



# **MALABAR CANCER CENTRE**

**THALASSERY  
KANNUR DISTRICT,  
KERALA**

(An autonomous centre under  
Government of Kerala)



# **ANNUAL REPORT**

**2021-22**



## ***MALABAR CANCER CENTRE***

(An Autonomous Institution under Govt of Kerala)  
Moozhikkara (P.O), Kannur Dist., Kerala, India-670103.  
Phone : (+91)0490 2355881, Mobile :(+91) 94960 48800  
Fax : (+91) 0490 2355880

## **ANNUAL REPORT 2021-22**

## VISION

The development of an exponentially progressing apex institution in oncology with equal on clinical care, oncology related educations and multifaceted research

## MISSION

Non compromising professionalism and quality in cancer treatment, research and education

## SERVICE STANDARDS

Quality and health care delivery ● Accountability in the Governance from top to bottom ● Maintaining a patient-centered clinical care ● Effective communication ● Internal customer satisfaction

## UNIQUE ACHIEVEMENTS

- First Government owned hospital in Northern Kerala to start Bone Marrow Transplantation.
- The only Government centre performing pediatric transplants
- First Cancer Centre in Northern Kerala to acquire High end multiple energy linear accelerator with FFF technology.
- First Cancer Centre in Northern Kerala to acquire Blood Irradiator.
- First cancer centre in Kerala to Start Cancer Genetics Clinic
- First Cancer centre in India to develop, test and implement E-Palliative care.
- First Cancer Centre in South India to be a PAIN FREE HOSPITAL
- First institution in Kerala to acquire and use Robotic biopsy and intervention radiology assistance system
- First Cancer centre in Northern Kerala to introduce High end Dual Energy Linear Accelerator with VMAT capability in Public sector.
- F-18 PSMA scan performed first time in Kerala
- The first under Government Sector to launch Bone Marrow Donor Registry in India.

Year	LANDMARK
1998	Formation of Malabar Cancer Center Society
2001	Clinical services started
2004	Blood bank started
2005	CT Scanner and Telecobalt and (Telecobalt and 4 Slice CT Scanner)
2008	Transferred to Health and Family welfare department from Power Department
2009	Bed strength increased from 40-100 (60 to 100), Home care services
2009	Limb salvage surgery started, second operation theatre, nurse's hostel, Pain free hospital.
2009	Dormitory of Patients- MPLAD of Smt. Sathi Devi MP
2010	Dual energy linear accelerator with VMAT, Hematology, Hospital based cancer registry, Community oncology department, Doctor's quarters, BSc Medical Radiology
2011	Regular Pathology services, upgraded biochemistry lab.
2012	Started Department Library system
2013	Bone Marrow Transplantation Unit
2013	First Autologous HSCT transplant was held
2013	First Allogenic HSCT Transplant was held
2014	Pediatric bone marrow transplantation, Population based cancer registry including Kannur, Kasargode and Mahe districts
2014	RFID System with CCTV Surveillance camera Implemented in Medical library
2015	Minimal residual disease testing for CML
2015	first Haplo HSCT transplant was held
2015	First PediatricHaplo HSCT was held
2015	First Pediatric HSCT transplant was held
2015	Second LINAC
2016	Biometric Punching system started
2016	Started 'Fellowship in Hemato-oncology and Bone marrow Transplantation 'training programme.
2017	First Mud allo HSCT transplant was held
2017	Cancer genetics laboratory with next generation sequencer was established
2017	BMT unit shifted to new block (4 bedded state of the art units)
2017	First matched unrelated donor hematopoietic stem cell transplant performed
2017	Separate pediatric oncology division started
2017	Parent orientation programme in Pediatric oncology introduced
2017	Mutation Analysis
2018	FISH
2018	State of art proteomics laboratory is established
2018	Began immunotherapy in solid tumors
2018	conventional radiotherapy simulator –Imagin (Panacea) was installed
2019	First Pediatric MUD HSCT transplant was held
2019	Intervention radiology started
2020	NABH accreditation
2020	Started E-office software and E- Sanjivani online OPD
2020	Brachytherapy: New brachytherapy machine was installed 2020. Flexitron (Elekta-Nucletron)
2020	64 Slice fluoro-CT scan was installed
2020	Paediatric Haematocology Block Inaugurated
2021	Established Cancer Bio bank
2021	Stated Nuclear medicine department-PET CT scan, SPECT CT
2022	Started DOTA Therapy, PSMA Therapy
2022	Upgraded to Postgraduate Institute of Oncology Sciences & Research
2022	Started high dose iodine therapy, Ocular Oncology

## RECOGNITIONS

**1. Chief Minister's Awards for Innovation in Public Policy-2015**

Category: Personnel Management (I-Prize)

**2. Kerala State Energy Conservation Award, 2016 (I-Prize)**

**3. National Healthcare Excellence Awards, 2016**

Category: Best Single Speciality Hospital (Oncology)

**4. Kerala State Pollution Control Board Award 2017**

**5. Kerala State e-Governance Awards 2016 & 2017**

a) e-Palliative Care Project won II Prize in e-Citizen Service Delivery

Category

b) Aware & Awake Project won II Prize in Social Media & e-Governance

Category

**6. Kerala State Pollution Control Award – 2018.**

**7. Kerala State e-Governance Awards 2019-20, 2020-21.**

OPPAM Initiative won Third Prize in social media & e-Governance Category and Second Prize in Innovations in Covid Pandemic Management

**8. NABH Accreditation-2020**

**9. DSIR-SIRO Certification**

**10. Gold Certification**

(B PMJAY Quality Certification programme is a joint initiative by NHA and Quality Council of India)-Malabar Cancer Centre is the **first Government hospital** in Kerala to get a **Gold Quality Certificate -2021**



## TABLE OF CONTENTS

CONTENTS		PAGE NO
<b>Apex Body</b>	Governing Body	06
	Executive Committee	08
	Organogram	09
<b>Preamble</b>	From Director's Desk	10
<b>Malabar Cancer Center- Introduction</b>	Malabar Cancer Centre	12
	Profile 2021-22	13
	Internal and External Committee	16
<b>Department Activities &amp; Achievements</b>	Department of Anesthesiology	20
	Department of Cancer Palliative Medicine	23
	Department of Cancer Registry & Epidemiology	27
	Department of Clinical Hematology and Medical Oncology	32
	Department of Clinical Laboratory services and Translational Research	36
	Department of Community Oncology	53
	Department of Dentistry & Rehabilitation	57
	Department of Imageology	60
	Department of Nuclear Medicine	64
	Department of Radiation Oncology	66
	Department of Respiratory Medicine and Critical Care	71
	Department of Surgical Oncology	72
	Department of Engineering & Maintenance	80
	Department of General Administration	84
	Department of Oncology Nursing	103
	Independent Divisions	111
<b>Research, Publications, Committees &amp; Courses</b>	Research, Publications, Committees & Courses	121
	Institution Review Board	121
	Institutional Ethics Committee	122
	Research Proposals	123
	Scientific Advisory Committee	130
	Research Advisory Committee	131
	Research Publications	132
<b>Educational Programmes</b>	Courses at MCC	134
<b>Accounts</b>	Auditor's Report	135
<b>Patient Welfare Activities</b>	Patient Welfare Scheme	141
<b>How to Support MCC</b>	How to Support MCC	143
	Patient Free Food Scheme	143
<b>Right to Information Act</b>	Right to Information Act	144

## GOVERNING BODY MEMBERS

1	<b>Chief Minister of Kerala</b>	<b>Chairman</b>
2	Minister for Health & Social Justice, Kerala	Vice-Chairman
3	Minister for Electricity, Kerala	Alternate Vice-Chairman
4	M.L.A. of the Thalassery constituency	Member
5	President, District Panchayat, Kannur District	Member
6	Chairman, Thalassery Municipality, Thalassery	Member
7	A public man from the North Malabar region (to be nominated by the Government of Kerala)	Member
8	Vice Chancellor-Kannur University	Member
9	Secretary, Department of Finance, Kerala	Member
10	Secretary, Department of Power, Kerala	Member
11	Secretary, Department of Health & Family Welfare, Kerala	Member
12	Secretary- Planning Department, Kerala	Member
13	Secretary, Department of Science, Technology & Environment	Member
14	Director- Rajiv Gandhi Centre for Bio Technology, Trivandrum	Member
15	Director of Medical Education, Directorate of Medical Education, Trivandrum	Member
16	Director, Malabar Cancer Centre, Thalassery	Member & Secretary to Governing Body
17	Director, Regional Cancer Centre, Trivandrum	Member
18	Principal, Medical College, Kozhikode	Member
19	Principal/Chief Executive Officer of Medical College, Pariyaram	Member
20	An eminent Medical Scientist	Member
21	One nominee of the Ministry of Health, Government of India	Member
22	One nominee of the CHARITABLE SOCIETY Established for rehabilitation and financial assistance for poor cancer patients.	Member
23	One Head of the department nominated from Malabar Cancer Centre, Thalassery by the Government	Member

## 12<sup>th</sup> GOVERNING BODY -2021

SL No	Participants Name & Designation
1	<b>Shri. Pinarayi Vijayan</b> , Hon'ble Chief Minister of Kerala
2	<b>Smt.Veena George</b> , Hon'ble Minister for Health and Woman & Child Development
3	<b>Shri.K.Krishnankutty</b> , Hon'ble Minister for Electricity
4	<b>Adv.A.N.Shamseer</b> , Hon'ble Speaker of Kerala Legislative Assembly
5	<b>Smt.Jamuna Rani</b> , Chairperson, Thalassery Municipality
6	<b>Dr.Rajan N.Kobhragade IAS</b> , Principal Secretary to Government, Health & Family Welfare, Department
7	<b>Smt.Shyni George</b> , Additional Secretary, Department of Planning & Economic Affairs
8	<b>Dr.Remla Beevi.A</b> , Director of Medical Education
9	<b>Prof. Gopinath Ravindran</b> , Vice Chancellor, Kannur University
10	<b>Prof. Dr. V.R. Rajendran</b> , Principal, Government Medical College, Kozhikode
11	<b>Prof. Chandrabhas Narayana</b> , Director- Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram
12	<b>Dr. Rekha.A Nair</b> , Director – Regional Cancer Centre, Thiruvananthapuram
13	<b>Dr. Satheesan B</b> , Director Malabar Cancer Centre, Thalassery.



## EXECUTIVE COMMITTEE MEMBERS

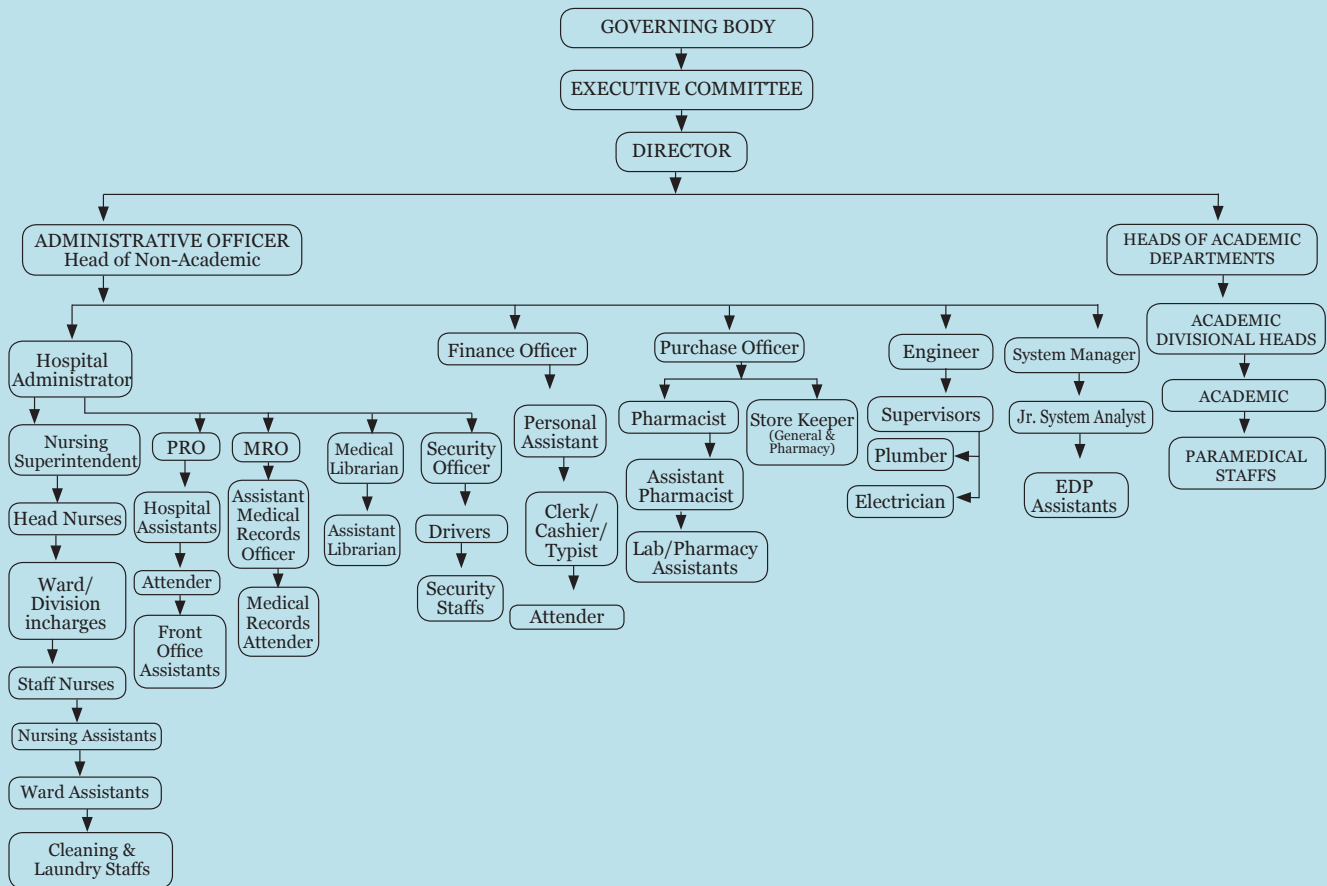
1	Secretary, Health & Family Welfare Department	Chairman
2	Secretary, Finance Department	Member
3	Secretary, Planning and Economic Affairs Department	Member
4	Secretary, Power Department	Member
5	MLA of Thalassery constituency	Member
6	Director of Medical Education	Member
7	Chairman , Thalassery Municipality	Member
8	Director, Regional Cancer Centre, Trivandrum	Member
9	Director- Cochin Cancer Centre & Research Centre Kochi	Member
10	Director, Malabar Cancer Centre –Thalassery	Member/Convenor

### EXECUTIVE COMMITTEE (APRIL 2021-MARCH 2022)

2021-22	EC No: 79	12-07-2021	online
2021-22	EC No: 80	12-10-2021	online
2021-22	EC No: 81	02-02-2022	online

SL No	Participants Name & Designation	Executive Committee No.
1	<b>Dr. Rajan. N.Kobhragade</b> IAS Principal Secretary to Government, Health & Family Welfare Ayush Department	79,80,81
2	<b>Adv.A.N.Shamseer</b> , Hon'ble Speaker and MLA of Thalassery Constituency	79,80,81
3	<b>Smt.Jamuna Rani</b> , Chairperson, Thalassery Municipality	80,81
4	<b>Smt.K.S.Usha</b> , Additional Secretary, Finance Department	81,
5	<b>Smt.Lakshmi Raghunathan</b> , Additional Secretary to Government Finance Department	80
6	<b>Smt.Shyni George</b> , Additional Secretary to Government, Planning & Economic Affairs Department	79,80,81
7	<b>Dr.Ramla Beevi</b> , Director of Medical Education	79,81
8	<b>Dr.Rekha.A.Nair</b> , Director, Regional Cancer Centre, Thiruvananthapuram,	79,80,81
9	<b>Dr.P.G.Balagopal</b> , Additional Professor Representing, Cochin Cancer & Research Centre, Kochi	79,80,81
10	<b>Dr.B.Satheesan</b> , Director-MCC	79,80,81

# ORGANOGRAM



## FROM DIRECTOR'S DESK

*Where you're headed is more important than how fast you're going. Rather than always focusing on what's urgent, learn to focus on what is really important.*

**-Stephen Covey**

The entire globe has witnessed a stagnancy followed by the COVID-19 outbreak. Though the situations were challenging, Malabar Cancer Centre (MCC) ensured that patient care is never compromised. The data of pre-COVID and COVID period indicate the effectiveness of the strategies designed and implemented. The planning and preparedness of the COVID cell is laudable. Safeguarding the staff and patients during first and second waves with limited resources could be achieved only because of cooperation and dedication of the staff. But as time moved, the world gradually started open up and it was really important to have a proper direction and vision to be in the run. As the world regained its momentum and direction, as an organisation MCC has also reworked its priorities and made sure the timely achievement of all the goals.

The community oncology department restarted community level activities online and offline mode which benefitted significant number of people. The community empowerment and community volunteer system model took the form of Kannur Cancer Control Consortium (KCCC) which is an inevitable factor in the success of a participatory development process. Homely feeling in the hospital is very important for the paediatric cancer patients for their coping in the treatment process for which a separate pediatric block was made on the concept of a second home and this was supported by various organisations in the form of sponsorships.

There were 5866 new cancer patients registered among the total registration of 8306. The total number of patients visited during the period was 82524 and there were 5191 in-patients. 2415 new patients received radiation therapy and 1930 major surgeries were performed in three operation theatres. 268 students including 14 medical doctors, 17 MSW students, 23 medical physics intern, and trainees underwent short-term training and 85 research projects are being carried out.



The community oncology department could play a significant role in cancer awareness and cancer control activities in various parts of Kerala. Exhibitions, seminars, and cancer detection camps were carried out by the department. Structured programmes with various local self-government bodies showed positive results. These are part of epidemiological and intervention studies carried out by the department.

Expansion of the Population-based cancer registry faces its challenges due to COVID crisis, incomplete data sets available due to poor documentation and inertia of hospitals in providing data. Despite the adversaries, the efforts of the PBCR have been commendable. Currently it covers seven districts-Kasargode, Kannur, Kozhikode, Wayanad, Malappuram, Palakkad, and Thrissur apart from Mahe under union territory of Puducherry. The Malabar Population Based Cancer Registry is expected to rejuvenate the Dream of the Kerala Cancer Registry.

The continued support of philanthropists and various NGOs and voluntary organizations to help needy patients is duly acknowledged with respect and gratitude. A few to specifically mention are Malabar CH Centre for providing free food for all inpatients. Similarly, Ashraya Charitable Society, Abhaya foundation, and DePaul Centre for providing

accommodation and food for patients of MCC are appreciated and acknowledged.

The volunteer program of Kannur Cancer Control Consortium (KCCC) is another project initiated during this period. Volunteers assist patients in registration and navigation. This has been highly appreciated by patients and their caregivers. Community rehabilitation and support system is also planned through KCCC. Reproducing similar models in Kasargode, Wayanad, Kozhikode and Malappuram are in the process.

Scientific Advisory Committee provided invaluable guidance and input on the development of various research, academic and training programs in the institution. The process of development of the institution as Postgraduate Institute of Oncology Sciences and Research has been augmented by the KIIFB projects. The phase I is progressing at good pace and it is expected to be complete by March 2023. The approval of the DPR and other formalities for bigger phase 2 project is awaited.

Though the pediatric oncology block is completed,

the institution of amenities for children to rejuvenate the childhood dreams and activities are being carried with the support of the CSR funding of Indian Oil Corporation Ltd. LIONS Club International completed the Mini theatre for child a cancer patient which is a stand out facility cherished by the tiny tots. The concept of second home for child is nearing its logical conclusion. But the building could not be occupied because of non-sanction of posts for the block. The government rejected the proposal and it is taken up again. The institution insists on sanctioning of posts to utilise the state of art facility as the cancer treatment of paediatric cancers is quite intense and without adequate staff, it is quite risky for children to put through the aggressive cancer care.

I express my sincere thanks to all the members of Governing body, the Executive committee, and other standing committees and staff for keeping and nurturing MCC as an apex institution in oncology in the state. I expect this annual report would provide a bird's eye view of the work and achievement of this institution in the 2021-22 periods.

**Dr. Satheesan Balasubramanian**

## MALABAR CANCER CENTRE

Malabar Cancer Centre, Thalassery (MCC) is an autonomous institution under Health and Family Welfare Department, Government of Kerala, started with an aim to establish a comprehensive cancer centre, providing the much-required oncology care to the population of the Northern region of Kerala and neighbouring parts of Karnataka and Tamilnadu states and Union Territory of Pondicherry(Mahe). The centre is situated on a beautiful hilltop in Kodiyeeri in Thalassery Municipality 5km away from the town. MCC was established in 2001. The main objective of the Centre is not only to provide comprehensive cancer care but also to develop as a Research and Training Centre of International standards. At present MCC has total bed strength of 203.

The institution is an Apex cancer centre that renders its service to society with equal thrust on clinical and oncology-related education research and Clinical care Oncology services. MCC is being developed as a postgraduate institute of oncology sciences and research. It has research association with the School of Health Sciences, Kannur University Centre for Electronic Materials Technology,

Thrissur, P.S.Vaidhyarathnam Ayurveda College, Kottakkal, HTIC-Chennai, various institutions of National Cancer Grid etc. It is expected that these could bring revolutionary changes in the management of cancer. Malabar Cancer Centre has been recognized as Research Institute by the Kerala University of Health Science and Kannur University.

The control and management of the Society are vested in the Governing Body consisting of 23 members with the Honourable Chief Minister of Kerala as the Chairman, Honourable Minister for Health as Vice Chairman, and Honourable Minister for Power as Alternate Vice-Chairman. The routine activities and functions of the Centre are supervised by the Executive Committee, with the Secretary, Department of Health and Family Welfare, Government of Kerala, being the Chairman of the Committee. The members of the Governing Body and Executive Committee function in their official positions. The institute has grown to possess highly sophisticated facilities to provide cancer care. The hospital has a team of well-trained staff, rendering cancer care to the needy.

## MALABAR CANCER CENTRE: PROFILE 2021-22

SL NO	PROFILE	TOTAL
1	New Cancer cases	5866
2	Non-cancerous cases	2440
3	<b>Total New Registrations</b>	8306
4	Follow up cases	74218
5	Total outpatients	82524
6	Total in-patients	5191
7	Total Deaths	138

SL NO	SURGERY	TOTAL
1	Major Surgeries	1930
2	Minor Surgeries	647
3	Total Surgeries	2577
4	Endoscopies	1954

SL NO	CLINICAL HEMATOLOGY, MEDICAL ONCOLOGY	TOTAL
1	OPD Attendance (Clinical Hematology + Paediatric Oncology)	13022
2	OPD Attendance (Medical Oncology + Solid Tumor Division)	20994
3	New Case in OPD (Clinical Hematology+ Pediatric Oncology)	1161
4	Day Chemotherapy Administered	17132
5	In-patient chemotherapy	

SL NO	RADIATION ONCOLOGY	TOTAL
1	Curative RT (patient number)	1194
2	Palliative RT	1221
3	BrachyTherapy	663
4	4 DCT CT Simulation	2529

SL NO	IMAGING	TOTAL
1	MRI	1531
2	CT	5243
3	Mammography	2832
4	Ultrasound	2325



SL NO	ONCOPATHOLOGY	TOTAL
1	Biopsy small	2625
2	Biopsy Radical	1589
3	Biopsy Second Opinion	2335
4	Fine Needle Aspiration Cytology(FNAC)	665
5	FNAC with Cell Block	117
6	FNAC Second Opinion	197
7	Effusion Fluid Cytology	255
8	Effusion Fluid Cytology with Cell Block	348
9	Peripheral Smear	1239
10	Gynaec cytology	74
11	Bone marrow aspiration	681
12	Bone marrow biopsy	677
13	BM Aspiration 2nd opinion	158
14	BM biopsy 2nd opinion	158
15	Frozen section studies	770
16	Flowcytometry	166
	Total	12,054

SL NO	CYTOGENETICS AND MOLECULAR ONCOLOGY	TOTAL
1	Quantitative BCR-Abl	239
2	Qualitative BCR Abl	52
3	JAK2	64
4	AML Panel (10 markers)	66
5	ALL Panel (8 markers)	48
6	FISH blood (PML-RARa and BCR-Abl)	30
7	FISH Her2	80
8	EGFR Mutation analysis	185
9	RT-PCR PML-RARa	33
	Total	797

SL NO	COMMUNITY ONCOLOGY	TOTAL
1	Volunteer Training Programme (ECDC)	33
2	Cancer Awareness Class	30
3	Early Cancer Detection Camps	19

SL NO	COVID TEST	TOTAL
1	RT-PCR	111748
2	Antigen	3500

SL NO	BLOOD BANK	TOTAL
1	Whole Blood Donors	3043
2	Flow Cytometry	208
3	HLA Typing	123
4	Blood Donation Camps	24

SL NO	NUCLEAR MEDICINE	TOTAL
1	SPECT /CT	653
2	PET / CT	932

SL NO	EDUCATION & TRAINING	TOTAL
1	Medical Doctors	14
2	BSc/MSc MLT,BSc/MSc Life Science	211
3	MSW	17
4	Observership	03
5	Internship	23

SL NO	BSc COURSE	DURATION/ Total students
1	Medical Radiation Technology	4 Yrs/25
2	Nursing	4 Yrs/40

SL NO	FELLOWSHIP PROGRAMME	TOTAL
1	Head and Neck Oncology	2/1
2	Gynaecologic Oncology	2/2
3	Hemato-Oncology &BMT	1/2
4	Gastrointestinal Oncology	1/2
5	Oral Oncology	2/1
6	Aphaeresis Medicine	1/2
7	Oncopathology	1/1
8	Head and Neck Pathology	1/1
9	Oncology Nutrition	1/1
10	Onco-Imaging &Interventional Radiology	1/2
11	High Precision Radiotherapy	1/1
12	Molecular Pathology	1/1

SL NO	DNB COURSE	DURATION/ Total students
1	DNB Surgical oncology	3/3
2	DNB Pathology	3/1
3	DNB Radiation Oncology	3/3

## INTERNAL & EXTERNAL COMMITTEE

### External Committee

SI. NO	COMMITTEE	NO. OF MEETINGS CONDUCTED
1	Scientific Advisory Committee (SAC)	01
2	Research Advisory Committee (RAC)	00
3	Institutional Ethics Committee (IEC)	07
4	Intra Mural Research Fund Review Committee	02

### Internal Committee- Academic

SI. NO	COMMITTEE	NO. OF MEETINGS CONDUCTED
1	Academic Council	12
2	Institutional Review Board –Scientific Committee(IRB-SRC)	17
3	Academic Standing Committee	7
4	Academic Monitoring Cell	12

### Internal committee-Administration

SI. NO	COMMITTEE	NO. OF MEETINGS CONDUCTED
1	HOD Committee	5
2	Admin Committee	37
3	Hospital Management Committee	10
4	Nursing Administration	5
5	Scheme Review Committee	13
6	Biomedical Waste Management Committee	6
7	Pharmaco Therapeutics Committee	6
8	Hospital Blood Transfusion Committee	9

### Other committee (Quality)

SI. NO	COMMITTEE	NO. OF MEETINGS CONDUCTED
1	Hospital Infection Control	10
2	Medical Record Audit Committee	3
3	Facility Management & Safety Committee	3
4	Clinicians Committee	12
5	Grievance Handling Committee	5
6	Internal compliance Committee	1
7	Quality Cell	5
8	HOD Committee QA	5
9	Code Blue committee	3
10	Radiation Safety committee	3

## PATIENT WELFARE AND SUBSIDY

Particulars	2021-22
Total % of patients given free treatment using various financial assistance schemes.	92.59%
Treatment charge discount	52.00 Lakhs
Pharmacy discount	2049.50 Lakhs
<b>Total treatment subsidy is given by MCC</b>	<b>2101.50 Lakhs</b>
Free treatment for patients	730.59 Lakhs
Patient Free Transportation	2.64 Lakhs
Through Patient Welfare Fund (Donation from philanthropist )	1.83 Lakhs
*Patient Free Food Schemes	30.73 Lakhs

## Free Food Scheme 2021-22

Number of patients benefited	CH Centre Contribution in Lakhs	MCC Contribution in Lakhs	Actual Expenditure in Lakhs
<b>5191</b>	<b>17.73</b>	<b>13.00</b>	<b>30.73</b>

## SCHEMES AND EXPENDITURE

Schemes	Unique Patient Beneficiaries	Amount Utilized in Lakhs
Karunya Arogya Suraksha Pathathi	4073	2529.14
Karunya Benevolent Fund	1339	750.39
Karunya Arogya Suraksha Pathathi - out of package	2284	464.97
Karunya Benevolent Fund - Out Of Package	939	265.62
Cancer Suraksha Scheme	274	245.59
CST	368	245.20
ESI	120	110.62
PMNR	163	24.17
KSSM- We Care	12	20.08
Thalolam	10	11.70
Arogyakiranam	3	11.58
Cope with Cancer	38	9.64
Sneha Santhwanam	24	7.24
PWS	34	1.83
ThanalVatakara	1	0.81
Co-op Bank Mavilayi	1	0.27
<b>Grand Total</b>	<b>9683</b>	<b>4698.84</b>

## DEPARTMENTS AND DIVISIONS

### ACADEMIC DEPARTMENTS

1. **DEPARTMENT OF ANAESTHESIOLOGY**
2. **DEPARTMENT OF CANCER PALLIATIVE MEDICINE**
  - CANCER PALLIATIVE MEDICINE DIVISION
3. **DEPARTMENT OF CANCER REGISTRY AND EPIDEMIOLOGY**
  - CANCER REGISTRY AND EPIDEMIOLOGY DIVISION
  - MEDICAL RECORDS DIVISION
4. **DEPARTMENT OF CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY**
  - CLINICAL HEMATOLOGY DIVISION
  - MEDICAL ONCOLOGY DIVISION
  - PAEDIATRICS/ PAEDIATRIC ONCOLOGY DIVISION
5. **DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH**
  - BIOCHEMISTRY DIVISION
  - BLOOD BANK AND TRANSFUSION MEDICINE DIVISION
  - GENETICS, CYTOGENETICS
  - MICROBIOLOGY DIVISION
  - MOLECULAR ONCOLOGY DIVISION
  - ONCOPATHOLOGY DIVISION
6. **DEPARTMENT OF COMMUNITY ONCOLOGY**
7. **DEPARTMENT OF DENTISTRY AND REHABILITATION**
8. **DEPARTMENT OF IMAGEOLOGY**
9. **DEPARTMENT OF NUCLEAR MEDICINE (UNDER DIRECTOR)**
10. **DEPARTMENT OF RADIATION ONCOLOGY**
  - RADIATION ONCOLOGY DIVISION
  - RADIATION PHYSICS DIVISION
11. **DEPARTMENT OF RESPIRATORY MEDICINE AND CRITICAL CARE**
  - PULMONARY MEDICINE DIVISION (UNDER DIRECTOR)
- DEPARTMENT OF SURGICAL ONCOLOGY**
  - CLINICAL NUTRITION AND DIETETICS UNIT
  - CENTRAL STERILIZATION AND SUPPLY UNIT
  - REHABILITATION-PHYSIOTHERAPY SPEECH AND SWALLOWING THERAPY UNIT
  - SURGICAL ONCOLOGY

### NON-ACADEMIC DEPARTMENTS

- 1 **DEPARTMENT OF ENGINEERING AND MAINTENANCE**
- 2 **DEPARTMENT OF GENERAL ADMINISTRATION**
  - GENERAL ADMINISTRATION DIVISION
  - HUMAN RESOURCES AND ESTABLISHMENT DIVISION
  - FINANCE DIVISION
  - PURCHASE/ STORES & PHARMACY DIVISION
  - HOSPITAL ADMINISTRATION- PUBLIC RELATIONS AND CLINICAL SERVICES
  - SECURITY DIVISION
  - ACADEMIC LIBRARY AND INFORMATION SCIENCE DIVISION
3. **DEPARTMENT OF ONCOLOGY NURSING**

### INDEPENDENT DIVISIONS

1. **CLINICAL RESEARCH AND BIOSTATISTICS DIVISION**
2. **HEALTH INFORMATION TECHNOLOGY DIVISION**
3. **PSYCHO-ONCOLOGY DIVISION**

# ACADEMIC DEPARTMENTS & DIVISIONS



## DEPARTMENT OF ANAESTHESIOLOGY



### DEPARTMENT IN CHARGE: DR. JASHMA C ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr.Jashma. C	Assistant professor
2	Dr.Joona P	Assistant professor
3	Dr.Roopesh	Assistant professor
4	Dr. Sonali	Assistant professor

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Vipin.K	OT and Anaesthesia technician
2	Mayan John	Dialysis technician
3	SreejeshP.B	OT and Anaesthesia technician
4	Balukrishnan.S.R	OT and Anaesthesia technician
5	Shaija.E	Staff Nurse
6	Sajna.N	Staff Nurse
7	Jisha.P	Staff Nurse
8	Ameer .O.Sanjani	Staff Nurse
9	Shiraz. N	Staff Nurse
10	Shivakumar	Staff Nurse
11	Haseena k. A	Staff Nurse
12	Sreejith .S	Nursing Assistant

## INTRODUCTION

Though the Department of Anaesthesiology was formally formed only in 2010-11 with the contract appointment of Col. Prof.Dr.N.C.Krishnan, the permanent faculty joined only in 2015. Now the department is developed into a state-of-the-art facility with all the clinical departments being anchored to it. The department follows an integrated approach and standard protocols for patient care, education, and research.

On 13th January 2020 major OT complex started functioning after renovation work of OT-1 and OT-2. At present, there are three major operation theatres and a Brachy therapy OT. The major OT Complex is designed with state of art facilities.

The surgical intensive care unit (ICU) is situated within the operation theatre complex. In the ICU, post-surgical patients and critically ill surgical patients are admitted. The unit has ICU with 10 beds.

From admission to discharge, the patient and families are involved in all clinical decisions.

## STATISTICS

SL NO	PROCEDURE	NUMBERS
1	General Anaesthesia(GA)	1094
2	General Anaesthesia+Epidural block	427
3	Sub Arachnoid Block(SAB)	118
4	Epidural Block	02
5	CSEB	18
6	GA+Subarachnoid Block	03
7	Short General Anaesthesia	12
8	Monitored Anaesthesia Care	01
9	Regional Blocks	07

The surgical intensive care unit (SICU) is situated within the operation theatre complex. The unit has 8 beds. The patient population includes those undergoing complex onco-surgical procedures including gastrointestinal, gynaecologic, urologic, thoracic, orthopaedic, head and neck, breast, and micro vascular surgeries.

## CURRENT FACILITIES

- High-end Anaesthesia work station with electronic gas mixing, End Tidal gas monitoring.
- Multipara monitors with cardiac output monitoring, Etco2, Spo2, Invasive and non-invasive blood pressure monitoring, temperature monitoring, and CVP monitoring.
- Syringe pumps, infusion pumps, fluid pressure bags, and body/fluid warmers
- Depth of anaesthesia monitoring- entropy, ISNeuromuscular transmission monitoring
- Total Intravenous Anaesthesia, Target Controlled infusion and PCA pumps.
- Ultrasound machine for central venous catheterization and regional anaesthesia
- Nerve stimulator, manual jet ventilation catheter, and high flow nasal cannula

## ACADEMIC / TRAINING PROGRAMMES

- Topic discussions-All Mondays
- Journal club-All Wednesdays
- Staff academics(OT&SICU)-All Saturdays
- Publications– 3
  1. Changing trends of invasive mediastinal evaluation in India: A questionnaire-based survey Chandveetil J, Kattepur AK, Pareekutty NM, Kumbakara R, Balasubramanian S. Cancer Res Stat Treat 2021; 4:231-7
  2. Totally implantable venous access devices in cancer chemotherapy: A retrospective analysis of 8421 catheter days in a tertiary cancer center Chandveetil J, Kattepur AK, Pareekutty NM, Alapatt JJ, Mathiyazhakan AR, Kumbakara R, et al.. Cancer Res Stat Treat 2021; 4:449-55.
  3. Authors' reply to Shah et al. and Kreditsu Chandveetil J, Pareekutty NM, Kattepur AK. Cancer Res Stat Treat 2021;4:575-6
- Conference presentations- 4 ( ISACON 2021 )
  1. Dr Joona P presented the topic “Comparative study of gum elastic bougie guided insertion of prozac LMA with digital technique” in the virtual conference ISACON 2021 on 25th to 28th November 2021 as delegate.
  2. Dr Jashma C presented the topic “Pre-operative MI after non cardiac surgery in patients undergoing cancer surgeries” in the virtual conference ISACON 2021 on 25th to 28th November 2021 as delegate
  3. Dr Sonali presented the topic “Prevalence of pre-operative anxiety and depression in major oncosurgeries” in the virtual conference ISACON 2021 on 25th to 28th November 2021 as delegate
  4. Dr Roopesh presented the topic “Comparison of Propofol versus fentanyl infusion for post operative sedation in mechanically ventilated patients following hand and neck onco surgeries” in the virtual conference ISACON 2021 on 25th to 28th November 2021 as delegate.

## DEPARTMENT OF CANCER PALLIATIVE MEDICINE



**DEPARTMENT IN CHARGE: DR.M.S.BIJI**

### ACADEMIC STAFF

NO	NAME	DESIGNATION
1	Dr. M S Biji	Assistant Professor

### NON-ACADEMIC STAFF

NO	NAME	DESIGNATION
1	Sheeja Nellikka	Staff Nurse

### INTRODUCTION

Cancer Palliative Medicine has been functioning in this Centre, since November 2002. The Centre is a recognized medical institution for the possession and supply of Oral Morphine. The Palliative Care Services also provide counselling to patients and their family members. Cancer palliative medicine aims at improving the quality of life of cancer patients, especially those for whom curative options have been exhausted.

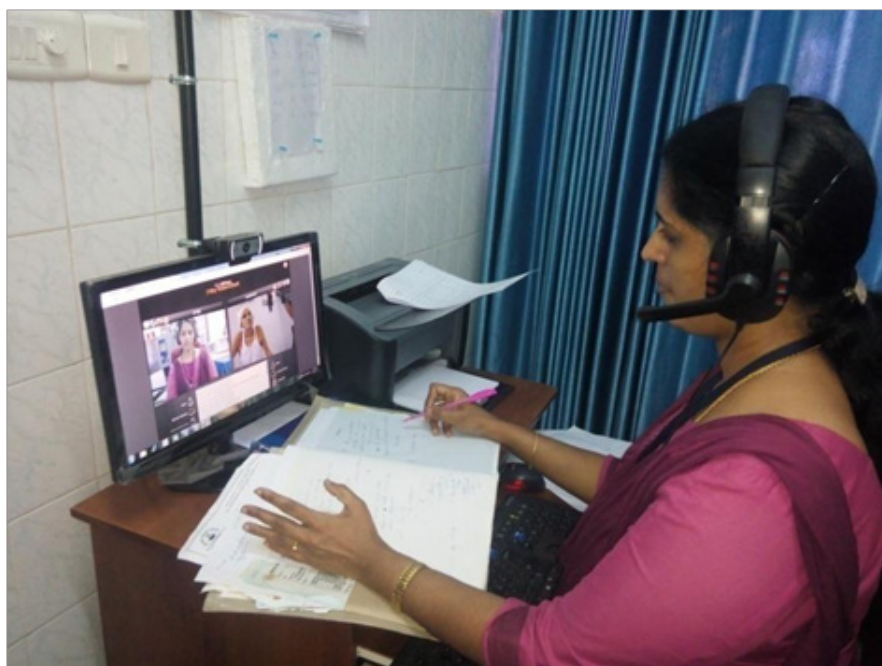
Cancer Palliative Medicine Division has an inpatient, outpatient, and home care facility.

### ACTIVITIES AND ACHIEVEMENTS

The homecare facility for needy patients was started on June 20, 2009. Home care is done thrice a week catering to the need of patients staying within 35 km from MCC. There are so far 588 patients registered in the homecare facility. Patients are given medication free of cost. Procedures like ascitic tapping, wound dressing, catheterization, and Ryle's tube introduction are done. Apart from this psychological support to the patient and their families are also given.

### E-palliative Medicine:

The homecare service from MCC is Nurse- lead and doctor-assisted. To make the service more effective consultation of the patient is done through e-palliative medicine wherein the patient and relatives can see and consult the doctor directly making the homecare visit more satisfying to them.



## STATISTICS

Month	IPD	OPD	Homecare	Stoma Clinic	Lymphedema clinic	Counseling clinic
<b>TOTAL</b>	<b>6135</b>	1684	126	974	1220	1550

## ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT:

- Dr.M.S.Biji took a session on “Pathophysiology of pain”.16 Nursing students from A.K.G Memorial Nursing college, 5 Post Basic Diploma in Oncology nursing attended the session. 12.4.21
- Dr,Bijiattended the EQUIP India workshop for National & International mentors conducted by Stanford India Quality Improvement Collaborative 2021. 4th, 5th,18<sup>th</sup>& 19th June 2021
- Dr.Remya T.K attended the 10 days Part B IAPC course “Hands-on training in Palliative care. 14.6.21- 26.6.21
- The July 2021 batch of the IAPC Certificate Course in “Essentials in Palliative care” was held on 24<sup>th</sup>,25<sup>th</sup>,31<sup>st</sup> July &1<sup>st</sup> of August 2021. This is the 13<sup>th</sup> batch at MCC. One candidate (from outside) enrolled for this course in this batch. 24.07.21
- Dr.M.S.Biji took an online session on “Pain management for Post Basic Diploma in Oncology Nursing. 13.8.21
- Dr.M.S.Biji was an invited faculty for the 1-year distance education National Fellowship program in Palliative Medicine for doctors and nurses jointly run by the Institute of Palliative Medicine & Christian Medical Association of India. She took a session on Introduction and Pathophysiology of Pain. 15.09.21
- The final examination of the July 2021 batch of the IAPC Certificate Course in “Essentials in Palliative care” was held on 25.09.21. Two candidates took the online mode of examination. 25.09.21

- Dr.M.S.Biji took a session on “Palliative care at MCC” in the combined academics of Cancer Palliative medicine and Rehabilitation Oncology. 9.10.21
- World Hospice and Palliative care day was observed in MCC. Dr.BijuRaghavan,Senior Consultant and HOD Pain and Palliative Medicine, RajagiriHospital, Aluva, Ernakulam.The program was conducted for the Nursing staff of MCC and about 61staff attended the session on the zoom platform.The topic was “Patient Centred Skills Development Program Part 1:Communication Skills Basics”. 9.10.21
- The first Hub Action team from MCC Dr.Geetha and Dr.Joneeta completed their QI Project on “Weight loss of more than 5% in patients is undergoing curative-intent RT in Head & Neck patients “under the guidance of National mentors Dr.M.S.Biji and Dr.PraveenShenoy. The EQUIP Cohort 2021 virtual Graduation was held on the 16th of October 2021. 16.10.21
- Dr. Arsha and Dr.Pramisha have joined the Part B IAPC course which consists of 10days of hands-on training in palliative care. 18.10.21
- As part of the observance of World Hospice and Palliative Care Day, the Indian Academy of Paediatrics,Thalassery branch organized a webinar for the students of the Institute of Nursing Sciences and Research (INSeR), MCC, and CIMET on 22.10.21 at 7pm. Dr.M.S.Biji was the speaker on the topic: “Palliative care; a social responsibility”. 22.10.21
- Dr.Jijila Jayarajan joined the Part B IAPC course which consists of 10days of hands-on training in palliative care. 08.11.21
- Dr.M.S.Biji took a session on “Introduction to Palliative care” for nursing students of Kannur Medical College.20 students attended the session. 22.11.21
- Dr.M.S.Biji took a session on “Pain Management” for Post Basic Diploma in Oncology Nursing students.5 students attended the session. 23.11.21
- As part of the Foundation month celebration, the department of Cancer Palliative Medicine in association with the department of Onco-nursing and Skill & Knowledge enhancing cell of MCC conducted a series of webinars on “Patient Centred Skills Development Program” Part 1-Communication Skills Basics for doctors and nurses of MCC. Dr.BijuRaghavan, Senior Consultant and HOD Pain and Palliative Medicine, Rajagiri Hospital, Aluva, Ernakulam about 77 members participated in the program. 24.11.21
- The Part 2 session on Advanced Communication skills focusing on Communicating Bad news, Collusion management, and Anger Management was held. About 79 members participated. 26.11.21
- The Part 3session on Advanced Communication skills focusing on Family Counselling of terminally ill patients was held. About 84 members participated. 27.11.21
- Dr.M.S.Biji took a session on “e-Palliative Initiative in Malabar Cancer Centre” for MSc Medical Documentation students. Around 14 students participated. 4.12.21
- Dr.M.S.Biji took a session on “Pain Management” for nursing students of AKG Memorial Nursing College. 28.12.21-
- January 2022 batch of the IAPC course in Palliative care started on 8th Jan. This time also the course was on a virtual platform. Nine doctors registered for the course (8 in-house and one doctor from outside). 08.01.22-
- Sheeja Nellikka was invited as a Nurse trainer for the Volunteers training program conducted by IRPC. Around 250 volunteers attended the program. 9.01.22-



- Dr.M.S.Biji took a session on “Pain Management” for the 2<sup>nd</sup> batch of nursing students of AKG Memorial Nursing College. 11.01.22-
- In connection with “Palliative care Day” a webinar was conducted for Nurses of AKG Memorial Nursing College on 15th Jan 2022 on the topic-“Palliative care: What we must know”. Around 50 students participated. 15.01.22-
- Dr.M.S.Biji was invited as a faculty for the IAPC “Certificate course in Palliative Care Pharmacy” (CCPCP) and took a session on “Drugs used in the management of pain”. 27.03.22-

### **COURSES CONDUCTED:**

1. Part A IAPC course in “Essentials of Palliative care” for doctors and nurses -13<sup>th</sup> and 14<sup>th</sup> batches completed in 2021-2022
2. Part B IAPC course “Hands-on training in Palliative care” – 4 doctors completed in 2021-2022

### **AWARDS & RECOGNITIONS**

- Dr.M.S.Biji selected for the “International Award for Excellence in Palliative care 2021-22” instituted by Cancer Aid Society, an Associate of United Nations Department of Global Communications, having special Consultative Status with United Nations Economic and Social Council and Participant World Health Organization’s GCM/NCD.

### **FUNCTIONS, CONFERENCE & WORKSHOP DETAILS**

- Dr.M.S.Biji Attended the virtual 29th International Conference of IAPC IAPCON 2022 held at Jaipur from 11<sup>th</sup> -13<sup>th</sup> Feb 2022 and presented an e-poster on “Return to work after curative cancer therapy and the barriers associated with it”. Also was a faculty and participated in a panel discussion on “Sensitive communications” on 13<sup>th</sup> Feb 2022.

## DEPARTMENT OF CANCER REGISTRY & EPIDEMIOLOGY



**DEPARTMENT IN CHARGE: DR. SAINA SUNIL KUMAR**

### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Saina Sunil Kumar	Lecturer
2	Bindu T	Lecturer
3	Ratheesan K	Lecturer

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1.	Prachith K S	Coding Clerk

### INTRODUCTION

This department was set up to provide cancer statistics and information on patient care. In collaboration with the National Cancer Registry Programme of the Indian Council of Medical Research (ICMR), a Hospital Based Cancer Registry (HBCR) was initiated in November 2010 and started functioning from February 2011 onwards. The department systematically collects, stores, summarizes, and distributes information about cancer patients who are treated for MCC or live in a particular geographic area.

The functions of the Cancer Registry include:

- Case finding (case ascertainment): Identifying reportable cases.
- Abstracting: Using the medical record as well as other sources to identify and document information about the patient and the patient's disease in a standard manner on a paper or computerized form.
- Follow-up: For the patient's lifetime, the registry continues to monitor the patient's health status at periodic intervals.
- Quality control: Procedures that ensure the accuracy and completeness of registry data.
- Reporting: Analyzing data and distributing information using the registry database.

## HOSPITAL-BASED CANCER REGISTRY [HBCR]:

In collaboration with the National Cancer Registry Programme of the Indian Council of Medical Research (ICMR), a Hospital Based Cancer Registry (HBCR) was initiated in November 2010 and started functioning from February 2011 onwards. The department publishes annually, the hospital-based cancer registry report and to date, the department published the 10th Hospital Based Cancer Registry Report for the year 2019. The main objective of HBCR is to generate reliable data on the magnitude and patterns of cancer registered at MCC.

## MALABAR POPULATION-BASED CANCER REGISTRY:

The Malabar Population Based Cancer registry was launched in 2014 for three districts Kannur, Kasargode, and Mahe. Population-based cancer registries seek to collect data on all new cases of cancer/mortality occurring in a well-defined population. As a result, and in contrast to hospital-based registries, the main objective of this type of cancer registry is to produce statistics on the occurrence of cancer in a defined population and to provide a framework for assessing and controlling the impact of cancer in the community. The department has published three Malabar Population Based Cancer Registry Reports for the years 2014, 2015 and 2016. The department expanded the MPBCR area to the 5 districts Kozhikode, Malappuram, Wayanad, Thrissur, and Palakkad in 2018.

## PATTERNS OF CARE AND SURVIVAL STUDIES [POCSS]:

Commenced in 2014 and is a funded project of NCRP/ICMR till Feb.2017, now clubbed with HBCR funding from 1st March 2017. This project is a surveillance Programme on cancers of the breast, cervix, and head and neck cancer patients. For this project, the department monitors the patient's health status at periodic intervals.

## LIFESTYLE AND CANCER:

To assess the epidemiological evidence on diet and cancer and to make public health recommendations, the department started the project titled "Lifestyle and Cancer".

## e-Mor PROJECT:

The department also started the funded project of NCDIR/ICMR entitled—"Implementation of NCDIR electronic mortality software (NCDIR-e-Mor)-strengthen medical certification of cause of death". The e-Mortality software is information technology software to record the cause of death information of all deaths occurring in hospitals. The main objective of this project is

- Record underlying cause of death in the Medical Certification of Cause of Death (MCCD) Form 4 / 4A.
- Strengthening cause of death statistics in India.
- Improve the quality of cause of mortality statistics in India.
- Build a death auditing system in hospitals.

## STATISTICS: 10-YEAR REPORT OF HBCR FOR THE YEARS 2010-19

YEAR-WISE CANCER REPORTED (HBCR)			
year	Male	Female	Total
2010	1193	1061	2254
2011	1368	1212	2580
2012	1685	1458	3143
2013	2028	1796	3824
2014	2140	1902	4042
2015	2162	1764	3926
2016	2125	1799	3924
2017	2447	2180	4627
2018	2800	2395	5195
2019	2805	2402	5207

## Leading cancers in males

YEAR WISE LEADING SITES OF CANCER IN MALES (HBCR 2010-19)																			
2010		2011		2012		2013		2014		2015		2016		2017		2018		2019	
Lung	241	Lung	312	Lung	372	Lung	397	Lung	442	Lung	440	Lung	488	Lung	521	Lung	570	Lung	542
Mouth	106	stomach	111	Mouth	121	Mouth	157	Mouth	175	Mouth	166	Mouth	148	stomach	180	Mouth	184	Stomach	177
stomach	97	Mouth	104	Stomach	121	stomach	135	stomach	154	stomach	135	stomach	135	Mouth	172	stomach	174	Mouth	171
Larynx	63	Tongue	67	Tongue	91	Tongue	116	Tongue	112	Tongue	116	Larynx	110	Tongue	142	NHL	167	NHL	171
Tongue	61	Oesophagus	61	Oesophagus	86	Larynx	103	NHL	103	NHL	116	NHL	107	NHL	129	Tongue	140	Prostate	141
Oesophagus	58	Larynx	55	Prostate	85	Oesophagus	88	Larynx	97	Larynx	105	Prostate	105	Rectum	124	Prostate	139	Liver	130
Prostate	52	Oropharynx	52	Larynx	66	Rectum	85	Rectum	89	Rectum	86	Tongue	101	Larynx	121	Larynx	132	Larynx	129
Rectum	52	Rectum	50	Rectum	64	Prostate	77	Oesophagus	88	Oesophagus	81	Oesophagus	94	Prostate	107	Rectum	121	Rectum	124
Hypopharynx	48	NHL	47	Hypopharynx	58	NHL	72	Oropharynx	72	Prostate	81	Rectum	73	Liver	85	Liver	116	Tongue	123
colon	38	Hypopharynx	45	NHL	57	Bladder	65	Prostate	70	Hypopharynx	75	Colon	69	Liver	77	Colon	106	Multiple Myeloma	90

## Leading cancers in Females

YEAR WISE LEADING SITES OF CANCER IN FEMALES (HBCR 2010-19)																			
2010		2011		2012		2013		2014		2015		2016		2017		2018		2019	
Breast	301	Breast	358	Breast	425	Breast	574	Breast	600	Breast	530	Breast	537	Breast	655	Breast	775	Breast	698
cervix	124	cervix	103	Cervix	113	cervix	131	cervix	147	cervix	135	cervix	144	cervix	157	Ovary	157	Cervix	184
Mouth	81	ovary	92	Ovary	109	Mouth	124	Mouth	104	ovary	128	ovary	109	ovary	134	Cervix	154	Ovary	157
ovary	75	Mouth	83	Mouth	92	ovary	114	ovary	100	Mouth	117	Mouth	92	Mouth	110	Lung	103	Rectum	114
Corpus uteri	46	Corpus uteri	47	Stomach	57	Rectum	72	Lung	83	Thyroid	76	Thyroid	73	Lung	104	Mouth	101	Corpus Uteri	112
Lung	40	Tongue	46	Lung	49	Lung	71	Thyroid	69	Rectum	65	Corpus uteri	71	Rectum	91	Rectum	95	Mouth	98
Rectum	36	Rectum	44	Tongue	49	Tongue	60	Rectum	64	Lung	63	Lung	69	Corpus uteri	89	Thyroid	95	Lung	96
Oesophagus	32	NHL	39	Corpus uteri	46	Thyroid	59	Oesophagus	63	NHL	60	Rectum	65	Thyroid	78	Corpus Uteri	93	NHL	92
NHL	27	Lung	35	NHL	43	NHL	55	stomach	60	Corpus uteri	54	NHL	65	NHL	71	NHL	83	Thyroid	83
colon	27	Thyroid	34	Rectum	40	stomach	53	Corpus uteri	56	Tongue	51	Colon	60	Multiple Myeloma	69	Colon	75	stomach	66

## **ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT:**

Combined regular academic sessions are conducted Tuesday [Journal Club] and Thursday [Topic presentation] of every week.

## **CONFERENCE & WORKSHOP DETAILS ATTENDED & PRESENTED:**

1. Dr. Saina, Bindu T, and Ratheesan K attended the 13<sup>th</sup> October 2021 Data Review meeting for HBCR conducted by NCDIR ICMR on 13<sup>th</sup> November 2021.
2. Dr. Saina, Bindu T, and Ratheesan K attended a training session on Coding using ICD for cancers through video conferencing conducted by NCDIR ICMR on 4<sup>th</sup> March 2022.
3. Dr. Saina, Bindu T, and Ratheesan K conducted a webinar on Strengthening MCCD in India conducted by ICMR-NCDIR on 16<sup>th</sup> March 2022.
4. Dr. Saina, Bindu T, and Ratheesan K attended GCP Training Program organized by Shodh Clinical Solution LLP on 31<sup>st</sup> July 2021.
5. Bindu T attended an online course on Bioethics conducted on 10<sup>th</sup>, 17<sup>th</sup>, and 24<sup>th</sup> December 2021 organized by Clinical Development Service Agency (CDSA), Translational Health Science & Technology Institute (THSTI) in collaboration with the National Biopharma Mission (NBM), Department of Biotechnology, and Government of India.

## **FORTH COMING PROJECT & GRANTS**

1. “Hospital-based cancer registries in India” by NCDIR/ICMR (01.04.2022-30.03.2027)
2. “A study on Patterns of Care and Survival of Head and Neck, Breast and Cervical Cancers in India “under the Hospital Based Cancer Registries of National Cancer Registry Programme (01.04.2022-30.03.2027).

## MECIAL RECORDS DIVISION

### DIVISION IN CHARGE: JAYADEV G

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Jayadev G	Medical Record Officer
2	Karthika O	Medical Record Assistant
3	Nameetha S	Medical Record Attender

### INTRODUCTION

The medical records division is situated on the ground floor adjacent to outpatient departments and reception. All the patient files are kept in movable racks according to UHID and the death files are kept separately. It does two types of registration, malignant and non-malignant cases. Malignant and Non-malignant cases are kept separately according to UHID. Malignant case folders are colour coded according to the site of cancer for easy identification. On average 400 files are retrieved and sent to different outpatient departments. Files sent to different departments were given after making an entry in the file tracking module using the barcode and the process repeats when the file returns to the Medical records division for filing.

### SERVICES PROVIDED:

The services mainly rendered by the division are:

1. Dispatch of medical records for patient care purposes
2. Dispatch of files for academic purposes
3. Receive the medical records from the various specialties after the patient has either been discharged from the hospital or has died.
4. Check the files for any discrepancies in the record and get it amended by the respective person including doctors, nurses, and other support staff.
5. Assembling of IP sheets
6. Arrange the files as per the order.
7. Death registration online.
8. Intimation of notifiable diseases
9. Intimation of Medico-Legal Cases
10. Inpatient file-Diagnostic coding of diseases using ICD-10

### STATISTICS

SL. NO	NAME	DESIGNATION
1	Outgoing File	108493
2	Chart In	109300
3	Discharge Analysis Done	5143
4	Death Intimation	138
5	Notifiable Disease	12



## DEPARTMENT OF CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY



### DEPARTMENT HEAD: DR. CHANDRAN K NAIR

#### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr.Chandran. K.Nair	Professor
2	Dr. Vineetha Raghavan	Associate Professor
3	Dr. Manu Prasad	Associate Professor
4	Dr. Praveen Kumar Shenoy	Associate Professor
5	Dr. Jithin T K	Assistant Professor
6	Dr. KG Gopakumar	Assistant Professor
7	Dr. Nandini Devi	Assistant Professor
8	Dr. Sherin	Assistant Professor

### INTRODUCTION

The department of clinical hematology and medical oncology has three divisions

- 1) Clinical hematology
- 2) Medical Oncology
- 3) Paediatrics/Pediatric Oncology.

This department functions with the aim of early diagnosis and treatment (Chemotherapy, Immunotherapy, Hormonal therapy, and targeted treatment) of hematological cancers, benign hematology diseases, solid tumors, and pediatric cancers. The department also provides training in the above and participates in research activities.

OPD STATISTICS / PROCEDURES									
Month	OPD attendance Clinical hematology	OPD attendance Pediatric Oncology	New cases Clinical hematology	New cases Pediatric Oncology	OPD attendance Medical Oncology solid tumor division	Bone Marrow study	Intra ventricular MTX	Lumbar puncture with I.T MTX	Day Chemo administered
TOTAL	10600	2422	1055	106	20994	632	37	659	17132

## BONE MARROW TRANSPLANTATION

	Autologous	Allogeneic (MSD)	Allogeneic (Haploidentical)
TOTAL	14	06	03

## AWARDS PRESENTED

1. Best E Poster award in NALLCON 12th Annual Conference of Indian Society for Study in Lung Cancer (Online), November 26th - Dr. Manuprasad A
2. Best oral paper presentation award at NATCON 2021, 34th Annual conference of the Indian Association of Surgical Oncology (Online) conference - Dr. Praveen Kumar Shenoy

## CONFERENCE ATTENDED & PRESENTED

1. Dr. Chandran K Nair presented the topic "Aplastic anemia" in the THOT webinar on 25th April 2021
2. Dr. Chandran K Nair presented the topic "Hemophilia- management" as part of world hemophilia day events @ IAP Thalassery via the zoom platform
3. Dr. Manuprasad attended the "Updates in Head and Neck Cancer" webinar as a faculty conducted on April (28-29th) 2021
4. Dr. Jithin T K attended Kerala PHOCON 2022 on March 6th at Thiruvananthapuram and participated in a panel discussion on "Pediatric oncology for general pediatricians"
5. Dr. Praveen Kumar Shenoy - Faculty - speaker on recent advancements in Cancer Diagnosis at Virtual conference on 'Emerging trends in Oncology' at NS Memorial College of Nursing virtual CME.
6. Dr. Praveen Kumar Shenoy - Faculty - speaker on Hematological Investigations in Cancer at Virtual conference for Ayurveda college (NIBODHINI'22) - 21/03/2022.
7. Dr. Jithin was the invited speaker for the IAP antibiotic awareness week observation awareness talk. He spoke on the rational use of antibiotics in Febrile neutropenia on 30th September.
8. Dr. Jithin was the invited speaker for the IAP antibiotic awareness week observation awareness talk. He spoke on the rational use of antibiotics in Febrile neutropenia on 30<sup>th</sup> September

## **PROGRAMMES CONDUCTED/ATTENDED:**

1. Conducted monthly meeting of parent support group “MUKULAM” via the online platform on 19.5.21
2. Dr.Vineetha,Dr.Sherin, Dr. Unnikrishnan, and Dr.Nisseem attended the Research methodology and statistics workshop conducted by MCC on 12/6, 13/6, 19/6, 26/6
3. Dr.Chandran, Dr. Praveen, and Dr.Manuprasad attended the GCP training workshop on the zoom platform on 8/6, 15/6, 22/6, 29/6
4. Dr.Chandran attended a webinar on Hodgkin lymphoma - treatment conducted by the Mumbai hematology group as faculty and participated in a panel discussion.
5. Dr. K G Gopakumar and Dr.Jithin T K attended the Online Good clinical practice workshop conducted by Shodh Clinicals on 31st July 2021
6. Dr.Manuprasad attended 4th Master Class in Lung Cancer as faculty Aug 6-7th (Conducted by Cancer Research and Statistic Foundation)- Speaker -NACT in Limited Stage SCLC
7. Dr.Jithin, Dr.Gopakumar, and Dr. Garima attended SIOP 2021 - online conference- from Oct 21 - 24
8. Dr. Praveen attended NATCON-IASO 2021 - Virtual conference on 23, 24, 30 & 31 October and did an oral presentation on the topic “Preoperative oral metronomic chemotherapy in advanced resectable oral cavity squamous cell carcinoma”. Secured award for best oral presentation for the same.
9. Dr.Jithin TK and Dr. K G Gopakumar attended the MCC foundation day seminar organized by the Skill and knowledge and enhancement cell on “Communication skills”.
10. Dr.Manuprasad - Faculty-Speaker session on ALK-positive Lung Cancer 5th annual year-end review Lung Cancer by Cancer Research Statistics Foundation-Mumbai December 11th, 2021
11. Dr.Manuprasad presented the E-poster “Distribution and Outcomes of Rare and Compound EGFR mutations in NSCLC in NALLCON 12TH Annual conference by Indian Society of Study in Lung Cancer Nov 26th -
12. Dr. K G Gopakumar attended Kerala PHOCON 2021 on December 4th and 5th, as faculty and chaired a session.
13. Dr. K G Gopakumar was an invited speaker at the Pediatric Oncology division, Kasturba Medical College, and took an online session on the topic “Pediatric Oncological emergencies on” 10.12.21
14. Dr.Jithin, Dr. K G Gopakumar, and Dr. Garima Nirmal attended 24th Annual PHOCON on December 10th and 11th 2021 online. Dr. Garima presented a poster on “KaposiformHemangioendothelioma” during the same.

## **AWARDS**

1. Best E Poster award in NULLCON 12th Annual Conference of Indian Society for Study in Lung Cancer (Online) November 26th
2. Dr. Praveen Kumar Shenoy completed an online course on the Basics of Health Economics.

## **MUKULAM-PROGRAMMES CONDUCTED:**

1. 17/6/21 - Conducted Mukulam (Parent-child support group) meeting on an online platform
2. Conducted Onam-related survivor meeting of Mukulam (parent support group) on 15/9/21 on Zoom online platform. State award singer Mrs.Sithara Krishnakumar joined the program online.
3. Conducted monthly Mukulam parent support group meeting on 25/8/21.
4. Conducted monthly parent support group - “Mukulam” meeting on 27/10/21
5. Pediatric oncology Parent support group (Mukulam) meeting held on 18.11.21. A class on CVAD care was taken by Mrs.Bijitha

6. Pediatric oncology Parent support group (Mukulam) meeting held on 14.12.21.
7. Pediatric oncology - Parent support group (Mukulam) meeting held on 13.01.22. A class on Day care chemotherapy was taken by S/N Sindhu NR
8. Conducted monthly parent support group “Mukulam” meeting on 17/3/22 at Conference hall, Pediatric block.

### **AWARENESS PROGRAM:**

1. Dr.Jithin T K spoke was the invited speaker for a talk on childhood cancer conducted as part of the observation of childhood cancer awareness month on 17th September. The programme was organized by the HOPE child cancer care foundation in association with the District Women and Child Department, Kasaragod & Mahila Sakthi Kendra.
2. As part of the observation of childhood cancer awareness month, an online awareness talk about Childhood Cancer was given by Dr. K G Gopakumar, on 26th September. The programme was organized by the HOPE child cancer care foundation in association with District Women and Child Department, Ernakulam Dist., and Mahila Sakthi Kendra, Ernakulam. The programme was attended by nearly 100 participants including ICDS workers and parents of children affected with cancer.
3. As part of the observation of childhood cancer awareness month, an online awareness talk about Childhood Cancer was given by Dr.Jithin T K, (Assistant Professor, Malabar Cancer Centre & past secretary IAP Thalassery) on 27th September. The programme was organized by HOPE in association with St Joseph’s Higher Secondary school, Uliyil Mount flower English medium school, and MLIP School.

## DEPARTMENT OF CLINICAL LAB SERVICES AND TRANSLATIONAL RESEARCH



### DEPARTMENT HEAD: DR. SANGEETHA K NAYANAR

Diagnostic services in the Clinical laboratory services and Translational Research, Malabar Cancer Centre, grew several folds from its inception in 2001. There are five divisions in the Department of CLSTR namely, Clinical Biochemistry and Hematology, Clinical Microbiology, Blood Bank, Molecular Oncology & Cytogenetics, and Onco-pathology.

## DIVISION OF ONCO PATHOLOGY

### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr.Sangeetha.K.Nayanar	Professor
2	Dr.Sithara Aravind	Associate Professor
3	Dr.Aswathi Krishnan M	Assistant professor
4	Dr.Kandathil Joseph Philip	Assistant professor
5	Dr.Anand Narayanan	Assistant professor
6	Dr. Vivek Nair	Assistant professor

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Sabna Dev. S.K	Cytotechnologist
2	Nimi. G.K	Cytotechnologist
3	Subitha S	Cytotechnician
4	Soumya. V.K	Lab.Technician
5	Biji K R	Lab.Technician
6	Preethu Das T K	Personal Assistant
7	Reena K C	Lab Assistant
8	Vishnu Raj	Attender

## INTRODUCTION:

The division of Onco-pathology caters to diagnostic reporting of all registered cancer patients at MCC. The final diagnosis of the type and nature of cancer is ascertained in the subdivisions of Histopathology, Cytopathology & Hemato-pathology. The techniques of frozen sections and automated immunohistochemistry special staining enable accurate and specialized cancer treatment and outcome for patients. The department aims to be the backbone of dedicated cancer research in the upcoming field of molecular pathology, as cancer treatment moves into the realm of personalized medicine. It has the latest technology in Molecular Pathology aimed at providing complete diagnostic and prognostic facilities. The department is situated in spacious premises in the new laboratory block which is on par with any state of art laboratories.

## KEY FEATURES OF THE DIVISION

- Services of grossing on automated grossing station on all working days
- Automated tissue processing and staining of biopsy specimens on all working days.
- Cryostat cut frozen sections and intra-operative reporting on all OT days.
- Immunohistochemical staining on automated stainer.
- Diagnostic reporting of surgical tissue specimens by faculty pathologists
- Facility for Fine needle aspiration for OP & IP patients on all days.
- Processing & reporting of Fine needle aspiration & fluid aspiration samples.
- Diagnostic reporting of Peripheral blood & bone marrow aspiration samples with clinical correlation.
- Archiving of tissue paraffin blocks & slides for future reference.
- Academic activities of undergraduate & postgraduate teaching.
- Research activities in collaboration with other department and divisions.

## NEW RESEARCH GRANTS:

- Dr.Sangeetha K Nayanar was granted ICMR research scheme-“Assessment of key immune factors in the pathogenesis of HPV associated oral and oropharyngeal squamous cell carcinoma”-Dec2021
- Dr.Sithara Aravind was granted the Kerala State Science, Technology and Environment Council(KSTEC) fund for “Genetic profiling of Bilateral breast cancers” in November 2021

## DETAILS OF NEW FACILITIES

A separate hall named “Dyuti” was arranged as a classroom for 45 students

## EQUIPMENT DETAILS NEW/ EXISTING:

Table top high-speed centrifuge (SorvallST16, Thermo Scientific) procured in July 2021

BD FACS Lyrics-10 part flow cytometry machine installed in August 2021

SL NO	NAME OF THE INSTRUMENT	NO:
1	Rotary microtome Leica RM 2125 RTS	1
2	Cryostat Leica CM 185 oUV	1
3	Tissue embedder+ freezer EG 1150 H+ EG 1150G	1
4	Tissue processor Leica ASP 6025	1

5	Automatic stainer+ Cover slipper Leica ST 5020+Leica CV 5030	1
6	Incubator YST- 438	1
7	Automatic Immunostainer Leica Bond Max	On rental
8	Semiautomatic Microtome	1
9	1. Microscope Magnus 2. Microscope DM 750, 3. Microscope DM 1000 4. Microscope Axio Lab A1 5. Microscope CH 20 i	7 (2 Trinocular) 1 1 5(1 with camera) 1
10	Tissue floatation bath YSI 133	1
11	Electronic balance KRT 300H DIGITAL	1
12	Microwave Oven	1
13	Hot air oven	1
14	Cytocentrifuge Rotofix 32	1
15	Centrifuge R 8C7/99	1
16	Grossing station	1
17	Liquid based Cytology	1
18	Automated Stainer	1
19	Block filing cCabinet	4
20	Slide filing cabinet	5
21	Flow Cytometry	1

## STATISTICS

SL No	PROCEDURE	NUMBER
1	Biopsy small	2625
2	Biopsy Radical	1589
3	Biopsy Second Opinion	2335
4	FNAC	665
5	FNAC with Cell Block	117
6	FNAC Second Opinion	197
7	Effusion Fluid Cytology	255
8	Effusion Fluid Cytology with Cell Block	348
9	Peripheral Smear	1239
10	Gynaec cytology	74
11	Bone marrow aspiration	681
12	Bone marrow biopsy	677



13	Bone Marrow Aspiration 2nd opinion	158
14	Bone Marrow biopsy 2nd opinion	158
15	Frozen sections	770
16	Flow Cytometry samples (Aug 21- March 22)	166
17	Total Number of reports Issued	11888

## ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT

Division of Onco-pathology conducts Senior residency & two Fellowship programmes for post-doctoral candidates, one in Onco-pathology & other in Head and Neck Pathology to foster specialized training and experience in the field for post-graduate doctors. The faculty and residents are encouraged to do original research projects and create academic publications & presentations. Undergraduate students pursuing BSc. MLT is given rotation posting in all divisions of the service laboratories. The Division also receives a steady intake of Postgraduate trainees pursuing MD Pathology and MDS.OralPathology. DNB Pathology was started in May 2019 with an intake of two trainees. The effort to start DM Onco-pathology, which is a post-MD three-year super specialty programme under the Medical Council of India is initiated.

During the year 115 academic sessions were conducted in the department and more than 96 cases were discussed in the Path Board

## AWARDS & RECOGNITIONS

The multidisciplinary Research Unit (MRU) has been set up under the guidance of the Directorate of Health Research (DHR) and ICMR in Govt. Medical College, Kozhikode. Dr.Sangeetha K Nayanar was appointed to the post of Co-chairperson of this body.

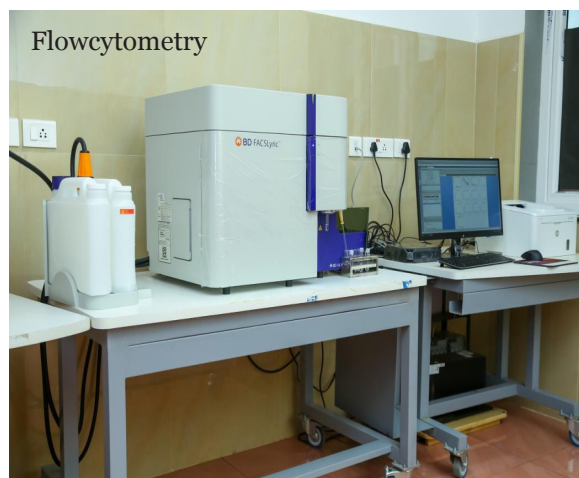
## CONFERENCES ATTENDED:

1. Dr Sangeetha attended The Seminar on Soft tissue tumors- Dr. Bharat Rekhi-February 2021
2. Dr Sangeetha attended IAPM kerala Chapter slide seminar on Bone and Soft tissue March 2021
3. Dr Sangeetha attended Case Seminar on Head & Neck tumors May 2021 conducted by AIMS Kochi
4. Dr Sangeetha attended BIRAC CTN course on Good Clinical Practice June 2021
5. Dr Sangeetha attended Seminar on lymphomas-Aug 2021
6. Dr Sangeetha attended IAPM kerala Chapter slide seminar on Lymphoma Aug 2021
7. Dr Sangeetha attended the Course on IA & QMS(NABL) Sep 2021
8. Dr Sangeetha attended the Course on Flow Cytometry Sep 2021
9. Dr Sangeetha attended the BIRAC CTN course on Boethics Dec 2021
10. Dr Sangeetha attended 12 sessions on preparation of Synoptic reporting formats in collaboration with IAPM Kerala State Chapter (part of Head & Neck group and Expert Committee)
11. Dr Sangeetha act as Chairperson on Head & Neck tumor-case Seminar conducted by AIMS Kochi
12. Dr Sangeetha act as Chairperson for session on Peripheral T cell lymphomas conducted by IAPM Kerala State Chapter
13. Dr. Sithara Aravind participated in NATCON National Conference and presented an E poster on "Can histologic risk assessment factors in biopsy specimens predict survival in cervical squamous

cell carcinoma- A cross sectional study at a tertiary cancer centre in Kerala”

14. Dr. Sithara Aravind attended 12 sessions on preparation of Synoptic reporting formats in collaboration with IAPM Kerala State Chapter (part of CNS reporting group)
15. Dr. Sithara Aravind attended the Mandatory GCP training by Shodh Clinicals
16. Dr. Sithara Aravind attended the IAPM kerala Chapter slide seminar on Bone and Soft tissue March 2021
17. Dr. Sithara Aravind attended the Seminar on Neuropathology Upadates- IAPM Kerala Chapter
18. Dr.Ashwathy Krishnan participated in NATCON National Conference via online platform and presented an E poster on “A Study on association between mammographic micro calcification ad HER2 status in breast carcinoma- 2 year retrospective analysis from a tertiary cancer centre”
19. Dr. Ashwathy Krishnan Mandatory GCP training by Shodh Clinicals
20. Ashwathy Krishnan attended the Seminar on Neuropathology Upadates- IAPM Kerala Chapter.
21. Kandathil Joseph Philip gives Keynote lecture on “Intraoral FNAC with immunochemistry application – A pearl in the deep blue sea” at Oral Pathshala – XVII Annual state conference of KSOMP, 30 th April – 2 nd May, 2021, organized by Department of Oral Pathology and Microbiology, Malabar Dental College and Research centre, Edappal.
22. Dr Kandathil Joseph Philip Attended training course on Laboratory management system and internal auditor as per ISO 15189: 2012 by CAHO and CQI in an online virtual sessions from 13 th to14 th March, 2021.
23. Dr. Kandathil Joseph Philip Attended training in Good Clinical Laboratory Practices (GCLP) by Shodh clinical in a virtual platform from 7 th August – 8 th August, 2021.
24. Dr. Kandathil Joseph Philip Attended Fluorescent insitu Hybridisation (FISH) workshop training on a virtual
25. Platform from July – September, 2021 conducted by MEU India.
26. Attended training in Good Clinical Practice (GCP) by Shodh clinicals in a virtual platform on 13th November, 2021.
27. Dr. Anand Vijayanarayanan attended Biomarker testing in lung cancer – TMH- EBM- Preconference Workshop-24.2.22
28. Dr. Anand Vijayanarayanan Completed Flow Cytometry Certificate course by MEU India
29. Dr.AnandVijayanarayanan attended TMH-EBM Virtual Conference-25-27.2.22
30. Dr. Anand Vijayanarayanan attended Mandatory GCP training by Shodh Clinicals

## NEW MACHINES



## DIVISION OF MICROBIOLOGY

### DIVISION IN CHARGE: DR. R. PARTHIBAN

#### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. R. Parthiban	Associate Professor
2	Dr.Sajani Samuel	Assistant Professor
3	Dr. M. Saravanan	Assistant Professor
4	Dr.Sarath K. E	Assistant Professor

#### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Mrs. Ramitha M.G.	Lab Technician
2	Mrs. Aswathy	Lab Technician

#### INTRODUCTION

The division of microbiology is committed to providing accurate and reproducible results on clinical material within the shortest possible time. Automated state-of-the-art equipment is available for blood cultures, and molecular diagnostics. The department provides services on all days of the week.

The division provides services for environmental testing and water testing in the hospital infection control. Implementation of best practices for infection control including surveillance of healthcare-associated infections is under the scope of Microbiology.

#### PHOTOS - NEW EQUIPMENT / FACILITIES/ PROCEDURE:



Gradient Thermal cycler 96 well (i-gene)

### DETAILS OF EXISTING / NEW FACILITIES:

SL. NO	EXISTING FACILITIES	PURPOSE
1	VITEK – 2	Automated Bacterial Identification and Susceptibility testing
2	MALDI-TOF	Automated Microorganisms Identification (Rapid)
3	BACT/ALERT -3D	Automated Blood Culture System
4	Bactec – 9050	Automated Blood Culture System
5	Real-Time PCR	Molecular diagnosis for Infectious diseases
6	GenXpert	Molecular diagnosis for Infectious diseases
7	Anaerobic Chamber	Culture of Anaerobic Micro-organisms
8	Thermofisher-Kingflex	Automated Extraction system for RNA/DNA
9	Refrigerated Centrifuge	Used for RNA/DNA Extraction
10	Fluorescence Microscope	For Mycobacterium tuberculosis identification

### IMPLEMENTED NEW DIAGNOSTIC TESTS:

1. **Molecular Diagnostics:** Quantitative PCR – Pneumocystis jirovecii & BK Virus
2. **Serological Test:** Serum Galactomannan Assay.

### STATISTICS:

Total No. Of Samples: 5690

Sample Details:

SL. NO	SAMPLE TYPE	SAMPLE NUMBER
1	Urine	1191
2	Stool	94
3	Blood	1836
4	Respiratory (Sputum, throat swab, BAL)	183
5	Pus (wound Swab/ swab/ dead tissues/ Exudates)	748
6	AFB Staining	103
7	Gram Staining	81
8	Fungal culture	45
9	KOH Mount	39
10	Environmental Swabs	731
11	Serology	115
12	Blood bag quality check	141
13	CMV & EBV PCR (Molecular diagnosis)	283
14	Bacterial identification (Outside Hospitals & Colleges)	69
15.	Blood Culture (Outside)	56
16	Water Analysis	63
17.	Disinfectant Testing	152

COVID-19 testing RT PCR	samples	-	1, 11,748
COVID-19 Antigen testing	samples	-	3,500

### ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT:

- Classes are taken for B.Sc MRT and B.Sc Nursing.
- Orientation classes regarding HIC activities for newly joined staff.

### AWARDS & RECOGNITIONS:

- Dr. R. Parthiban Awarded LOUIS PASTEUR award for the best oral presentation in the International Virtual conference on “SARS-CoV-2 CONTAGION LESSONS LEARNT”-2021.
- Dr. R. Parthiban Awarded Best E-Poster in the International Virtual conference on Emerging and Re-Emerging infectious diseases in a Health care setting- MICROSUMMIT 2021

### CONFERENCE & WORKSHOP DETAILS - ATTENDED & PRESENTED:

- Dr. R. Parthiban attended the Virtual GCP Training Program on November 13, 2021
- Dr. R. Parthiban attended the Hands-on Training in “Cancer Cell Culture Technique” at Centre for Stem cell and cancer genomics, AMI Bioscience, Coimbatore on 17-19 September 2021.
- Dr. R. Parthiban Presented a scientific paper (oral presentation) on “Combinatorial Tapestry Pooling of Samples for Validation of SARS CoV-2 RT PCR Testing: A Multi-centre Study.at the International Virtual Conference on “**SARS-CoV-2 Contagion Lessons Learnt**”, organized by the Department of Microbiology, Balaji Dental College & Hospitals on 15 &16<sup>th</sup> December 2021
- Dr. R. Parthiban Presented a scientific E-Poster on ‘Molecular characterization of carbapenem-resistant gram-negative bacilli in a tertiary care cancer centre’ in the International Virtual conference on Emerging and Re-Emerging infectious diseases in a Health care setting- MICROSUMMIT 2021, organized by the Department of Microbiology, Saveetha Dental College & Hospitals in association with Indian Association of Applied Microbiologists (IAAM) on 13<sup>th</sup>&14<sup>th</sup> August 2021.
- Dr. R. Parthiban Invited as faculty – Skill-based Internship program on Experimental Animal Sciences for researchers and Entrepreneurs organized by RUSA 2.0, Entrepreneurship and Carrier hub, University of Madras – 09-01-2022.
- Dr. Sajani Samuel Presented a Paper in World Congress on Infectious Diseases and Antibiotics-2022: Virtual Conference on” Antibiotic resistance, mecA gene detection, and biofilm formation ability among coagulase-negative staphylococci in cancer patients” on 30<sup>th</sup> Jan 2022 (Virtual Conference).
- Dr. Sajani Samuel Presented a paper at the 42<sup>nd</sup> Annual Conference of Indian Associations of Biomedical Scientists (IABMSCON- 2021) Recent Trends and Advances in Biomedical Sciences- An Integrated Approach on “Distribution of resistant genes encoding extended-spectrum beta-lactamases in Enterobacteriaceae isolated from various clinical samples in a tertiary care cancer centre ”on 25- 27<sup>th</sup> Nov 2021 (Virtual Conference).
- Dr. Saravanan. M Attended Workshop – Quality Management Systems and Internal Audit in Medical Labs as per ISO 15189: 2012, conducted by 360 Diagnostic & Health Services Pvt. Ltd, Noida 15 – 18<sup>th</sup> September 2021.
- Dr. Saravanan. M Attended Workshop – Basic – Certificate Course on Antimicrobial Stewardship, Conducted by Consortium of Accredited Healthcare Organizations (CAHO), 18<sup>th</sup> December 2021.
- Dr. Saravanan. M Attended - Online Hands-on workshop on “Genomic Data Analysis” organized by VIT-TBI -08-02-2022.

- Dr. Saravanan. M Completed Basic course on Biomedical Research (BCBR) - conducted by ICMR – NIE.
- Dr. Saravanan. M participated an E- Poster Presentation – Topic: Microbial pathogens and their susceptibility pattern in surgical site infections among cancer patients – A Retrospective analysis. International Virtual Conference on Emerging and Re-emerging Infectious Diseases in Healthcare Settings. 2ndMICROSUMMIT – 2021. In Association with Indian Association of Applied Microbiologists (IAAM) 13 – 14<sup>th</sup> August 2021.
- Dr. Saravanan. M participated E-paper presentation - Topic: Microbial pathogens and their susceptibility pattern in surgical site infections among cancer patients – A Retrospective analysis. “2nd International E-conference: Aspects of Microbiology in Healthcare Sectors Department of Microbiology, Primeasia University-30<sup>th</sup> January 2022.
- Dr.Sarath KE Attended Workshop – Basic – Certificate Course on Antimicrobial Stewardship, Conducted by Consortium of Accredited Healthcare Organizations (CAHO), 18<sup>th</sup> December 2021

### **PUBLISHED BOOK CHAPTERS:**

- Phenotypic Detection Of Metallo- Beta Lactamase (MBL) Producing Gram Negative Bacteria In The Book Entitled “Research Insights Of Life Science Students (ISBN Number: 978-93- 91342-27-2) (Volume – 3)”.
- Oral Microbiome And Its Detection Methods In The Book Entitled “Research Insights Of Life Science Students (Isbn Number: 978-93- 91342-27-2) (Volume – 3)
- Quorum Sensing in Microorganisms. Entitled “Research Insights of Life Science Students (ISBN Number: 978-93- 91342-27-2) (Volume – 3)”.
- Aminoglycoside Resistance (16s rRNA Methyltransferase) In Gram-Negative Bacteria in the book entitled “Research Insights of Life Science Students (ISBN Number: 978-93- 91342-27-2) (Volume – 3)”.

### **NEW MACHINES**



MALDI -90F



## DIVISION OF BIOCHEMISTRY

**DIVISION IN CHARGE: Dr. SINDHU E.R.**

### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1.	Dr. Sindhu E. R	Assistant Professor

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Mrs. Mini	Lab Technician
2	Mr. Aneesh	Lab Technician
3	Mrs. Namitha	Lab Technician
4	Mrs. Dhanya Prabha N	Lab Technician
5	Mrs. Aneesha	Lab Technician
6	Mrs. Sinsha NP	Lab Technician
1.	Mrs. Ajisha	Lab Technician
2.	Mrs. Akhila	Lab Assistant

### INTRODUCTION

The division of Biochemistry (MCC clinical lab) is a well-equipped, computerized, fully air-conditioned laboratory providing round-the-clock services. The clinical lab has the facility to do all the biochemical as well as hematological assays required in the hospital. It is connected to Hospital Information System for electronic reporting of results within the turnaround time. The quality systems are compliant with the ISO 15189 standard guidelines. There are Vitros fully automated biochemistry analyzers (Vitros 250 for Biochemistry analysis - Vitros 5600 for both Biochemistry and immunoassays), an Access 2 analyzer (Beckman Coulter) for tumor marker analysis. For hematological tests, we have two Beckman Coulter CBC analyzers in the lab. Electrophoresis and immunofixation tests are performed in the Helena SAS3 SAS4 fully automated system. STAGO analyzer is used for coagulation assays and an ABG analyzer is also available in the division. We have an osmolality analyzer for osmolality tests and MiniVIDAS for immunoassays

The technologists and staff in the division are trained to work independently, to ensure smooth functioning and compliance with the quality systems.

### DETAILS OF EXISTING / NEW FACILITIES:

SL NO.	NAME OF EQUIPMENT	PURPOSE
1	Blood Gas Analyser (ABG Machine)	Blood gas analysis
2	Coagulometer (STAGO fully automated system)	Coagulation studies
3	Cardiomarkeranalyser Mini Vidas	Chemiluminous immunoassays



4	Vitros 250 Biochemistry Analyser	Biochemistry assays
5	Vitros 5600 Biochemistry Analyser	Biochemistry and immunoassays
6	Access 2 tumor marker analyzer (Beckman Coulter)	Chemiluminous immunoassays
7	Blood cell counter (Beckman Coulter) LH 780/750	Complete Blood Cell count
8	CRP Analyser	CRP analysis
9	Vein Viewer	To view veins for blood collection
10	Electrophoresis apparatus with immunofixation	Electrophoresis with immunofixation of serum protein



## STATISTICS:

Samples Handled: 42150

## Sample Details:

SL. NO	TEST	NUMBER
1	Complete Blood Count	41988
2	Biochemistry	542760
3	Urine Analysis	1009
4	Coagulation tests	6304
5	Tumor marker	7996
6	Serology	5467
7	Arterial Blood Gas Analysis	608
8	Electrophoresis with immunofixation	720

## **ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DIVISION:**

- Classes are taken for B.Sc Nursing.
- Examiner for B. Sc. Medical Biochemistry and evaluator for B.Sc Medical Biochemistry and Nursing course.

## **FUNCTIONS, CONFERENCE & WORKSHOP DETAILS**

- Paper presented in national conference QUAESITIO 2021-2022. Organized by Research cell and IQAC, St. Stephens college, and MG university Kottayam on 10/03/2022
- Paper: Lymphocyte monocyte ratio as a prognostic marker in diffuse large B-cell lymphoma and T cell lymphoma patients-An observational study.

## **PUBLICATIONS - BOOKS / JOURNALS (INTERNATIONAL, NATIONAL)**

### **1. Book chapter**

- Dr. Sindhu ER -Preventive role of carotenoid in oxidative stress-induced cancer; in the book Handbook of Oxidative Stress in Cancer: Therapeutic Aspects" Publishers- Springer publications.

# BLOOD BANK AND TRANSFUSION MEDICINE DIVISION

**DIVISION IN CHARGE: DR. MOHANDOSS M**

## ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Mohandoss M	Associate Professor

## NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Sabeesh P	Blood Bank Technician
2	Sajeesh VM	Blood Bank Technician
3	Shibin CV	Blood Bank Technician
4	Anoop Joy	Blood Bank Technician
5	Thahira D	Blood Bank Technician
6	Maya PK	Staff Nurse
7	Arun KV	Attender

## INTRODUCTION

The Blood centre provides quality blood products to patients by using the latest technology for blood collection, processing, and testing. In addition, the division supports the bone marrow transplant program of the centre.

## EXISTING / NEW FACILITIES:

1. 24 x 7 Blood Centre
2. Blood Components – Packed Red cells, Platelet concentrate, Fresh Frozen Plasma, Cryoprecipitate
3. Apheresis – Platelets, Convalescent Plasma
4. HLA typing
5. Flow cytometry - Diagnostic
6. Stem Cell Collection and Cryopreservation
7. Irradiation of blood components
8. Cell therapy lab- for modifying cell products

## STATISTICS

SL. NO	CATEGORY	NUMBERS
1	Whole Blood Donors	3043
2	Apheresis Donors	551

3	Blood Donation Camps	24
4	Stem Cell Collection	31
5	Irradiated Blood Components	3806
TOTAL		7455

□ **Blood Components Issued**

SL. NO	CATEGORY	NUMBERS
1	PRBC	2932
2	Platelet Concentrate	2194
3	Single Donor Platelets	1010 units
4	Fresh Frozen Plasma	718
5	Cryoprecipitate	258
TOTAL		7112

SL. NO	CATEGORY	NUMBERS
1	Flowcytometry	208
2	HLA Typing	123
3	TCR of and CD19 depletion	2
TOTAL		333

### ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT:

- Dr. Angel Mary Sam 3<sup>rd</sup> year PG in Transfusion Medicine from SCTIMST, Trivandrum attended her peripheral posting

### AWARDS & RECOGNITIONS:

- Dr.Mohandoss M – received third prize in an oral presentation at the 3<sup>rd</sup> Joint Congress of AABB-AATM conducted on a virtual platform (03.12.21-04.12.21)
- Dr.Mohandoss M – attended as External Examiner for PDCC – Apheresis course at JIPMER, Puducherry on 27.10.21

### FUNCTIONS, CONFERENCE & WORKSHOP ORGANIZED

- Felicitated Blood Donation Camp organizers as part of World Blood Donor Day Celebrations and National Blood Donation Day

### CONFERENCE ATTENDED & PRESENTED:

- Dr.Mohandoss M attended as Delegate in AABB-AATM Congress held in the virtual platform and presented “Evaluation of Hemolysin test as a tool to screen high titre group O Platelet Apheresis Donors- A Prospective Study” on Dec 2021
- Dr.Mohandoss M attended as Faculty in TRANSCON 2020 –National Conference (Virtual) of Indian Society of Blood Transfusion and Immunohematology and participated as a panellist in a session on Mar 2022

### CONFERENCE ATTENDED & PRESENTED:

1. Dr. Mohandoss was a Delegate in ISBT 2020 – Virtual Congress of the International Society of Blood Transfusion and presented “Impact of Transfusion Dependency at Presentation and Transfusion Intensity during Intensive Chemotherapy on Treatment Outcomes in Acute Myeloid Leukemia “on December 2020
2. Dr. Merline Augustine as a delegate in APBMT 2020- 25th Annual Congress of Asia Pacific Blood and Marrow Transplantation Group and presented “Anaemia in Multiple Myeloma Patients undergoing autologous hematopoietic stem cell transplant influences CD34 cell collection yield and RBC transfusion requirements during Peri-Transplant and Post-Transplant Period “on October 2020
3. Dr. Mohandoss M as faculty in TRANSCON 2020 –National Conference (Virtual) of Indian Society of Blood Transfusion and Immunohematology and presented “Updates in regulations of Cellular Therapy in India” and Poster “ Predicting donor factors in high yield platelet donations by CART analysis “on February 2021
4. Dr. Merline Augustine as a delegate in TRANSCON 2020 –National Conference (Virtual) of Indian Society of Blood Transfusion and Immunohematology and presented “Vein assessment tool on outcomes of double platelet product apheresis”&“Analysis of PRBC Irradiation Practices from South India” on February 2021.

### ONGOING RESEARCH PROJECTS:

1. Implications of Vein assessment tool on outcomes of double platelet product apheresis
2. Anemia in Multiple Myeloma Patients undergoing autologous hematopoietic stem cell transplant influences CD34 cell collection yield and RBC transfusion requirements during Peri-Transplant and Post-Transplant Period
3. Does Intensity of Blood Transfusion Influence Clinical Outcome in Adolescent and Adult Acute Lymphoblastic Leukemia
4. Transfusion Risk Prediction for Perioperative blood transfusion in ovarian cancer patients with post NACT and interval cytoreduction surgery
5. Evaluation of Hemolysin Test as a Tool to Screen High Titre Group O Platelet Apheresis Donors

### PUBLICATIONS - BOOKS / JOURNALS (INTERNATIONAL, NATIONAL)

1. Murugesan M, Padmanaban M, Malodan R, Chellaiya GK, Nayanar SK. Modeling predonation testing strategies in platelet donations - Approach from low throughput apheresis blood center from India. Asian J Transfus Sci. 2020 Jul-Dec;14(2):131-136. doi: 10.4103/ajts.AJTS\_93\_19.
2. KC G, Murugesan M, Nayanar SK, Malodan R, Padmanaban M. Comparison of abo antibody levels in apheresis platelets suspended in platelet additive solution and plasma. HematolTransfus Cell Ther. 2020; June
3. Murugesan M, Chellaiya GK, Nair CK, Nayanar SK. Analysis on the composition of leukapheresis product – A comparison between MCS+® + and spectra optia apheresis equipment. J ApplHematol2021;12:1-5.
4. Augustine M, Murugesan M, Nair CK, Raghavan V, Nayanar SK. Recurrent hyperhemolytic transfusion reaction in myelodysplastic syndrome- A case-based approach. TransfusApher Sci. 2021 Feb 4;103073. doi: 10.1016/j.transci.2021.103073.

# GENETICS & CYTOGENETICS AND MOLECULAR ONCOLOGY DIVISION

**DIVISION IN CHARGE: Dr. DEEPAK ROSHAN VG**

## ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Deepak Roshan VG	Assistant Professor
2	Dr. Vipin Gopinath	Assistant Professor

## NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Vincy Augustine M A	Lab Technician
2	Sreehari O P	Lab Technician
3	Sreeja K V	Lab Assistant

## INTRODUCTION

Division of Genetics and Cytogenetics and Division of Molecular Oncology are mainly focusing on understanding the molecular and Genetic mechanism of tumorigenesis, metastasis, and Drug resistance to cancers. The major research direction of division for “bench to bedside” are the following:-

- To explore the molecular mechanisms of cancer; the research fields include genomics, proteomics, signal transduction pathway, Drug design, and screening, for anti-cancer drugs.
- To address the problems associated with clinical treatment of cancer patients, such as Drug resistance and Drug toxicity to develop personalized medicine

Along with molecular research to understand the biology of tumorigenesis, Division is also involved in molecular diagnosis.

The division is also focused on HR development by providing a Ph.D. program in life science, short-term training for BSc, MSc, Life Science, and B.Sc MLT students, and dissertation work for MSc/MD/MDS students

## DETAILS OF EXISTING / NEW FACILITIES

1. Genomics
2. Proteomics
3. Cell culture
4. FISH

## STATISTICS

SL. NO	CATEGORY	NUMBERS
1	Quantitative BCR-Abl	239
2	Qualitative BCR Abl	52
3	JAK2	64

4	AML Panel (10 markers)	66
5	ALL Panel (8 markers)	48
6	FISH blood (PML-RARa and BCR-Abl)	30
7	FISH Her2	80
8	EGFR Mutation analysis	185
9	RT-PCR PML-RARa	33
TOTAL		797

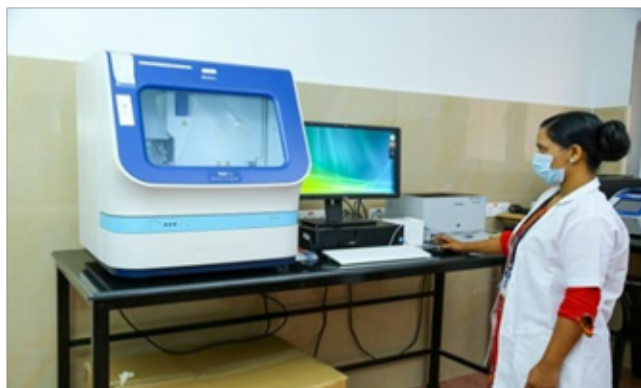
## ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT

- Ph.D. In life Science
- Fellowship in Molecular Diagnosis
- PG Diploma
- PG desertion 3 months and 6 months

## NEW INNOVATIONS IN DEPARTMENT FOR THE YEAR

- Three Extramural grants received

## NEW MACHINES



DNA Sequencer



LN2



Real time PCR



Biosetty Cabinet



## DEPARTMENT OF COMMUNITY ONCOLOGY



### DEPARTMENT IN CHARGE: DR. NEETHU A P

#### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Neethu A P	Lecturer
2	Dr. Phinse M Philip	Lecturer

#### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Santhosh Kumar K	Lab Assistant
2	Nisha	Nursing Assistant

## INTRODUCTION

Community Oncology Department has been regularly conducting cancer awareness programs, volunteer training programs, health exhibitions, and school-based tobacco awareness programs in 6 districts namely Kozhikode, Kannur, Wayanad, Malappuram, Kasargod, Palakkad in Kerala, and Mahe in U T of Puducherry. From 2011 to 2020, the department has conducted 1359 cancer screening camps, 640 cancer awareness programs, 169 school tobacco programs, 184 volunteer training programs and 121 health exhibitions along with regular Associate center (ECDC) visits. After 2020 owing to the restrictions imposed by the COVID situation, the department continued awareness activities through online webinars and conducted 23 awareness webinars for the public and 3 for students in collaboration with Kannur cancer control consortium (KCCC) and other organizations like IMA, Rotary club, Kudumbasree, etc.

MCC has established Associate centers with facilities for early detection of cancer in various places in Kannur and Kasargod districts and conducts regular follow-up visits to these centers.

1. PHC based ECDC clinics at Cherukunnu, Kuttiattoor, Keezhpally (Kannur Dist.) and Cheruvathur and Thrikkariapur (Kasargod Dist.)
2. NGO Based ECDC clinic-Alakkode, Nellikkampoyil (Kannur District) Chittarikkal (Kasargod District), and Thamarassery (Kozhikode District) under Thalassery Social Service Society (TSSS)

## ACTIVITIES AND ACHIEVEMENTS

### ROUTINE ACTIVITIES

#### 1. Awareness Programs

- a. Cancer awareness campaign: cancer awareness classes for the general public and health workers in cooperation with various organizations, residential groups, clubs, etc.
- b. Tobacco awareness campaign at schools: anti-tobacco awareness classes using audiovisual aids were conducted at different schools.
- c. Exhibitions and observation of cancer-related health days: cancer and tobacco-related health exhibitions were organized at different public programs and schools. No tobacco day, cancer awareness day, etc. were observed with massive public programs.
- d. Training and workshops: Training in tobacco control and cancer screening for health workers, volunteers, JPHNs, and nurses is regularly conducted.
- e. Awareness generating public competitions: painting and literary competitions, and online competitions were organized for school children and the general public on tobacco control and cancer prevention.
- f. Quarterly newsletter NETHI on tobacco awareness for school children.
- g. Publication of IEC materials for awareness generation.
- h. Screening of short film for tobacco awareness “U-Turn” in schools and public programs.
- i. Community participatory research activities.
- j. Collaborative projects with community components were initiated by various universities affiliated with MCC.

#### 2. Tobacco Cessation Clinic

Tobacco cessation treatment is provided to those addicted to all forms of tobacco use. People identified at the camps were directed to the department OPD. Division also conducts various tobacco awareness programs for public and school children. Research on various aspects of tobacco use is also conducted in the division. Tobacco cessation OPD functions on all Wednesdays.

#### 3. Anti-Tobacco Cell

The anti-tobacco cell was formed under the dept. on 31-10-11. The cell consists of eminent personalities from different walks of life like teachers, Journalists, Social activists, writers, Janamithi police, etc. The main aim of the cell is to educate the student community on the menace posed by tobacco use. The cell is involved in all anti-tobacco campaigns.

#### 4. Kannur District Cancer Control Consortium (Kccc):

As a part of including socially committed individuals and organizations in the cancer control activities of MCC, MCC has formed the Kannur district cancer control consortium for cancer control activities. It is formed to work under the guidance and technical support of Malabar Cancer Centre, Thalassery to initiate and promote health care with community participation, create awareness about the prevention of cancer, eliminate fear and stigma about cancer, to spread the message about the curability of cancer and to provide rehabilitation to cancer survivors. KCCC was officially inaugurated on 4<sup>th</sup> February 2021 by the hon'ble Chief Minister of Kerala.

#### 5. Early Cancer Detection Clinic

MCC has initiated early cancer detection clinics led by trained nurses at various panchayaths (Cherukunnu PHC at Kannapuram, Keezhpally PHC at Aralam) in Kannur district and Kasaragod district (Cheruvathur CHC and Neeleswaram Taluk hospital). Early cancer detection clinics are also initiated in collaboration with NGOs and are functioning well (centers at Alakkode and Chittarikkal and Thomapuram and Nellikkampoyil in collaboration with Thalassery Social service society). Another center was started at Thamarassery in December 2021.

## 6. Museum

The department prepares and maintains a museum of cancer-inflicted organs which are also utilized in cancer awareness health exhibitions for awareness generation.

### DETAILS OF EXISTING / NEW FACILITIES

1. Tobacco cessation clinic on all Wednesdays
2. Museum with mounted specimens of organs with cancer, which is utilized in cancer awareness health exhibitions for awareness generation among students and public.



### STATISTICS

#### 1. Awareness activities

Public awareness class (webinar)	Public awareness class	School awareness program	Public programmes	Volunteer training program	A public awareness class on the vaccine trial	ECDC visit	Observer training	Other meetings
25	22	10	17	22	10	32	17	13
Total: 168 programs								

#### 2. Tobacco cessation clinic data

New case	Follow up
84	67

### ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN THE DEPARTMENT

- a. Training and workshops: training in tobacco control and cancer screening for health workers, volunteers, JPHNs, and nurses is regularly conducted.
- b. Tobacco cessation observer program for doctors as part of training for cancer control
- c. Student academic sessions for BSc MRT students in public health
- d. Health worker academic sessions for nurses and doctors as a part of training in cancer screening

- and setting up Associate Centres for early cancer detection.
- e. The academic session for institutional fellows, doctors, nurses, and MSW students in tobacco cessation
  - f. Public webinars for cancer awareness in collaboration with Kannur District Cancer Control Consortium.
  - g. Training of doctors, MSLP and nurses in District cancer control program

### **FUNCTIONS, ACTIVITIES, CONFERENCES & WORKSHOP - ORGANIZED:**

- a. Observation of world no tobacco day and international day against Drug abuse and illicit trafficking
- b. “Enhancing capacity for the conduct of human clinical trials for COVID 19 vaccine candidates”
- c. ECHO-MCC training program for school teachers on cancer control
- d. Cancer awareness webinar series for KCCC
- e. Inclusion of cancer awareness in the school curriculum
- f. District Cancer Control Program
- g. KCCC public program
- h. Patient navigation program of KCCC
- i. PINK Ribbon Month and other specific cancer month awareness activities
- j. Observation of MCC foundation day
- k. Observation of National Cancer Awareness Day
- l. New associate centre at Thamarassery
- m. Program at BWFF dispensary Manjeswar
- n. World cancer day observation
- o. COVID cell

### **CONFERENCE & WORKSHOP ATTENDED & PRESENTED**

1. Attended workshops on quasi-experimental analysis and Qualitative data analysis -Preconference workshops of IPHACON 2021 on 8<sup>th</sup> and 18<sup>th</sup>, September
2. A workshop on Kerala Cancer Control Strategy was held at SHRC, Trivandrum. Dr. Neethu A.P represented MCC in the workshop.
3. Kerala Cancer Control Strategy workshop was held on 13<sup>th</sup> January 2022 at District planning office Kannur, attended by Dr. Neethu

### **PUBLICATIONS & BOOKS**

1. Handbook on tobacco
2. NETHI newsletter –a publication of anti-tobacco cell of MCC every 3 months
3. Handbook for nurses and volunteers in cancer control
4. Pamphlets on oral, breast, and cervical cancers

## DEPARTMENT OF DENTISTRY & REHABILITATION



**DEPARTMENT HEAD: DR. PRAMOD SANKAR**

### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Pramod Sankar	Associate Professor

### INTRODUCTION

Cancer patients often have compromised dental health either due to the disease, co-morbidities, or the effect due to the treatment they undergo. Maintenance of optimum dental health is of paramount importance to the overall quality of life of cancer patients. Department of Dentistry & Rehabilitation at MCC, provides dental services only to registered cancer patients. Rehabilitation dental screening for all Head and neck cancer patients undergoing surgery and /or radiotherapy is the mainstay of the services provided. Dental restorations, oral prophylaxis, and fixed and removable prosthesis are provided for such patients. All the patients will be regularly followed up for optimum dental health. Hematological patients and patients with solid tumors having skeletal metastasis are also screened for dental health and provided with necessary dental treatments.

Surgical patients who need obturators are planned in concordance with the head and neck surgery departments. Maxillofacial prosthesis services are also being provided.

### EXISTING FACILITIES AND SERVICES:

1. Minor surgical procedures
2. Dental implants
3. Rotary endodontics
4. Maxillofacial prosthesis
5. Fixed and removable prosthesis
6. Dental radiography





## STATISTICS

The following services were provided:

SL NO	PROCEDURES	NUMBER
1	Patients attended OP	2755
2	Dental extractions	1324
3	Oral prophylaxis procedures	20
4	Restorations	45
5	Obturators	15
6	Root canal treatment	52
7	Complete dentures	4
8	Fixed partial dentures	21
9	Dental implants	2
10	Removal partial dentures	10
11	Maxillo-facial prosthesis	1
TOTAL		4249

## ACADEMIC ACTIVITIES:

The senior House surgery program for BDS Graduates was suspended and no new candidate was taken for the year 2021-22.

## CONFERENCES/TRAINING ATTENDED

1. Attended Training by SHA on “Quality standards for KASP-AB PMJAY” on APR 12<sup>th</sup> at Kannur.
2. Attended IPS Kerala state 4<sup>th</sup> state conference on May 22 and May 23<sup>rd</sup>, 2021.
3. Attended online training session on Jun 26<sup>th</sup> organized by CAHO - Continuing Quality Education

Series' session on "Best Practices in ICU Management".

4. Completed Master class series -3 Online classes on Facility Management Standards- May- July 2021
5. Attended CAHOTECH- 6<sup>TH</sup> International Conference In Hospital Technology as delegate- Online conference- 19-21 Aug 2021
6. Attended "Cancer Rehabilitation" CME program organized by TMH on 25<sup>th</sup>Sept. and 3<sup>rd</sup>October 2021
7. GCP Online Training – Jan 22,2022- Shodh clinics
8. Started NABH master class series 4- 19 January 2022- Departmental standards- Multiple Online sessions- completed 2 sessions.
9. Online training on "Clinical Audit" organized by CAHO on 18<sup>th</sup> Feb 2022.
10. NABH master class series 4- 19 January 2022- completed 4 more sessions
11. NABH master class series- March 2-30- Completed 5 more sessions

## OTHER ACTIVITIES

- Conducted an online session on Primary dentition and Oral hygiene measures for the Parent support group of pediatric oncology patients.
- Conducted an Online Training session for higher secondary school students in association with IAP Presidential Action Plan 2021 on Jun 21, 2021.
- Classes for BSc MRT on Dental radiology
- Academic sessions for Rehabilitation Oncology along with Cancer Palliative Medicine on August 07/08/2021.
  - a. 5 sessions in August.
  - b. 9 sessions in September
  - c. 4 sessions in October.
  - d. 2 sessions in Jan - rehabilitation Oncology- along with Cancer Palliative Medicine.
  - e. 4 sessions in Feb- rehabilitation Oncology- along with Cancer Palliative Medicine.
  - f. 4 sessions In march- rehabilitation Oncology- along with Cancer Palliative Medicine.



## DEPARTMENT OF IMAGEOLOGY



### DEPARTMENT HEAD: DR. T V SATHEESH BABU

#### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. T V Satheesh Babu	Associates Professor
2	Dr. Sriikiran T K	Assistant Professor
3	Dr. Thoufiq Ali	Assistant Professor

#### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Shamna P	EDP Assistant
2	Sheena T P	Radiographer
3	Sindhu K U	Radiographer
4	Vini Raveendran	Radiographer
5	Nimmya Parameswaran	Radiographer
6	Muhammed Naseem	Radiographer
7	Srinsi N K	Radiographer
8	Praveen Kumar	Radiographer
9	Nidhu C D	Radiographer
10	Anu Anandhan Achari	Radiographer
11	Shajeena	Radiographer
12	Noufal P	Radiographer
13	Shikha M K	Radiographer
14	Sabina C V	Radiographer
15	Simi T K	Radiographer

## INTRODUCTION

Radiology's role is central to cancer management, with a wide choice of tools and techniques available for the detection, staging, and treatment of the disease. Imaging plays a major role in the detection of cancer as it provides a detailed insight into the exact location and extent of the disease. It can also provide detailed information about structural or cancer-related changes. Emerging methods of molecular imaging, which combine traditional imaging technology and nuclear medicine techniques, can also be used to obtain more detailed information about abnormalities, including their distinct metabolism. As technologies are constantly being refined, imaging modalities will become even more accurate and reliable in the future

## DIVISION OF INTERVENTIONAL RADIOLOGY (IR)

Department acquired a high-end Digital Subtraction Angiography machine (Siemens Artis Zee Pure) and became functional in January 2020. A dedicated interventional suite and 5 bedded recovery areas are present in IR. The Solero Microwave Tissue Ablation System for the ablation of tumors in the liver, lung, and kidney is also used. Both vascular and non-vascular procedures are at present done in IR.

### FACILITIES AVAILABLE

- 128 slice GE Revolution Evo with facility for CT fluoroscopy
- Clinical MR scanner: GE- Signa HDxT1.5T
- USG scanner– Toshiba Apollo(high-end USG machine), 3 portable machines ( Nobulus by Hitachi, Acusonfreestyle wireless USG by Siemens, and Acuson P500 by Siemens), Automated breast ultrasound (iABUS by Episonica)
- Maxio Robot for robotic interventions
- 3D breast tomosynthesis
- Vacuum Assisted Biopsy Machine( VAB)
- ConventionalX-ray and Digital Radiography
- High-end mobile DR.-SamsungGM85
- GE centricity Enterprise PACS
- DSA suite (Siemens ArtisZee Pure)
- Starburst Radiofrequency Ablation system by Angiodynamics
- Solero Microwave ablation system

### NEW FACILITIES

1. High-end portable Digital Radiography (DR) system – Department acquired a new portable DR. system Care stream DR.X Revolution to take high-quality digital portable X-rays. It has the advantage of instant viewing of the images and can reduce time and unwanted retakes, thus reducing radiation exposure.
2. Upgrading of present 3D mammogram – Department has a Hologic Selenia Dimensions 3D mammography system which was installed 8 years back. The machine was upgraded for contrast mammography and tomo-biopsy.
3. Enterprise PACS – Department has acquired a new enterprise PACS (GE Centricity) and 80% of the installation is completed.

## STATISTICS

SL NO	MODALITY	INVESTIGATION/PROCEDURE	NUMBER
1	MRI	No of Patients Imaged	1531
2		Full Study	1992
3		Screening	523
4		MR RT Planning	116
5	CT	No of Patients Imaged	5264
6		Full Study	8549
7		Biopsy	404
8		Robotic Biopsy	7
9	Pigtail	USG guided	15
10		CT guided	23
11	Portable X-ray		721
12	Digital Radiography	No of Patients	5887
13		Studies	6640
14		Barium Studies	36
15	C-arm Procedure		12
16	Mammography	Studies	2832
17		Stereotactic biopsy	1
18	Ultrasound	Studies	2325
19		Biopsy	328
20		FNAC	350
21		Aspiration	54
22		Wire localization	39
23		Coil marking	18
24	Interventional Radiology	Trans arterial Chemoembolization	12
25		Radiofrequency ablation	4
26		Microwave ablation	14
27		PTBD	28
28		Ureteric stenting	3
29		Nephrostomy	2
30		Biliary stenting	22
31		Percutaneous cholangiogram	2
32		NJ/NG Tube insertion	67
33		Esophageal stenting	6
34		Fluoroscopic balloon dilatation of RIES	9
35		Catheter exchange	9
36		Lymphangiogram	2
37		Coiling / embolization	3
38		Percutaneous gastrostomy	1
39		Percutaneous lower limb mechanical thrombectomy	1
40		Balloon test occlusion	1
		<b>Total</b>	<b>186</b>

## **COURSES OFFERED IN THE DEPARTMENT:**

- BSc. MRT
- Fellowship in Oncoimaging and Interventional Radiology
- Diploma in Radio diagnosis – Department was allotted 2 seats under DMRD by NBEMS.

## **CONFERENCE AND WORKSHOP ATTENDED AND PRESENTED:**

1. Parotid tumors - An update, conducted by MCC on 06/11/2021. Dr.Sriikiran gave a talk on “Imaging in Parotid tumors: Through the surgeon’s eye” and Dr. Satheesh Babu participated in the panel discussion on parotid tumors.
2. Training workshop attended - Dr. Satheesh Babu attended the Online GCP training conducted by Shodh Clinicals on 13<sup>th</sup> November 2021.

## **NEW MACHINES**



Portable X-Ray



CT Machine



Mammography



Cathlab

## DEPARTMENT OF NUCLEAR MEDICINE



### DEPARTMENT IN CHARGE: DR. RAHUL ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Rahul A.S.	Associate Professor
2	Dr. Nikhil Mohan	Sr. Lecturer

### INTRODUCTION

This department is the most recently added one in the institution and it grew quite rapidly to the pride of the institution. Nuclear Medicine (NM) scan are a diagnostic test that provides important information about organ function. In Nuclear Medicine Imaging Radiopharmaceuticals (radioactive medicine or tracers) is either taken orally or by intravenous injection or inhalation. Special cameras then capture and form images from the radiation emitted by the Radiopharmaceuticals in the body.

### DETAILS OF EXISTING / NEW FACILITIES:

1. SPECT/CT Scan
2. PET/CT Scan
3. High Dose Therapy Ward
4. Hot lab

### STATISTICS:

SL NO	PROCEDURE	NO OF TEST
1	<b>Total SPECT/CT cases</b>	<b>653</b>
	Bone Scan	507
	Thyroid Scan	7
	Whole Body Iodine Scan	118
	DTPA Scan	16

	MIBG Scan	2
	EC Renogram	2
	Para Thyroid Scan	1
<b>2</b>	<b>Total PET/CT Cases</b>	<b>930</b>
	FDG PET CT Scan	908
	BONE PET CT Scan	20
	PSMA Scan	2
<b>3</b>	<b>High Dose Therapy</b>	<b>133</b>
	Iodine Therapy	131
	DOTA Therapy	2

## NEW MACHINES



SPECT



## DEPARTMENT OF RADIATION ONCOLOGY



### DEPARTMENT HEAD: DR. GEETHA M ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Geetha. M	Associate Professor
2	Dr.Vinin. N. V	Associate Professor
3	Dr.Joneeta Jones	Associate Professor
4	Dr.Greeshma. K. E	Assistant Professor
5	Dr. Arun. P. Narendran	Assistant Professor
6	Dr. Nabeel Yahiya	Assistant Professor
7	Dr. Akhil. P. Suresh	Assistant Professor
8	Dr. Vivek Nambiar	Assistant Professor
9	SilpaAjaykumar	Lecturer (Radiation physics)
10	Suja. C. A	Lecturer(Radiation physics)
11	Resmi. K. Bharathan	Lecturer(Radiation physics)
12	Lisha Jose	Lecturer(Radiation physics)

### NON-ACADEMIC STAFF

SL.NO	NAME	DESIGNATION
1	Arun Kumar. E. S	Dosimetrist
2	Preethy U. P	Dosimetrist
3	SrijiSoman	Technician
4	Nijeesh. P. T	Technician
5	Beena. K	Technician
6	Dhanya. V	Technician



7	Harshal. C.H	Technician
8	Gayathri U	Technician
9	Faizal. A	Technician
10	Rejitha Mohan	Technician
11	Sunoj. K. Anand	Technician
12	Shijila	Staff Nurse
13	Aneetha	Staff Nurse
14	Sandeep Kumar	Attender
15	Sujith. T	Attender

## INTRODUCTION

Radiation oncology is an essential part of a multidisciplinary approach to cancer treatment. The department of radiation oncology is equipped with the latest technological advances in the field of radiation oncology and provides state of art treatment meeting international standards to the patients. The department is equipped with two high-end linear accelerators, Clinac ix (Varian) and Versa HD with FFF (Elekta), Telecobalt machine – Equinox(Team Best), brachytherapy machine (Flexitron – Elekta), CT simulator and a conventional simulator. Dedicated contouring stations (MIM) and planning systems (Eclipse, Monaco & Oncentra) for EBRT and brachytherapy planning also are available.

## FACILITIES

### 1. Linear accelerators

1. **Clinac – iX** (M/s) Varian: dual-energy (6mv & 15 mv) Linear Accelerator with 120 mlcs which can deliver radiation treatment with all advanced techniques
2. **Versa – HD** (M/s) Elekta: Linear accelerator with 6mv, 10mv, and 15 mv energy, 120 mlcs, and flattening filter-free facility for delivering treatment with advanced techniques

**2. Telecobalt machine** – Equinox is a basic external beam radiation therapy facility with a carbon fiber couch. It is cost-effective, less complicated, consumes lesser power and needs less maintenance compared to linear accelerators

**3. Brachytherapy unit** – flexitron- 20 channels, remote after-loading the brachytherapy unit for intracavitary, intraluminal, interstitial, and surface mould therapy.

### 4. Simulators-

- a. CT Simulator- a real-time, CT-linked, 3-D treatment planning system, with a CT scanner, a multi-image display, a treatment planning device with real-time visual optimization, and a laser beam projector.
- b. Conventional simulator – imaging - is used for radiotherapy treatment planning, in which x-rays in the diagnostic range are used. The equipment is used for 2d planning.

### 5. Treatment planning systems

- a. Eclipse – with AAA algorithm for planning IMRT, VMAT, IGRT, 3DCRT
- b. Monaco – Monte Carlo Algorithm
- c. Oncentra – for Brachytherapy planning
- d. Contouring stations- Somavision and MIM

## STATISTICS

<b>1</b>	<b>Curative</b>	<b>1194</b>
	2D	200
	3D	462
	VMAT	487
	SRS/SRT	5
	Hybrid arc	37
	Electron beam therapy	4
<b>2</b>	<b>Palliative</b>	<b>1221</b>
<b>3</b>	<b>Brachytherapy</b>	
	ICA	270
	Sorbo	393

## ACADEMIC ACTIVITIES DEPARTMENTAL ACADEMICS

1. Presentations by MSc Interns - Tuesdays 8.30 AM to 9 AM
2. Presentations by DNB resident- Monday and Thursdays 8.30 AM – 9 AM
3. Journal presentation by the faculty – Wednesday – 8.30AM -9 AM
4. Research methodology and Statistics class – Friday 8.30AM – 9 AM
5. Case presentation/ Clinical Discussion – Saturday
6. BSCMRT – Theory classes 10.30 AM to 11.30 AM – II year; 2.30PM to 3.30 PM – III year
7. RT Board – Monday – Friday 3.30PM – 4 PM
8. Chart Rounds Saturdays 10- 11 Noon

## CONFERENCES ATTENDED

SL. NO.	ATTENDED BY	CONFERENCE	PRESENTATION
1	Dr. Geetha. M	1. NATION-IASO Conference-virtual held on October 2021	Internal mammary node failure in patients with Her2Neu positive and triple-negative breast cancer
		2. FHNO- 10-12 December 2021	Second primary malignancies in oral cavity cancer patients
2	Dr.Vinin. N.V	FHNO-2021	CT and MRI-based gross tumor volume comparison in pharyngeal and laryngeal carcinoma
		WCI TMH BREAST CANCER CONFERENCE	An audit of efficacy and toxicity of neoadjuvant paclitaxel and trastuzumab in Her 2 positive locally advanced breast cancer

3	Dr.Joneeta jones	1.NATION-IASO Conference-virtual held on October 2021	Treatment compliance in geriatric patients treated with radical intent radiation in head and neck malignancy
		2.FHNO- 10-12 December 2021	Correlation between calculated and measured creatinine clearance is a malignancy
4	Dr.Greeshma. K.E	8th National Annual Conference of ISMPOCON 2022” held on 21-23/28-30 Jan 2022 on a virtual platform	Retrospective analysis on the pattern of relapse in patients with Non-Hodgkin’s lymphomas treated with radiotherapy
5	Dr.Arun. P. Narendran	.NATION-IASO Conference-virtual held on October 2021	1. NATCON-IASO on October 2021 virtual conference- poster presentation
6	Dr. Nabeel Yahiya	NATCON -IASO on September 2021	Preoperative Chemotherapy in elderly patients with locally advanced rectal cancer
7	Dr.Akhil. P. Suresh	1. NATCON-IASO Conference held on December 23rd - 24th and December 30 to 31st on a virtual platform 2. FHNO-2021 held on 10th to 12th December 2021 on a virtual platform	An audit of treatment package time in oral cavity cancer patients treated with adjuvant radiotherapy at MalabarCancerCentre
8	Mrs. Silpa Ajay Kumar	The 21st Asia-Oceania congress of medical physics held on 10th to 12th December 2021 organized by the Bangladesh Medical Physics Society	Moliere weighted multi-component analysis of flat top Gaussian radiotherapy beam for small fields

## AWARDS AND ACHIEVEMENTS

1.	Best E-poster presentation award for "Internal Mammary Nodal Failure In Patients with Triple Negative And Her2neu Positive and the survival analysis"
2.	Best E- poster presentation award for An audit of treatment package time in oral cavity cancer patients treated with adjuvant radiotherapy at Malabar Cancer Centre



Simulator (Conventional)



Cobalt Machine(Telecobalt)

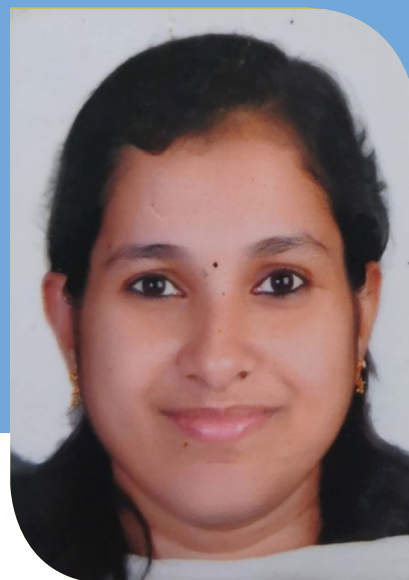


VersaelektaHD



Varian4DCT Simulator

## DEPARTMENT OF RESPIRATORY MEDICINE AND CRITICAL CARE



**DEPARTMENT IN CHARGE: DR. PRIYA JAYARAJAN**

### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Priya Jayarajan	Assistant Professor

### INTRODUCTION

The department is actively involved in the management of intensive care units along with Department of anaesthesiology. The training of staff nurses and residents in critical care is also bestowed upon this department. The department is directly supervised by the Director. The department has only one faculty.

### STATISTICS

OP	PFT	DLCO
1993	797	33

### FACILITIES AND SERVICES

1. Pulmonary function test with DLCO
2. OP and IP services
3. Bronchoscopy and interventions

## DEPARTMENT OF SURGICAL ONCOLOGY



**DEPARTMENT IN CHARGE : Dr.NIZAMUDHEEN M P  
(Officer In Charge)**

### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Dr. Satheesan B	Professor & Director
2	Dr.Nizamudheen M P	Associate Professor & Officer in Charge
3	Dr. Adarsh Dharmarajan	Associate Professor
4	Dr. Shamna Muhammed	Assistant Professor
5	Dr. Anand Ebin Thomas	Assistant Professor
6	Dr. Ashitha R G	Assistant Professor
7	Dr. Sandeep Vijay	Assistant Professor
8	Dr. Anoop A	Assistant Professor
9	Dr Raveena Nair	Assistant Professor

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Reena C	Dietician
2	Roopa V	Physiotherapist
3	Aneeth M V	Speech & swallowing therapist
4	Rasiq	Endoscopy Technician
5	Krishna Kumar	Technician Operation theatre (CSSU)
6	Midhun	Nursing Assistants (CSSU)

### INTRODUCTION

The department of Surgical Oncology has grown further in the current year. Dr. Raveena Nair joined as an assistant professor in Head and neck oncology division. Dr. Linu Thomas and Dr. Aparna Vimal have joined as ad hoc faculties in Head and neck division and gynaecological oncology divisions. Infrastructural improvements have been carried out in the department for advanced surgeries. The new Medtronic Drill system, advanced operating microscope, operating loops, new suction machines etc. were purchased. The departmental academics were diversified and this improved the opportunity for the residents to present more cases and topics in each division.



## ACTIVITIES AND ACHIEVEMENTS

### Routine Activities

Total Number of Major Surgeries Performed: 1930

SL NO	SITE	NUMBER
1	Head and Neck	507
2	Breast Cancer Surgeries	510
3	Gastrointestinal Cancer Surgeries	489
4	Urological Cancer Surgeries	40
5	Gynecological Cancer Surgeries	253
6	Bone & Soft tissue Cancer Surgeries	51
7	Pediatric cancer surgeries	35
8	Venous access procedures	27
9	Thoracic	18
<b>Total</b>		<b>1930</b>

### MINOR SURGERIES

SL NO	PROCEDURE	NUMBER
1	Biopsy	190
2	Tracheostomy	36
3	Central Lines	37
4	Orchidectomy	38
5	Revision surgery	14
6	Colposcopy	23
7	Wound debridement	28
8	D&C	8
9	Others	273
<b>Total</b>		<b>647</b>

### TOTAL NUMBER OF ENDOSCOPIES

SL NO	PROCEDURE	NUMBER
1	Direct LaryngoPharyngoscopy	1070
2	Oesophago-gastroscopy	397
3	Bronchoscopy	75
4	Colonoscopy	288
5	Nasal endoscopy	17
6	Structure Dilatation	4
7	PEG insertion	7
8	DLDP+RT insertion	4
9	PEG Removal	2
10	FEES	90
<b>Total</b>		<b>1954</b>



## ACADEMIC ACTIVITIES

### Training To Students:

1. DNB in Surgical Oncology
2. Fellowship in Head and Neck Oncology
3. Fellowship in Oral Oncology
4. Fellowship in Gynaec Oncology
5. Training for MDS students
6. Training for BASLP students

## CONFERENCE ORGANIZED

1. An online CME was organized on 6-11-21. Topic – parotid tumors- an update. It was attended by more than 100 delegates all across India.

## CONFERENCES ATTENDED

1. IAPC course was attended by 8 residents
2. NATCON IASO conference attended by Dr. Appumathi, Dr. Aravind, and Dr. Prashanth.
3. ISTSTCON attended by Dr. Nizamudheen M P

## CONFERENCES PRESENTATIONS:

1. Dr Nizamudeen presented a topic “ Functional outcome of rectal surgery” in the conference “ IASO- NATCON 2021 “ on 23rd to 24th October and 30th to 31st October as faculty
2. Dr Nizamudheen presented a paper on “ Changing trends of invasive mediastinal evaluation in India- a questionnaire based survey” in “ISTST CON 2021” as a delegate in virtual platform on 12,13,19,20 March 2021
3. Dr Nizamudheen M P presented a paper on “Update on multidisciplinary management of stomach Cancer” in a conference organized by “MAHE KMC Academics” and he attended as faculty on 6th March 2021
4. Dr. Nizamudheen M P, QOL issues in rectal cancer treatment
5. Dr. Nizamudheen M P, ISTSTCON, Survey on mediastinal evaluation in India.
6. Midterm IASO conference attended by Dr. Satheesan B and presented topic on sarcoma.
7. Dr. Prasanth, Dr. Aravind and Dr. Appumathi, Dr. Aparna Vimal presented papers/posters in NATCON IASO 2021.
8. Dr. Adarsh attended a webinar on carcinoma endometrium conducted by the Perinthalmanna O&G society as faculty.
9. Dr. Adarsh presented ‘HIPEC in carcinoma ovary’ for IMA- Koothuparamba
10. Dr. Aparna Vimal presented “Survival outcome of stage IV ovarian cancer treated with creative intent at a tertiary cancer care centre”.
11. Dr. Aswin presented ‘Trismus in oral cancer: prevalence and causative factors from a tertiary cancer centre’.

## ACHIEVEMENTS

1. Dr. Appumathi Rangarajan received an award for best E-Poster in NATCON IASO 2021 for his E-Poster titled “Factors predicting recurrence in epithelial ovarian cancer”.

## CENTRAL STERILE SUPPLY UNIT (CSSU)

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Krishna Kumar	OT and Anaesthesia Technician & CSSU In charge
2	Midhun	Nursing Assistant

### INTRODUCTION

The Central Sterile Supply Unit currently is under the Department of surgical oncology. It started functioning in its present location from March 2018 onwards. It functions as per the NABH Standard guideline.

### EQUIPMENT

1. Steam sterilizer.
2. Plasma sterilizer.
3. ETO sterilizer.
4. Sealing machine.
5. Washer disinfectant.
6. Ultrasonic cleaner.
7. Hot air oven.
8. Hand labelling machine.
9. Gauze cutting machine
10. Compressed Air gun
11. Packing Reels Cutting Machine
12. Stainless steel furniture etc

## CLINICAL NUTRITION AND DIETETICS UNIT

### NON-ACADEMIC STAFF

SL. No	NAME	DESIGNATION
1	Reena C	Dietician

### INTRODUCTION

The Clinical Nutrition unit is one of the inevitable parts of the cancer institute. Nutrition Oncology is a new weapon in cancer treatment. This includes not only an understanding of the basic dietary needs of cancer patients but also the role of nutrients in the pathogenesis of cancer and the role of diet in the prevention and treatment of cancer. This unit emphasizes to provide through nutritional education and dietary advice to all indoor and outdoor patients in the hospitals. As per the requirements, indoor patients are provided with a nutritious diet from the hospital canteen under the guidance of the unit. Along with medical nutrition therapy, Fellowship courses, training programs, and workshops are conducted in the various field of nutrition, for medical and non-medical staff.

### STATISTICS

SL.NO	PATIENTS	NUMBER
1	Total OP patients	3309
2	Total IP patients	10235

## PRESENTED

- Member of consensus committee, IAPEN India Association for parenteral and enteral nutrition (IAPEN INDIA) first Indian and South Asian Consensus in Nutrition in Cancer Care held on 26th and 27th November 2021.
- Faculty for Nutrition class organized by ICDS Kuthuparamba for Anganwadi workers “Healthy eating during Pregnancy, lactation-1000 days in Life” on 08/04/2021
- Faculty for JCI (Junior Chamber International) is a youth organization organized seminar on “Healthy diet for healthy and happy living”, Kasaragod on 14/05/2021
- Awareness class in connection with Breastfeeding week organized by State Nutrition Bureau, Government of Kerala, Thiruvananthapuram for Government Nursing Students of Trivandrum district on 12/08/2021
- Head and neck protocol in Nutrition at Malabar Cancer Centre- presented on 09/02/2022 at Palliative lecture hall, MCC, Kerala
- Micro Nutrient Deficiency How to manage?- awareness classes to the Anganwadi workers given as part of the observance of Nutrition month on 8 September at ICDS Edakkad, Government of Kerala (online)
- Resource person for the awareness classes to the Anganwadi Workers and community under Panoor ICDS as a part of the PoshanMaah 2021 celebration on 10th September 2021
- Need of Micro and Macro Nutrients in the regular diet - awareness class in connection with Nutrition Month on 12/09/2022 at Govt. of Kerala - Women and Child Development Dept. -- ICDS Project, Iritty Addl., Mattannur. (online)
- Resource person for the awareness classes to the Public health Nurses of Trivandrum District as part of the observance of State Level National Nutrition Month on 14th September 2021 organized by the State Nutrition Bureau, Government of Kerala
- Faculty for a programme organized by Government Higher Secondary School Chittariparamba, Government of Kerala on 15/09/2021 in connection with National Nutrition Month “Healthy eating for better tomorrow”
- Resource person for the awareness classes to the ASHA workers in connection with State Level National Nutrition Month on 20th September 2021 organized by State Nutrition Bureau, Government of Kerala
- Resource person for National Nutrition month Programme organized by Chinmaya Mission School, Chala Kunnu, Kannur, Kerala on 21/09/2021.
- Faculty for the Nutritional awareness programme Safe and Nutritious food for School children (SNF@ School) organized by the Food Safety Department, Government of Kerala in the year 2021-2022 (from December 2021 to February 2022).
- The schools in Kannur district namely PR memorial GHSS, Panoor, GHSS Kottayam Malabar, GHSS Pattayam, ST. Mary's Higher Secondary School Edoor, GHSS Padiyoor, St. Thomas Killiyanthara, GHSS Manathana, Kavumbadi CHM HSS, ST. Cornelius HSS Kolayad, GHSS Kunnoth, Perigome GHSS, GHSS Vellur, GHSS Korom, Azhikode H S, Azhikode, Kousear English medium School, Chirakkal, GHSS Chirakkal, Rajas HS, Chirakkal, BEMP School, Girls School Thalassery, Chirakkara School.

## ATTENDED

- Implementing Nutrition management in Routine clinical Practice Nutrition E-CME on 29th June 2021.
- Diet in Renal disease organized by Abbott Nutrition International at Kannur 29/07/2021
- Training programme and 4 module Nutrition classes both theory and practical - organized by Apollo Hospitals Chennai Nutri Class 2021-2022
- Role of curcumin in Prevention, treatment and post COVID complication management -19/02/2022 organized by Bio-Av curcumin

## **PUBLICATIONS - BOOKS / JOURNALS (INTERNATIONAL, NATIONAL)**

Publications in health magazines:

- Contributed write-up regarding Normal and therapeutic diet brochure for publication for PHC Chockli.

## **PHYSIOTHERAPY UNIT**

### **NON-ACADEMIC STAFF**

SL. NO	NAME	DESIGNATION
1	Roopa V	Physiotherapist

### **INTRODUCTION**

Rehabilitation is an Integral Part of Cancer treatment; Physiotherapy plays a pivotal role in cancer rehabilitation. Physiotherapy management starts from Pre rehabilitation for every patient and also helps to regain the maximum functional ability of a person due to cancer and its treatment.. The division works in unison with the surgery, radiotherapy, and other oncology departments and helps in minimizing both the long and short-term after-effects of the disease as well as treatment.

- Providing Chest rehabilitation to all surgical inpatients and referred outpatients.
- Manual Therapy techniques for bone and soft tissue complications
- Neuromuscular Rehabilitation techniques are used for Neuromuscular dysfunction
- Lymphedema care
- Orthosis Prescription

### **STATISTICS**

SL. NO	PATIENTS	NUMBER
1	Total OP patients	1346
2	Total IP patients	3614

## **SPEECH AND SWALLOWING UNIT**

### **NON-ACADEMIC STAFF**

SL. NO	NAME	DESIGNATION
1	Aneeth	Speech Therapist

### **INTRODUCTION**

We provide expert swallow and speech pathology services to both inpatients on an outpatient basis. IP and OP services for Speech and Swallowing rehabilitation for head and neck cancer patients

### **INPATIENT/OUTPATIENT, DIAGNOSTIC AND THERAPEUTIC SERVICES PROVIDED**

1. Counselling- Pre and post-treatment counselling
2. Swallowing assessment- Clinical, subjective, and objective
3. Swallowing therapy- Postures, manoeuvres, and ROM exercises
4. Speech therapy- Laryngeal speech training
5. Voice therapy

## STATISTICS

SL NO	PROCEDURES	NUMBER
1	Speech consultation	2766
2	Swallowing therapy	484
3	Swallowing assessment	345
4	Speech therapy	39
5	Speech assessment	83
6	FEES	75
7	Video-fluoroscopy	02

## EDUCATIONAL PROGRAMMES AND COURSES

1. Yearly internship postings to the Speech and Hearing students from Marthoma College OF Special Education – Kasargod (from 20/09/12) and Baby Memorial Hospital, Calicut (from 2017).

## PARTICIPATION IN CONFERENCES, SEMINARS, AND WORKSHOPS

1. Attended 7th Sri Ramachandra voice update 2022(online), held on 28th&29th January 2022.
2. Attended workshop on swallowing rehabilitation in 21st annual conference foundation for head and neck oncology (FHNO 2021), Thiruvananthapuram, Kerala, held on 10th -12th December 2021 on the virtual platform.
3. Attended state-level continuing rehabilitation education (CRE) webinar programme “Swallowing disorders in children and adults” held from 24/03/2022 to 26/03/2022.
4. Attended a one-day seminar (online) on Laryngectomy rehabilitation organized by Marthoma College of special education, institute of speech and hearing, Kasargod, Kerala on 3/12/2021.
5. Attended an academic session on the topic - Rehabilitation protocols for head and neck cancers organized by multidisciplinary rehabilitation professionals in MCC.

## PRESENTATIONS

- Was an invited faculty in a one-day seminar organized by Marthoma College of speech and hearing, Kasargod on 3/12/2021 and delivered a lecture on the topic of Evidence-based approach in laryngectomy rehabilitation (online).
- Was an invited faculty in the 21st annual conference foundation for head and neck oncology (FHNO 2021), Trivandrum, Kerala, held on 10th -12th December on the virtual platform and did case presentations on the topic Pathophysiology of Dysphagia in Head and Neck Cancers.
- Was an invited faculty in the state-level continuing rehabilitation education (CRE) webinar program Swallowing Disorders In Children And Adults held from 24/3/2022 to 26/03/2022 and delivered a lecture on the topic titled Dysphagia Rehabilitation In Head and Neck Cancer Patients
- Was an invited faculty in the state-level continuing rehabilitation education (CRE) webinar program Swallowing Disorders in Children and Adults held from 24/3/2022 to 26/03/2022 and delivered a lecture on the topic titled Dysphagia Assessment in Head and Neck Cancer Patients.
- Presented in an academic session on the topic of rehabilitation protocols for head and neck cancers organized by multidisciplinary rehabilitation professionals in MCC.

# NON-ACADEMIC DEPARTMENTS & DIVISIONS

## DEPARTMENT OF ENGINEERING & MAINTENANCE



**DEPARTMENT IN CHARGE: REENA P C**

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Reena .P.C	Engineer –In Charge
2	Devadasan.V.V	Project Engineer
3	Chandran .K	Supervisor Electrical
4	Liji Krishnan	Supervisor Biomedical
5	Shijina .E	Supervisor Civil
6	Susanth.P.P	Electrician
7	Nyju A.C	Electrician
8	Anil Kumar .S	Electrician
9	Rasheed P	Plumber
10	Jinsithlal. O.N	Plumber

### INTRODUCTION

All new Hospital buildings consist of a huge infrastructure of Electro-mechanical equipment, Medical Equipment etc. Optimum utilization of these important infrastructures is the key to the success of any Hospital management. The Engineering & Maintenance Department understands the same and can proudly say that we are utilizing all hospital infrastructures to the optimum through a dedicated team and well-organized functioning to become the backbone of, day to day functioning of MCC. The Engineering & maintenance department ensures the basic necessity of providing uninterrupted power & water supply in the hospital. This is achieved through two dedicated 11 KV feeders HT Transformer substation, higher capacity Generators for backup supply, a dedicated KWA Water supply line with UG& OH Tanks, various capacity pump set with control system. In addition to the routine work of operation and maintenance of aforesaid equipment and system we are maintaining various other electro-mechanical installations. Medical equipment maintenance is also being carried out by the department with the help of a dedicated biomedical team through AMC/CAMC s, Installation of all medical equipment is carried out under the monitoring



and support of the department from the beginning stage to the end. The Engineering department also plays a major role in the development activities of MCC by providing key inputs and suggesting necessary modifications to different projects to optimize the resources. The Engineering Wing of MCC contributed a major part to these developments by undertaking all major and minor building projects including its design & drawings, estimation, execution through a call of tender, supervision, obtaining all regulatory approvals, etc.

The Engineering Department also takes care of liaison works with local authorities like BSNL, KSEB, Electrical Inspectorate, Municipality Self-governing bodies etc. whenever the need arises for any statutory permit/approvals. Monitoring and Renewal of various CAMC/AMC agreements, statutory licenses, and insurance processing of whole hospital equipment buildings and other structures are also taken care of by the department

During the past years, lot of additional build-up sis added and much equipment was also added however it is being handled by the limited resources of the Department

**THE FOLLOWING ACHIEVEMENTS/ ACTIVITIES ARE CARRIED OUT/ EXECUTED ON THE MCC CAMPUS DURING THE YEAR 2021-22 IN ADDITION TO AFORESAID ROUTINE WORKS.**

Construction of Nuclear Medicine Block completed including delay tank and its sock pit as per AERB norms and started functioning. The Engineering Wing provided necessary guidance and support for the Engineering works in connection with the installation of CT, PETCT, SPECT etc.



Plinth area of 2448 sq.m  
Project cost is ₹9.00 Cr

Construction of 18no.s General Staff quarters with plinth area 2351.38sq.m completed and occupied from March 2022



Project cost: 900 lakhs  
Plinth area of each quarter:  
84.46 sq.m

## FACILITIES

Two bed room one attached bath room common toilet, Drawing /dining room, sit out, kitchen etc with common Lift & Staircases Parking area Solar

Construction of waiting and resting area for Bystanders completed from the MLA Local area development fund



Plinth area : 387.05 sq.m  
Amount : Rs. 100 Lakhs  
Execution agency: Kerala PWD  
Status : All Works completed and waiting for inauguration  
Contractor : M/s ULCCS

Repair/renovation of various toilets like replacement of flush tanks was needed to achieve patient satisfaction and the same was carried out successfully by the department. Painting works of various areas as per the request from concerned departments completed.

1. Renovation/repairs works of the BMT.
2. Additional parking area location was identified and developed successfully for the benefit of the patients visiting MCC.
3. Installation of 200 LPM O<sub>2</sub> generator completed commissioned on 13/09/21. This has reduced the intake of Medical Oxygen from other sources, saving revenue for MCC.



Lions Club works in Pediatric Oncology Block – Thalassery Lions Club sponsored setting up of a Children's Conference Hall – cum – Mini Theatre and Children's Library in the Pediatric block, completed successfully under the supervision of the Engineering



## ENERGY CONSERVATION

MCC received a State level Energy Conservation award in the respective category for the year 2016, which is a huge motivation in taking up Energy Conservation activities on the campus. However, in April 2021, a significant increase in monthly Electricity bills was observed. (Rs 25, 07,217/-) As the increased amount to be paid from the limited resource of MCC, it was also a necessity to limit such a significant hike in the Electricity bills by limiting wastage of energy and hence decided to intensify Energy Conservation activities on the campus. Energy audit conducted in MCC through an empanelled agency of Energy Management Centre, Govt. of Kerala and needful actions for implementing recommendations of the energy audit report was taken accordingly. A meeting of the head of all sections/departments was convened to bring back energy conservation awareness among all staff members as well as to study & collect inputs for limiting wasteful energy.

### AN ENERGY CONSERVATION PROTOCOL BY THE ENERGY CONSERVATION MONITORING COMMITTEE

- A] for maintaining AC temperature settings at 21-22°C for equipment and 24°C for human comfort
- B] to ensure the proper closing of all windows & doors of all air-conditioned areas
- C] All staff members were strictly instructed to switch off light/fan / AC / Computers etc. after the use and instructed security/maintenance staff to conduct regular rounds to ensure the same.
- D] Regular servicing of all AC units is arranged to ensure filters are cleaned every month for optimum efficiency and power saving.
- E] Defective and old motors/pump sets are replaced by energy-efficient motors/pump sets.
- F] Doors without door-closer were provided with the same for automatic closing of doors.
- G] Conventional type light fittings were replaced by energy-efficient LED type light fittings in a phased manner and energy-efficient ceiling fans were used to replace faulty ceiling fans.
- H] Power Factor (PF) panel capacitors are properly maintained and thereby achieving PF above 0.99 results in a monthly saving of about Rs 35,000/- towards the PF incentive in the Electricity bill.
- I] Announcement through a public address system daily as well as Energy Conservation Posters displayed at prominent places to bring awareness about Energy Conservation is implemented for the benefit of staff and the general public visiting MCC.
- J] Staff groups are regularly circulated with pop-up messages about Energy Conservation to bring more awareness among staff & their family members

The Monitoring Committee meetings were conducted every month last Friday to oversee the proper implementation of Energy Conservation activities and to take corrective action against staff members who do not follow Energy Conservation protocol. The efforts were very fruitful as the Electricity bill amount decreased by 2.5 lakhs in the subsequent month, even though ambient temperature is comparatively high (which generally increases Electricity consumption) in the subsequent months. It is also worth mentioning here that as a part of ongoing Energy Conservation measures adopted for many years in MCC, we were able to limit our Contract Demand (and thereby limiting monthly fixed charges @350/- per KVA) to 700 KVA against the Connected load of 3500 KVA (3.5 MVA). Many projects are coming up on the MCC campus including KIIFB-funded projects, in connection with developing MCC as a Post Graduate Institute of Oncology Science and Research. All these projects are designed on Green Building Concepts for optimum Energy Conservation.

### KIIFB Phase I & II Project

Renovation of the OP block is in the final stages of completion and is anticipated to hand over by end of the month. Construction of the RT blocks also progressing fast and is likely to be complete by 30th September 2022. In other words, the KIIFB phase I project is anticipated to complete shortly and these additional facilities will be a great help to numerous patients visiting MCC. All necessary approvals needed for the commencement of the Phase II project are obtained or in the final stages and tendering action & start of the works are anticipated in a short period.

## DEPARTMENT OF GENERAL ADMINISTRATION



**DEPARTMENT HEAD: RAJESH A. K**

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Mr. Rajesh A K	Administrative Officer
2	Mr. Rejoy K	Clerk/ Cashier/ Typist
3	Mrs. Bindu T K	Clerk/ Cashier/ Typist
4	Mrs.Surekha M C	Clerk/ Cashier/ Typist
5	Mrs. Mini P	Clerk/ Cashier/ Typist
6	Mr. Shajith R P	Attender

### INTRODUCTION

General administration is responsible for organizing and overseeing daily activities of the institution including the hospital. The department manages human resources, budgets, official communications, general discipline, policy implementation etc.. Recruitment of employees, training, functioning, setting the salaries and benefits of employees and managing employee-employer relations, are some of the primary duties of the Administration. The policy-making body of the Institute is the Governing Body (GB) and the day-to-day activities are controlled by the Executive Committee (EC). To meet the objectives of the Institute, the Administration coordinates the activities of the Centre and creates policies so that all areas of the Institute staff function efficiently. The employees are periodically evaluated and proper guidance and training are provided to them to bring out the maximum output. Senior Officers lead these administrative services to assist the Director and are directly responsible for the day-to-day operation.

Department of General Administration	
Divisions	General Administration Division
	Accounts Division
	Purchase, Stores Division
	Human Resources & Establishment Division
	Security Division
	Academic, Library & Information Sciences
	Hospital Administration, Public Relations and Clinical Services



## DIVISION OF HUMAN RESOURCES & ESTABLISHMENT

### DIVISION IN CHARGE: SHRI. REJI SANKAR.S.T

This Division maintains all the personal records of staff, their service matters, recruitment procedures, appointment, posting, leave matters, attendance, etc.: and Finance Officer is the Officer in charge of the Division- The overall matters of staff are looked after by this Section and plays a pivotal role in maintaining the discipline of the institution.

#### STAFF JOINED THE INSTITUTION DURING THE PERIOD April 2021-March 2022

SL. NO	ID	NAME	DESIGNATION	DEPARTMENT	DOJ
1	613	Dr.ThoufiqAli.M	Sr.Resident/ Asst.Professor	Radiology	09.04.2021
2	614	Dr. Raveena R Nair	Asst.Professor	Head and Neck Oncology	28.06.2021
3	615	Dr.Vivekanand.K	Asst.Professor	Radiation oncology	07.07.2021
4	616	Aswathi Maheswar	Clinical Lab Assistant	Microbiology	01.11.2021
5	617	Sreelatha.P	Nursing Supt	Onco Nursing	30.12.2021
6	618	Dr. Namratha Divakaran	Asst.Professor	Anesthesiology	28.02.2022

#### STAFF WHO HAD LEFT THE INSTITUTION DURING THE PERIOD

SL.NO	ID	NAME	DESIGNATION	DEPARTMENT	DOJ	DATE OF RELIEVING
1	587	Asmina.P.M	Staff Nurse GrII	Onconursing	02.12.2019	05.04.2021
2	518	Suji.A.S	Staff Nurse GrII	Onconursing	20.07.2018	26.04.2021
3	577	Anand Ebin Thomas	Assistant Professor	Head And Neck Oncology	02.09.2019	02.07.2021
4	484	Bhavadas	Staff Nurse	Onco Nursing	23.04.2018	17.08.2021
5	342	Nisha Gangan	Assistant Pharmacist	Pharmacy	10.10.2013	23.09.2021
6	589	Rihanna.K	Staff Nurse Gr-II	Onco Nursing	02.12.2019	11.09.2021
7	434	Deepak Omanakuttan	Technician Clinical Lab	Microbiology	06.04.2017	.1.10.2021
8	608	Anju Aravind O K	Staff Nurse GrII	Onco Nursing	15.01.2021	06.10.2021
9	588	Sivakumar	Staff Nurse GrII	Onco Nursing	02.12.2019	30.10.2021
10	497	Nisha.A.R	Staff Nurse GrII	Onco Nursing	18.05.2018	03.11.2021
11	469	Soumya. P.G	Staff Nurse GrII	Onco Nursing	24.03.2018	24.11.2021
12	395	Vincy Augustine	Technician Clinical Lab	Genetics	03.02.2016	12.03.2022

## RECRUITMENT PROCEDURES

As per Service Rules of MCC, under Chapter-V-Recruitment Rules, it is mentioned that the Recruiting authority for various posts shall be as follows:

Director	Government of Kerala
Academic staff -	Staff Selection Committee of MCC
Paramedical, Nursing, auxiliary, Technical staff, Junior Administration staff, Last grade	Director or Recruitment Committee constituted for the purpose.

## ACADEMIC STAFF

The recruitment of Academic staff is conducted by Staff Selection Committee, consisting of the following, as decided by the Governing Body of MCC:

1. Secretary to Government, Health Department or his nominee - Chairman
2. Secretary to Government, Planning & Economic Affairs Department or his nominee - Member
3. Secretary to Government, Finance Department or his nominee - Member
4. Members of Scientific Committee - Members
5. External subject expert(s) - Member
6. Director, Malabar Cancer Centre Society, Thalassery - Convener

The nationwide notification shall be published in leading newspapers and the website of MCC, as and when a vacancy arises for permanent posts. Accordingly, applications received, within the stipulated date, shall be evaluated by the Academic Sub Committee of MCC, which includes Heads of 4 Clinical Departments namely Clinical Lab Services, Hematology & Medical Oncology, Surgical Oncology, and Radiation Oncology. A convenient date shall be fixed for Selection Interview, in consultation with Interview Board members. The eligible candidates shall be invited for the Selection Interview.

On the day of the Interview, the candidates shall be seated in a separate area and all their electronic gadgets shall be collected and kept separately. The documents of each candidate shall be verified and the eligible candidate will only be allowed to mark their attendance.

## NON-ACADEMIC STAFF

The recruitment of non-academic staff of MCC is conducted by Recruitment Committee, consisting of the following, as decided by the Executive Committee of MCC:

- Director-MCC
- External Subject Expert (s)
- HOD of the concerned Department
- HOD- Clinical Laboratory Services and Translational Research/Senior HOD of any Clinical Department (Clinical Hematology/Radiation Oncology/Surgical Oncology)
- Administrative Officer.

State-wide notification will be published in leading newspapers and the website of MCC, for filling vacant posts, on a permanent basis. Applications received will be forwarded to LBS, Trivandrum for scrutiny and conducting written tests for candidates. The total marks for the selection process is 100. The written test carries 75 marks. LBS will prepare a provisional rank list of candidates who had appeared for the written test and the same will be forwarded to MCC. Out of the rank list, the first four provisionally ranked candidates, for each post (1:4 ratio), will be invited to attend a Selection Interview conducted by MCC. The interview carries 25 marks out of 100. While verification of certificates and testimonials all communication devices including electronic gadgets will be collected from the candidates and are seated separately. A set of questions are prepared just before the interview by the subject experts, which carries 15 marks out of 25. Same questions are asked to all candidates and candidates after the interview are not allowed to contact other candidates. Moreover, the interview board members will be informed of the marks scored by the candidates in the written test, only after the interview is over. This is to avoid bias.

Accordingly, a rank list will be prepared, and published on the website, immediately after the Interview. Communal rotation is followed for the appointment of all non-academic staff in MCC.

## DIVISION OF FINANCE AND ACCOUNTS

**DIVISION IN CHARGE: SHRI.REJI SANKAR.S.T**

### NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Reji Sankar S T	Finance/Accounts Officer
2	Jayadeep. E. K	Clerk/Cashier/Typist
3	Anoop. V.S	Clerk/Cashier/Typist
4	Surekha.M.C	Clerk/Cashier/Typist

### INTRODUCTION

The Division is instrumental in developing and maintaining a strategic financial plan and annual operating and capital budgets, financial analysis of new programs, acquisitions, and business development, revenue management, preparation of the financial statements in accordance with financial management and techniques appropriate to the health care industry, decision support and cost accounting, oversight of disbursements and receivables processes, oversight of patient admissions processes, etc.:-

### LIST OF SERVICES PROVIDED:

1. Computerized accounting and Book Keeping
2. Budgeting & Forecasting
3. Business Strategy
4. Fixed Assets
5. Cash Management
6. Bank Reconciliation
7. Statutory Payments (TDS, GST, Professional Tax, etc.)
8. Accounts Payable
9. Accounts Receivable
10. Billing and Monitoring
11. Bill wise Details
12. Invoice and Voucher Maintenance
13. Internal Auditing
14. Reporting Finance & Accounts
15. Financial Analysis

### ACHIEVEMENTS

1. **Gold Certification** (B PMJAY Quality Certification programme is a joint initiative by NHA and Quality Council of India)-Malabar Cancer Centre is the **first Government hospital** in Kerala to get a **Gold Quality Certificate. Certificate No. G-2021G-00084, Valid up to 31-07-2023**
2. **CSR Certification – Ministry of cooperate affairs-** For Spending and Receiving funds from companies under the Companies Act 2013, CSR certification is mandatory as per the recent amendments of MOC. **Registration number is CSR00010773**



3. **12 A Certification from Income Tax Department.** 12 A Renewed Registration vide Unique Registration Number AAATM4095KE19999, Valid up to **2026-27**
4. **80 G Certification from Income Tax Department-** 80 G Vide Unique Registration Number AAATM4095KF20110 Valid up to **2026-27**
5. **Registered under section 35 Income Tax Act** as Scientific and Research Organization vide Registration no. AAATM4095KG20217&is valid till Assessment Year **2026-2027**

## **COMPLIANCE WITH ADMINISTRATIVE & STATUTORY REQUIREMENTS.**

1. M/s RSM Associates is the statutory Auditor for the Financial Year 2021-22.
2. Return of TDS, Income Tax, GST, etc. for the Assessment Year 2022-23 has been completed.

## **PLAN AND NON-PLAN ALLOCATION & UTILIZATION STATUS 2021-22**

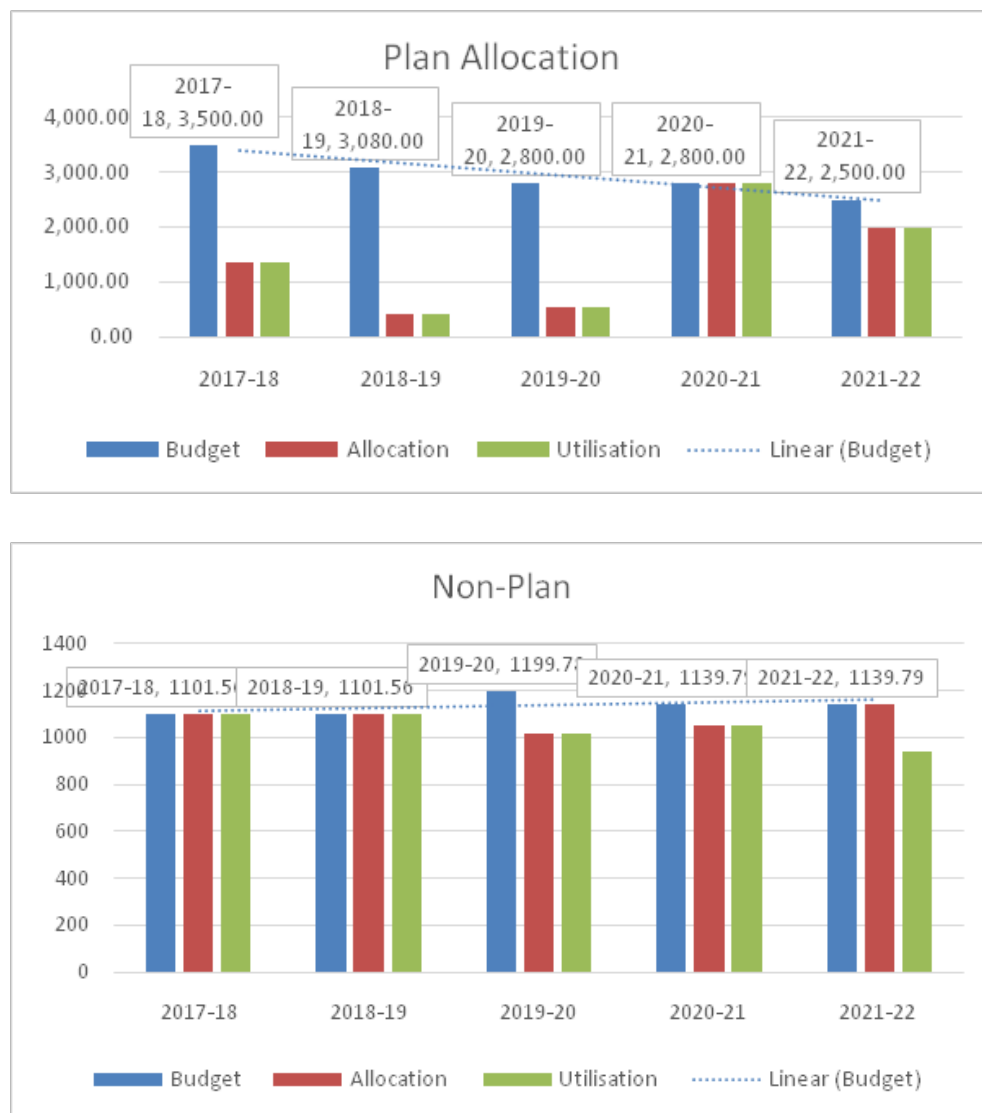
Vide order no. G.O. (Rt) No.1703/2021/H&FWD dated 09.08.2021 Administrative sanction for an amount of Rs.3639.79 lakhs was received from the Government for various activities of MCC. The budget allocation & utilization status under Government Plan & Non-Plan fund, from 2017-18 onwards are cited below:

PLAN ALLOCATION	HEAD OF ACCOUNT	HEAD OF ACCOUNT	TOTAL BALANCE
Particulars	2210-05-200-96-35	2210-05-200-96-36	available
Grant in aid	1500	1000	2500
Released by government	1500	500	2000
Expenditure	1500	500	2000
Percentage	100%	100%	100%
Short Allocation	0	500	500

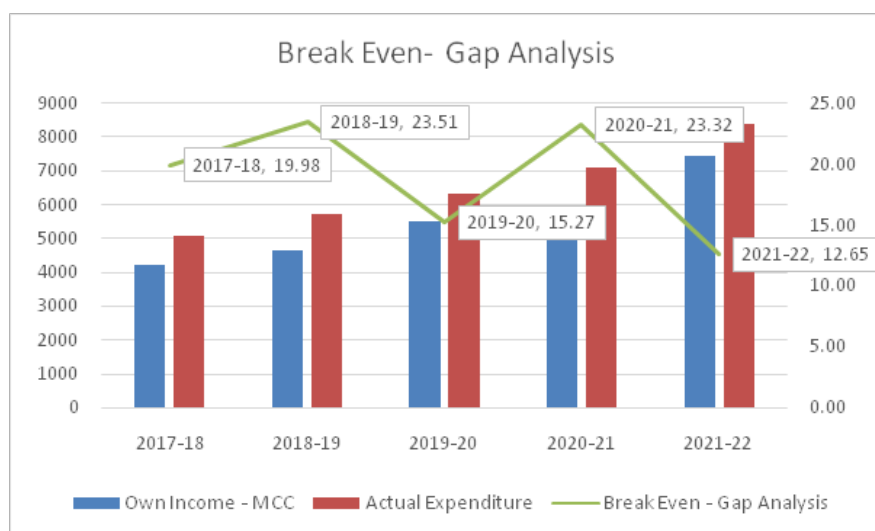
NON -PLAN	HEAD OF ACCOUNT	HEAD OF ACCOUNT	TOTAL BALANCE
Particulars	2210-05-200-96-31	2210-05-200-96-36	available
Grant in aid - Non-Plan	611.94	527.85	1139.79
Released by government	611.94	527.85	1139.79
Expenditure	611.94	527.85	1139.79
Percentage	100%	100%	100%

## LAST FIVE YEARS GOVERNMENT SUPPORT IN PLAN AND NON-PLAN HEAD



## ECONOMIC SUSTAINABILITY OF THE LAST FIVE YEARS

The economic sustainability for the last 5 years shows a fluctuating trend. MCC is working hard to achieve 100% of income to meet the expenditure, without compromising on the quality care and not to increase the pocket expenditure of beneficiaries. MCC adopted the policy of developing the institution as an exponentially progressing apex institution with equal trust in clinical care, oncology-related education and multifaceted research. Accordingly, the institution is in the path to be upgraded to a Post Graduate Institute in Oncology and Research and will achieve 100% economic stability.



## GOVERNMENT SUPPORT SCHEMES

1. **Karunya Arogya Suraksha Padhathi (KASP)** is the health care scheme that aims at providing a health cover of Rs. 5 lakhs per family per year for secondary and tertiary care.
2. **Karunya Benevolent Fund (KBF)** is providing financial assistance to underprivileged people suffering from acute ailments like Cancer, Haemophilia, Kidney and Heart diseases, and Palliative Care. Those APL beneficiaries who have no KASP card or APL families and whose income is less than 3 lakhs are also eligible for this scheme, up to an amount of Rs.2.00 lakhs
3. **Cancer Suraksha Scheme (CSS)** - Registered patients up to the age of 18 years would be provided treatment free of cost the age 18 years through the Social Security Mission.
4. **Thalolam** - Thalolam scheme aims to provide free treatment to children below the age of 18, who are suffering from Kidney diseases, Cardiovascular diseases, Cerebral Palsy, Brittle Bone Disease, Hemophilia, Thalassaemia, Sick Cell Anaemia, Orthopaedic deformities, and other Neuro-Developmental Disabilities, Congenital anomalies (Endosulfan victims) and accident cases which needs surgery.
5. **Employees State Insurance Schemes** – ESI Schemes aim to provide free treatment to the registered beneficiaries under ESI.
6. **Comprehensive Health Suraksha Scheme (ST)** – The scheme intends to provide free treatment for patients belonging to the ST category having a BPL card and in the case of APL, financial support up to Rs.10000/- will be provided.

## SCHEME DATA FROM E-HOSPITAL DB- 2019-20 FY

PARTICULAR	2019-20 FY		2020-21FY		2021-22FY	
	Total Amount	No. Of Patients	Total Amount	No. Of Patients	Total Amount	No. Of Patients
AROYAKIRANAM	0.40	1	10.68	2	11.58	3
ASWAS	0.08	3	0.01	2	0.00	0
CHIS PLUS	240.55	2247	0.00	0	0.00	0
Co-op Bank Mavilayi	0.00	0	0.00	0	0.27	1
Cope With Cancer	0.00	0	0.00	0	9.64	38
CSS	141.12	153	280.02	227	245.59	274

CST	127.77	287	187.95	281	245.20	368
ESI	143.64	115	0.02	1	110.62	120
Govt Old Age Home	0.00	0	2.22	2	0.00	0
KBF	853.45	2289	498.81	1269	750.39	1338
KASP	1080.00	2274	1856.20	3565	2530.31	4073
KASP OUT OF PACKAGE	356.35	1541	424.69	2111	464.97	2284
KBF SHA OUT OF PACKAGE	0.00		65.27	236	265.62	939
Kerala Social Security Mission Assistance	18.07	5	17.73	13	20.08	12
MADHYMAM HEALTH CARE PROJECT	0.12	3	0.08	1	0.00	1
PMNR	22.33	154	13.31	146	24.17	163
PWS	0.88	23	1.55	23	1.83	34
SNEHA SANTHWANAM	11.13	52	5.31	27	7.24	24
THALOLAM	3.35	2	7.48	8	11.70	10
GRAND TOTAL	2999.21	9149	3371.32	7914	4699.21	9679

## SUBSIDY FOR MCC BENEFICIARIES

MCC has its category assessment mechanism because some of the beneficiaries neither have treatment-supporting schemes nor have financial stability. The category Assessment mechanism has 7 grades starting from A to G, which will be assessed by Clinicians/Counsellors, against approved parameters, with the intention that no beneficiaries shall be denied treatment. Accordingly, in 2021-22 an amount of Rs 21.015 Cr. Was accounted for as a 'subsidy' for beneficiaries.

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Total % of patients given free treatment using various financial assistance schemes.	96.00 %	95.94 %	95.10%	87.56%	82.76%	92.59%
Treatment charge discount (A,B,C category)	3.85Cr.	5.54 Cr.	5.77Cr	4.20Cr.	1.01Cr.	0.52Cr.
Pharmacy discount (from MRP)	27.43 Cr.	26.13 Cr.	26.18Cr	15.62Cr.	11.44Cr.	20.495Cr.
Total treatment subsidy is given by MCC	31.28 Cr.	31.67 Cr.	31.95 Cr.	19.82Cr	12.45Cr	21.015Cr

## \* CALCULATING SCHEME% FOR THE FINANCIAL YEAR 2021-22

- Total patients received treatment (Radiation/Chemotherapy/SOG/BMT) – **5563**
- No. of patients who received Schemes - **4522**
- No of the patients who did not receive any scheme – **1041**
- No. of Govt. Employee/ Pvt Insurance among the 1041 patients – **629**
- Thus total no. of patients who received schemes -  $4522+629 = 5151$
- Total % of patients given free treatment using various financial assistance schemes. -  $5151/5563 \times 100 = 92.59\%$

## DIVISION OF PURCHASE DIVISION (STORES/ PHARMACY/ TAPAL)

**DIVISION IN CHARGE: JIJU.T.T.V**

**NON-ACADEMIC STAFF:**

SL. NO	NAME	DESIGNATION
1	Mr. Jiju T T V	Purchase Officer
2	Mr. Jayanandan	Clerk/Cashier/Typist
3	Mr. Dinesh Kumar T M	Clerk/Cashier/Typist
4	Mr. Prasoonan P P	Clerk/Cashier/Typist
5	Mrs. Sandhya K P	Hospital Assistant

All purchase matters including medicine purchases are handled by this Division. All purchases of the Centre are routed through this Division, including local purchases. Purchase procedures are carried out, following Store Purchase Rules. The Division is handled by the Purchase Officer. The important functions of this Division are as follows:

- To ensure competent quality execution of all regular purchasing duties and administrative works.
- To prepare reports and summarize data including sales reports and book value.
- To support relevant departments with quotations for tenders.
- To monitor and coordinate deliveries of items between suppliers to ensure that all items are delivered to the site/store on time.
- To plan and manage inventory levels of materials or products.

**MAJOR EQUIPMENT PURCHASED/INSTALLED (DEPARTMENT / DIVISION WISE) DURING THE PERIOD 2021-2022 ARE AS FOLLOWS:**

DEPARTMENT/ DIVISION	EQUIPMENT NAME	SUPPLIER	DATE OF INSTALLATION	AMOUNT
BIRAC COVID SURAKSHA PROJECT	Icu Cot (2 No.)	Kerala Surgical Equipment	26-11-2021	<b>2,79,660.00</b>
BIRAC COVID SURAKSHA PROJECT	Deep Freezer(-80 Degrees)	Bioline India Pvt Ltd	14-01-2022	<b>6,40,500.00</b>
BIRAC COVID SURAKSHA PROJECT	Centrifuge Refrigerated	Kochin Inlab	30-11-2021	<b>5,43,665.00</b>
BIRAC COVID SURAKSHA PROJECT	Reagent Refrigerator (1 No.)	Bioline India Pvt Ltd	24-12-2021	<b>2,62,500.00</b>
BIRAC COVID SURAKSHA PROJECT	Reagent Refrigerator (1 No.)	Bioline India Pvt Ltd	24-12-2021	<b>2,62,500.00</b>

CLSTR CYTOGENETICS	Autoclave	Biolinx India Pvt Ltd	25-06-2021	<b>11,84,000.00</b>
CLSTR CYTOGENETICS	Deep Freezer (-20 Degree) Ctn Birac	Labtop Instruments Pvt Ltd	18-01-2022	<b>1,90,310.00</b>
CLSTR CYTOGENETICS	Ln2 Tank (3 No.)	Biolinx India Pvt Ltd	01-10-2021	<b>77,00,000.00</b>
CLSTR CYTOGENETICS	Centrifuge -High-Speed Refrigerated	Kochin Inlab Equipment India Pvt.Ltd	16-06-2021	<b>5,43,665.00</b>
CLSTR CYTOGENETICS	Deep Freezer(-80 Degree) Ctn Birac	Eppendorf India Limited	11-04-2022	<b>9,82,940.00</b>
CASUALTY	Automated External Defibrillator	Nihon Kohden	07-07-2021	<b>1,78,000.00</b>
ENGINEERING & MAINTENANCE	Oxygen Generator	Pci Gases India Pvt Ltd	13-09-2021	<b>53,00,000.00</b>
OPERATION THEATRE	Suction Apparatus	Miti Electronics	23-09-2021	<b>2,94,227.00</b>
OPERATION THEATRE	Suction Apparatus	Miti Electronics	23-09-2021	<b>2,94,227.00</b>
OPERATION THEATRE	TEMS(Trance Anal Endoscopic Microsurgery)	OLIVE HEALTHCARE AND SURGICALS KANNUR	30-08-2021	<b>9,00,000.00</b>
OPERATION THEATRE	Ot Table	Palakkad Surgical Industries Pvt Ltd	09-01-2021	<b>12,10,000.00</b>
OPERATION THEATRE	Nerve Monitor	India Meditronic Pvt Ltd	15-06-2021	<b>20,36,993.00</b>
COVID ISOLATION	Automated External Defibrillator	Nihon Kohden	07-07-2021	<b>1,78,000.00</b>
CLSTR-PATHOLOGY	Centrifuge	Kochin InlabEquipments India Pvt.Ltd	11-08-2021	<b>5,43,665.00</b>
RECOVERY	High Flow Nasal Cannula	Medical System	26-04-2021	<b>2,86,961.18</b>
BIRAC	Data Logger	Scientific Enterprises	17-01-2022	<b>2,69,400.00</b>
BIRAC	Multi Plate Reader	Bioscreen Instruments	16-12-2021	<b>14,17,500.00</b>
RADIO THERAPY	Automated External Defibrillator	Nihon Kohden	07-07-2021	<b>1,78,000.00</b>
IMAGEOLOGY	Automatic Film Processor	Care Stream	21-07-2021	<b>3,76,000.00</b>

ONCO ANESTHESIOLOGY	O2 Generator	Pci Gases India Pvt Ltd	13-09-2021	<b>53,00,000.00</b>
CLSTR BIOCHEMISTRY	Binocular Microscope	Universal Agencies	10-11-2021	<b>46,611.00</b>
CLSTR BIOCHEMISTRY	Binocular Microscope	Universal Agencies	10-11-2021	<b>46,611.00</b>
BRACHY&BRACHY OT	Anesthesia Ventilator	Biomedical Engineering Company	14-02-2022	<b>31,48,000.00</b>
CLSTR CYTOGENETICS	Deep Freezer (-20 Degree) Ctn Birac	Labtop Instruments Pvt Ltd	18-01-2022	<b>1,90,310.00</b>
CLSTR CYTOGENETICS	Deep Freezer(-80 Degree) Ctn Birac	Eppendorf India Limited	11-04-2022	<b>9,82,940.00</b>
CASUALTY	Ecg Machine	Rins Marketing	19-04-2022	<b>1,05,000.00</b>
CSSD	Horizontal Steriliser	Cl Micromed Pvt Ltd	18-04-2022	<b>48,97,000.00</b>
CATH LAB	Ecg Machine	Rins Marketting	19-04-2022	<b>1,05,000.00</b>
DAY CHEMO WARD	Ecg Machine	Rins Marketting	19-04-2022	<b>1,05,000.00</b>
DAY CHEMO WARD	Donor Couch	Kochin InlabEquipments India Pvt.Ltd	25-03-2022	<b>1,44,550.00</b>
DAY CHEMO WARD	Donor Couch	Kochin InlabEquipments India Pvt.Ltd	25-03-2022	<b>1,44,550.00</b>
DAY CHEMO WARD	Donor Couch	Kochin InlabEquipments India Pvt.Ltd	25-03-2022	<b>1,44,550.00</b>
DAY CHEMO WARD	Donor Couch	Kochin InlabEquipments India Pvt.Ltd	25-03-2022	<b>1,44,550.00</b>
DAY CHEMO WARD	Donor Couch	Kochin InlabEquipments India Pvt.Ltd	25-03-2022	<b>1,44,550.00</b>
DAY CHEMO WARD	Donor Couch	Kochin InlabEquipments India Pvt.Ltd	25-03-2022	<b>1,44,550.00</b>
OP DEPARTMENT	Spot Light	Kerala Surgical Equipments	08-04-2022	<b>22,400.00</b>



OP DEPARTMENT	Spot Light	Kerala Surgical Equipments	08-04-2022	<b>22,400.00</b>
OPERATION THEATRE	Surgical Microscope	Serum Biologicals	23-02-2022	<b>140,00,000.00</b>
OPERATION THEATRE	Diode Laser Machine	Biomedix	15-02-2022	<b>39,76,000.00</b>
PAEDIATRIC WARD	Ecg Machine	Rins Marketting	19-04-2022	<b>1,44,550.00</b>
MICROBIOLOGY	Thermal Cycler	Igene Lab Serve Pvt Ltd	09-05-2022	<b>5,69,439.00</b>
BIRAC	Centrifuge Refrigerated	First Source Laboratories	13-01-2022	<b>4,68,493.00</b>
<b>Total :</b>				<b>7,40,72,512.36</b>

## **MEDICINE /CONSUMABLES & REAGENTS**

The entire medicines except cancer drugs (Cancer drugs through KMSCL), consumables, surgical disposables, X-ray films, common Drugs, antibiotics, re-agents, etc.-, required for the Centre, are purchased through this Division. E-tender procedures are followed for the purchase of medicines on yearly basis. Purchase procedures are initiated by giving wide publicity through newspapers and the website of MCC. A pre-bid meeting is conducted with potential Suppliers and tenders are floated. Selected firms are to execute a Supply agreement with MCC and payment shall be released based on the supply and proper checking of bills. Non-quoted medicines/emergency medicines are purchased from Neethi stores/Local market, subject to availability. The total purchase amount of medicines during the year 2021-22 is Rs. **19, 23, 18,482/-** (Rupees Nineteen crore Twenty-three lakhs, Eighteen thousand four hundred and eighty-two only). The total purchase amount of Reagents & consumables during the year 2021-22 is Rs **5, 53, 16,036 /-** (Rupees Five crores fifty-three lakhs sixteen thousand thirty-six only)

## **PHARMACY UNIT**

### **NON-ACADEMIC STAFF:**

SL NO	NAME OF EMPLOYEE	DESIGNATION
1	Mrs. Sneha V N	Pharmacist
2	Mr. Sugandham	Assistant Pharmacist
3	Ms. Sajitha P	Assistant Pharmacist
4	Mr. Nidheesh K	Assistant Pharmacist
5	Ms. Sabitha M V	Pharmacy Assistant
6	Mrs. Bindu K T	Pharmacy Assistant
7	Mrs. Darley Joseph	Pharmacy Assistant
8	Mr. Viju V V	Clerk/Cashier/Typist

As the Centre is situated 5 km away from Thalassery town adequate stock of all required medicines are to be maintained. Non-availability of medicines in the Pharmacy will force poor patients to travel a long way to Thalassery or Kannur for purchasing the medicines. Hence, it is the policy of the institution to ensure adequate quantities and to make the drugs, if unavailable, to be available so that no in-patient need to go out to purchase medicines or other consumables. A detail of purchases and sales during the year 2021-22 is as below:

Total purchase amount - Rs. **19, 23, 18,482/-**  
Total sale amount - Rs. **23, 03, 07,101/-**

## **STORE UNIT**

### **NON-ACADEMIC STAFF:**

SL NO	NAME OF EMPLOYEE	DESIGNATION
1	Mrs. Lasitha	Store Keeper (General)
2	Mr. Viju V S	Store keeper (Pharmacy)

This Division is headed by Purchase Officer and Store Keeper is the Officer in charge. This Division works in tandem with the Purchase Division and mainly looks after the physical custody of stores, proper inventory control, preservation of stores, receipt of stores, movement of stores, including packing and forwarding, issue of stores, and accounting of stores. This Division ensures that bills with documents in respect of accepted items are cleared immediately to the Accounts section, with a copy to the purchase section and will watch purchase orders periodically for dates of delivery, especially when such items are critical in stock and inform purchase section. Stores Division deals with stock handling, maintenance of Central Stock Register, condemnation, disbursement of required items to various Departments/Divisions, printing & stationary, local purchase, etc.:- Stock verification is carried out in all Departments/Divisions and Pharmacy of the Centre annually.

**TAPAL SECTION:** The purchase Officer is the Officer in charge of this Section. This Division handles the dispatch and inward registers, correspondences with Government as well as other Institutions, maintenance of files related to various contracts, collection of mandatory statements from Staff, convening of various meetings, tapal section, maintenance of various agreements (outsourced manpower), etc.:- This Division also handles activities related to the Hospital and also liaison work with Government and other Departments.

## DIVISION OF SECURITY

### DIVISION IN CHARGE: REJI SANKER S T (SECURITY OFFICER I/c)

The security wing of MCC plays a pivotal role in maintaining the overall security of MCC and is headed by Security Officer I/c. Security guards are ex-servicemen and are outsourced through KEXCON (Kerala State Ex-Servicemen Development and Rehabilitation Corporation). They guard the Campus and Centre 24x7 and are posted in various areas of this Centre, for smooth functioning. Vigilant security measures need to be undertaken as a lot of highly sophisticated and costly state of art equipment and some equipment are installed under Atomic Energy Regulatory Board (AERB) regulations. AERB insists on tight security for the equipment and this Centre comes under the direct security plan approval of the District Police Chief. Security measures are even tightened up, especially during the COVID-19 breakout, by installing surveillance cameras as and where required. This Division also takes charge of Drivers and Hospital vehicles and handles Fires Safety of the Institution.

### NON-ACADEMIC STAFF

SL NO	NAME OF EMPLOYEE	DESIGNATION
1	Babu.M	Driver
2	Nidheesh P.V	Driver
3	Rajeevan Karayi	Driver
4	Ratheeshan .V.P	Driver

### VEHICLES

1	Bus	02
2	Jeep (Bolero)	01
3	Car (Indica)	01
4	Van (Eco)	01
5	Omni Ambulance	01
6	Tempo Traveller	02
	<b>Total</b>	<b>08</b>

# DIVISION OF CLINICAL ADMINISTRATION AND PUBLIC RELATIONS

**DIVISION IN CHARGE: ANITHA THAYYIL**

**NON-ACADEMIC STAFF:**

SL. NO	NAME	DESIGNATION
1	Anitha Thayyil	Hospital Administrator
2	Padmakumar C S	Public Relation Officer
3	Mahija P M	Hospital Assistant
4	Shyni D R	Hospital Assistant
5	Bindu V	Hospital Assistant
6	Reena K	Hospital Assistant
7	Anupama Achuthan	Hospital Assistant
8	Sreeja K	Hospital Assistant
9	Bhavanamoukthi	Hospital Assistant
10	Remya V	Hospital Assistant
11	Bindu T N	Hospital Assistant
12	Honeymol R	Hospital Assistant
13	Aswini V	Hospital Assistant
14	Safna Sari	Hospital Assistant
15	Gladish A	Hospital Assistant
16	Sreejith P K	Cashier
17	Rajeevan U	Telephone Operator
18	Pramod P	Attender

## INTRODUCTION

The division of Clinical Administration and Public Relations (CAPR) handles the day-to-day hospital operations of the hospital side of the Centre to provide high-quality oncology care to the patients. The division plays a major role in assessing and ensuring patient satisfaction. The public relations wing acts as the face of the hospital communicating with the patients, relatives, and other stakeholders supporting them to solve queries, concerns, and issues they come across during their treatment and follow-up at the center. The division has different sections such as registration, admission, Follow up, Schemes & insurance, Billing, Help desk, certificates & reimbursement, telephones, and communications. . The department also arranges and manages funding from different NGOs to ensure the treatment of underprivileged patients.

## NEW INITIATIVES STARTED DURING THE YEAR

- Patient Navigation System through volunteers of Kannur Cancer Control Consortium  
The new patients and day-care patients are navigated to various departments by the trained volunteers of the Consortium which includes, retired government officers, professionals like doctors,

engineers, chartered accountants, Psychologists, social workers, students, and other committed individuals from like-minded organizations. The volunteers provide support to the patients to get hassle-free services from the centre.

The Senior Volunteers were trained by Faculty from MCC through a structured two days training Program to act as Trainers for the other volunteers. The program started

- B. Meaningful Community posting to Juvenile Offenders: - The Juvenile Justice Board of Thalassery passes orders to do community services to juveniles committing minor offenses. In this context, discussions were held between the officials of the Department of Social Justice and Malabar Cancer Centre Thalassery on posting such juveniles to MCC for serving the Cancer patients. And the Program started on 14.03.2022.

## STATISTICS

SL. NO.	DESCRIPTIONS	TOTAL
1	New Cases	5866
2	Non-Cancerous Cases	2440
3	Total New Patients	8306
4	Follow up cases	74218
5	Total Outpatients	82524
6	In patients	5191

Academic Activities including courses offered in the department: Provided internship training for Master of Hospital Administration student from TISS, Mumbai

## FUNCTIONS, CONFERENCE & WORKSHOP DETAILS

### INTERNATIONAL PATIENT SAFETY DAY (17.09.2021)

International Patient Safety Day was celebrated in all departments of MCC with various programs such as mock Drills, awareness classes for patients, relatives, and staff, quiz programs, etc.





## INAUGURATION OF PAEDIATRIC RECREATIONAL FACILITY SPONSORED BY LIONS CLUB INTERNATIONAL 14.01.2022

Ultra-Modern 4 mini Dolby stereos in the mini theatre having 56 seating and Air-conditioned Conference Hall with 50 seating capacity, a Child-friendly Library with 500plus books were inaugurated by Honourable Minister for Health and Family Welfare Smt.Veena George via video conferencing. MLA Adv. Shamsheer,Municipal Chairperson,Smt.Jamuna Rani, Ward Councillor, LIONS LUB office bearers, and parents and children participated.



## 04.02.2022 – WORLD CANCER DAY

MCC celebrated World Cancer Day by interacting with cancer winners on Cancer Day. Representatives from various Patient Support groups attended the program. It was a whole new experience as various support group representatives shared their treatment experiences with the new generation. The program was held with a minimum number of people keeping the protocols.



# LIBRARY AND INFORMATION SCIENCE DIVISION

**DIVISION IN CHARGE: SUBHASH CHANDRAN A K**

## **NON-ACADEMIC STAFF:**

SL. NO	NAME	DESIGNATION
1	Subhash Chandran A K	Medical Librarian
2	Harish Babu	Assistant Librarian
3	Ganeshan V	CCT

## **INTRODUCTION**

Medical Library provides integrated library infrastructure for the effective use of electronic resources. All administrative work involving the purchase of Books, subscription of journals, scrutiny of bills for the payment, calling for tenders, quotations, etc., are carried out, under this division. Preparation of annual report, documents for publication, Malayalam basha activities come under the division

## **DETAILS OF EXISTING / NEW SERVICES/ FACILITIES**

- 24x7 Services
- Reference Services
- SDI Services
- Department Library
- Orientation Services
- Risograph-Printing Services

## **FACILITIES**

- Digital Duplicator Facilities
- Digital duplicator/Print duplicator created to produce a high volume of good quality print copies at a lower cost than toner copies.
- Digital Library Facilities

## **STATISTICS**

SL NO	ITEMS	NUMBER
1	<b>Books</b>	<b>3319</b>
	Newly Added	57
2	<b>Journals</b>	
	Printed	16
	Online	47

- Number of Printed Books/ Printed periodicals issued during the period: 59
- Number of Printed Books/ Printed periodicals returned during the period: 61
- Number of Printed Books/ Printed periodicals Department transfer: 00



## LIST OF ONLINE JOURNALS/DATABASES PURCHASED

SL NO.	PUBLISHER	NO OF JOURNALS	ADDED FACILITY
1	JOHN WILEY	23	02
2	WOLTERS KLUWER	10	26
3	ELSEVIER	07	138
4	SPRINGER NATURE	04	43
5	TAYLOR & FRANCIS	02	00
6	UpToDate-WOLTERS	01	00

## HOSPITAL LIBRARY

### INTRODUCTION

A unique Hospital Library for patients, their relatives, and staff is functioning in the centre since 2004. The library is funded by the Kerala state Library council.

### SERVICES

- Issues Periodicals and Books to the patients, patient bystanders, and staff of MCC

### STATISTICS

SL NO	ITEMS	NUMBER
1	Books Purchased	00
2	Magazines Subscribed	35
3	Newspaper	05
4	New Members	25

**Number of Books & Magazines issued -324**

## DEPARTMENT OF ONCOLOGY NURSING



**DEPARTMENT HEAD: SREELATHA P**

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
	<b>Sreelatha P</b>	<b>Nursing Superintendent</b>
1	<b>Shiny A F</b>	<b>Head Nurse</b>
2	Abhina S S	Staff Nurse Gr -1
3	Abhilash.K.K	Staff Nurse Gr -2
4	Aiswarya K S	Staff Nurse Gr -2
5	Ajaya Kumar V D	Staff Nurse Gr -2
6	Ajith.N	Staff Nurse Gr -2
7	Akash Surendr.An	Staff Nurse Gr -2
8	Ameer Sanchani O	Staff Nurse Gr -2
9	Aneesha S	Staff Nurse Gr -2
10	Anjana G N	Staff Nurse Gr -2
11	Anjana.S.R	Staff Nurse Gr -2
12	Anju Baby	Staff Nurse Gr -2
13	Ansil.M	Staff Nurse Gr -2
14	Anuthara R	Staff Nurse Gr -2
15	Archana.V.Hari	Staff Nurse Gr -2
16	Asha Gopi	Staff Nurse Gr -2
17	Asha John B	Staff Nurse Gr -2
18	Ashamol M A	Staff Nurse Gr -2
19	Athira K Chandran	Staff Nurse Gr -2

20.	Bhavya.K.K	Staff Nurse Gr -2
21	Bijeesh Mohan	Staff Nurse Gr -2
22	Bijitha P	Staff Nurse Gr -1
23	Bindhu Raman	Staff Nurse Gr -2
24	Blassy P	Staff Nurse Gr -2
25	Chithira.B	Staff Nurse Gr -2
26	Deepa Mathew	Staff Nurse Gr -2
27	Depu Raj	Staff Nurse Gr -2
28	Divya C M	Staff Nurse Gr -2
29	Eana S	Staff Nurse Gr -2
30	Fathimath Suhra	Staff Nurse Gr -2
31	Haseenamol .K.A	Staff Nurse Gr -2
32	JaleemaLawarance	Staff Nurse Gr -2
33	Jayakrishna Prabhu	Staff Nurse Gr -2
34	Jayasree	Staff Nurse Gr -2
35	Jemy Mathew	Staff Nurse Gr -2
36	Jibin K V	Staff Nurse Gr -2
37	Jincy Xavier	Staff Nurse Gr -2
38	Jisha K	Staff Nurse Gr -1
39	Jisha P	Staff Nurse Gr -2
10	Jitha Joseph	Staff Nurse Gr -2
41	Jithin T P	Staff Nurse Gr -2
42	Jolly	Staff Nurse Gr -2
43	Kastoori	Staff Nurse Gr -2
44	Kavitha C N	Staff Nurse Gr -1
45	Ligy Jose	Staff Nurse Gr -1
46	Maneesh	Staff Nurse Gr -2
47	Manjima.T	Staff Nurse Gr -2
48	Manju Mathew	Staff Nurse Gr -2
49	Maya P K`	Staff Nurse Gr -1
50	Meera .R.Nair	Staff Nurse Gr -2
51	Naseema.P.P	Staff Nurse Gr -2
52	Navami .T .C	Staff Nurse Gr -1
53	Navya.T.K	Staff Nurse Gr -2
54	Neha.S	Staff Nurse Gr -2
55	Nidhina.K.P	Staff Nurse Gr -2

56	Nimmy P V	Staff Nurse Gr -2
57	Nirmala Nallacherry	Staff Nurse Gr -2
58	Prajina. E	Staff Nurse Gr -2
59	Prasanth. C. Das	Staff Nurse Gr -2
60	Praseeda	Staff Nurse Gr -2
61	Praseetha .M	Staff Nurse Gr -2
62	Rajalekshmi.V	Staff Nurse Gr -2
63	Remya Raveendr.An	Staff Nurse Gr -2
64	Reshmi.B	Staff Nurse Gr -2
65	Rinsha P K	Staff Nurse Gr -2
66	Roni Antony	Staff Nurse Gr -2
67	Sabeena Mathew	Staff Nurse Gr -2
68	Sabitha K	Staff Nurse Gr -1
69	Sabitha.C.S	Staff Nurse Gr -2
70	Sabitha.M.S	Staff Nurse Gr -2
71	Sachithra E	Staff Nurse Gr -2
72	Sajika	Staff Nurse Gr -2
73	Sajina N	Staff Nurse Gr -2
74	Sajitha. P	Staff Nurse Gr -2
75	Saritha. K .R	Staff Nurse Gr -2
76	Saritha. N	Staff Nurse Gr -2
77	Satheesh .M	Staff Nurse Gr -2
78	Seena. E	Staff Nurse Gr -2
79	Seena Mathew	Staff Nurse Gr -2
80	Shabina Palliparavana	Staff Nurse Gr -2
81	Shaija. E	Staff Nurse Gr -1
82	Shamseer	Staff Nurse Gr -2
83	Sheeba.S	Staff Nurse Gr -2
84	Sheeja Nellikka	Staff Nurse Gr -1
85	Sheena C	Staff Nurse Gr -2
86	Sherjin A J	Staff Nurse Gr -2
87	Shibimol Thomas	Staff Nurse Gr -2
88	Shiji P	Staff Nurse Gr -2
89	Shiji Poulose	Staff Nurse Gr -2
90	Shijila V	Staff Nurse Gr -2
91	Shimna Sebastian	Staff Nurse Gr -2

92	Shiniraj R	Staff Nurse Gr -2
93	Sibi K Daniel	Staff Nurse Gr -2
94	Sijo Augustine	Staff Nurse Gr -2
95	Silja Kurian	Staff Nurse Gr -2
96	Simimol	Staff Nurse Gr -2
97	Sindhu N R	Staff Nurse Gr 1
98	Sindhu S	Staff Nurse Gr 1
99.	Sindhu.M	Staff Nurse Gr -2
100	Sini S S	Staff Nurse Gr -2
101	Smitha Grace	Staff Nurse Gr 1
102	Smithamol D	Staff Nurse Gr -2
103	Soumya Jose	Staff Nurse Gr -2
104	Soumya Mathew	Staff Nurse Gr -2
105	Sreeja Kumari G	Staff Nurse Gr -2
106	Sreeja.K	Staff Nurse Gr -2
107	Sreejisha P	Staff Nurse Gr -2
108	Sreenivas	Staff Nurse Gr -2
109	Srelatha T N	Staff Nurse Gr 1
110	Srijil A	Staff Nurse Gr -2
111	Sujatha K	Staff Nurse Gr -2
112	Suma Devi	Staff Nurse Gr -2
113	Sumi.P	Staff Nurse Gr -2
114	Sunera Rajan	Staff Nurse Gr -2
115	Sunitha Kumari S	Staff Nurse Gr -2
116	Tessy Jose	Staff Nurse Gr -2
117	Vijina K	Staff Nurse Gr -2
118	Vineeth Krishnan	Staff Nurse Gr -2
119	Ancy M.Panickar	Staff Nurse Gr -2

SL. NO	NAME	DESIGNATION
1	Abitha.C.A	Nursing Assistant
2	Agimol Dominic	Nursing Assistant
3	Biju Prasad	Nursing Assistant
4	Bindhu K M	Nursing Assistant
5	Deepa Prabha O B	Nursing Assistant
6	Dhanya E	Nursing Assistant
7	Dhanya P M	Nursing Assistant
8	Jerry A	Nursing Assistant
9	Jinshi R S	Nursing Assistant
10	Jiji.P.S	Nursing Assistant
11	Kalamol A B	Nursing Assistant
12	KavithaPrakash	Nursing Assistant
13	Lethiamma P R	Nursing Assistant
14	Mary I C	Nursing Assistant
15	Mercy John	Nursing Assistant
16	Midhun Gopalakrishnan	Nursing Assistant
17	Neethu B S	Nursing Assistant
18	Nisha T	Nursing Assistant
19	Prajina E K	Nursing Assistant
20	Ragi Sandhya	Nursing Assistant
21	Rehana T	Nursing Assistant
22	Rekha Muraleedharan	Nursing Assistant
23	SanthiniChandran	Nursing Assistant
24	Sajina.K.K	Nursing Assistant
25	Shamla N	Nursing Assistant
26	Shibila K	Nursing Assistant
27	Shibu S	Nursing Assistant
28	Shobitha L	Nursing Assistant
29	Silna.K.K	Nursing Assistant
30	Sreejith S	Nursing Assistant
31	Suma.S	Nursing Assistant
32	Surya C	Nursing Assistant
33	ZeenathBattantavida	Nursing Assistant
34	Indu.P	Nursing Assistant
35	Neena.A.P	Nursing Assistant
36	Reshma.V	Nursing Assistant
37	Riya.K	Nursing Assistant

## INTRODUCTION

Nursing service is an integral part of the institution, which aims at high-quality nursing care for the patients and community. The main stratum of the workforce in MCC is constituted by well-trained professional nurses from different specialty areas such as CVAD, Stoma care, Paediatric oncology, BMT, Pain and Palliative care, brachytherapy, intervention radiology, and Nuclear medicine.

During the **COVID-19 outbreak**, Onco-nursing Department planned and implemented strategies to fight COVID as per the guidelines of the COVID cell Malabar cancer centre. **It includes**

- Screening of all patients, relatives, and staff on daily basis.
- COVID-19 sampling for all suspected patients and staff.
- A well-equipped isolation room with a ventilator facility was set in the ward.
- Provided training to all the Staff nurses and Residency oncology nurses regarding ventilator care and management of a patient on a ventilator.
- Prepared informative videos about donning and doffing of PPE Do's and don'ts during COVID-19 and staff awareness then circulated these videos among all staff.
- Training by infection control team on infection control policies to all hospital staff.
- Information regarding webinars and online classes was provided and started online classes for nurses were through the clinical nursing education unit.
- A quarantine facility for hospital staff was arranged on the hospital premises.
- Provided 2 doses of COVID-19 vaccination for all staff and their dependents.

### **Participated in Covid-19 vaccine trial**

## NURSING IN-SERVICE EDUCATION PROGRAMMES

**The clinical Nursing Education unit (CNEU)** started with an aim to improve the professional competency of nurses. Lifelong learning is important in nursing to strengthen their career from the threat of changing world health care management. CNEU help them to build strong collaborative relationships with patients and co-workers, to improve patient outcome, it helps to reduce mortality and morbidity rates and reduce the chance of errors.

In-service education programmes were carried out throughout the year to upgrade the standard of nursing care and improve the quality of care. The following classes in the Zoom platform were conducted at MCC.

- "Fatigue and sleep evaluation among cancer patients" by Dr.Kishore
- "Sepsis clinical diagnosis" by Dr.Ganesh Kumar
- An overview of KASP by Mr.Reji Sankar
- "Paediatric chemotherapy regimen" by Dr.Jithin
- "General overview about Nuclear medicine" by Rahul.M(RSO)
- "Chemotherapy Drugs and administration" by Sindhu.N.R (Day chemo in charge)
- ADR. " Adverse Drug reaction "by Mis.Jyothis clinical pharmacist
- "Introduction to intervention radiology" by Dr.Satheesh Babu
- "Role of nurse in intervention radiology" by staff nurse Shibi Suraj
- "Present and future of MCC" by Dr.Satheesan.B
- Nursing management of chemotherapy & extravasations by Sindhu.N.R
- National accreditation board hospital standard (NABH)
- Infection control measures during COVID-19.
- Management of patient on ventilator
- "Genetic counseling" by Dr.Praveen Shenoy.
- "PHLEBITIS" by Sajitha.P (Infection control nurse)
- "Overview of Bone marrow transplantation" by Dr.Praveen
- International consortium on advances in oncology nursing practices



- Webinar on the Role of immunotherapy in cancer patients by Mrs,AbhijaPrincy.B Nurse manager,CMC,Vellore
- Due to COVID-19-related restrictions, each month of the year is selected as Awareness month and conducted classes on the zoom platform.



- Breast cancer awareness programmed Rise rally, supporting,serving, and screening everyone on 30.10.2021
- “Pressure ulcer prevention day” webinar on 19<sup>th</sup> November 2021
- Palliative care webinar on 15.01.2022
- Cervical health awareness month webinar by Dr.Aparna Vimal
- Gall bladder and bile duct cancer Awareness by Dr. Vijay Sethupathi
- NABH education series webinar
- colorectal cancer awareness by Dr.SherinP.Mathew on 30.03.22

## ACTIVITIES AND ACHIEVEMENTS

- Online classes started for Nurses and Nursing trainees and are conducted regularly.
- The competency checklist started to evaluate the competency of staff.
- CVAD team prepared a demonstration video of CVAD care and PICC line care which helped the patients to manage during the Covid-19.
- Quality improvement activities started in 2018. Nurses are part of a quality team and participate in different activities.
- world safety day was celebrated on 17.07.2021 by conducting Fire &safety demonstration by Mr.Akash (staff nurse)



- webinar on Patient-centered skill development program communication skill basics on world Hospice & Palliative care day
- CNE conducted a webinar “Pradithi Hope With Pink on 8. 12.20 2
- Online session on Financial planning on 17.12.2021
- All nursing staff attended career guidance & good parenting (Understanding your children by Mr.Sajeevan Othayoth
- “Philips monitoring analytics and therapeutic care solution show “a dedicated technology update programmed in the continuum of care on 7<sup>th</sup> and 8<sup>th</sup> Jan 2022. The nursing staff took part in the show.
- Inauguration of Recreation facility at Pediatric block: Nurses and patients at pediatric wards took part actively in the programme.
- IRPC volunteer training programme: Palliative care nurse Mrs. Sheeja Nellikka came up with training for volunteers.
- Vaccine trial: Nursing team cooperates with the vaccine trial at MCC.



## CELEBRATIONS

International nurses' day was celebrated on May 12<sup>th</sup> with a limited number of staff as per COVID-19 protocol. All nursing staff donated to the patient welfare fund and chief minister relief fund. The Nursing staff submitted consent to become a member of the Bone marrow registry.

## AWARENESS PROGRAMME FOR THE GENERAL PUBLIC

The patient education cell in Malabar Cancer Centre aims at improving the quality of life of our patients in all spheres of life. Educational programmes with a therapeutic intent are very essential in all therapeutic settings. The patient education cell organized various patient awareness programmes.

## TRAINING PROGRAMMES

- A webinar on Pediatric Critical care nursing was attended by 5 staff from the nursing department.
- MCC provides abundant opportunities for higher studies. One of our nurses pursued a post-basic diploma in oncology nursing this year.

## INFECTION CONTROL NURSE ACTIVITIES

- Conducted various sessions for newly recruited nurses and housekeeping staff on hospital infection control practices, biomedical waste management, spill management and needle stick injury.
- Individual area rounds are conducted by ICN daily and onsite training programmes were conducted in clinical areas.
- Surveillance of environmental culture and sterility samples taken monthly basis and report distributed to all prospective areas and take action according to hospital policy.
- Special training to all hospital staff regarding COVID-19 management.

# INDEPENDENT DIVISIONS

# DIVISION OF CLINICAL RESEARCH & BIOSTATISTICS

## DIVISION IN CHARGE: MAYA PADMANABHAN

### ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Maya Padmanabhan	Lecturer
2	Riyas M	Lecturer

### NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Bhavana mukthi	Hospital Assistant

### INTRODUCTION:

The Division of Clinical Research & Biostatistics (CRB) was formally organized in 2013 under the Department of Cancer Registry and Epidemiology. The Division of CRB was created primarily to coordinate the clinical, epidemiological, and translational research in the institution, coordination of collaborative research ventures, education in the field of Biostatistics, Bioethics and clinical research, administrative responsibilities in institutional academics, various courses and training conducted in MCC, organization, and monitoring of Institutional Review Boards-Scientific Review committee(IRB-SRC), Institutional Ethics Committee (IEC), various external standing committee and provide statistical consultation for the academic faculties and other components of oncology departments.

The mission of the Division of Clinical Research and Biostatistics is to develop, disseminate and apply bio statistical and analytical methods for research in cancer, encompassing both research design and analysis. The division supports the conduct of clinical data management for clinical trials in compliance with ICH-GCP, regulatory requirements. Presently the department is working under the supervision of the Director, MCC, it also function as Academic office of the Institution.

### STATISTICS :

SL NO	COMMITTEE	NO OF MEETING
1	Institutional Review Board-Scientific Review Committee (IRB-SRC)	17
2	Institutional Ethics Committee(IEC)	7
3	Academic Monitoring Cell meeting	12
4	Project Monitoring Committee	11
5	Scientific Advisory Committee	1

## **ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED IN DEPARTMENT:**

- o Conducting academic sessions (Biostatistics)for students, faculty, and external observers

## **FUNCTIONS, CONFERENCE & WORKSHOP DETAILS**

- Research Methodology Workshop 12<sup>th</sup> to 27<sup>th</sup> June 2021

## **CONFERENCES ATTENDED & PRESENTED :**

- Good clinical Practice conducted by CDSA from 14<sup>th</sup> to 28<sup>th</sup> June, 2021-Attended
- Clinical Research Methodology conducted by Tata Memorial Hospital from 9<sup>th</sup> October to 30<sup>th</sup> October, 2021-Attended
- Good Clinical Practice Professional Certification Scheme conducted by CDSA on 20<sup>th</sup> October 2021-Attended
- Bioethics, conducted by CDSA on 10<sup>th</sup>, 17<sup>th</sup>, and 24<sup>th</sup> December,2021-Attended
- Importance of Biostatistics and its application, Dept. of Statistics, Sree Narayana College Vadakara on 29<sup>th</sup> June 2021-Attended and presented

## **ON-GOING RESEARCH PROJECTS - INTERNATIONAL, NATIONAL, ETC.:**

Coordinating the following EMR-funded project and clinical trial

1. To establish a ready network of clinical trial units across the National Cancer Grid to promote multi-centric collaborative research in the field of Drug and device development-National
2. Mission COVID Suraksha-Enhancing capacity for the conduct of Human clinical trials for COVID-19 Vaccine candidates
3. Phase IIb/III study to determine the efficacy of Curcumin and Metformin to reduce the incidence of second primary tumors of the aero-digestive tract in patients with a history of head and neck squamous cell carcinoma-National

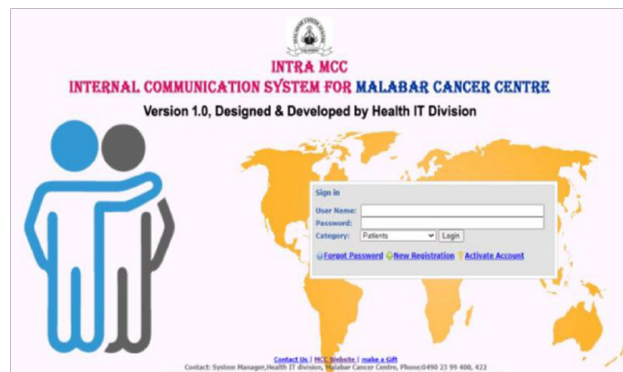
# HEALTH INFORMATION TECHNOLOGY DIVISION

## DIVISION IN-CHARGE : RANJITH M K NON-ACADEMIC STAFF

SL. NO	NAME	DESIGNATION
1	Ranjith M K	System Manager
2	Bavina C	Junior System Analyst

## INTRODUCTION:

The Health Information Technology Division under the Department of Cancer Registry and Epidemiology was established in the year 2012. Currently, the division is under the direct control of the Director. The main responsibilities of the division are to provide technology vision and leadership in the development and implementation of the organization-wide information technology (IT) program and the planning and implementing of information systems to support both clinical and business operations and achieve more effective and cost-beneficial IT operation. The division helps in implementing the hospital policy for information and associated computer technology. It undertakes broad system development and research and has responsibilities for organizational change to support the new system.



## MAJOR ACTIVITIES /PROJECTS

1. Administration & Management of e-Hospital Software implemented at MCC.
2. Implemented e-Office project.
3. Implemented eSanjeevani OPD five days a week.
4. Updating and maintaining the official website of MCC.
5. Server and Database Administration, Management, and Maintenance
6. Desktop Computers (200+), Laptop, Printer (80+), Scanner, Projectors, Local Area Network (40+Switches & 12 Racks), Network devices, UTM, etc. Maintenance and support
7. Maintenance of CCTV Security Surveillance System, PA system & Wi-Fi Connectivity



8. Designed, developed, and Implemented e-Palliative Software
9. Managing Virtual Tumor Board (NCG), Virtual Consultations, and Telemedicine
10. Support for Online meetings, Online Classes, etc.
11. Developed & Implemented online examination facilities and online career applications.
12. Developed & Implemented IntraMCC software for issuing various certificates
13. Developed & Implemented File Movement Tracking Software System
14. Implemented Bio-medical Asset and Maintenance Management System
15. Implemented Mobile Application for MPBCR Data Collection
16. Implemented Mobile app for PBCR Data collection
17. Implemented Canteen Billing and Management Software
18. Implemented e-Procurement Project
19. Official E-mail to all Employees
20. Managing, Administering, and providing support for Online Birth & Death Registration, Centralized Procurement and Rate contract System(CPRCS), Government e-Market (GeM), HR & Pay Role Management Software, Online Registration System through ORS portal, etc.
21. Implemented Biometric Punching System and Proximity ID card.
22. Interfaced Biochemistry Analyzers with e-hospital
23. Patient support through OPPAM Whatsapp Group and Social media
24. Managing National Knowledge Network (NKN), National Cancer Grid MPLS LAN, and NMECT connectivity.
25. Implemented, Guidelines for Computer Users at MCC, Guidelines for Computer Users at MCC, IT equipment and communication network maintenance Plan, etc.

## **SOFTWARE AVAILABLE AND DETAILS**

### **1. Hospital Management Information System (e-Hospital@NIC)**

This is an integrated Hospital Management Information System (HMIS) that automates the activities of the hospital and improves patient care. E-Hospital is web enabled and built on industry-standard software technologies and best practices. The Software, Hardware, and Communication Architecture facilitate cross-platform applications and application integration. The software is developed and implemented by National Informatics Centre. The software is an openSource Software – Linux, JBOSS, PostgreSQL, JSP – No licensing is required as all components used are of open standards. The software is accessed from our Hospital Server which is located in the Health IT Department. The software was implemented in a phased manner. Phase-I includes OP Registration, repeat visits, Clinic Information System, IP Registration, Repeat visit, Admission, Discharge and Transfer, Lab Information System, Hospital Pharmacy, Cash counters, MRD, Store, Wards, and Radiodiagnosis. The registration modules were implemented from 11-08-2014 onward and the Bills & Payment modules on 18-08-2014 onwards followed by Pharmacy and Blood bank modules. Phase-II includes Enhancement of clinic modules for oncology treatment, OT Modules, Appointment, Revisit & Queue Management, Patient Portal, Enhancement of pharmacy module, HR module, MIS for accounts and finance module, PACS integration, Microbiology Lab integration with interface application, Customization of pathology Lab, Integration of SMS Service, Central Sterile Department (CSSD) and the Phase-II implementation was going on.

### **2. e-Palliative: An online Palliative Care and Support Network.**

The ePalliative System is a web-based online Palliative Care and support network to support the palliative care activities of different palliative units and to provide online resources and support to them. The system helps the unit to get regular consulting and advice from medical experts online. The system is an online web-based application and it helps the patient to interact with doctors through video conference mode.



### **3. Official Website in CMF**

Developed and hosted a dynamic website with the domain [www.mcc.kerala.gov.in](http://www.mcc.kerala.gov.in) using an open-source Content Management System (Joomla). Along with the website Online career application module, Registration module, dynamic photo gallery, Event calendar, etc. are also hosted.

### **4. Online Examination System**

A software is developed in-house and is a web application developed using open source technology. This software is used for conducting online entrance examinations for fellowship programmes, and selection examinations for contract/temporary/Trainee/project staff recruitment.

### **5. HR and Payroll Management System**

The HR and Payroll Management System software is trial running stage and the software is implemented for HR management, bio-metric attendance management Leave management, and payroll processing.

### **6. File Movement Tracking Software**

The software is implemented for tracking the movement of patient physical files across different divisions and sections. The software also helps to schedule the patient follow-up visit.

### **7. Intra MCC: Internal communication System for MCC**

In MCC, more than 12000 requests are received a year for issuing certificates such as Treatment Certificate, Pension forms, Expenditure Certificate, Medical certificates, Utilization certificates, No dues Certificate, Treatment Summary, LIC claims, Insurance claims, essentially certificates, Tax exemption certificate, the certificate for financial assistance, Medical Reimbursement certificates, etc. The IntraMCC software is developed for managing and tracking the certificate requests. The system also provides an SMS alert to the applicant if the certificate is ready for issuing.

### **8. Bio-medical Asset and Maintenance Management System**

The Bio-medical Asset and Maintenance Management System software is a web application capable of managing all the bio-medical assets, break-down maintenance, Preventive maintenance, Calibration, etc. efficiently. The system is capable of integrating with a similar software system and is developed using open-source technologies. The software was implemented at MCC from June 2020 onward.

### **9. e-office Software**

The e-Office, a digital workplace solution aims to support governance by ushering in more effective and transparent inter and intra-government processes. The implementation of e-office software may automate the entire workflow of file processing starting from Tapal/File Creation, reduce the delay in file processing, increase efficiency, enhance transparency, enhance inter-departmental communication, increase accountability and assure data security & data integrity. The Administrative committee meeting held on 22-11-2019 at Malabar Cancer Centre discussed the possibilities of implementing e-Office software at MCC and requested the Government for the implementation. As per our request, Kerala State IT Mission setup the e-office instance for Malabar Cancer Centre and provided online demonstration and training. Malabar Cancer Centre implemented the e-office software from 20-07-2020 onward.

### **10. e-Sanjeevani Online OPD**

e-Sanjeevani, the National Tele Consultation Service of the Ministry of Health and Family Welfare is the first of its kind online OPD service offered by a country's government to its citizens. National teleconsultation Service aims to provide healthcare services to patients in their homes. Safe & structured video-based clinical consultations between a doctor in a hospital and a patient in the confines of his home are being enabled. C-DAC Mohali has developed the platform for the Government and provides technical support. MCC started oncology specialty OPD through the e-Sanjeevani platform from 09-07-2020 onward.

### **11. Mobile Application for MPBCR Data Collection**

The mobile app was developed and implemented for MPBCR data collection. A Cancer Mapping (GIS

with Clustering) application was also developed and implemented in 2019.

**12. Canteen Management Software**

For the smooth management of the hospital canteen, canteen management software was implemented from April 2020 onwards. The major modules include Billing Management, Purchase and Inventory Management, Accounting Management, Dynamic Reports & Statistics

**13. IBM SPSS Statistics Base 20.0**

10 user licenses were procured and implemented in a different department for statistical data analysis.

**14. Tally 6.5.5 Multiuser gold version**

Implemented Accounts division method for managing accounts.

**15. Interfacing of Laboratory equipment with e-hospital Software**

The software was implemented in 2015 and 6 analyzers are interfaced with eHospital software for automatic laboratory report generation

**16. e-Procurement System of Govt. of Kerala**

Implemented in March 2013.

**17. Official email ID to all employees using Govt. of India E-mail Service**

The system was implemented from July 2015 onwards.

**18. Centralized Procurement and Rate Contract System of Govt. of Kerala**

The software was implemented in 201.

**19. Online Birth & Death Registration of IKM**

The system was implemented in Sep. 2013

**20. GeM: Government e-Market Place of Govt. of India**

Implemented in 2020.

**21. Online Appointment of New Cases through the ORS portal:**

The online new case Registration through the ORS (<https://ors.gov.in>) portal was implemented in February 2016.

## **HARDWARE AND NETWORK INFRASTRUCTURES**

The details of IT hardware are as follows

SL. NO.	ITEM	QUANTITY
1	Server	15
2	Workstation	40
3	Desktop PC	247
4	Laptop	28
5	Laser Printer	61
6	Inkjet Printer	2
7	Dot matrix Printer	17
8	Network Printer	5
9	Barcode Printer	16
10	Card Printer	2
11	Scanner	17
12	Barcode Scanner	50

13	Network Switch	51
14	Web camera	14
15	LCD Projector	19
16	Tablet	3
17	Modem	3
18	External Hard disk	17
19	External DVD Writer	2
20	Biometric Punching Device	11
21	CCTV Camera	322
22	64 Channel NVR	8
23	32 Channel NVR	2
24	PA System Speaker	104
25	Amplifier	8
26	Wi-Fi-controller	1
27	Wi-Fi Access Point	37
28	Router	1
29	OHP	1
30	Risograph	1
31	UTM	1
32	High-Resolution Digital Visualizer	2
33	Wireless Interactive White Board	2

## NETWORK INFRASTRUCTURE

1. National Knowledge Network (NKN) Dedicated Internet Connection-100 Mbps
2. MPLS Network along with Internet Connectivity-100Mbps
3. 2 BSNL Broadband Connection with static IP for Machine Remote Support
4. 1 BSNL Internet connection (NNECT)
5. Structured Cat6 cabling (LAN) with L2 and L3 switches
6. Wi-Fi Connectivity in Main Block

The smooth and successful implementation of e-governance may increase productivity and improve health care quality. Timely and easy access to information is critical to the pursuit of excellence in all clinical, academic, research, and administrative matters.

# PSYCHO-ONCOLOGY DIVISION

## DIVISION IN CHARGE: JISHA ABRAHAM

### ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Jisha Abraham	Lecturer

### NON-ACADEMIC STAFF:

SL. NO	NAME	DESIGNATION
1	Sobhith V K	Medical Social Worker

## INTRODUCTION

Psycho-oncology is the division that deals with the behavioral, emotional, cognitive and social aspects of cancer patients and their families. Presently the division is headed by the Director. The division of psycho-oncology has been functioning in this centre, since July 2017. It focuses on psycho-social interventions for patients and families from cancer diagnosis to survivorship and palliation, thereby improving their quality of life. The division also provides alcohol and tobacco de-addiction counseling for the patients. It also deals with stress management of the staff dealing with cancer patients. The division combines psychiatry, psychology, and medical social work aspects in the Cancer centre. This year this division started one-year institutional fellowships in Psycho-oncology and Oncology Social Work.

## STATISTICS OF PATIENT CONSULTATION BY THE DIVISION

SL.NO	SESSIONS	NUMBER
1	Get well clinic	112
2	Genetic counseling	240
3	Pretreatmentcounseling	340
4	Pre RT / Chemo counseling	66
5	Inpatient routine counseling	2039
6	Post-operativecounseling	220
7	Psycho-oncology consultation	618
8	Discharge counseling	1780
9	Trainee (MSW)	22
10	Academic session	50

## **ACADEMIC ACTIVITIES INCLUDING COURSES OFFERED DEPARTMENT :**

1. One-year fellowship in Psycho-oncology
2. One-year fellowship in Oncology Social Work
3. Internship and Observership for social work and psychology students

## **FUNCTION, CONFERENCE & WORKSHOP CONDUCTED AND ATTENDED:**

1. Conducted online competitions among BSc MRT students on “World No tobacco day” on May 31<sup>st</sup>, 2021
2. Taken session as part of KCCC on 31<sup>st</sup> May (World no tobacco day) on ‘Tobacco: A Psycho-social concern’ by Ms. Jisha Abraham.
3. Talk by Ms. Jisha Abraham on ‘stress-free life and online learning during COVID-19’ for Student Police Cadet as part of KCCC on 6th June 2021.
4. A session for nursing staff as part of Clinical nursing education on Sleep hygiene – 4/09/2021
5. Division organized a Webinar on ‘Body image distress in head and neck cancer patients on 11<sup>th</sup> September 2021. Dr. Evan Graboyes, Head & Surgeon from South Carolina University was the resource person. 23 participants from MCC attended the session.
6. Meeting of mental health professionals working in MCC (permanent, outsourced, and trainees) as part of World Mental Health day observance conducted on 11/10/2021 at 3.00pm. Dr. Sangeetha K Nayanar gave the keynote address.
7. Training in Psycho-oncology for the M. Phil scholars of IMHANS was done by Ms.Jisha Abraham on 1<sup>st</sup> November 2021 at IMHANS, Calicut.
8. Organized Webinar for mental health professionals on ‘Psychotherapeutic management of Body image distress among cancer patients’ on 3<sup>rd</sup> November 2021 at 4.00pm. Twenty-seven participants attended through the Zoom platform.
9. Ms. Jisha participated in the MCC Echo school teachers’ training program in cancer control as an expert on 24/11/2021.
10. ECD training for associate centre nurses on 26/11/2021 presented on ‘Counselling and Psychological support.
11. KCCC Webinar on Cancer Day (04/02/2022) - ‘Psycho-social Concerns among cancer patients’ by Ms. Jisha Abraham.
12. Self-development training program for BSc MRT 1<sup>st</sup> year conducted by Psycho-oncology division organized by SSGP on 26<sup>th</sup> March 2022.

## **WORKSHOP/WEBINAR ATTENDED & PRESENTED:**

1. Attended webinar on ‘Healthbehaviors in cancer survivors and the role of fear of cancer recurrence: joint webinar with IPOS Forwards on 22<sup>nd</sup> July 2021.
2. Attended online workshop on Motivation Enhancement Therapy (Mrs. Jisha&Mr.Sobhith) on Feb 14, 15, 16: 6.00-7.00pm.

# RESEARCH, PUBLICATIONS, COMMITTEES & COURSES

## RESEARCH

Research in Malabar Cancer Centre is conducted as per the ICMR guidelines and an academic research guideline specific for the institution is prepared. As research is a major responsibility of the institution, all efforts are taken to maintain the highest ethical and scientific standards. Malabar Cancer Centre is involved in clinical research in major Oncological disciplines and it emphasizes on interdisciplinary research. The Institutional Review Board is responsible for supervising the scientific and ethical issues associated with any research conducted in the institute. The institute has memoranda of understanding with several governmental organizations so that their expertise can be used in clinical research. In order to ensure that research is conducted under the most stringent conditions the institute has an Institutional Review Board (IRB).

The IRB is made of two separate bodies

- The Scientific Review Committee (SRC)
- The Institutional Ethics Committee (IEC). Both these bodies are constituted as per the guidelines provided by the ICMR for conducting biomedical research

## SCIENTIFIC REVIEW COMMITTEE (SRC)

The SRC meets twice in every month (2nd and 4th Saturday) and / or as and when required. SRC is responsible for reviewing the scientific merit of any new research proposal. All research proposals have to be submitted by the first week of every month so that it can be reviewed by the SRC. Once studies are approved by the SRC, they are submitted to the IEC for ethical approval. All academic staff are trained in Good clinical practices. It is a mandatory requirement for conducting clinical research in MCC.

## INSTITUTIONAL REVIEW BOARD –SCIENTIFIC REVIEW COMMITTEE

SL.NO	NAME	DESIGNATION & DEPARTMENT
1	Dr.Satheesan B	Professor, Dept of surgical Oncology
2	Dr.Sangeetha K Nayanar	Professor, Department of Clinical Lab service & Translational Research
3	Dr. Chandran K Nair	Professor, Department of Clinical Hematology and & Medical Oncology
4	Dr.Sajith Babu T P	Professor, Dept of surgical Oncology
5	Dr.Geetha M	Associate Professor, Department of Radiation Oncology
6	Dr.Parthipan Rudrapathy	Associate Professor, Division of microbiology
7	Dr.Pramod Sankar S	Associate Professor, Department of Dentistry & Rehabilitation
8	Dr.Satheesh Babu	Associate Professor, Department of Imageology

9	Dr. Nived K	Associate Professor, Department of Onco-Anesthesiology
10	Dr.Sithara Aravind	Associate Professor, Division of Oncopathology
11	Dr.Vineetha Raghavan	Associate Professor, Department of Clinical Hematology and & Medical Oncology
12	Dr.Mohandoss M	Associate Professor, Division of Transfusion medicine and Blood bank
13	Dr.Nizham M Parekutty	Associate Professor, Dept of surgical Oncology
14	Dr.Manuprasad	Associate Professor, Department of Clinical Hematology and & Medical Oncology
15	Mrs. Maya Padmanabhan	Office bear, Division of Clinical Research & Biostatistics
16	Mr.Riyas M	Office bear, Division of Clinical Research & Biostatistics

## INSTITUTIONAL ETHICS COMMITTEE

Constituted as per ICMR guidelines in August 2013. The IEC meets once in every three months and / or as and when required. DHR and DCGI registered IEC.

SL NO	NAME	POSITION	AFFILIATION	GENDER	EXPERTISE
1	Dr. T. N. Babu Ravindran	Chairman	Senior Medical Consultant Indira Gandhi Co-Operative Hospital, Manjodi, Thalassery, Kannur	Male	Medical consultant
2	Dr.Sangeetha K. Nayanar	Member	Professor & Head, Department of Clinical service & Translational Research, Malabar Cancer Centre, Thalassery, Kerala	Female	Basic Medical Scientist
3	Dr. Balakrishnan Valliyot	Clinician	Professor of Medicine Head, Centre for Medical Research & Non-communicable diseases, Academy of Medical Science, Pariyaram, Kannur,	Male	Medicine
4	Dr.Jeeja M.C	Basic Medical Scientist	Additional Professor, Department of Pharmacology Govt, Medical College, Idukki, Kerala	Female	Pharmacologist
5	Dr. Biju George	Clinician	Additional Professor in Community Medicine, Govt. Medical College, Kozhikode, Kerala	Male	Community Medicine



6	Adv.Preethi Parambath	Legal expert	Addl Govt Pleader & Public Prosecutor, Kannur District Court,Thalassery, Kerala	Female	Legal expert
7	Adv. John Joseph	Legal Expert	Advocate, Near District Court, Thalassery, "Thalackal" House, NangarathPeedika, TempleGate P.O., Thalassery, Kerala PIN- 670 102	Male	Legal Expert
8	Dr. K. R. Vasudevan	Clinician	Consultant Physician "ARCHANA", Kovilakam Road, Nilambur (P.O),Malappuram, Kerala	Male	Medical consultant
9	Rev.Fr Thomas Thengumpally	Social Scientist	Chancellor Archdiocese, Arch Bishop House, Thalassery, PB No.70, Kerala	Male	Social Scientist
10	Mr. G.V. Rakesh	Lay Person	Correspondent Mathrubhumi Daily G.V. House, PonniamP.O.,Thalassery, Kannur, Kerala	Male	Lay Person
11	Managing Trustee, <i>Salil Sivas</i> Foundation,	Social Scientist	Managing Trustee, <i>Salil Sivas</i> Foundation, Salil Bhavan", P.O. Sivapuram, Dist. Kannur, Kerala	Female	Social Scientist

## NEW RESEARCH PROJECTS

SI. NO	TITLE OF THE STUDY	INVESTIGATOR NAME	DEPARTMENT
1	Effect of preoperative anxiety on postoperative pain scores and morbidity in major onco-surgeries: A prospective observational study	Dr. Sonali Opneja	Anesthesiology
2	Exit Dose Measurements in High Energy Photon Beams	Mrs. Lisha Jose	Radiation Oncology
3	The outcome of early glottis laryngeal carcinoma patients treated with radical radiotherapy – A single institution experience	Dr. Joneeta Jones	Radiation Oncology
4	Dosimetric comparison with Different ARC and Beam VMAT optimization in the Monaco treatment planning system	Ms. Silpa Ajaykumar	Radiation Oncology
5	A retrospective analysis of the pattern of relapse after involved site radiotherapy in Hodgkin's Lymphomas	Dr. Greeshma KE	Radiation Oncology

6	Retrospective analysis on the pattern of relapse in patients with Non-Hodgkin's lymphomas treated with radiotherapy	Dr.Greeshma KE	Radiation Oncology
7	Second primary Malignancies In Oral Cavity Cancer Patients	Dr.Geetha M	Radiation Oncology
8	Internal Mammary Nodal Failure In Patients with Triple Negative And Her2neu Positive Breast Cancer	Dr.Geetha M	Radiation Oncology
9	study on compliance to quality indicators to rectal cancer surgery in a tertiary cancer centre	Dr.Satheesan B	Surgical Oncology
10	Sentinel lymph node biopsy after NACT in breast cancer - a prospective study in a tertiary cancer care hospital	Dr.Satheesan B	Surgical Oncology
11	Analysis of nodal prognostic factors and their impact on oncological outcomes based on subsite in oral squamous cell carcinoma: Oral tongue/Floor of mouth vs. Gingivobuccal complex	Dr. Anoop Attakkil	Surgical Oncology
12	Neoadjuvant chemotherapy followed by Surgery versus Surgery followed by adjuvant chemotherapy for resectable Gastric adenocarcinoma-2x2 Factorial Phase 3 Multicentric Randomized Controlled Trial	Dr.Nizamudheen	Surgical Oncology
13	Immunomorphological and molecular spectrum of Acute Myeloid leukemia cases – a study from South India.	Dr. Deepak Roshan VG	Genetics
14	Prevalence of Basal-like phenotype in Triple-negative Breast Cancer	Dr.Sangeetha	Pathology
15	Breast cancer survivorship experiences-A retrospective cohort study from 2016 Hospital Based Cancer Registry of a Tertiary Cancer Centre in Northern Kerala	Dr. Neethu A P	Community Oncology
16	A retrospective study of cyto-histological and radiological correlation of salivary gland lesions using Milan System for Reporting Salivary Gland Cytopathology	Dr. Anand VijayaNarayanan	Pathology
17	Predicting Lymph Node Metastasis In Carcinoma Tongue By Using Tumor Thickness and Tumor Volume Measurements in Preoperative MR Imaging	Dr.Srikiran T K	Radiology
18	Multidisciplinary Approach For Rectal Cancer in a Comprehensive Cancer Centre-Does it has an impact on survival?	Dr.Satheesan B	Surgical Oncology

19	Role of Geriatric Clinic Assessment in Predicting 30-Day Postoperative Morbidity in Elderly Patients Undergoing Curative Surgery for Oral Cancers-A Prospective Observational Study	Dr.Satheesan B	Surgical Oncology
20	Validation of a questionnaire and estimating the prevalence of occupational exposure to biological fluids among anaesthesiologists	Dr.Roopesh	Anesthesiology
21	outcomes and toxicity of low dose abiraterone in metastatic prostate cancer- a multicentre audit	Dr.Manuprasad	CHMOG
22	Common Anatomical Variations Of Biliary Tree In MRCP	Dr. Satheesh Babu	Radiology
23	Adherence to full dose ABVD chemotherapy with maintained dose intensity for Hodgkin's lymphoma and its implications on toxicity and treatment outcome	Dr. Chandran K Nair	CHMOG
24	Phase 3 randomized study for evaluation of physician choice Rx and triple metronomic as second-line therapy in head and neck cancer	Dr.Manuprasad	CHMOG
25	CT Features of Sensitive EGFR-Mutated Adenocarcinoma of the Lung: Comparison with resistant and Nonmutated adenocarcinoma	Dr. Satheesh Babu	Radiology
26	development of an efficient protein isolation protocol for proteomic studies from formalin-fixed paraffin-embedded (FFPE) samples	Dr. Vipin Gopinath	Molecular Oncology
27	Lipidomic analysis of B3A2 and B3A3 type CML	Dr. Deepak Roshan	Genetics
28	Comparative Lipidomic analysis of MCF7 and radioresistant cell lines	Dr. Vipin Gopinath	Molecular Oncology
29	molecular characterization of aminoglycoside resistant gram-negative bacilli in a tertiary care cancer centre	Dr. M. Saravanan	Microbiology
30	antibiotic resistance and biofilm formation ability among coagulase-negative staphylococci in cancer patients	Dr.Sajani Samuel	Microbiology
31	Accuracy of MP- MRI in the detection of prostate cancer	Dr.Satheesh Babu	Radiology

32	A Multicenter, Randomised, Double-blind, Parallel, Phase III Global Study to Assess the Efficacy and Safety of BPO1 (Bevacizumab) when compared to Avastin®-EU in Combination with Carboplatin and Paclitaxel during the Induction phase and Bevacizumab alone during the Maintenance phase in patients with newly diagnosed or recurrent Stage IIIB/ IV Non-Squamous (ns) Non-Small Cell Lung Cancer (NSCLC).	Dr.Manuprasad	CHMOG
33	Role of Cross-Sectional Imaging of Thorax in Initial Evaluation of Colorectal Cancer: Retrospective Analysis from a tertiary cancer centre	Dr.Satheesan B	Surgical Oncology
34	Metabolite Identification of Aqueous Fraction of Tinospora Cordifolia	Dr. Vipin Gopinath	Molecular Oncology
35	Characterization of Acetone Fraction of Stem of Tinospora Cordifolia	Dr. Vipin Gopinath	Molecular Oncology
36	Identification of Metabolite in the Aqueous Fraction of Baicopa Monnieri	Dr. Deepak Roshan	Genetics
37	Metabolite Identification of Ethanolic Fraction of Bacopa Monnieri	Dr. Deepak Roshan	Genetics
38	Composition Analysis of Stem Ethanolic Fraction of Tinospora Cordifolia	Dr. Vipin Gopinath	Molecular Oncology
39	Clinical outcome of Spindle cell carcinoma of Head and Neck region: Experience from a tertiary Cancer Centre	Dr.Vinin N V	Radiation Oncology
40	A Retrospective Study on the Outcomes of Patients with Her2 Positive Metastatic Breast Cancer Treated with Low Dose Lapatinib at a Tertiary Cancer Care Centre in India.	Dr.Sherin P Mathew	CHMOG
41	Utility of thromboelastography in perioperative coagulation and its effect on the clinical outcome in patients undergoing very major oncosurgery	Dr.Jashma	Anesthesiology
42	clinical outcome and toxicity profile of carcinoma prostate patients treated with image-guided radiation therapy	Dr.Arun	Radiation Oncology
43	oncological outcomes of advanced resection in differentiated thyroid malignancy in a tertiary cancer centre	Dr. Anoop	Surgical Oncology

44	Impact of nodal positivity on survival in patients with advanced ovarian cancer undergoing interval cytoreductive surgery in a tertiary cancer centre	Dr. Adarsh	Surgical Oncology
45	The survival outcome of patients with Peripheral T-Cell Lymphoma treated with CHOP versus CHOPE chemotherapy regimen in the first line setting - Is it really different??	Dr. Nandini	CHMOG
46	Establishing BIRAC Clinical Trial Network Registry for Breast, Colorectal, Lung, Gall bladder cancers	Dr. Praveen	Anesthesiology
47	A feasibility study of intranasal administration of TLR2 agonist (Mw), an approved product, for the prevention of COVID-19 in participants at risk of developing COVID-19	Dr. Chandran K Nair	CHMOG
48	AI-Driven Large-scale Screening for Oral and Oropharyngeal Cancer (AIDOScan)	Dr. Satheesan B	Surgical Oncology
49	Comparison of propofol versus fentanyl infusion for postoperative sedation in mechanically ventilated patients following head and neck oncosurgeries- A Retrospective analytic study	Dr. Roopesh	Anesthesiology
50	Bacterial Screening of Apheresis Platelets for Septic Transfusion Reactions – Experience from South India	Dr. Mohandoss	Transfusion Medicine
51	Trismus in Oral Cancer; Incidence and Causative factors from a Tertiary Cancer Center	Dr. Sandeep Vijay	Surgical Oncology
52	Efficacy of Intradermal Sepsivac (Mycobacterium w, a TLR2 agonist) in Double Dose COVID-19 Vaccinated Individuals: An Open-label, Phase II Clinical Trial in subjects at risk of developing COVID-19.	Dr. Chandran K Nair	CHMOG
53	Prevalence and Outcomes of Carbapenem-resistant Bloodstream Infection in children with Cancer	Dr. Jithin	CHMOG
54	Bacterial Screening of Apheresis Platelets for Septic Transfusion Reactions – Experience from South India	Dr. Mohandoss	Transfusion Medicine
55	A Randomized, Open-Label Study of the Efficacy and Safety of Galinpepimut-S (GPS) Maintenance Monotherapy Compared to Investigator's Choice of Best available Therapy in subjects with Acute Myeloid Leukemia Who Have Achieved Complete Remission After Second Line Salvage Therapy	Dr. Chandran K Nair	CHMOG

56	feasibility study of shielded diode detector for small field dosimetry	Ms. Resmi K Bharathan	Radiation Oncology
57	A Study on Effective Source-Skin Distance in Electron Beam Therapy Using Three Different Dosimeters	Ms. Lisha Jose	Radiation Oncology
58	Dosimetric Comparison And Evaluation Of VmatQa Systems	Ms. Suja C A	Radiation Oncology
59	Comparative Evaluation of Plate related Complications between Mini-plate and Reconstruction plate for Free Fibula Osteocutaneous Flaps in Oral cavity malignancy	Dr. Sandeep Vijay	Surgical Oncology
60	A3 Methodology-guided solution to address waiting time in Palliative care Out Patient Department	Dr.Biji MS	Palliative Medicine
61	Measurement of Neutron Dose Using TRIAC Code by Photoneutron Spectrum Analysis	Mrs. SilpaAjaykumar	Radiation Oncology
62	Establishing BIRAC Clinical Trial Network Registry for Breast, Colorectal, Lung, and Gall bladder cancer	Dr.Satheesan B	Surgical Oncology
63	Clinicopathologic Profile of Primary Bone Lymphomas- An Institutional Experience	Dr.Sithara Aravind	Pathology
64	HER 2 IHC-Equivocal cases- A Revisit after FISH	Dr. Sangeetha K Nayanar	Pathology
65	Comparison between a modified MRI-based tumor regression grade and pathology-based tumorregression grade in post neoadjuvant treatment response assessment of locally advanced rectal cancers	Dr. Satheesh Babu T V	Radiology
66	A Prospective double-blind randomized Phase III Clinical Study to Evaluate the Immunogenicity and Safety of Single Booster dose of Biological E's CORBEVAX vaccine when Administered to COVID-19-Negative Adult Volunteers Previously vaccinated with 2-doses of either Covishield or Covaxin	Dr. Chandran K Nair	CHMOG
67	Incidence of perioperative cardiac complications in patients with heart disease undergoing major oncosurgeries: a retrospective study	Dr. Sonali Opneja	Anesthesiology
68	Hospital-Based Cancer Registries in India	Dr. Saina Sunil Kumar	Cancer Registry
69	Cancer Trends in North Malabar:10 year Hospital Based Cancer Registry Data	Dr. Saina Sunil Kumar	Cancer Registry

70	A Prospective, Multicenter, Open-label, Phase IV, Interventional Study to Assess the Safety and Efficacy of Capmatinib in Indian Patients with Mesenchymal- Epithelial Transition (MET) exon 14 Skipping Mutation Positive Advanced Non-Small Cell Lung Cancer (NSCLC)	Dr.Manuprasad	CHMOG
71	ALPelisibINDia Safety STudy(ALPINIST): a Phase IV, prospective, multicenter, open-label, non-comparative, interventional study to assess the safety of alpelisib plus fulvestrant, in men and post-menopausal women with HR-positive, HER2-negative, advanced breast cancer (aBC) with a PIK3CA mutation, whose disease has progressed on or after endocrine-based treatment	Dr.Manuprasad	CHMOG
72	A Phase IIb/III, Randomised, Double-blind, Placebo-controlled, Multicentre, Study of CA-170 in Combination with Chemotherapy in Patients with Stage IV Non-Squamous Non-Small Cell Lung Cancer (ASIAD-3)	Dr.Manuprasad	CHMOG
73	A Phase II Open-Label Trial Evaluating the Efficacy and Safety of Once Daily Oral ODM-203 in Patients with Unresectable Transitional Cell Urothelial Carcinoma with FGFR3 Mutation (TEJAS-1)	Dr. Praveen Kumar Shenoy	CHMOG
74	Outcomes and prognostic factors in patients with Burkitt lymphoma: real-world data	Dr.Chandran K Nair	CHMOG
75	Prevalence of swallowing-related problems after radiation therapy among patients with head and neck and lung cancer	Dr.Vineetha	CHMOG
76	Anti-Hypertensive Drug compliance among hypertensive patients	Dr. Praveen Shenoy	CHMOG
77	Menopausal problems among women	Dr.Sithara Aravind	CLS & TR
78	Role of tumor-infiltrating lymphocytes as a predictive marker for assessing pathologic response after neoadjuvant chemotherapy in triple-negative and HER2 positive breast cancers; A retrospective analysis from a tertiary cancer centre in South India	Dr.Aswathy Krishnan	CLS & TR
79	Depth of invasion and Tumor-infiltrating lymphocytes as predictors of lymph node metastasis in early oral squamous cell carcinoma	Dr. Vivek Nair	CLS & TR



80	Correlation Of IgG and IgA Monoclonal Gammopathy With Crab Criteria In Newly Diagnosed Multiple Myeloma Patients.	Dr. Sindhu	CLS & TR
81	Profiling of light chain elevation in newly diagnosed myeloma patients and correlation between light chain type and CRAB criteria.	Dr. Sindhu	CLS & TR
82	Distress And Insomnia Among Cancer Patients Admitted For Surgery – A Retrospective Cross-Sectional Study From A Tertiary Cancer Centre	Ms. Jisha Abraham	Psycho Oncology
83	Radiotherapy for Pediatric malignancies: An experience from a tertiary cancer centre	Dr.Vinin	Radiation Oncology
84	Clinical Outcome And Tolerance Of Radical Chemoradiation For Anal Canal Carcinoma	Dr.Vinin	Radiation Oncology
85	Effectiveness of planned teaching program on prevention of cervical cancer among women	Dr. Adarsh	Surgical Oncology

### SCIENTIFIC ADVISORY COMMITTEE (SAC)-Reconstitution 2020

Scientific advisory committee will periodically review the training, services and research activities of the Malabar Cancer Center and evaluate and make recommendations to the Executive Committee (EC) and Governing Body of the Malabar Cancer center.

SL.NO	NAME	DESIGNATION	POSITION
1	Prof. Kanjaksha Ghosh	Former Director, National Institute of Immune Hematology, ICMR	Chairman
2	Dr.ManojMurahekar	Director, National Institute of Epidemiology, Chennai	Member
3	Dr.Mohanasankar Sivaprakasam	Director, HTIC, Associate Professor, Department of Electrical Engineering, IIT Madras	Member
4	Dr. B. Venkatraman	Outstanding Scientist & Director, Health, Safety and Environment Group, Indira Gandhi Centre for Atomic Research, Kalpakkam	Member
5	Dr.Moni Kuriakose	Director, Cochin Cancer Centre	Member
6	Dr. R. Swaminathan	Assistant Director, Professor, and Head Department of Epidemiology, Biostatistics and Cancer Registry & Cancer Institute (WIA), Chennai	Member
7	Dr.R.M.Pandey	Professor & Head, Dept of Biostatistics, AIIMS, New Delhi	Member
8	Dr.Sathees C Raghavan	Professor, Department of Biochemistry, Indian Institute of Science, Bangalore	Member
9	Dr.ManjuSengar	Professor, Department of Medical Oncology, Tata Memorial Hospital, Mumbai	Member
10	Dean, Research	KUHS (Official nomination)	Member
11	Director	MCC	Convener

## RESEARCH ADVISORY COMMITTEE (RAC)

SL NO	NAME & ADDRESS	POSITION
1	Dr.Bhudev Chandra Das, PhD, FNASc, FASc, FAMS, FNA J.C. Bose National Fellow. Hargobind Khorana Chair Professor Amity Institute of Molecular Medicine & Stem Cell Research (AIMMSCR) Dean, Health and Allied sciences Amity University Uttar Pradesh, Sector-125, Noida, India-201313	Chairman
2	Prof KBR Varma Vice Chancellor Sathya Sai University Prasanthi Nilayam, Anantapur Distict Puttapathi,Andhra Pradesh 515134	External Member
3	Dr.Shantikumar Nair Dean of Research, Director, Nanosciences, Center for Nanosciences, Amrita Institute of Medical Science Kochi	External Member
4	Dr.Harikrishna Varma P. R. Head ,Biomedical Technology Wing Sree Chitra Tirunal Institute for Medical Sciences & Technology, Satelmond Palace, Poojappura,Thiruvananthapuram, Kerala, India	External Member
5	Dr. N Raghu Director, Centre for Materials for Electronics Technology (C-MET) Athani P.O., SH22, Kerala 680581	External Member
6	Dr.RajendraPilankatta Dean, School of Medicine and Public Health SMPH), Associate Professor Department of Biochemistry and Molecular Biology Central University of Kerala Tejaswini Hills, Periyar (PO), Kasaragod (DT), Kerala – 671316	External Member
7	Prof (Dr) Sangeetha K Nayanar Head of the Department Department of Clinical Laboratory Service and Translational Research Malabar Cancer Centre, Thalassery.	Internal Member
8	Dr Deepak Roshan VG Assistant Professor Division of Genetics and Cytogenetics Malabar Cancer Centre, Thalassery.	Internal Member
9	MMrs.Maya Padmanabhan Lecturer, Division of Clinical Research and Biostatistics Malabar Cancer Centre, Thalassery.	Internal Member
10	Prof (Dr) Satheeshan B Director, Malabar Cancer Centre, Thalassery.	Convener & Member secretary

## INTRA MURAL RESEARCH FUND REVIEW COMMITTEE MEMBERS

SL. NO.		
1	Dr.Sreejayan M P Professor of Surgery, Govt Medical College Kozhikode	Chairman
2	Dr.Chandran C Professor Dept of Statistics, University of Calicut	Member
3	Dr.Anu Augustine, HoD Dept of Biotechnology and Microbiology, School of Life Sciences, Kannur University	Member

## PUBLICATION 2021-22

1. Sajani S, Parthiban R, Saravanan M, Sarath KE. Changing Trends in Antimicrobial Resistance among Gram-negative Bacilli isolated from Respiratory tract of Cancer Patients at a Tertiary Cancer Centre: A 4-year Retrospective Study.(2021). Int J Pharm Sci.;12(2):b114-123.
2. Neoadjuvant Platinum Based Chemotherapy in Triple Negative Breast Cancer-
3. Preliminary Experience from A Tertiary Cancer Centre,Praveen Kumar Shenoy,Joneetha Jones , Vinin N V, Manuprasad A(2021).Int J Pharm Sci.12(2), 71-77
4. Parthiban Rudrapathy, Athira KV, Sajani Samuel and Saravanan Murugesan. Phenotypic Detection of Metallo- Beta-Lactamase (MBL) Producing Gram Negative Bacteria and their Prevalence in a Tertiary Care Cancer Centre. International Journal of Pharma and Bio Sciences. ISSN 0975-6299.
5. Saravanan Murugesan, Sujina Tk, Sajani Samuel, Sarath KE, Parthiban Rudrapathy. Methicillin-Resistant Staphylococci Prevalence in Cancer Patients at a Tertiary Care Cancer Centre – A Retrospective Study. Asian J Pharm Clin Res, Vol 14, Issue 7, 2021, 82-85.
6. Rudrapathy P, Samuel S, Murugesan S. Microbiological profile and Antibiotic resistance of bloodstream infections among cancer patients at a tertiary care cancer centre in North Kerala, India. National Journal of Laboratory Medicine (Accepted). (DOAJ)
7. Sajani Samuel, Neeraja.O, Parthiban R, Saravanan M, and Sarath K.E. Distribution of resistant genes encoding extended-spectrum beta -lactamases in enterobacteriaceae isolated from various clinical samples in a tertiary care cancer centre- NJLM - National Journal of Laboratory Medicine (Accepted). (DOAJ)
8. Sajani Samuel, Vismaya, Parthiban R, Saravanan M, and Sarath K.E. ESBL Prevalence in Urine Specimens of Cancer Patients at a Tertiary Care Cancer Centre in Kerala - International Journal of Biosciences. (DOAJ)
9. Breast cancer in young women of age 35 years and below:Initial experience at a tertiary cancer centre in South India, Sithara Aravind, Geetha Muttath, Fathima Bincy, Mohandoss Murugesan, Sangeetha K Nayanar, Satheesan Balasubramanian, Oncology and Radiotherapy 15 (9) 2021: 1-6
10. Knowledge, perception, and attitude of the general population toward cancer and cancer care: A cross-sectional study,Maya Padmanabhan, Satheesan Balasubramanian, EK Muhammed Sha, Riyas Malodan;Cancer Research, Statistics and Treatment,2021, Vol 4, Issue 2, 251-255
11. Patient satisfaction in Home care services through e-Palliative Care - An experience of tertiary cancer centre from Kerala, Balasubramanian S, Biji MS, RanjithMK, Abhina SS, Cancer palliative Medicine,2021
12. Analysis on the composition of leukapheresis product – A comparison between MCS+® + and spectra optia® apheresis equipment, Murugesan M, Chellaiya GK, Nair CK, Nayanar SK, J Appl Hematol 2021;12:1-5
13. Adopting a vein assessment tool improves procedural outcomes in double dose platelet collections – A prospective study, Augustine M, Murugesan M, Nayanar SK, Padmanabhan M ,TransfusApher Sci 2021;60:103198
14. Determination of mononuclear cell count using peripheral smear and flow cytometry in peripheral blood stem cell products: A retrospective study from an Indian cancer center, Krishnan A, Murugesan M, Therayangalath B, Philip KJ, Nayanar SK, Nair CK.. Asian J Transfus Sci 2021;15:151–6.
15. Analysis of red blood cell irradiation practices from South India, Murugesan M, Augustine M, Nayanar SK, Asian J Transfus Sci 2021;15:199–203
16. Extent of transfusion support in a developing country in managing a bleeding acute myeloid leukemia patient with platelet transfusion refractoriness, Chellaiya GK, Nair CK, Raghavan V, Pandian RJ, Vinod R, Murugesan M, Asian J Transfus Sci 2021;15:90–3
17. Changing trends of invasive mediastinal evaluation in India: A questionnaire-based survey

Chandveetil J, Kattepur AK, Pareekutty NM, Kumbakara R, Balasubramanian S. Cancer Res Stat Treat 2021;4:231-7

18. Totally implantable venous access devices in cancer chemotherapy: A retrospective analysis of 8421 catheter days in a tertiary cancer center Chandveetil J, Kattepur AK, Pareekutty NM, Alapatt JJ, Mathiyazhakan AR, Kumbakara R, et al.. Cancer Res Stat Treat 2021;4:449-55.
19. Authors' reply to Shah et al. and Kreditsu Chandveetil J, Pareekutty NM, Kattepur AK.. Cancer Res Stat Treat 2021;4:575-6
20. Comparison of patient controlled epidural analgesia with continuous epidural analgesia for postoperative pain control after surgeries for gynaecological cancers-a randomized controlled study. Jashma Chandveetil, Nizamudheen M Pareekutty, Gnanam Sathyamurthy, Rajani Sundar. Oncology and Radiotherapy 2021;15(4):18-23.
21. Suresh An audit of Organ at Risk (OAR) constraints achieved for carcinoma of the nasopharynx treated with intensity modulated radiotherapy, Greeshma KE, Geetha Muttath, Joneetha Jones, Nabeel Yahia, Vinin N V, Arun P Narendran, Akhil P. Oncology and Radiotherapy ,2021, Vol.15 Iss.6:10-15
22. P. M. Philip and S. Kannan, "Patient Interval and Associated Factors in the Diagnostic Journey of Oral Cancer: A Hospital-Based Cross-Sectional Study from Kerala, India," Asian Pacific Journal of Cancer Prevention, vol. 22, no. 10, pp. 3143–3149, Oct. 2021



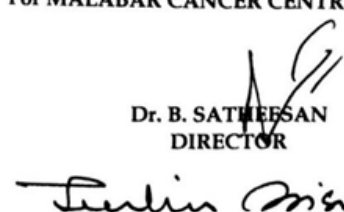
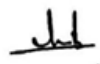
## OTHER COMMITTEES

SL NO	NAME OF COMMITTEES
1	Academic Council
2	Administrative Committee
3	Building Committee
4	Canteen Core Committee
5	Internal Complaint Committee
6	CSR Committee
7	Patient Welfare Committee
8	Technical Committee
9	Stock Verification Committee
10	Pre-bid Committee
11	Radiation Safety Committee
12	Waste Management Committee
13	Library Committee

## COURSES

Sl No	Course	Duration	University/ Board
1	DNB Surgical Oncology	3 Years	National Board of Examinations
2	DNB Pathology	3 Years	National Board of Examinations
3	B. Sc MRT, (Medical Radiology Technology)	4 Years	Kerala University of Health Sciences
4	B.SC. Nursing	4 Years	Kerala University of Health Sciences
5	FHNO fellowship	2 Years	
6	Oral oncology fellowship	2 Years	
7	Basic Certificate Course in Community Palliative Nursing (BCCCPN)	6 weeks	Institute of Palliative Medicine, Kozhikode
8	Certificate Course in Community Palliative in Auxiliary Nursing Course(CCPAN)	3 Months	Institute of Palliative Medicine, Kozhikode
9	Fellowship in Head and neck oncology	1 Year	Institutional fellowship
10	Fellowship Programme in High Precision Radiotherapy	1 Year	Institutional fellowship
11	Fellowship in Gynec Oncology	2 Years	Institutional fellowship
12	Fellowship in Oncopathology	2 Year	Institutional fellowship
13	Fellowship in Head & Neck Pathology		
14	Fellowship in Nutrition Oncology	1Year	Institutional fellowship
15	Indian Association of Palliative Care Courses		
16	Distance education course in Cancer Pain and Palliative Medicine		
17	Post Basic Diploma in Oncology Nursing	1 Year	Kerala Nursing Midwifery Council

# AUDITOR'S REPORT 2021-22

MALABAR CANCER CENTRE SOCIETY THALASSERY, KANNUR			
CONSOLIDATED BALANCE SHEET AS AT 31ST MARCH 2022			
PARTICULARS	Schedule No.	FY : 2021-2022	FY: 2020-2021
<b>I. FUNDS &amp; LIABILITIES</b>			
<b>1. Trust Funds</b>			
a. Capital Fund	1	1,36,61,67,293.40	1,29,28,02,183.37
b. Grant in Aid- Capital Grant (Pending Utilisation)	2	5,67,06,795.58	10,62,31,205.58
c. Funds & Schemes	3	6,69,16,241.40	5,32,28,127.06
		<b>1,48,97,90,330.38</b>	<b>1,45,22,61,516.01</b>
<b>2. Current Liabilities</b>			
a. Sundry Creditors		14,75,63,737.52	16,53,09,006.00
b. Income Received in Advance		35,07,399.04	21,91,806.02
c. Provision for Expenses	4	2,57,60,690.40	3,05,05,816.00
d. Other current liabilities	5	14,15,12,348.61	15,60,16,612.61
		<b>31,83,44,175.57</b>	<b>35,40,23,240.63</b>
<b>TOTAL</b>		<b>1,80,81,34,505.95</b>	<b>1,80,62,84,756.64</b>
<b>II. PROPERTY &amp; ASSETS</b>			
<b>1. Property , Plant &amp; Equipment</b>			
a. Tangible assets	6	1,06,82,93,112.50	70,43,21,102.90
b. Capital Work In Progress		31,02,44,798.19	57,04,41,846.89
		<b>1,37,85,37,910.69</b>	<b>1,27,47,62,949.79</b>
<b>2. Current assets</b>			
a. Deposits ,Advances & other current assets	7	5,56,23,074.76	12,44,75,155.43
b. Cash and cash equivalents	8	16,84,45,629.12	8,90,24,944.95
c. Closing stock	9	13,04,30,393.22	9,96,10,744.04
d. Sundry Debtors		7,50,97,498.16	21,84,10,962.43
		<b>42,95,96,595.26</b>	<b>53,15,21,806.85</b>
<b>TOTAL</b>		<b>1,80,81,34,505.95</b>	<b>1,80,62,84,756.64</b>
Significant accounting policies and Notes on Accounts	26		
As per our report of even date attached			
<b>For RSM &amp; ASSOCIATES</b> <b>CHARTERED ACCOUNTANTS</b> FR No. 28135  <b>PAUL JOSEPH K FCA</b> <b>PARTNER</b> M.No.26816 UDIN : 22026816AVYUIL1019 		<b>For MALABAR CANCER CENTRE SOCIETY</b>  <b>Dr. B. SATHEESAN</b> <b>DIRECTOR</b>  <b>TINKU BISWAL IAS</b> <b>PRINCIPAL SECRETARY TO GOVERNMENT</b> <b>Health &amp; Family Welfare</b> <b>Government of Kerala</b>   <b>ANILA . L</b> <b>Additional Secretary to Govt.</b> <b>Finance Department . Government of Kerala</b>	
Place: COCHIN Date : 05.09.2022			



**MALABAR CANCER CENTRE SOCIETY  
THALASSERY, KANNUR**

**CONSOLIDATED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2022**

SL.N o:	PARTICULARS	Schedule No.	FY : 2021 -2022	FY : 2020 -2021
<b>I.</b>	<b>INCOME</b>			
	Revenue from Hospital operations	10	34,47,82,717.00	38,77,21,409.00
	Grant In Aid - Revenue Grant	11	9,10,71,000.00	10,51,78,000.00
	Rental Income	12	24,55,391.00	18,54,409.00
	Income from Training and Teaching	13	1,63,82,254.04	1,02,72,626.00
	Other Income	14	43,99,127.60	27,84,900.47
	Pharmacy Collection		23,02,07,101.00	17,62,71,144.00
	Penal Liquidation Charges		44,40,835.00	3,71,801.00
	Interest Income		25,66,632.00	17,19,809.00
	Canteen Sales		3,09,89,293.00	2,04,56,111.00
	Donation Received		1,04,150.00	-
	<b>Project fund utilised</b>			
	HBCR - NCDIR -ICMR Project		8,28,284.00	8,13,706.00
	NCDIR - E-MOR Project Fund		6,70,152.00	6,06,296.00
	YIPB Project		4,96,565.00	1,66,428.00
	BIRAC - Lamp Based Study		4,38,797.00	55,533.00
	SARS Cov-2RT-PCR- clinical Study		1,05,215.00	1,99,777.00
	BIRAC CTN Project		24,95,636.00	-
	BIRAC - Mission Covid Suraksha Project		60,96,373.00	-
<b>II</b>	<b>Total Income</b>		<b>73,85,29,522.64</b>	<b>70,84,71,949.47</b>
<b>III</b>	<b>EXPENDITURE</b>			
	Pharmacy consumption	15	17,73,98,800.44	13,11,67,959.01
	Employee Benefit Expenses	16	43,02,53,500.00	42,41,15,675.00
	Consumables/Treatment Expenses	17	4,60,87,320.74	5,51,52,807.58
	Energy Charges	18	2,65,78,429.80	2,58,58,183.00
	Programme Expenses	19	8,690.00	1,24,672.00
	Rates & Taxes	20	7,04,675.00	38,74,750.20
	Vehicle Expenses	21	18,17,341.06	18,62,474.00
	Course Conducting Expense	22	14,56,499.80	4,70,637.40
	Printing & Stationary	23	14,06,698.63	13,26,497.37
	Canteen Purchase & Expenses	24	1,90,02,639.94	1,51,37,397.00
	Other Expense	25	46,68,682.00	27,15,029.00
	Advertisement Expenses		7,78,609.00	6,47,358.00
	Repairs & Maintenance		23,36,888.00	29,18,013.00
	Travelling Expenses		3,16,090.00	1,32,946.00
	Rent Paid		11,25,000.00	9,75,000.00
	Bank Charges		26,481.19	1,19,272.98
	Legal & Professional Charges		3,33,990.00	2,98,040.00
	Cleaning & Laundry Expenses		1,39,33,469.00	1,57,74,612.00
	AMC Charges		1,23,52,267.00	3,80,27,929.00
	Security Service Charges		1,09,23,890.00	1,09,18,130.00
	Subsidy given to patients		4,21,806.00	88,24,387.00
	Audit Fee		2,06,500.00	2,06,500.00
	Depreciation	6	15,40,21,916.00	11,40,18,515.00





<b>Project Expenses</b>			
<b>HBCR - NCDIR -ICMR Project</b>	6,69,171.00	7,00,526.00	
Salary & Allowances	99,525.00	92,954.00	
Printing & Stationery	2,836.00	4,992.00	
Postage & Communication	-	15,234.00	
Computer Consumables	56,752.00	-	
Asset acquisition	-	-	
<b>NCDIR -E-MOR Project Fund</b>	6,28,616.00	5,99,790.00	
Salary & Allowances	41,536.00	6,506.00	
Printing & Stationery	-	-	
<b>YIPB Project</b>	-	1,66,428.00	
Salary & Allowances	4,96,565.00	-	
Purchase of re-agents	-	-	
<b>BIRAC - Lamp Based Study</b>	-	5,533.00	
Advertisement Expenses	1,90,188.00	50,000.00	
Salary & Allowances	59,459.00	-	
Asset acquisition	1,89,150.00	-	
Purchase of re-agents	-	-	
<b>SARS Cov-2RT-PCR- clinical Study</b>	-	93,377.00	
Salary & Allowances	-	1,06,400.00	
Covid -19 Combo Kit	-	-	
Purchase of re-agents	1,05,215.00	-	
<b>BIRAC CTN Project</b>	14,85,485.00	-	
Salary & Allowances	9,198.00	-	
Printing & Stationery	9,85,333.00	-	
Asset acquisition	9,340.00	-	
Computer Consumables	6,280.00	-	
Registration fee	-	-	
<b>BIRAC - Mission Covid Suraksha Project</b>	12,73,597.00	-	
Salary & Allowances	8,000.00	-	
Training Fee	5,428.00	-	
Printing & Stationery	45,02,175.00	-	
Asset acquisition	4,533.00	-	
Patient Expenses	2,26,369.00	-	
Purchase of re-agents	24,940.00	-	
Program Expenses & Refreshments	1,500.00	-	
Repairs & Maintenance	49,831.00	-	
Advertisement Expenses	-	-	
IV <b>Total Expenditure</b>	<b>91,72,91,205.61</b>	<b>85,65,08,524.54</b>	
V <b>Excess of Expenditure over Income (II-IV)</b>	<b>17,87,61,682.97</b>	<b>14,80,36,575.07</b>	
Significant accounting policies and Notes on Accounts			26

As per our report of even date attached

For RSM & ASSOCIATES  
CHARTERED ACCOUNTANTS  
FR No. 28135

PAUL JOSEPH K FCA  
PARTNER  
M.No.26816  
UDIN : 22026816AVYUIL1019



Place: COCHIN  
Date : 05.09.2022

For MALABAR CANCER CENTRE SOCIETY

Dr. B. SATHEESAN  
DIRECTOR

Tinku Biswal  
TINKU BISWAL IAS  
PRINCIPAL SECRETARY TO GOVERNMENT  
Health & Family Welfare  
Government of Kerala

ANILA, L  
Additional Secretary to Govt.  
Finance Department . Government of Kerala

**MALABAR CANCER CENTRE SOCIETY  
THALASSERY, KANNUR**

**CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2022**

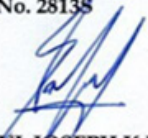



Sl.No:	PARTICULARS		FY : 2021 -2022
I.	<b>RECEIPTS</b>		
	<u>Opening Balance</u>		
	Cash in Hand	6,99,615.00	
	Cash at Bank	8,83,25,329.95	8,90,24,944.95
	<u>Corpus Funds</u>		
	Grant Received from Govt		19,98,76,219.00
	<u>Receipts from Funds &amp; Schemes</u>		
	BIRAC - Mission Covid Suraksha Project	60,39,000.00	
	C-MET Project Design & Dev.of Ultrasonic TransDuc	9,93,000.00	
	DBT AIDO Scan Project	5,14,400.00	
	ICMR Project -HPV Associated Oral	12,01,160.00	
	ICMR Project - Oral Precancer	11,85,216.00	
	Indian Oil Corporation , Mumbai	41,98,907.50	
	SRS Project - Clinicopathologic	4,45,000.00	
	State Health Agency (SHA) Credits	28,26,31,724.00	
	Patients Welfare Schemes	12,60,346.00	
	Patients' Account (PMNRF)	1,19,65,143.00	
	HBCR - NCDIR - ICMR Project	8,08,791.00	
	Medical Librarian	29,415.00	
	NCDIR - E - MOR Project	6,32,575.00	
	Training Fund - KSACS	97,100.00	
	Academic & Research Fund	12,92,107.84	31,32,93,885.34
	<u>Income Received</u>		
	Income from Training & Teaching	1,63,05,811.04	
	Revenue from Hospital Operations	22,62,44,789.00	
	Interest income	23,66,634.00	
	Rental Income	18,79,816.00	
	Canteen Sales	2,25,42,365.00	
	Discount Received	14,770.00	26,93,54,185.04
	<u>Other Income</u>		
	Application Fee	5,51,758.00	
	Fine & ID fee	83,150.00	
	Income from Ambulance Service	4,510.00	
	Income from sale of Bus Coupon	4,03,740.00	
	Income from sale of Tender forms	10,01,356.00	
	Income from xerox	1,44,451.00	
	Miscellaneous Income	1,06,537.66	
	RTI Fee collected	3,363.00	
	Sale of Sand , Scrap & Trees	10,69,137.00	
	Van Hire Charges Collected	2,200.00	33,70,202.66
	<u>Grand Received from Govt</u>		9,10,71,000.00
	<u>Insurance Claim Received</u>		54,180.00
	<u>Income received in Advance</u>		2,41,37,948.02
	<u>Caution Deposit received</u>		19,81,350.00
	<u>Advance received</u>		6,17,57,846.78
	<u>EMD Received</u>		38,49,357.00
	<u>Security Deposit received</u>		22,84,229.00
	<u>Retention Money</u>		5,16,174.00
	<u>Donation received for Canteen</u>		23,22,593.00
	<u>Term Deposit Matured</u>		7,30,46,672.55
	<u>Receipt from Debtors (Net)</u>		11,92,96,792.47
	<u>Branch Transfers</u>		
	Malabar Cancer Centre	14,679.00	
	MCC - Canteen	12,59,534.00	
	MCC - Nursing College	35,08,338.00	47,82,551.00
	<b>TOTAL</b>		<b>1,26,00,20,130.81</b>





<b>II</b>	<b>PAYMENTS</b>		
	<b>Funds Utilised</b>		
	BIRAC - Mission Covid Suraksha Project	8,130.00	
	Patients' Account (PMNRF)	13,40,041.00	
	Patients Welfare Schemes	10,88,727.00	
	BIRAC - CTN Project	8,650.00	
	Medical Librarian	26,287.00	
	Training Fund - KSACS	15,660.00	
	Academic & Research Fund	17,214.00	25,04,709.00
	<b>Payment to Creditors (Net)</b>		54,61,03,643.00
	<b>Bank Loan recovered remitted</b>		6,40,000.00
	<b>EMD Refunded</b>		35,56,074.00
	<b>Security Deposit refunded</b>		31,65,359.00
	<b>Caution Deposit refunded</b>		17,69,500.00
	<b>Deposits</b>		1,88,624.00
	<b>Advance given</b>		5,83,59,716.00
	<b>GST &amp; Flood Cess Paid</b>		13,31,380.00
	<b>Tax Deducted at Source</b>		8,67,490.00
	<b>Capital Expenditure</b>		
	Plant & Machinery	20,87,795.91	
	Furniture & Electrical fittings	9,303.00	
	Computer & Computer software	763.00	
	Books & Journals	27,85,005.19	
	Capital Work in Progress	1,48,20,559.00	1,97,03,426.10
	<b>Indirect Expenses</b>		
	Distress Relief Fund	4,50,000.00	
	Exam Fees - BSC MRT	1,91,940.00	
	Employee Benefit Expenses	36,28,96,534.00	
	Vehicle Running & Maintenance	5,04,590.00	
	Energy Charges	2,57,89,310.00	
	Telephone Charges	26,500.00	
	Rent	80,000.00	
	Visiting Consultant Charges	5,12,267.00	
	Statutory Payments	4,68,68,302.00	
	Printing & Stationery	1,11,411.00	
	Repairs & Maintenance	9,64,324.00	
	Travelling & Conveyance	77,576.00	
	Bank Charges	26,433.99	
	Consumables & Other Treatment Expenses	8,41,630.00	
	Subsidy to Patients	2,15,175.00	
	Course Conducting Expenses	10,95,167.00	
	Legal & Professional Charges	14,300.00	
	Programme Expenses	8,690.00	
	Rates , Fees & Tax	6,84,460.00	
	Canteen Purchase	3,72,284.00	
	Canteen Expenses	29,12,362.00	
	<b>Other Expenses</b>		
	Cable Subscription Charges	11,200.00	
	Insurance Charges Paid	12,00,000.00	
	Meeting Expenses	1,32,228.00	
	General Expenses	1,42,662.00	
	Postage & Communication	3,33,043.00	
	Water Charges	90,398.00	44,65,52,786.99



<b>Branch Transfers</b>			
Malabar Cancer Centre		47,48,467.00	
MCC - Canteen		8,51,834.00	
MCC - Nursing College		12,31,492.60	
MCC - Creche		-	68,31,793.60
<b>Closing Balance</b>			
Cash in Hand		8,38,542.00	
Cash at Bank		16,76,07,087.12	16,84,45,629.12
<b>TOTAL</b>			<b>1,26,00,20,130.81</b>
<i>Significant accounting policies and Notes on Accounts</i>			-
As per our report of even date attached			
<b>For RSM &amp; ASSOCIATES</b> <b>CHARTERED ACCOUNTANTS</b> <b>FRNo. 2813S</b>  <b>PAUL JOSEPH K FCA</b> <b>PARTNER</b> <b>M.No.26816</b> <b>UDIN : 22026816AVYUIL1019</b>    <b>Place: COCHIN</b> <b>Date : 05.09.2022</b>		<b>For MALABAR CANCER CENTRE SOCIETY</b>  <b>Dr. B. SATHEESAN</b> <b>DIRECTOR</b>  <b>TINKU BISWAL IAS</b> <b>PRINCIPAL SECRETARY TO GOVERNMENT</b> <b>Health &amp; Family Welfare</b> <b>Government of Kerala</b>   <b>P. ANILA, L</b> <b>Additional Secretary to Govt.</b> <b>Finance Department . Government of Kerala</b>	

## PATIENT WELFARE ACTIVITIES

The Patient Welfare Committee was constituted for the smooth functioning of our Patient Welfare Activities has attributed a boost to our patient services and management. The Committee consists of Doctors of different specialties, representatives from Administrative section, Social Scientist and Nursing personnel. The Committee co-ordinates the welfare activities of the patients who are undergoing treatment at this Centre. It promotes to raise the fund for the patient welfare fund from the general public as well as staff members of Malabar Cancer Centre. Majority of the staff members generously donate to this fund. This fund is utilized for the treatment/investigations for the needy patients after proper assessment.

### PATIENT WELFARE SCHEMES

- Comprehensive Health Care Project for Scheduled Tribe patients.
- Prime Minister's National Relief Fund
- Chief Ministers Relief Fund
- Cancer Suraksha Scheme
- Thalolam
- Sneha Santhwanam
- CHIS PLUS
- PMRS (Pondicherry Medical Relief Society)
- Employees State Insurance Credit facility
- Karunya Benevolent fund

### MCC'S OWN PATIENT SUPPORT FACILITIES

#### Patient Free Food Scheme:

As most of our patients belong to lower socio-economic strata struggling to earn for their meal, with the financial assistance from philanthropists and like-minded organizations, all in-patients are given food (three times a day) at free of cost. Malabar CH Centre provides Free Food Scheme since 2012.

#### Patient Welfare Fund:

The Patient Welfare Committee co-ordinates all the welfare activities of the patients who are undergoing treatment at this Centre. It promotes to raise the money for the patient welfare fund from the general public as well as staff members of Malabar Cancer Centre. This fund is utilized for the treatment/investigations for the needy patients after proper assessment. Those patients who fail to get any Government assistance scheme are assisted with this fund.

#### Hospital Library for Patients and Relatives:

A unique Hospital library for patients, their relatives and staff is functioning in the centre since 2005. The library is funded by Kerala State Library Council.

#### Free Home care Services:

Home care services are provided to patients staying nearby and who are unable to travel to MCC for availing treatment. Medicines like morphine, certain palliative procedures are performed by trained staff. MCC's own vehicle is used for the purpose and no charge is levied for the services.

**Drug Bank:**

Apart from the above a Drug Bank is also formulated for collection of drugs from Doctors in and around Thalassery and also sample medicines issued from various pharmaceutical companies. Such medicines are issued free of cost to the needy poor patients, who are undergoing treatment from this Centre.

**Free Transport System:**

Renowned business tycoon and great philanthropist, Shri.Gokulum Gopalan and donated a mini bus for transportation of patients to and from MCC, which is situated on a hill top in the suburb of Thalassery town and Railway station of Thalassery. This is of immense help to poor patients.

**Waiting area and resting area for Bystanders**

Constructed using the MLA ADS scheme of Advt. AN. Shamseer, MLA Thalassery.

**Dormitory Support for bystanders (carers):**

Many patients come from far off places from various Districts. Their care givers need accommodation to support their loved ones. Most of them are unable to bear the expenses of stay in rented buildings or Hotels. Hence through MPLADS, Adv.Sathidevi was kind enough to provide a Dormitory, built within the campus. Here bystanders of in-patients are provided free accommodation.

**‘AKSHAYA’- Financial support scheme for Bone marrow transplantation:**

Bone marrow transplantation (BMT) treatment is highly expensive and not many patients will be able to afford the same. It is a state of art curative treatment for my blood cancers. But it has significant failure and death rate apart from financial toxicity. The Government sponsored schemes will not be quite enough to cover up the expenses in this regard. To help out poor cancer patients, MCC has decided to set up a separate fund for meeting the expenses of patients in this regard. Donations from individuals, voluntary organizations, philanthropists are expected for raising this fund. The fund is proposed as a "Ever Green"scheme. Monthly electronic transfer to the account of Akshya Scheme from the donor's account through standing instruction to the bank is suggested to achieve the goal. Any amount is considered big and there is no limitations to the monthly transfer. It is desired to get a minimum of 10 lakhs per month through this method so that no patient shall drop out of the ambit of Bone marrow transplantation.

**SUPPORT GROUPS**

MCC initiates the formation of five supports groups for the welfare and rehabilitation of Breast and Colostomy, Bone Marrow Transplantation, All survivors, Limb Salvage Surgery patients;

1. Thejas: Thejas (Breast Support group) is started on 30-09-2009
2. Spandhanam: Ostomy Association started on 21-11-2011
3. Navajeevan
4. Amrutham
5. Sanjeevani



# How to Support MCC

## **An Appeal:**

As you are aware that cancer treatment is expensive and many people could not afford the expenditure without some kind of financial assistance. Our centre is also committed to offer free treatment to financially and socially backward patients and others on a concessional rate. Many of our patients had already applied for financial assistance from various agencies. So many broad-minded organizations and agencies had already helped our poor patients and so many of them were expressing their willingness to help such patients in future also.

Generous donations are welcome to realize the dream: It may please be noted that donations to MCC are exempted from income tax according to rule 80G of the Income Tax Act.

Donations to MCC may be forwarded to  
**Director, Malabar Cancer Centre or to the following Account in IDBI,  
Thalassery Branch:**

Account Number	Bank	Branch	IFSC Code
1154104000017958	IDBI	Thalassery	IBKL0001154

## Patients Free Food Scheme

Recently MCC had started a “Patients Free Food Scheme” for all patients in MCC, irrespective of their financial status. MCC is looking forward for financial assistance as donations from individuals, corporate institutions, State owned Corporations, in this regard. Since November 2008, this programme has been running successfully. However as more and more patients are visiting the Centre the funds kept for this purpose are likely to be exhausted. In this regard MCC hereby request for financial aid to run this charity work and seek help from likeminded people and organizations to join hands for this noble venture.

Generous donations are welcome to realize the dream: Donations to MCC may be forwarded to Director, Malabar Cancer Centre or to the following Account in SBI:

Account Number	Bank	Branch	IFSC Code
30469577061	State Bank of India (SBI)	Thalassery	SBIN0000926

### ***For further details Contact:***

Shri. Rajesh A.K,  
Administrative Officer,  
Malabar Cancer Centre, Thalassery  
Mobile: (+91) 9496048800  
Phone: 0490 2355881, Fax: 0490 2355880  
E-mail: mcctly@gmail.com, aomcctly@gmail.com  
Web: www.mcc.kerala.gov.in



## Right To Information Act

Malabar Cancer Centre (MCC) has implemented the Right to Information Act 2005. Citizens can seek information about the activities of MCC by submitting a written request with contact details like Name, address, telephone number, etc. and particulars of the information sought by submitting a fee of Rs.10 at the cash counter, or Demand Draft drawn in favour of the Director, Malabar Cancer Centre payable at Thalassery. Court fee stamp/post orders will not be considered.

Per the provisions contained in section 5(i) of the Right to Information Act, 2005 the following officers are designated as the State Public Information Officer and Appellate Authority of Malabar Cancer Centre.

### Public Information Officer

**Sri. A.K. Rajesh**

Administrative Officer

Malabar Cancer Centre Thalassery

Moozhikkara (P.O), Kannur Dist.,

Kerala, India-670103.

Phone:(+91)0490 2355881,

Mobile:(+91) 94960 48800

Fax: (+91) 0490 2355880

### Asst. Public Information Officer

**Smt. Lasitha KV**

Store Keeper

Malabar Cancer Centre Thalassery

Moozhikkara (P.O), Kannur Dist.,

Kerala, India-670103.

Phone:(+91)0490 2355881,

Fax: (+91) 0490 2355880

### Appellate Authority

**Dr. B. Satheesan**

Director

Malabar Cancer Centre Thalassery

Moozhikkara (P.O), Kannur Dist.,

Kerala, India-670103.

Phone: (+91) 0490 2355881,

Fax: (+91)0490 2355880



Published by  
**Malabar Cancer Centre**

(An autonomous centre under Government of Kerala)

Thalassery-670 103, Phone : (+91) 0490 2355881, Fax: 0490 2355880

E-mail: mcctly@gmail.com Website: www.mcc.kerala.gov.in

