuka Devi & Tara Devi Narang Charitable Trust and P.C. Chandra Group
- We are grateful to Exide Industries Ltd., Jute Corporation of India Ltd for providing 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 Volkart Foundation, Mrs. Ananda Swarup Foundation, Bengal NRI complex, Ms Madhulavi Majumder, Mr. Biswanath Dutta Sharma & Prof Dwarka Nath Bose, Sri Arun Kumar Sur, Rotary Presidency Foundation, Sri Subhankar Dey & Smt Rita Sarkar 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 64 transplants have been done with 100 % success rate.



We are grateful to him and his family for their major contribution.

Various organization and groups help the children of our pediatric oncology department and also the adult patients. Notable among them are : Rotary Clubs of Dist 3291, Rotary Club of Cacutta Midtown, Rotaract Clubs, Lions' Club, Hitaishini, Tanusree Dasgupta Trust, Make a Wish Foundation, Resurrection, Bansi Vidya Charitable Trust, Indian Cancer Society, Cankids, Cuddles Foundation, Sarani, SAAHAS, MCKV food for hungry foundation, Innerwheel Clubs, AIWC, members of Sri Sri Mohonananda Brahmachari Trust, NK Realtors, Srijan, Yuvraj Singh Foundation, Arush Memorial Trust and Balmer Lawrie & Co.Limited. We are also grateful to all the members of FCCRS Houston, USA for their continuous support to our Paediatric patients.

- Our sincerest thanks to United Way Kolkata, I.T.C Ltd. IPPL & many other Clubs, Organisations, NGOs for their continuous supply of Sanitizer, PPE, N95 Masks etc to this Institute during the Covid 19 Pandemic situation.
- 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 & also 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 as envisioned by our founder Dr Saroj Gupta.
- Finally, we express our deep appreciation for the support of the patients and their relations who made our endeavor meaningful.

Place: Kolkata Dated: 17.12.2020 Mr Jayanta Chatterji President Mr Anjan Gupta Hony Secretary