ANNUAL REPORT 2023-24

MALABAR CANCER CENTRE

POST GRADUATE INSTITUTE OF ONCOLOGY SCIENCES AND RESEARCH

THALASSERY
KANNUR DISTRICT,
KERALA

(An autonomous Institution under Government of Kerala)

MALABAR CANCER CENTRE

POST GRADUATE INSTITUTE OF ONCOLOGY SCIENCES AND RESEARCH THALASSERY

(An Autonomous institution under Govt of Kerala)
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ANNUAL REPORT
2023-24

VISION

The development of an exponentially progressing apex institution in oncology with equal thrust 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.
- Plaque brachytherapy started for the first time in Kerala for eye cancers.
- The second government institution in India has commenced the CAR-T Cell Therapy procedure.

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 -2022**

11) **NABL Accreditation for all laboratories-2023**

12) **Eat Right Campus certification for MCC Canteen 2023 (FSSAI)**

13) **KUHS Accreditation Grade A- 2023**

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GOVERNING BODY MEMBERS

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

GOVERNING BODY MEETINGS CONDUCTED DURING THE PERIOD

Meeting no.14, held at the Conference Hall, Hon'ble Chief Minister's Office, Government Secretariat, Thiruvananthapuram, on 13.03.2024

Sl No	Name and designation	Position
1	**Shri. Pinarayi Vijayan** Hon'ble sChief Minister of Kerala	Chairman
2	**Smt. Veena George** Hon'ble Minister for Health and Woman & Child Development	Vice-Chairperson
3	**Shri. K. Krishnankutty** Hon'ble Minister for Electricity	Alternate Vice-Chairman
4	**Adv. A.N. Shamseer** Hon'ble Speaker of Kerala Legislative Assembly, M.L.A.Thalassery	Member
5	**Smt. P.P. Divya**, President, District Panchayath, Kannur	Member (via online)
6	**Smt. Jamuna Rani**, Chairperson, Thalassery Municipality	Member (via online)
7	**Shri. A.P.M. Mohammed Hanish IAS** Principal Secretary, Health and Family Welfare and Ayush Department	Member
8	**Shri. Rabindra Kumar Agarwal IAS** Principal Secretary, Finance Department	Member
9	**Smt. Shiny George** Special Secretary, Department of Planning & Economic Affairs	Member
10	**Smt. Preethy C.S.** Joint Secretary, Power Department	Member
11	**Dr. Thomas Mathew** Director of Medical Education, Thiruvananthapuram	Member
12	**Dr. Ashokan N.** Principal, Government Medical College, Kozhikode	Member (via online)
13	**Prof. Chandrabhas Narayana** Director-Rajiv Gandhi Centre for Biotechnology Thiruvananthapuram	Member
14	**Dr.Premalatha T.K.** Principal, Government Medical College, Kannur	Member

EXECUTIVE COMMITTEE MEMBERS

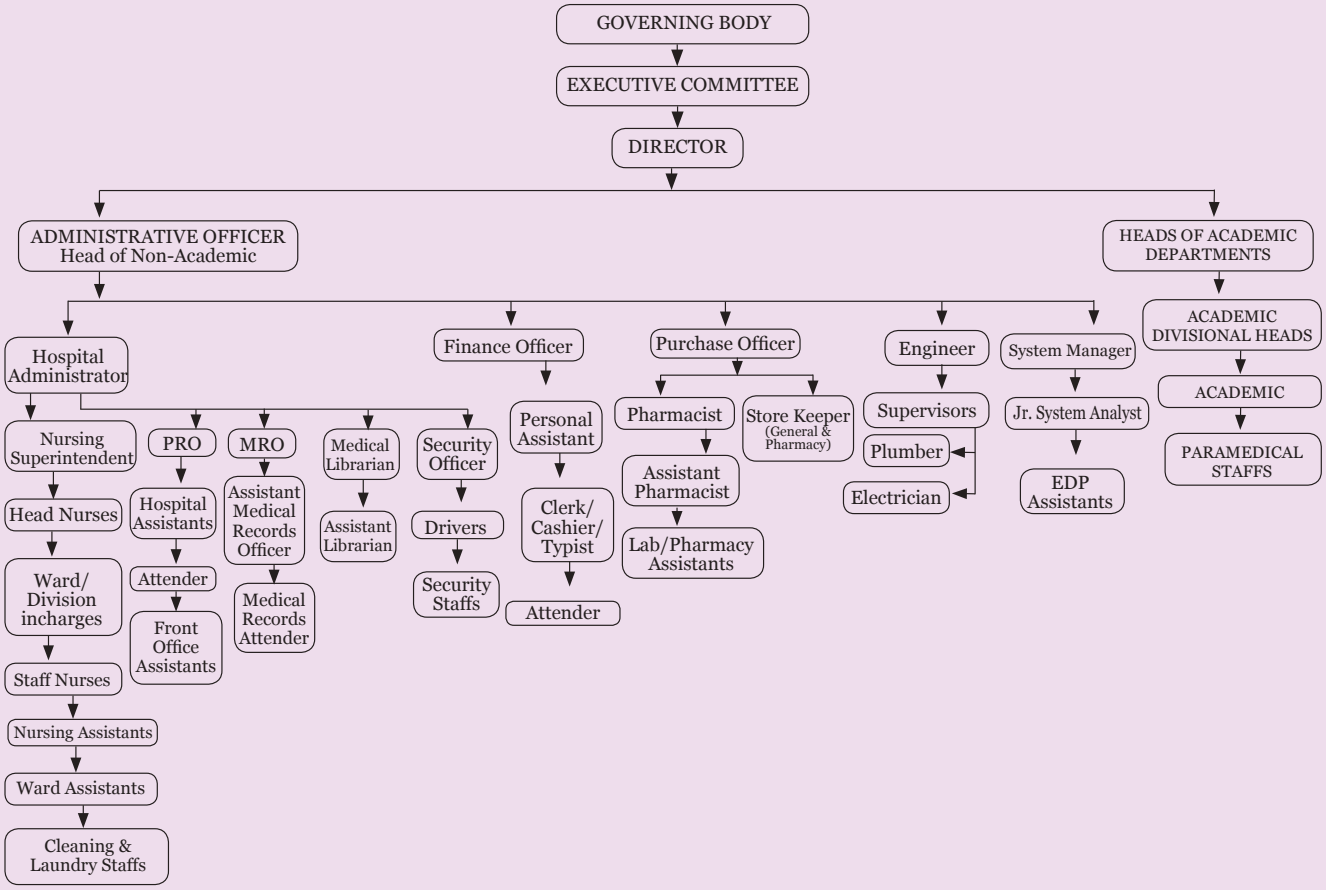
1	Secretary, Health & Family Welfare Department	Chairman
2	Secretary, Finance Department	Member
3	Secretary, Planning and Economic Affairs Department	Member
4	Secretary, Power Department	Member
5	MLA of the Constituency in which MCC is situated	Member
6	Director of Medical Education	Member
7	Chairman - Thalassery Municipality	Member
8	Director, Regional Cancer Centre	Member
9	Director- Cochin Cancer Centre and Research Centre, Kochi	Member
10	Director, Malabar Cancer Centre (PGIOSR)	Member/Convenor

EXECUTIVE COMMITTEE MEETINGS

Meeting no	Date	Venue
Meeting no.85	03.07.2023	Conference Hall, Malabar Cancer Centre, Thalassery
Meeting no.86	06.11.2023	Conference Hall no: 610, Kerala Legislative Assembly, Tvpm.
Meeting no.87	24.01.2024	Chamber of Hon'ble Speaker of Kerala Legislative Assembly, Tvpm.
Meeting no.88	28.02.2024	Online

Sl.no	Attendees	EC meeting numbers	Designation
1	Shri.Mohammed Hanish IAS	85, 86, 87 & 88	Principal Secretary to Government, Health & Family Welfare Department
2	Adv.Shri.A.N.Shamseer	85, 86, 87 & 88	Hon'ble Speaker of Kerala Legislative Assembly and MLA of Thalassery Constituency
3	Smt.Jamuna Rani	85 & 88	Chairperson, Thalassery Municipality
4	Shri.M.Muraleedharan Pillai	85	Under Secretary, Department of Finance
	Smt.S.V.Kala	86, 87 & 88	Special Secretary, Department of Finance
5	Smt.Shiny George	85, 86 & 87	Additional Secretary, Department of Planning & Economic Affairs
6	Smt.C.S.Preethi	85, 86 & 87	Joint Secretary, Department of Power
7	Dr.Thomas Mathew	85, 86, 87 & 88	Director of Medical Education
8	Dr.Rekha.A.Nair	85, 86, 87 & 88	Director, Regional Cancer Centre, Tvpm.
9	Dr.P.G.Balagopal	85	Medical Superintendent and Director-in charge (Representing, Cochin Cancer & Research Centre, Kochi)
	Dr.P.G.Balagopal	87 & 88	Director I/c, Cochin Cancer & Research Centre, Kochi
10	Dr.B.Satheesan	85, 86, 87 & 88	Director-Malabar Cancer Centre, Thalassery

ORGANOGRAM


GOVERNING BODY
EXECUTIVE COMMITTEE
DIRECTOR
ADMINISTRATIVE OFFICER
Head of Non-Academic
HEADS OF ACADEMIC DEPARTMENTS
Hospital Administrator
Finance Officer
Purchase Officer
Engineer
System Manager
ACADEMIC DIVISIONAL HEADS
Nursing Superintendent
PRO
MRO
Medical Librarian
Security Officer
Personal Assistant
Pharmacist
Store Keeper (General & Pharmacy)
Supervisors
Jr. System Analyst
ACADEMIC
Head Nurses
Hospital Assistants
Assistant Medical Records Officer
Assistant Librarian
Drivers
Clerk/ Cashier/ Typist
Assistant Pharmacist
Plumber
EDP Assistants
PARAMEDICAL STAFFS
Ward/ Division incharges
Attender
Medical Records Attender
Security Staffs
Lab/Pharmacy Assistants
Electrician
Front Office Assistants
Attender
Staff Nurses
Nursing Assistants
Ward Assistants
Cleaning & Laundry Staffs

FROM DIRECTOR'S DESK

It gives me immense pride to present the Annual Report for the year 2023–24, a year that has been transformative for Malabar Cancer Centre (Postgraduate Institute of Oncology Sciences and Research) [MCC(PGIOSR)]. This period has seen the Centre achieving new milestones in infrastructure, clinical care, academic excellence, research, and community outreach—furthering our mission of delivering comprehensive cancer care with compassion and innovation.

MCC (PGIOSR) continues to evolve as a premier tertiary cancer care institution. The Centre has made major strides in strengthening its clinical infrastructure. New state-of-the-art equipment was added to our arsenal this year, including a Surgical Operating Microscope, 3D Laparoscopy System, DEXA Scan, Second Cryostat Machine, marking a new era in precision oncology surgeries. A landmark development this year was the installation of the Robotic Surgical System—a transformative leap into the future of cancer surgery. With robotic assistance, surgeons at MCC(PGIOSR) are now empowered to perform complex procedures with greater dexterity, minimal invasiveness, and unprecedented precision, ultimately translating into better prognoses and quality of life for our patients. These advancements signify MCC(PGIOSR)'s steadfast commitment to integrating technology with compassionate care and reaffirm its position as a center of excellence in oncology.

In a landmark development, MCC(PGIOSR) became the first centre in Kerala to introduce Plaque Brachytherapy for intraocular tumors. This advancement complements the growing capabilities of our Ocular Oncology Division, which has seen a significant expansion with the installation of RETCAM, Cryotherapy, and Transpupillary Thermotherapy (TTT), further enhancing early detection and advanced treatment for ocular cancers.

We also proudly initiated Total Body Irradiation (TBI) for patients undergoing bone marrow transplantation, marking a major advancement in our radiation oncology services. TBI plays a critical role in conditioning regimens prior to stem cell transplants, helping to eliminate malignant cells and suppress the immune system to prevent graft rejection. The successful launch of this specialized service not only enhances our transplant program but also aligns MCC(PGIOSR) with globally recognized standards in comprehensive cancer care.

Over the past year, MCC(PGIOSR) has witnessed a significant rise in service utilization. A total of 7,748 new cancer patients were registered, contributing to an overall 1,10,324 patient visits. There were 5,865 in-patient admissions, while 2,130 major surgeries and 2,317 endoscopic procedures were performed in our operation theatres. Our Day Care Chemotherapy Unit administered 18,546 sessions, and the Radiation Oncology department delivered External beam curative and palliative treatment for1,199 and 1,043 patients respectively and 406 brachytherapy procedures..

The Community Oncology Department continued its vital outreach work, conducting 39 Volunteer Training Programs and 35 Cancer Awareness

Classes, strengthening public engagement and education in cancer control.

The commitment to quality and patient safety was validated this year with the NABL Accreditation for all laboratories of MCC(PGIOSR), the NABH Re-accreditation, and the prestigious NABH Digital Health Standards – Silver Level Accreditation. Our academic distinction was also reaffirmed as MCC was awarded Grade 'A' by the Kerala University of Health Sciences (KUHS).

In line with our commitment to patient welfare and overall institutional well-being, Malabar Cancer Centre proudly received the prestigious 'Eat Right Campus' certification from the Food Safety and Standards Authority of India (FSSAI). This certification is awarded to institutions that ensure safe, healthy, and nutritious food is made available to all stakeholders—including patients, caregivers, staff, and students—within the campus. The certification process involves rigorous evaluation based on parameters such as food safety measures, provision of balanced meals, reduction in use of unhealthy ingredients, and promotion of hygiene and sustainability practices in food preparation and distribution. Achieving this certification reaffirms MCC(PGIOSR)'s holistic approach to care—where nutrition is seen as a vital part of healing and recovery, and where a culture of wellness is deeply integrated into our institutional ethos.

On the academic front, National Medical Commission recognized the institution to start DM Onco-pathology courses with two seats. Two candidates joined the course and pursuing. DrNB Medical oncology with two seats was started during this period Various courses under National Board of Examinations such as DrNB Surgical oncology, DrNB Clinical Hematology, DNB Radiation oncology,etc are already continued.

As we look ahead, MCC(PGIOSR) remains steadfast in its mission to blend clinical excellence with academic leadership and robust community engagement. Our sustained partnerships with national agencies, academic institutions, and philanthropic organizations have been pivotal in advancing our goals. We express our sincere gratitude to all our supporters, stakeholders, and most importantly, our dedicated staff, whose tireless commitment and compassion continue to be the foundation of our progress. I trust this report will provide a comprehensive overview of MCC's journey through 2023–24, and reaffirm our collective vision for a comprehensive and compassionate cancer care.

Institute of Nursing Sciences and Research (INSeR) has outstanding achievements over the past year. The total strength of the B.Sc. Nursing students accounts to 165. 39 students successfully graduated from INSeR (2019 Batch). Achieving a remarkable pass percentage of above 88% is a testament to their academic commitment and collective effort. The successful release of the first college magazine 'Jyothirgamaya', the organization of numerous impactful NSS outreach programs, and the consistent recognition at both state and zonal levels in SNA activities are truly commendable. These milestones reflect the vibrant academic culture and dedication that define our institution.

Dr. Satheesan Balasubramanian

**"Together, through science, service, and compassion,
we illuminate the path to a future where cancer no longer casts a shadow."**

MALABAR CANCER CENTRE
POST GRADUATE INSTITUTE OF ONCOLOGY SCIENCES AND RESEARCH

Malabar Cancer Centre (Post Graduate Institute of Oncology Sciences and Research) [MCC(PGIOSR)], Thalassery is an autonomous institution under the 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 center is located five kilometers from the town on a picturesque hilltop in Kodiyeri, Thalassery Municipality. 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. Currently, MCC(PGIOSR) has 203 operational beds in total.

The institution is a tertiary cancer centre that renders its service to society with equal thrust on clinical and oncology-related education research and Clinical care Oncology services. It is being developed as a postgraduate institute of oncology sciences and research. The institution is in the process of developing and establishing a unique Clinical Researchand Biostatistics department to coordinate clinical research activities. There are academic and research collaborations with various institutions and universities. These are anticipated to have the potential to revolutionize cancer treatment. The Kerala University of Health Science and Kannur University have designated the Malabar Cancer Center as a Research Institute.

The control and management of the Society are vested in the Governing Body consisting of 23 members with the Honorable Chief Minister of Kerala as the Chairman, Honorable Minister for Health as Vice Chairman, and Honorable Minister for Power as Alternate Vice-Chairman. The Secretary of the Department of Health and Family Welfare, Government of Kerala, is the Chairman of the Executive Committee, which oversees the Center's regular operations. 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.

LANDMARKS

Year	
1998	Formation of Malabar Cancer Centre Society
2001	Clinical services started
2004	Started Blood bank services
2005	4 Slice CT Scanner and Telecobalt radiotherapy unit
2008	Administration of MCC was transferred to Health and Family welfare department from Power Department
2009	Bed strength increased from 40-100, Home care services were started
2009	Limb salvage surgery, second operation theatre, nurse's hostel, Pain free hospital.
2009	Dormitory for Patients- MPLAD of Smt. Sathi Devi MP
2009	Pediatric oncology-surgical procedures
2010	Dual energy linear accelerator with VMAT, Hematology services, Hospital based cancer registry, Community oncology department, Doctor's quarters, BSc Medical Radiology
2011	Regular Pathology services, upgraded biochemistry lab.
2011	High end Dual energy linear accelerator with VMAT installed
2012	Started Department Library system
2012	Cryostat installed and Frozen section studies started
2013	Bone Marrow Transplantation Unit was established
2013	First Autologous Hemopoetic Stem Cell Transplantation was performed
2013	First Allogenic Hemopoetic Stem Cell Transplantation was performed
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
2014	Digital Xray machine
2014	1.5 Tesla MRI
2014	4D CT scanner
2014	ETO sterilizer
2014	Implemented e-Hospital software (HIMS)
2015	First Pediatric Hemopoetic Stem Cell Transplantation was performed
2015	Second Linear accelerator with FFF technology- first of the kind in Government sector
2015	Blood Irradiator
2016	Biometric Punching system started
2016	Started various fellowship programs including 'Fellowship in Hemato-oncology and Bone marrow Transplantation 'training programme.

2017	First Matched Unrelated Donor (MUD) allogenic Hemopoetic Stem Cell Transplantation
2017	Cancer genetics laboratory with Next Generation Sequencer(NGS) was established
2017	BMT unit shifted to new block (4 bedded state of the art units)
2017	Separate pediatric oncology division started
2017	Parent orientation programme in Pediatric oncology introduced
2017	Mutation Analysis for various cancers
2018	Fluorescence in Situ Hybridization (FISH)
2018	State of art Proteomics laboratory is established
2018	Started immunotherapy in solid tumors, Population Based Cancer Registry is expanded to Kozhikode, Wayanad, Malappuram, Thrissur, and Palakkad
2018	Conventional radiotherapy simulator –Imagin (Panacea) was installed
2018	Hyperthermic Intraperitoneral Chemotherapy (HIPEC) was started
2019	First Pediatric Matched Unrelated Donor (MUD) allogenic Hemopoetic Stem Cell Transplantation
2019	Intervention radiology started
2019	New Cobalt Radio therapy machine installed to replace the old one
2020	NABH accreditation
2020	Started E-office software and E- Sanjivani online OPD
2020	Brachytherapy: New brachytherapy machine was installed 2020. Flexitron (Elekta-Nucleotron)
2020	64 Slice fluoro-CT scan was installed
2020	Paediatric Haemato-ocology Block Inaugurated
2020	Portable Digital Xray unit
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 and renamed as Malabar Cancer Centre (Postgraduate Institute of Oncology Sciences and Research)
2022	Ocular oncology division was started, first retinal artery intraarterial chemotherapy was performed
2022	Endoscopic Ultrasonography unit/EBUS/EUS installed and started functioning
2023	Surgical Operating Microscope
2023	3D laparoscopy system installed
2023	Dexa Scan
2023	Retcam for ocular oncology
2023	Second Cryostat machine
2023	NABL Accreditation for all laboratories and NABH Reaccreditation
2023	Eat Right Campus certificate of FSSAI for the canteen
2023	Started Total Body Irradiation for Bone marrow transplantation
2023	KUHS Accreditation Grade A

MALABAR CANCER CENTRE: PROFILE

SL NO	PROFILE	TOTAL
1	Total New Registrations	7748
2	Follow up visits	102576
3	Total patients visits	110324
4	Total in patients	5865
5	Total Deaths	152

SL NO	SURGERY	TOTAL
1	Major Surgeries	2130
2	Minor Surgeries	856
	Total Surgeries	2986
3	Endoscopies	2317

SL NO	CHMOG	TOTAL
1	OPD Attendance (Clinical Hematology +Pediatric Oncology)	16820
2	OPD Attendance (Medical Oncology + Solid Tumor Division)	23569
3	New Case in OPD (Clinical Hematology+ Pediatric Oncology)	1014
4	Day Chemo Administered	18546

SL NO	RADIATION ONCOLOGY	TOTAL
1	Curative RT	1199
2	Palliative RT	1043
3	Brachytherapy	406
4	4DCT Simulation	2248

SL NO	IMAGING	TOTAL
1	MRI scans	1741
2	CT scans	5289
3	Mammography	2803
4	Ultrasound	2667

SL NO	ONCOPATHOLOGY	TOTAL
1	Biopsy small	2564
2	Biopsy Radical	1573
3	Biopsy Second Opinion	2761
4	Fine Needle Aspiration Cytology(FNAC)	220

5	FNAC with Cell Block	625
6	FNAC Second Opinion	245
7	Effusion Fluid Cytology	379
8	Effusion Fluid Cytology with Cell Block	377
9	Peripheral Smear	1302
10	Gynaec cytology	76
11	Bone marrow aspiration	717
12	Bone marrow (BM)biopsy	700
13	BM Aspiration 2nd opinion	123
14	BM biopsy 2nd opinion	121
15	Flow Cytometry	305
16	Frozen sections	778
	Total No Reports Issued	12866

SL NO	CYTOGENETICS AND MOLECULAR ONCOLOGY	TOTAL
1	BCRABL Quantative assays	365
2	BCRABL Qualitative assays	49
3	EGFR	55
4	PML RARa	34
5	DPYD Mutation	08
6	JAK2 Mutation	33
7	AML Panel	66
8	ALL Panel	51
9	FISH BCRABL	17
10	FISH PML RARa	06
11	FISH HER2	57
12	FISH SS18	06
13	FISH ALK	04
14	FISH ROS	03
15	FISH EWSR	02
16	Myeloma Panel	62
17	FISH Triple hit	09
18	MPN Panel	40
	Total	838

SL NO	COMMUNITY ONCOLOGY	TOTAL
1	Volunteer Training Programme (ECDC)	31
2	Cancer Awareness Class	21

SL NO	NUCLEAR MEDICINE	TOTAL
1	SPECT /CT	927
2	PET / CT	1798

SL NO	BLOOD BANK	TOTAL
1	Whole Blood Donors	3522
2	Flow Cytometry	125
3	Blood Donation Camps	75

SL NO	EDUCATION & TRAINING	TOTAL
1	Medical Doctors	27
2	Non Medical	155
3	Observership	09
4	Internship	65
5	Training	01

SL NO	UNDERGRADUATE COURSE	DURATION (YRS)/ SEATS
1	Medical Radiological Technology	4yrs/25
2	Nursing	4yrs/40

SL NO	DNB /DrNB COURSE	DURATION (YRS) SEATS
1	Surgical oncology	3/2
2	Clinical hematology	3/2
3	Pathology	3/1
4	Radiation Oncology	3/3

SL NO	FNB /DIPLOMA COURSE	DURATION (YRS) SEATS
1	Pediatric Hemato Oncology	2/2
2	Head and Neck Oncology	2/2
3	DMRD	2/2

SL NO	FELLOWSHIP PROGRAMME	DURATION IN YEARS/ NUMBER OF SEATS
1	Head and Neck Oncology	2/1
2	GynaecologicOncology	2/2
3	Hemato-Oncology &BMT	1/2
4	Gastrointestinal Oncology	1/1
5	Oral Oncology	1/1
6	Aphaeresis Medicine	1/1
7	Oncopathology	1/1
8	Head and Neck Pathology	1/1
9	Oncology Nutrition	1/1
10	Onco-Imaging & Interventional Radiology	1/1
11	Psycho Oncology	1/1
12	Medical Social Worker	1/1

SL NO	EXTERNAL COMMITTEE	NUMBER OF MEETINGS
1	Scientific Advisory Committee (SAC)	01
2	Institutional Ethics Committee (IEC)	04
3	Intra Mural Research Fund Review Committee	01

SL NO	INTERNAL COMMITTEE-ACADEMIC	NUMBER OF MEETINGS
1	Academic Council	12
2	Institutional Review Board –Scientific Committee(IRB-SRC)	20
3	Academic Standing Committee	02
4	Academic Monitoring Cell	12

SL NO	COMMITTEE	NUMBER OF MEETINGS
1	HOD Committee	06
2	Admin Committee	46
3	Hospital Management Committee	10
4	Nursing Administration	06
5	Scheme Review Committee	07
6	Biomedical Waste Management committee	06
7	Pharmaco Therapeutics Committee	06
8	Hospital Blood Transfusion Committee	03

SL NO	OTHER COMMITTEES	NUMBER OF MEETINGS
1	Hospital Infection Control	13
2	Medical Record Audit Committee	05
3	Facility Management & Safety Committee	03
4	Clinicians Committee	14
5	Grievance Handling Committee	01
6	Internal complaints Committee	05
7	Quality Cell	06
8	Code Blue committee	02
9	Radiation Safety committee	03

SUBSIDY/ BENEFITS GIVEN TO PATIENTS

PARTICULARS	2023-24
Total % of patients given free treatment using various financial assistance schemes.	88.52%
Treatment charge discount	0.613 cr
Pharmacy discount	20.782 cr
TOTAL TREATMENT SUBSIDY IS GIVEN BY MCC (PGIOSR)	**21.395 cr**
Free treatment for patients	12.24 cr
Patient Free Transportation	0.03 cr
Through Patient Welfare Fund (Donation from philanthropist)	0.13 cr
Total amount of support	33.795 Crores

PATIENT FREE FOOD SCHEME 2022-23

Number of patients benefited	CH Centre Contribution in Lakhs	MCC Contribution in Lakhs	Actual Expenditure in Lakhs
24348	**18.59(54.8%)**	**15.32(45.2%)**	**33.91**

SCHEME DETAILS

SL. NO.	SCHEMES	UNIQUE PATIENT BENEFICIARIES	AMOUNT UTILIZED IN LAKHS
1	Karunya Arogya Suraksha Pathathi	4268	2975.96
2	Karunya Benevolent Fund	1522	872.26
3	Karunya Arogya Suraksha Pathathi - out of package	2702	753.70
4	Karunya Benevolent Fund - Out Of Package	1125	422.85
5	CSS	334	169.83
6	ESI 2021	160	269.08
7	CST	438	153.64
8	Medisep Kerala	206	140.72
9	PMNRF	381	150.94
10	Thalolam	21	17.25
11	Medisep Kerala Out Of Package	139	35.43
12	Kerala Social Security Mission Assistance	7	9.11
13	Cope with Cancer	63	13.94
14	Arogyakiranam 2023 IP High End Treatment	92	66.37
15	Sneha Santhwanam	19	4.03
16	Arogyakiranam 2023 Op	359	71.78
17	Sahayika Chennai	2	0.40
18	ThanalVatakara	3	0.74
19	Bairooha Foundation	23	3.34
20	Care and Cure Foundation	7	0.64
	Grand Total	**11871**	**6132.01**

DEPARTMENTS AND DIVISIONS

ACADEMIC DEPARTMENTS	
1	DEPARTMENT OF ANAESTHESIOLOGY
2	DEPARTMENT OF CANCER PALLIATIVE MEDICINE
3	DEPARTMENT OF CANCER REGISTRY AND EPIDEMIOLOGY
3,1	MEDICAL RECORDS DIVISION
4	DEPARTMENT OF CLINICAL HAEMATOLOGY AND MEDICAL ONCOLOGY
4.1	CLINICAL HEMATOLOGY DIVISION
4.2	MEDICAL ONCOLOGY DIVISION
4.3	PAEDIATRIC ONCOLOGY DIVISION
5	DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH
5.1	BIOCHEMISTRY DIVISION
5.2	CANCER GENETICS DIVISION
5.3	MICROBIOLOGY DIVISION
5.4	MOLECULAR ONCOLOGY DIVISION
5.5	ONCO-PATHOLOGY DIVISION
5.6	TRANSFUSION MEDICINE DIVISION
6	DEPARTMENT OF DENTISTRY AND REHABILITATION
6.1	DENTISTRY DIVISION
6.2	REHABILITATION ONCOLOGY DIVISION
7	DEPARTMENT OF NUCLEAR MEDICINE
8	DEPARTMENT OF PREVENTIVE AND COMMUNITY ONCOLOGY
9	DEPARTMENT OF RADIATION ONCOLOGY
9.1	RADIATION ONCOLOGY DIVISION
9.2	RADIATION PHYSICS DIVISION
10	DEPARTMENT OF RADIOLOGY/RADIO-DIAGNOSIS
10.1	INTERVENTIONAL RADIOLOGY DIVISION

11	DEPARTMENT OF RESPIRATORY MEDICINE & CRITICAL CARE
11.1	CRITICAL CARE DIVISION
11.2	PULMONOLOGY DIVISION
12	DEPARTMENT OF SURGICAL ONCOLOGY
12.1	GENERAL SURGICAL ONCOLOGY DIVISION
12.2	GYNAECOLOGY/ GYNAECOLOGIC ONCOLOGY DIVISION
12.3	HEAD AND NECK ONCOLOGY DIVISION
12.4	OCULAR/OPTHALMIC ONCOLOGY DIVISION
NON-ACADEMIC DEPARTMENTS	
1	DEPARTMENT OF ENGINEERING AND MAINTENANCE
1,1	ENGINEERING & MAINTENANCE DIVISION
1,2	BIOMEDICAL ENGINEERING DIVISION
2	DEPARTMENT OF GENERAL ADMINISTRATION
2.1	ACADEMIC DIVISION &LIBRARY AND INFORMATION SCIENCE
2.2	ACCOUNTS DIVISION
2.3	GENERAL ADMINISTRATION DIVISION
2.4	HOSPITAL ADMINISTRATION DIVISION.
2.5	HUMAN RESOURCES AND ESTABLISHMENT DIVISION
2.6	PURCHASE/ STORES AND PHARMACY DIVISION
2.7	SECURITY DIVISION
3	DEPARTMENT OF ONCOLOGY NURSING
3.1	CSSD UNIT
3.2	NURSING SERVICES DIVISION
INDEPENDENT DIVISIONS UNDER DIRECTOR	
1	DIVISION OF CLINICAL RESEARCH AND BIOSTATISTICS
2	DIVISION OF PSYCHO-ONCOLOGY
3	DIVISION OF HEALTH INFORMATION TECHNOLOGY

ACADEMIC DEPARTMENTS & DIVISIONS

DEPARTMENT OF ANAESTHESIOLOGY

HEAD IN CHARGE

Dr. JASHMA C. MD, DNB.
ASSOCIATE PROFESSOR

INTRODUCTION

Since its inception, the Onco-anaesthesiology Department has been a crucial component of Malabar Cancer Centre Hospital. The functioning commenced in June 2001 with a single operating room (OR) and three postoperative/anaesthesia care unit (PACU) beds. In 2009, a second OR was established, and the PACU capacity increased to five beds. A significant expansion occurred on January 13, 2020, when the main OR complex was enlarged to include three major operation rooms and nine PACU beds. Further growth took place in October 2023, with the addition of a fourth OR to the main complex and an increase in PACU beds to fifteen. Additionally, since 2012, one OR has been dedicated to Intracavitary Brachytherapy procedures.

MCC(PGIOSR) currently features four main ORs and a specialised brachytherapy OR. The PACU contains 15 beds, including an isolation room and a room equipped for dialysis. The primary operating theatre complex is a state of art facility.

The department employs a comprehensive strategy and established guidelines for patient treatment, conducting educational activities, and pursuing scientific investigations.

FACILITIES

SL NO	NAME OF THE EQUIPMENT
1	High-end Anaesthesia workstation with electronic gas mixing, End Tidal gas monitoring-5
2	Multipara monitors with cardiac output monitoring, Etco2, Spo2, Invasive and non-invasive blood pressure monitoring, temperature monitoring, CVP monitoring.-9
3	Intubating video laryngoscope-1
4	Syringe pumps, infusion pumps, fluid pressure bags and body/fluid warmers
5	Depth of anaesthesia monitoring- entropy, BIS
6	Neuromuscular transmission monitoring
7	Total Intravenous Anaesthesia, Target Controlled Infusion and PCA pumps.
8	Ultrasound machine for central venous catheterization and regional anaesthesia
9	Nerve stimulator, manual jet ventilation catheter, high flow nasal oxygen therapy

CURRENT FACILITIES

SL NO	FACILITIES
1	Pre Anaesthesia clinic
2	Four major operation rooms, and one brachytherapy operating room
3	Non-operating room anaesthesia (NORA) a. catheterization laboratory procedures- radiofrequency ablation, microwave ablation b. Radiotherapy for paediatric cases c. CT Simulator planning under anaesthesia for paediatric cases d. PET (positron emission tomography) scan for paediatric cases e. MRI (magnetic resonance imaging) under general anaesthesia for paediatric cases f. CT (computed tomography)-guided microwave ablation g. EBUS/EUS-endoscopic ultrasound procedures
4	Neuroanaesthesia
5	Anaesthesia for Ocular Oncology cases
6	The postoperative care unit- post-surgical patients and critically ill surgical patients are taken care of.

NEW EQUIPMENT AND INITIATIVES /FACILITIES

SL NO	NEW EQUIPMENT
1	Body warmers-3
2	Blood and fluid warmer-3
3	Defibrillator-2(transferred to recovery and high dependency unit)
4	High-end Anaesthesia workstation – 1

ACTIVITIES:

A. CLINICAL ACTIVITIES:

1. STATISTICS

Sl No	Facilities	Number of Cases
1	PreAnaesthesia clinic cases	4700
2	General anaesthesia (GA)cases	1519
3	GA+epidural	390
4	Spinal cases	305
5	Short GA	59
6	Regional block	1
7	Monitored anaesthesia care	1
8	Epidural anaesthesia	8
9	NORA(Non-operating room anaesthesia)	232

B. ACADEMIC ACTIVITIES

1. COURSES AND TRAINING PROGRAMS					
SL NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN THE CURRENT YEAR	TOTAL STUDENTS
1.	Operation/Anaesthesia technician training	1year	3	3	3
	Total Number of Trainees				3

2. ROUTINE ACADEMIC SESSIONS		
SL NO	ACADEMIC SESSION	NUMBER OF SESSIONS
1	Topic discussions	12
2	Journal clubs	3
3	Protocol presentation	2
4	statistics	2

3. OBSERVERSHIP			
SL NO	COURSE	INSTITUTION	NUMBER OF OBSERVERS
1.	B.Sc. Anaesthesia Technology	Sri Shanmuga Institute of Science and Research,Salem	1
2.	Diploma in Operation and Anaesthesia Technology	AKG Memorial Hospital, Kannur	2
	TOTAL NO. OF OBSERVERS		3

C.RESEARCH ACTIVITIES

ONGOING PROJECT DETAILS:

1. Incidence and risk factors of Ventilator-associated pneumonia in ICU in a tertiary Cancer Centre: A Retrospective Study. No funding, Interdepartmental(Dr SonaliOpneja)
2. An audit of central venous catheter-related infections in adult surgical patients in a cancer centre, No funding, Interdepartmental(Dr Roopesh S)
3. Anaesthesia challenges in children undergoing radiotherapy: Experiences from a cancer Centre No Funding, Interdepartmental(Dr Roopesh S)
4. Double lumen tube for lung isolation in Indian population: Applicability of size prediction based on internationally derived formulas, No funding, Interdepartmental(Dr Joona p)
5. Association of intraoperative mechanical power of ventilation with occurrence of postoperative respiratory failure in patients undergoing major abdominal oncosurgeries in a tertiary cancer centre in north Kerala, Nofunding, Interdepartmental(Dr Joona P)
6. Postoperative troponin elevation and its clinical outcome in patients undergoing cancer surgery at a tertiary cancer centre, No funding, Interdepartmental(Dr Jashma c)

PROJECTS COMPLETED IN THE CURRENT YEAR:

1.Incidence and risk factors associated with reintubation in ICU in a tertiary cancer centre: A retrospective study (Dr Sonali Opneja)

Results: The incidence rate of reintubation was calculated to be 0.286% for 3 3-year study period. The mean age of the reintubated patients was 62.74 years (SD: 7.72). Ten patients were females and the rest were males (56.52%). The rectum was the most commonly affected site (7 patients or 30.43%). The mean ICU stay post-reintubation was 8.22 days and ranged from one to 15 days.

Conclusion: The extubation failure rate considered acceptable has empirically been set at 10 –15%, but avoiding reintubation remains an important clinical goal.

2. Post-operative stroke after head and neck oncosurgeries-A Retrospective analytic study (Dr Roopesh)

Results: A total of 1311 patients were studied. Postoperative stroke was noted in 3 patients (0.2%).The mean age in the post-operative stroke patients was 62.3 ± 0.5 years which was significant. The majority of the patients in the study were males. Postoperative stroke was noted in 3 patients (0.2%).

Conclusion: The incidence of post-operative stroke was 0.2% which was higher in elderly patients. This is lower than the previously stated risks of 3.2% and 4.8%. This suggests that no special preoperative screening is needed, due to low risk.

PUBLICATIONS

1. Opneja S, Sureshan R, Abraham J, Balasubramanian S, Malodan R, John M. Prevalence of preoperative anxiety and depression in patients undergoing major oncologic surgeries: An analytical cross-sectional study. Cancer Research, Statistics, and Treatment. 2023 Oct 1;6(4):534-40.

1. Sureshan R, Opneja S, Jashma C, Joona P, Namratha D, Pai RV, Kambli D, Riyas M. Estimation of the Prevalence of Occupational Exposure to Biological Fluids among Anesthesiologists: A Survey Study. Indian Journal of Occupational and Environmental Medicine. 2023 Jul 1;27(3):249-54.

2. Sureshan R, Satheesan B, Opneja S, Jashma C, Joona P, Divakaran N, John M. Incidence of Post-operative Pulmonary Complications Following Cytoreductive Surgeries and HIPEC-A Retrospective Analytic Study. Asian Pacific Journal of Cancer Care. 2023 Oct 21;8(4):681-4.

3. Prabhakaran J, Chanduveettil J, Sureshan R, Opneja S, Divakaran N. Neutrophil lymphocyte ratio and platelet lymphocyte ratio as a predictor of postoperative complications after major oncosurgeries: A retrospective study in a tertiary cancer centre. Oncology and Radiotherapy 17(8) 2023: 270-273

4. Prabhakaran J, Chanduveettil J, Kumbakara R, Balasubramaniam S, Abraham J.Evaluation of insomnia in the perioperative period in patients undergoing cancer surgeries and factors affecting it J Cancer Rehabil 2023; 6 issue 4: 174-181 |DOI10.48252/JCR89

5. Prabhakaran J, Opneja S, John M, Riyas. Effect of perioperative variables on postoperative outcome after cytoreductive surgery with hyperthermic intraperitoneal chemotherapy: retrospective analysis in a tertiary cancer centre. Oncology and Radiotherapy. Vol.17 Iss.11: 801-806

6. Prabhakaran J, Sureshan R, Chanduveettil J, Kumbakara R. Perioperative coagulopathy in patients undergoing cytoreductive surgery and hyperthermic intraperitoneal chemotherapy. Oncology and Radiotherapy. Vol.17 Iss.12:001-007

AWARDS, HONOURS AND RECOGNITIONS

1. Dr Joona.P got second prize for E-poster presentation of the study titled “Neutrophil lymphocyteratio and platelet lymphocyte ratio as a predictor of postoperative complications after major oncosurgeries” in the conference conducted by Society of oncoanaesthesia and perioperative care(SOAPCON 2023)on august 26-27 atAll India Institute of Medical Sciences, Delhi

CONFERENCES AND WORKSHOPS ATTENDED

1. Dr Joona.P attended the conference conducted by Society of oncoanaesthesia and perioperative care(SOAPCON) in the year 2023 on august 26-27 at All India Institute of Medical Sciences, Delhi and presented E-poster on the study titled Neutrophil lymphocyteratio and platelet lymphocyte ratio as a

predictor of postoperative complications after major oncosurgeries.Another study was presented as paper presentation in the same conference on the study titledEvaluation of insomnia in the perioperative period in patients undergoing cancer surgeries and factors affecting it .

2. Dr Joona .P attended the conference 4th International and 14th National conference of the Indian College of Anaesthesiologists(ICACON) in the year 2023 on 2nd November 2023august 26-27 at Banglore and presented E-poster on the study titled Perioperative coagulopathy in patients undergoing cytoreductive surgery and hyperthermic intraperitonealchemotherapy.Another study was presented as paper presentation in the same conference on the study titled Effect of perioperative variables on postoperative outcome after cytoreductive surgery with hyperthermicintraperitoneal chemotherapy retrospective analysis in a tertiary cancer centre.
3. Dr Roopesh.S attended the conference 70th Annual Conference of the Indian Society of Anaesthesiologists in the year 2023 on 22-26thNovember at Gurgaon and presented a paper onPostoperative stroke after head and neck oncosurgeries-A Retrospective analytic study
4. Dr SonaliOpneja attended the conference 70th Annual Conference of the Indian Society of Anaesthesiologists in the year 2023 on 22-26thNovember at Gurgaon and presented a paper onIncidence and factors associated with reintubation in ICU in a tertiary cancer centre: A Retrospective study

EVENTS:

- ACLS workshop for in-hospital residents and staff on 02/03/2024 in Malabar Cancer Centre

STAFF DETAILS

ACADEMIC		
Sl No	STAFF	DESIGNATION
1	Dr Jashma. C	Associate professor
2	Dr Roopesh s	Assistant professor
3	Dr Joona P	Assistant professor
4	Dr Sonali Opneja	Assistant professor
5	Dr Namratha Divakaran	Assistant professor
NON-ACADEMIC		
Sl No	STAFF	DESIGNATION
1	Shaija. E	OT in-charge and Staff nurse
2	Vipin. K	OT and Anesthesia technician
3	Sreejith S	Nursing Assistant
4	Mayan John	Dialysis technician
5	Sajna .N	Staff Nurse
6	Jisha. P	Staff Nurse
7	Balakrishnan. S.R	OT and Anesthesia technician
8	Sreejesh P.P	OT and Anesthesia technician
9	Maneesh P	Staff Nurse
10	Roni Anthony	Staff Nurse
11	Ansil M	Staff Nurse

DEPARTMENT OF CANCER PALLIATIVE MEDICINE

HEAD IN CHARGE

DR.M.S.BIJI MBBS,
MSC APPLIED PSYCHOLOGY
ASSOCIATE PROFESSOR

INTRODUCTION:

Since November 2002, the Centre has been offering Cancer Palliative Medicine services. The facility is authorized to possess and supply Oral Morphine. In addition to medical care, the Palliative Care Services provide support through counseling for patients and their families.

The Cancer Palliative Medicine Department encompasses inpatient, outpatient, and home care services. Additionally, two nurse-led clinics operate under this department: a Stoma clinic and a lymphedema clinic. Home care services are provided three times per week, serving patients residing within a 35 km radius of MCC.

ACTIVITIES:

A. CLINICAL ACTIVITIES:

The Cancer Palliative Medicine Department offers services through outpatient clinics, inpatient units, and home-based care programs.

Outpatient care: Patients reporting cancer-related physical symptoms at the oncologist's clinic are directed to the Cancer Palliative Medicine Department's outpatient department (OPD) from their initial visit. Follow-up appointments are scheduled based on the level of symptom management required. Those experiencing severe symptoms undergo regular evaluations at the OPD. Additionally, the department's Medical Social Worker provides psychological counseling to patients.

Inpatient care: Depending on the intensity of their symptoms, medical requirements, and goals of care, patients with poorly managed symptoms may receive treatment in inpatient settings. Those experiencing inadequately controlled symptoms such as pain are hospitalized for symptom stabilization. Patients with advanced stage malignancies presenting with acute deterioration at end of life are frequently managed in wards based on family preferences.

Homecare facility: On June 20, 2009, a homecare facility for patients in need was established. Currently, 608 patients are enrolled in this service. The facility provides free medication and performs various procedures, including ascitic tapping, wound dressing, catheterization, and ryles tube insertion. Additionally, patients and their families receive psychological support. The homecare service is nurse-led and doctor-assisted. To enhance effectiveness, e-palliative medicine consultations are offered, allowing patients and relatives to directly interact with doctors, resulting in more satisfying homecare visits.

The department of Cancer Palliative Medicine operates two nurse-led clinics from 9am to 5pm on weekdays and 9am to 1.00pm on Saturdays.

Stoma clinic: The stoma clinic offers preoperative counseling to all patients undergoing stoma surgery. Nurses address patient concerns about stomas, facilitating acceptance. Post-surgery, nurses visit patients in the ward to educate them on stoma care and the use of stoma bags.

Lymphedema clinic: The lymphedema clinic manages patients who develop upper or lower limb lymphedema. Patients and their relatives are educated regarding the four fundamental aspects of lymphedema management: skin care, massage, exercises, and bandaging.

STATISTICS		
SL NO	FACILITIES	NUMBER OF PATIENTS
1.	In-patients	1861
2.	Out-patients	8656
3.	Homecare patients	119
4.	Stoma clinic	2333
5.	Lymphedema clinic	1210
6.	Counselling Out-patients	2303

MORPHINE CONSUMPTION (1st April 2023-30th March 2024)		
SL NO	TAB.MORPHINE STRENGTH	NUMBER
1.	10mg	91064
2.	20mg	12650

B. ACADEMIC ACTIVITIES:

1. COURSES AND TRAINING PROGRAMS

Sl no	Name of the course	Duration	Number of candidates	Admitted in current year	Total students
1.	Certificate Course in Essentials in Palliative care. (CCEPC)	8 weeks	15	5+1+2	8
2.	Foundation Course in Palliative Care	10 days	5	5	5
3.	IAPC Part B	10days	-	1+1+1	3
	Total Number of Students				16

2. ACTIVITIES

a. The final examination for the IAPC course in"Essentials in Palliative care" Jan batch was held on 01.04.23 in online mode. 4 out of the 5 candidates appeared for the exam.

b. The results of IAPC Part A Jan 2023 was published on 31.05.23. All 4 candidates passed the examination.

c. Dr.M.S.Biji took a class on "Overview of Palliative care" for 3rd year BSc Nursing students of Koyili College of Nursing.(1st batch)on 13.06.23.

d. Dr.M.S.Biji and Mrs.Sheeja Nellika took a session on Palliative care and Nursing issues respectively as part of volunteers training program held at Snehakoodu Pain and Palliative care unit at Dharmadam on 26.06.23.

e. Dr.M.S.Biji took a class on "Overview of Palliative care" for 3rd year BSc Nursing students of Koyili College of Nursing.(1st batch) on 28.06.23.

f. Dr.Rukma Subhash joined for the Part B IAPC course which consists of 10 days of hands on training in palliative care from 5.07.23 to 15.07.23.

g. IAPC course in"Essentials in Palliative care" July batch started with 1 doctor in online mode on 22.07.23.This is the 17th batch from MCC.,

h. Dr.M.S.Biji took a session on "Pathophysiology of pain" for the July 2023 batch of IAPC's "Certificate Course in Essentials of Palliative care"(CCEPC) in the online mode on 22.07.23 This was attended by 191 doctors from all over India.

i. Dr. Ganesh Vijaykumar G joined for the Part B IAPC course which consists of 10 days of hands on training in palliative care from 01.08.23 to 11.08.23.

j. Dr.M.S.Biji attended the online GCP training conducted by Shodh Clinicals on 05.08.23.

k. Dr.Kishore Kumar K joined for the Part B IAPC course which consists of 10 days of hands on training in palliative care from 16.08.23 to 26.08.23.

l. Session on "Introducing Palliative care" was taken by Dr.Biji for 1st batch of Nursing students of Tellicherry Cooperative College of Nursing on 04.11.23.

m. The 10 days "Foundation course in Palliative Medicine" for doctors was held from 6.11.23 to 16.11.23.5 doctors from health service completed the course with the final examination held on 16.11.23. This is the 1st batch.

n. Session on "Introducing Palliative care" was taken by Dr.Biji for 2nd batch of Nursing students of Tellicherry Cooperative College of Nursing on 30.11.23.

o. IAPC course in"Essentials in Palliative care" January 2024 batch started with 2 doctors(1 in-house) in online mode on 06.01.24.This is the 18th batch from MCC.

3.ROUTINE ACADEMIC SESSIONS

The department collaborates with the Department of Dentistry and Rehabilitation & Division of Psycho-oncology to hold joint academic sessions. These educational meetings take place twice weekly, occurring on Thursdays and Saturdays.

C.RESEARCH ACTIVITIES:

ONGOING PROJECT DETAILS:

1. Assessment of spiritual wellbeing in advanced cancer patients receiving palliative care in a tertiary cancer center in Kerala-A mixed method study (PI-Dr.M.S.Biji)
2. Return to work after curative cancer therapy and the barriers associated with it.(PI-Dr.M.S.Biji)
3. This study was done to estimate the proportion of individual who return to work after completion of their cancer treatment and to assess the various barriers to individuals in returning to work after cancer treatment. A sample of 200 patients was studied
4. Quality of Life in Cancer Patients who have undergone intestinal stoma in the treatment of cancer.(PI - Dr.M.S.Biji)

This study was done to study about quality of life using Malayalam version of 'City of Hope National medical center quality of life questionnaire (COHQOL-OQ) in cancer patients who have undergone intestinal stoma in treatment of their cancer and are following up with stoma clinic of Malabar Cancer center. A sample of 100 patients was studied.

AWARDS, HONOURS AND RECOGNITIONS:

Dr.M.S.Biji received award from the President IMA Thalassery on 30th September 2023 in recognition for the unwavering support and unrelenting guidance that helped in leading the Academic programmes of IMA Thalassery 2022-2023 to success.

CONFERENCES AND WORKSHOPS ATTENDED:

1. Poster presentation on "Validation of the Functional Assessment of Chronic illness therapy – Spiritual-wellbeing-Expanded (FACIT-Sp-Ex) tool into Malayalam language and its feasibility in advanced cancer patients receiving palliative care" by Dr.M.S.Biji at the the31st International Conference of IAPC IAPCON 2024 held at Gujarat Cancer and Research Institute from 9th -12th Feb 2024.

2. Faculty talk on ".Benefits of outpatient palliative care service to healthcare system/ community clinics." by Dr.M.S.Biji at the the31st International Conference of IAPC IAPCON 2024 held at Gujarat Cancer and Research Institute from 9th -12th Feb 2024.

EVENTS:

1) On October 14, 2023, MCC celebrated World Hospice and Palliative Care Day with great enthusiasm from staff and nursing students. The departments of Palliative Medicine and Community Medicine, supported by Pannyanoor block panchayath members and nursing students, jointly organized an awareness class for community volunteers. The event took place at Panoor Block Panchayath Hall in ThazheChambad, with approximately 50 community volunteers in attendance.

Dr. M.S. Biji, Department of Cancer Palliative Medicine in-charge, delivered a session on "Palliative care: A social responsibility." This was followed by Mrs. Sheeja Nellikka, a Palliative Nurse at MCC, who spoke about "How to care for a bedridden patient." The community volunteers engaged actively in discussions and expressed a desire for similar knowledge-updating sessions to be held regularly.

Observance of World Hospice and Palliative care Day at Pannyanoor block panchayath

2. Kerala Palliative care day was observed in MCC on 13.01.24. In conjunction with this event, a "Sensitization Program in Palliative Care" was conducted for INSeR nursing students on the same day. About 40 students and two faculty members from INSeR participated in the program, which began at 9:00 am. Dr. Satheesan B, Director of MCC, inaugurated the event, and Dr. Rohini, Principal of INSeR, offered felicitations. Dr. M.S. Biji presented a session on "Introducing Palliative Care," followed by Mr. Sobhith from the Division of Psycho-oncology, who spoke about "Communication Skills." Mrs. Sheeja Nellikka, Palliative Nurse, then led a session on "Nursing Issues." The program concluded at 1:00 pm with the distribution of certificates.

STAFF

ACADEMIC		
SL NO	NAME OF STAFF	DESIGNATION
1.	Dr.M.S.Biji	Assistant Professor & in-Charge
NON-ACADEMIC		
SL NO	NAME OF STAFF	DESIGNATION
1.	Mrs.SheejaNellikka	Staff Nurse

DEPARTMENT OF CANCER REGISTRY & EPIDEMIOLOGY

HEAD IN CHARGE

DR. SAINA SUNIL KUMAR
MBBS, MHSC PUBLIC HEALTH
LECTURER

INTRODUCTION

The Department of Cancer Registry & Epidemiology was set up to provide the cancer statistics reported at the institution and the information on patient care.The registry's responsibility is to ensure high-quality cancer data is available to inform and improve cancer care standards and clinical outcomes, while also facilitating the use of cancer information for audit and research programs.

The department systematically collects, stores, summarizes, and distributes information about cancer patients who are treated at the institution or live in a particular geographic area. These data describe the patient and the disease. Data collected include patient demographic information, cancer identification, diagnostic procedures, cancer-directed treatment, and survival. These data can be analyzed and the information distributed for the education of the medical professional and the community.

In collaboration with National Cancer Registry Programme (NCRP) of ICMR-NCDIR, the Hospital Based Cancer Registry (HBCR) was launched in November 2010 and began operations in February 2011. The HBCR collects data from cancer patients registered. Over this period, the department has released 13 annual HBCR reports.

The Malabar Population Based Cancer registry (MPBCR) was launched in 2014 for three districts Kannur,Kasaragod and Mahe with technical support by NCRP, ICMR. 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 five MalabarPopulation Based Cancer Registry Reports for years 2014-2018. The department expanded MPBCR area to the 5 districts Kozhikode, Malappuram, Wayanad, Thrissur and Palakkad in 2018.

The patterns of care and survival studies (POCSS) for breast, cervix, and head and neck cancers began in 2014 with financial backing from ICMR-NCDIR. This surveillance program monitors the health status of patients with these cancers at regular intervals. Since March 2017, the POCSS project has been integrated with and financially supported by NCDIR, ICMR.

DIVISION UNDER THE DEPARTMENT

Medical Records Division

AVAILABLE FACILITIES:

1. Hospital Based Cancer Registry(HBCR)
2. Population Based Cancer Registry (PBCR)
3. Patterns of Care and Survival Studies (POCSS)

PUBLICATIONS

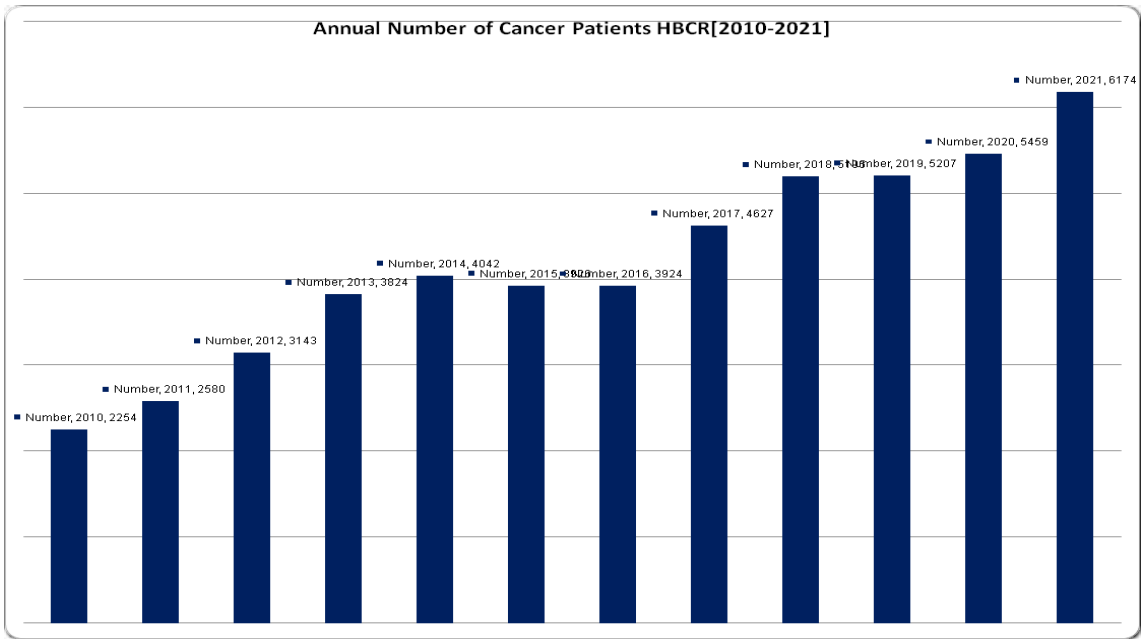
Hospital Based Cancer Registry Annual report for the year 2021

Abhayam, Newsletter September 2021, December2021, March 2022, June 2022, and September 2022 edition.

ACTIVITIES:

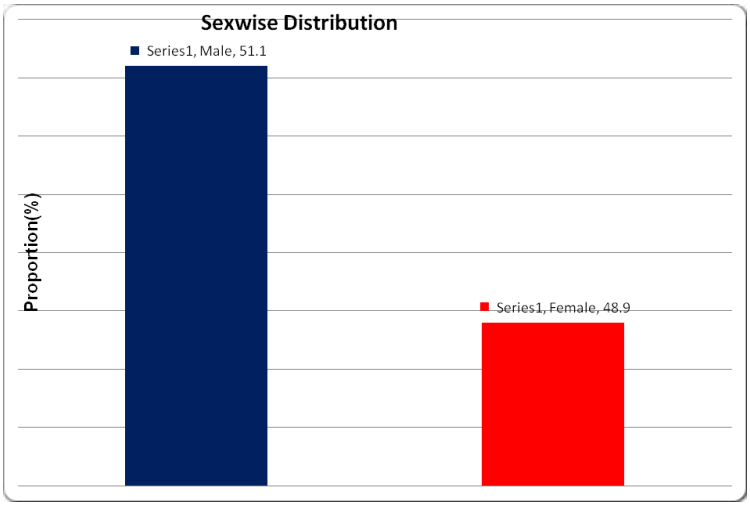
A. REGISTRY ACTIVITIES:

1. HOSPITAL BASED CANCER REGISTRY REPORT 2021

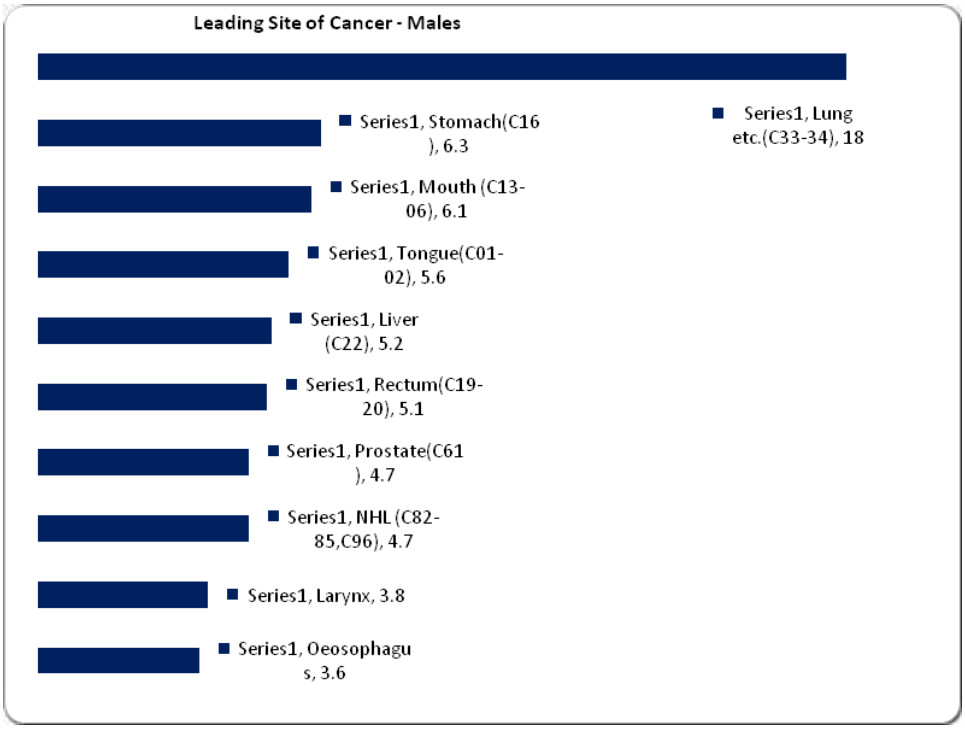


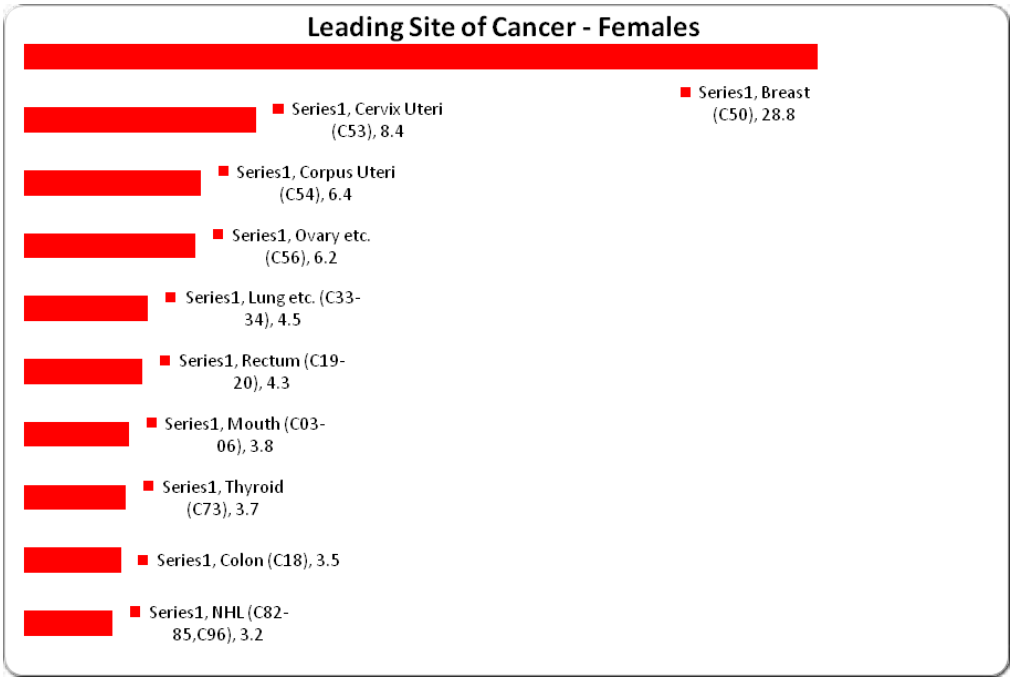
2. MAGNITUDE OF CANCERS

- During the year 2021, a total of 6174 cancer patients were registered at MCC and among them 3153 (51.1%) were males and 3021 (48.9%) were females.



- **Relative proportion of Ten leading site of cancer – Males & Females**





- **3. POPULATION BASED CANCER REGISTRYREPORT 2015-2018**

PBCR REPORT 2015-18						
Kannur						
year	Incidence			Mortality		
	Males	Females	Total	Males	Females	Total
2015	2801	2355	5156	1087	705	1792
2016	2524	2204	4728	989	694	1683
2017	2415	2051	4466	826	559	1385
2018	2790	2559	5349	1049	694	1743
Kasaragod						
year	Incidence			Mortality		
	Males	Females	Total	Males	Females	Total
2015	907	708	1615	454	308	762
2016	835	700	1535	342	239	581
2017	986	805	1791	299	189	488
2018	1157	965	2122	408	244	652

- **LEADING SITES IN MALES - KANNUR**

Leading Sites in Males - Kannur																
Sl.No	2015			2016			2017					2018				
	Site	#	%	Site	#	%	Site	#	%	CR	AAR	Site	#	%	CR	AAR
1	Lung	508	21	Lung	569	22.5	Lung	558	23.11	46.5	38.58	Lung etc	599	21.43	49.7	40.13
2	Stomach	162	5.8	Stomach	191	7.37	Stomach	187	7.74	15.6	12.66	Stomach	191	6.85	15.9	12.5
3	Mouth	138	4.9	NHL	142	5.63	Rectum	133	5.51	11.1	9.12	Prostate	181	6.49	15.0	12.31
4	Prostate	135	4.8	Prostate	127	5.03	Liver	128	5.3	10.7	9.05	Liver	157	5.63	13.1	10.75
5	Rectum	127	4.5	Rectum	115	4.86	Prostate	123	5.08	10.4	8.5	Rectum	149	5.34	12.4	9.86
6	NHL	121	4.3	Larynx	113	4.56	Larynx	108	4.47	9	7.1	Larynx	116	4.16	9.6	7.86
7	Tongue	104	3.7	Mouth	108	4.28	Mouth	106	4.39	8.8	7.3	Colon	115	4.12	9.6	7.8
8	Liver	97	3.5	Tongue	95	3.76	Tongue	89	3.69	7.4	5.85	Mouth	114	4.09	9.5	7.62
9	Larynx	84	3.4	Liver	89	3.53	Colon	78	3.23	6.5	5.27	NHL	107	3.84	8.9	7.35
10	Colon	91	3.2	Oesophagus	84	3.33	Oesophagus	74	3.06	6.2	4.83	Tongue	98	3.51	8.1	6.61

- **LEADING SITES IN FEMALES - KANNUR**

Leading Sites in Females - Kannur																
Sl.No	2015			2016			2017					2018				
	Site	#	%	Site	#	%	Site	#	%	CR	AAR	Site	Total	%	CR	AAR
1	Breast	736	31.5	Breast	634	28.8	Breast	605	28.5	43.3	33.3	Breast	833	32.53	59.2	43.98
2	Ovary	181	8.84	Ovary	140	6.33	Lung	121	5.9	8.7	6.58	Ovary etc.	162	8.33	11.3	8.88
3	Cervix	158	5.88	Cervix	137	6.22	Cervix	114	5.38	8.2	6.17	Lung etc.	139	5.43	9.8	7.34
4	Thyroid	113	4.8	Thyroid	108	4.9	Thyroid	107	5.22	7.7	5.72	Rectum	125	4.88	8.9	6.5
5	Rectum	105	4.46	Lung	101	4.58	Ovary	103	5.02	7.4	5.49	Thyroid	124	4.85	8.8	6.58
6	Lung	91	3.86	NHL	88	3.99	Rectum	95	4.63	6.8	5.05	Cervix Uteri	107	4.18	7.6	5.69
7	Mouth	87	3.69	Stomach	80	3.63	Corpus Uteri	88	4.29	6.3	4.67	Colon	103	4.03	7.3	5.44
8	Colon	72	3.06	Colon	77	3.49	Colon	72	3.51	5.1	3.72	Corpus Uteri	100	3.91	7.1	5.48
9	Stomach	64	2.72	Rectum	74	3.36	Stomach	71	3.46	5.1	3.79	Stomach	82	3.20	5.8	4.25
10	Corpus Uteri	64	2.72	Mouth	74	3.36	Mouth	65	3.17	4.6	3.33	Multiple Myeloma	68	2.58	4.7	3.37

- **LEADING SITES IN MALES - KASARAGOD**

Leading Sites in Males - Kasaragod																
Sl.No	2015			2016			2017					2018				
	Site	#	%	Site	#	%	Site	#	%	CR	AAR	Site	Total	%	CR	AAR
1	Lung	179	19.7	Lung	164	19.6	Lung	190	19.27	29	30.11	Lung etc.	218	18.84	33.0	33.61
2	Mouth	80	8.82	Mouth	87	10.4	Mouth	96	9.74	14.6	14.69	Mouth	100	8.64	15.1	14.75
3	Stomach	55	6.06	Stomach	63	7.54	Tongue	69	7	10.5	10.02	Tongue	76	6.57	11.5	10.73
4	Tongue	46	5.07	Tongue	52	6.23	Stomach	57	5.78	8.7	9.01	Stomach	75	6.48	11.4	11.33
5	Rectum	34	3.75	Oropharynx	38	4.55	Prostate	50	5.07	7.6	8.17	Rectum	61	5.27	9.2	9.51
6	Hypopharynx	31	3.42	NHL	34	4.07	Rectum	49	4.97	7.5	7.72	Prostate	55	4.75	8.3	9.07
7	NHL	31	3.42	Larynx	33	3.95	Liver	49	4.97	7.5	7.51	Colon	49	4.24	7.4	7.18
8	Larynx	31	3.42	Liver	30	3.71	Larynx	39	3.96	5.9	5.9	Liver	42	3.63	6.4	6.77
9	Prostate	29	3.2	Prostate	31	3.71	NHL	36	3.65	5.5	5.79	Oth. Oropharynx	35	3.03	5.3	5.56
10	Colon	28	3.09	Oesophagus	26	3.11	Oesophagus	35	3.55	5.3	5.44	Larynx	33	2.85	5.0	5.12

- **LEADING SITES IN FEMALES - KASARAGOD**

Leading Sites in Females - Kasaragod																
Sl. No	2015			2016			2017					2018				
	Site	#	%	Site	#	%	Site	#	%	CR	AAR	Site	Total	%	CR	AAR
1	Breast	191	27	Breast	198	28.4	Breast	202	28.82	32.1	28.54	Breast	210	32.32	42.5	34.69
2	Ovary	45	6.36	Cervix	69	9.86	Cervix	71	8.82	8.9	8.85	Lungetc	78	8.08	10.7	8.8
3	Cervix	43	6.07	Ovary	48	6.71	Ovary	54	6.71	7.5	6.77	Cervix Uteri	61	6.76	8.9	8.21
4	Mouth	32	4.52	Mouth	35	5	Lung	51	6.34	7.1	6.65	Ovary etc.	55	6.74	8.9	8.17
5	Lung	30	4.24	Lung	24	4.86	Mouth	49	6.09	6.8	6.28	Mouth	42	6.33	5.8	5.31
6	Tongue	27	3.81	Thyroid	22	4.57	Thyroid	36	4.47	5	4.34	Rectum	37	3.83	5.1	4.4
7	Thyroid	23	3.25	Stomach	21	3.57	Rectum	24	2.98	3.3	2.98	Colon	30	3.11	4.1	3.74
8	Stomach	21	2.97	Colon	20	2.86	Stomach	22	2.73	3	2.78	Thyroid	29	3.01	4.0	3.29
9	Rectum	20	2.82	Myeloid Leukaemia	20	2.86	Pancreas	21	2.61	2.9	2.69	Multiple Myeloma	28	2.69	3.8	3.23
10	NHL	20	2.82	Brain, Nervous System	18	2.57	Corpus Uteri	20	2.48	2.8	2.55	Corpus Uteri	25	2.59	3.4	2.84

B. ACADEMIC ACTIVITIES

1. SHORT TERM PROJECTS

Sl.No.	Name of the course	Duration	Institution	Number of candidates
1.	MSc Statistics	3mths.	Department of Statistical Sciences, Kannur University	4
2.	MSc Biostatistics	3mths.	St.Thomas College, Palai, Kottayam	2
3.	MSc Statistics	3mths.	School of Mathematics and Statistics, MG University , Kottayam	1
4.	MSc Statistics	3mths.	PG & Research Department of Statistics, Farook College, Kozhikode	1
	Total Number Of Students: 8			

2, ROUTINE ACADEMIC SESSIONS -Journal Club on Wednesday,Topics on Thursday

1	Journal Club	18
2	Topic	13

C. RESEARCH ACTIVITIES

ONGOING PROJECT DETAILS:

1. Hospital Based Cancer Registries in India" funded by NCDIR, ICMR [PI: Dr.Saina Sunil Kumar].
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 funded by NCDIR, ICMR [PI: Dr.Saina Sunil Kumar].

3. Population Based Cancer Registry for three districts Kannur, Kasaragod and Mahe [PI: Dr. Satheesan B]
4. Population Based Cancer Registry for Five districts Kozhikode, Malappuram, Thrissur, Palakkad and Wayanad [PI: Dr. Satheesan B]
5. Survival of Adolescent and Young Adult cancer patients in North Malabar: A Hospital BasedCancer Registry Data [PI- Dr. Satheesan B]
6. Survival of Common Cancers Reported in a Tertiary Cancer Centre in Kerala: ARetrospective Cohort Study [PI- Dr. Satheesan B]
7. Prediction of Prognostic Factors for Ovarian Cancer Survival Using Parametric Regression Models and Comparison with Parametric Bootstrap Analysis [PI- Dr. Bindu T].
8. Estimation of mean duration between diagnosis and treatment initiated using gamma distribution. [PI – Ratheesan K]

PROJECTS COMPLETED IN CURRENT YEAR

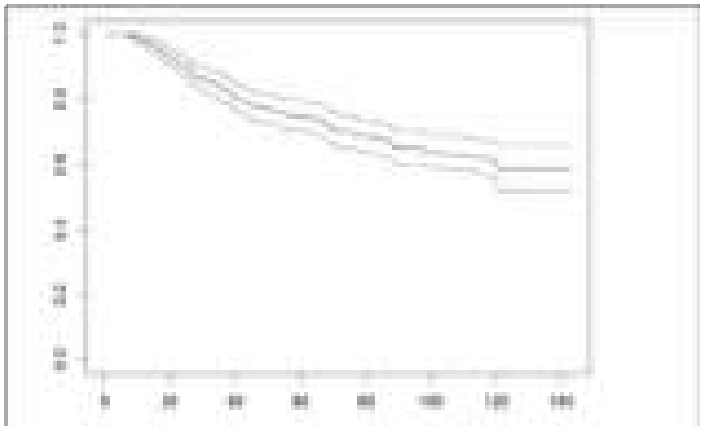
1. Comparison between Accelerated Failure-time and Cox Proportional Hazard Models in Analysing the Survival of Stomach Cancer Patients [PI- Dr. Bindu T].

The main objective of this study was to compare the accelerated failure time and Cox proportional hazard models in analyzing the survival of stomach cancer patients. The stomach cancer patients who received cancer directed treatment at MCC during 2016 and 2017 were considered for this study. A total of 174 stomach cancer patients were considered for this study. The average age of stomach cancer patients was 60.2 years with standard deviation 11.15. The 5 year overall survival rate of stomach cancer patient was 23.1% with median survival time of 19 months. Based on the criteria presented in this study, the lognormal AFT model outperformed than the Cox proportional hazard model. Using lognormal AFT model, we can concluded that age group, composite stage, intention to treat and recurrence status were the significant factors on the survival of stomach cancer patients ($p<0.05$).

2. Analysis of Survival in Breast Cancer Patients by Using Different Parametric Models [PI- Dr. Bindu T].

A total of 574 female breast cancer cases were registered at MCC in 2013 and among them 352 cases were received curative treatment. Thus 352 breast cancer patients were considered for this study. The median age of the patients were 51 years. The parametric distributions exponential, Weibull, lognormal and log logistic distributions were considered for fitting the breast cancer survival data. Comparing the Akaike information criteria (AIC), the AIC value is minimum for lognormal distribution. Thus the best fitted probability distribution for the breast cancer survival was the lognormal distribution. Using the lognormal distribution the 5 year overall survival rate was 74.3%.

3. Application of Mixture Cure Models in Determining the Survival of Patients with Breast Cancer [PI- Dr. Bindu T].



Kaplan Meier plot for survival of patients with breast cancer

From the Kaplan Meier survival curve of breast cancer patients, it is found that the curve level off a value greater than zero which indicated that a significant proportion of patients were cured. When the population contains a mixture of cured and uncured patients, mixture cure rate model is more appropriate than the standard survival models.The logarithmic hazard plot of the breast cancer data shows that the two curves are proportional considering the covariates, ER, PR, Her2nue and stage which indicates that the proportionality assumption is appropriate for this data set. Thus we used semi parametric PH mixture cure model for fitting this survival data.

1. **Estimation of Tumor Size and Survival Function using Lognormal Distribution: An Application to Breast Cancer Data [PI- Dr. Bindu T].**

   In this study we considered parametric distributions to estimate the tumor size and survival function of the breast cancer patients who received curative treatment at MCC. The parametric distributions exponential, lognormal, Weibull and loglogstic distributions were considered for fitting tumor size of the breast cancer patients. Using Akaike information criteria, the AIC value was minimum for lognormal distribution. Thus the best fitted probability distribution for the tumor size of the breast cancer patients was lognormal distributions. Using the lognormal distribution, the expected value of tumor size of female breast cancer was 4.6 cm with 95% CI [3.3, 6.9].

2. **Estimation of Rate of Second Primary Malignancies among Head and NeckCancers Using Capture-Recapture Method.[PI-Ratheesan.K]**

   Capture recapture method is a statistical technique used to estimate the size of an unknownpopulation by capturing and recapturing individuals multiple times. This method is based onthe Hypergeometric distribution, a standard distribution in statistics. This method will beused to estimate the rate of second primary malignancies in head and neck cancers for the years 2014 to 2016.In this study, it was observed that the rate of second primaries in HNC patients was 8.9% and there is a strong association is observed between smoking habits and the incidence of second primary in HNC patients.

3. **Survival model of larynx cancer patient's data using lognormal distribution[PI: Ratheesan.K]**

   The objectives of the study is to estimate survival rate and hazard rate among laryngeal cancer patients usinglognormaldistribution.Also to identify significant factors affecting survival rate using cox regression model.The parameters of the lognormal distribution are μ and σ, which are estimated usingmaximum likelihood method (MLE). The estimated parameters are μ= 3.2447 andσ= 0. 8282 We have used these values to estimate survival rate and hazard rate of larynxcancer patients using lognormal distribution.

RECOGNITIONS:

- Dr. Saina Sunil Kumar, member of Kerala Cancer Registry technical committee for developing PBCR Software-Cancer care suit. G.O.(Rt) No.680/2022/H&FWD dated 19.02.2021 .
- Mr.Ratheesan K was appointed as External Vigilance Officer for the Fourth Year B.Sc Nursing Degree Regular /SupplementaryExamination April 2023 at Canossa College of Nursig, cherukunnu,Kannur on 17-04-23.
- Mr.Ratheesan K was appointed as External Vigilance Officer for First Semester BSc Nursing Degree Regular/Supplementary Examinations June2023 (2021 Scheme)at College of Nursing, Thalassery on 05.06.2023.
- Mr.Ratheesan K wasappointed as the External Vigilance Officer for the Fourth Semester B.Sc. Nursing Degree Regular Examinations, February 2024 at College of Nursing, Kannur MedicalCollege, Anjarakandy on 12.02.2024.
- Dr. Bindu T appointed as an external examiner for M Phil Psychiatric Social Work Part II Regular/ Supplementary Examinations, December 2023, Kerala University of Health Sciences on 18th& 19th December 2023.

- Dr. Bindu T appointed as ObservorforFirst,Second,Third,Fourth year Bsc Nursing AyurvedaDegree& B Pharm(Ayurveda)Degree-Regular& Supplementary
- examinations March 2024. Kerala University of Health Sciences at MVR Ayurveda Medical College,Parassinikkadavu,kannur on 20-03-2024.
- Project student AnitJaimon got first prize for the paper presentation "Comparison between Accelerated Failure-time and Cox Proportional Hazard Models in Analysing the Survival of Stomach Cancer Patients" in the 41st Annual Conference of the Indian Society for Medical Statistics (ISMSCON-2023) during 2-4 November 2023 organized by School of Mathematics and Statistics & School of Data Analytics, MG University, Kottayam, Kerala.

WORKSHOPS ATTENDED:

- Dr. SainaSunilkumar, Dr.Bindu T and Mr.Ratheesan K attended Cancer Epidemiology and Surveillance Training (CanEST) programme, at ICMR-National Centre for Disease Informatics and Research, Bangalore from 11/12/2023 to 13/12/2023.
- Dr. Bindu T attended Three day National Workshop on Randomized Controlled Trials Organized by Kannur University and McMaster University on 7-9 December 2023.
- Dr. Saina Sunilkumar&Dr. Bindu T attended Online Good Clinical Practice (GCP) Training Program on 5th August 2023.
- Mr.Ratheesan.K, attended the CReDO Workshop 2024 from 4/3/2024 to 9/3/2024 at Mumbai.
- Mrs. Rejisha.R [HBCR project staff] attended the two daysHBCR workshop, on 30th November and 1st December 2023 at Bengaluru organized by ICMR-NCDIR.
- Sruthi . P.V &Sreesha .S [PBCR project staff], attended two day PBCR Workshop on 22-02-2024 and 23-02-2024at Bengaluru organized by ICMR-NCDIR.

EVENTS

1. CanEST - ICMR-National Centre for Disease Informatics and Research, Bangalore from 11/12/2023 to 13/12/2023.

2. Training workshopICMR-NCDIR

   HBCRPBCR

District Cancer Control Committee Meeting

a. District Collector Office , CivilStation,Kasargod on 08-09-2023

b. District Collector Office , Civil Station, Kannur on 21-09-2023

Dr. Saina Sunil Kumar, member of Kerala Cancer Registry technical committee for developing PBCR Software-Cancer care suite.G.O. (Rt) No.680/2022/H&FWD dated 19.02.2021. Technical committee meeting on 28.11.2023 at Conference Hall, State NHM Office Thiruvananthapuram. To finalize the frame work of Kerala Cancer Registry process flow.

STAFF

ACADEMIC STAFF		
SL. NO	NAME OF STAFF	DESIGNATION
1	Dr. Saina Sunil Kumar	Lecturer, H.O.D(I/C)
2	Dr. Bindu.T	Lecturer(Biostatistics)
3	Ratheesan.K	Lecturer(Biostatistics)
NON ACADEMIC STAFF		
SL. NO	NAME OF STAFF	DESIGNATION
1	Prachith.K	Coding clerk/ Permanent

DEPARTMENT OF CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY

HEAD OF THE DEPT

Dr. CHANDRAN K. NAIR, MD
DNB (GENERAL MEDICINE)
DM (CLINICAL HEMATOLOGY)
PROFESSOR

INTRODUCTION

The department commenced operations in January 2011, subsequently establishing three divisions: Clinical Hematology, Medical Oncology, and Pediatric Oncology. Clinical Hematology addresses benign and malignant blood disorders, Medical Oncology manages chemotherapy for solid tumors, and Pediatric Oncology treats childhood cancers. A blood/marrow transplant program was initiated in 2013, followed by a Fellowship program in Hemato-oncology & BMT in 2016. DrNB Clinical Hematology and DrNB Medical Oncology programs were launched in 2023 and 2024, respectively.

DIVISIONS UNDER THE DEPARTMENT

1. Clinical Hematology
2. Medical Oncology
3. Pediatric Oncology

DIVISION OF CLINICAL HEMATOLOGY

Division in charge: Dr Chandran K Nair , MD DNB (General Medicine) DM (Clinical Hematology), Fellowship in Leukemia and Bone Marrow Transplantation(BC Cancer Agency, University of British Columbia, Canada)

INTRODUCTION:

This division specializes in diagnosing and treating benign blood disorders across all age groups and malignant blood disorders in patients 15 years and older. Intensive chemotherapy treatments, such as acute leukemia induction and consolidation, are administered in single-occupancy, air-conditioned rooms within the Intensive Chemotherapy unit. The outpatient department serves approximately 10000 patients annually, with around 2500 new case registrations. Day care chemotherapy is provided in a dedicated ward equipped with biosafety cabinets.

Additionally, this division offers Hematopoietic stem cell transplantation for both benign and malignant disorders in adults and children. The Bone marrow transplantation unit at MCC was established in 2013. As of April 2024, MCC has conducted 232 stem cell transplants, including matched sibling, matched unrelated donor, haploidentical, and autologous transplants.

AVAILABLE FACILITIES:

1. Evaluation and treatment of benign and malignant hematological disorders.

2. Inpatient care is given in a dedicated intensive chemotherapy unit and general wards.
3. High intensity chemotherapies like acute leukemia induction, consolidation etc are administered in Intensive Chemotherapy unit, which are single occupancy air-conditioned rooms .
4. Outpatient department caters to around 10000 patients in a year with around 2500 new case registrations.
5. Day care chemotherapy is administered in a day chemo ward equipped with biosafety cabinets.
6. Blood/marrow stem cell transplantation for benign and malignant disorders in both adults and children, including all types of allogeneic transplants: matched related donor, matched unrelated donor, and haplo-identical transplantation.

ACTIVITIES:

A. CLINICAL ACTIVITIES:

MONTH	OPD ATTENDANCE CLINICAL HEMATOLOGY	NEW CASES CLINICAL HEMATOLOGY	BONE MARROW STUDY HEMAT	LUMBAR PUNCTURE WITH I.T MTXHEMT
April 2023 to March 2024	13524	902	537	228

BONE MARROW TRANSPLANT APRIL 2023 TO MARCH 2024									
	ADULT				PEDIATRIC				
	Matched Related Donor	Matched Unrelated Donor	Haplo-ideentical	TOTAL	Matched Relared Donor	Matched Unrelated Donor	Haplo-identical	TOTAL	Grand Total
Allo-transplantation	12	1	4	17	2	0	3	5	22
Autologous Transplantation	18				1				19
Total Bone Marrow Transplantation	35				6				41

B. ACADEMIC ACTIVITIES:

1. COURSES AND TRAINING PROGRAMS:

SL NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	DrNB Clinical Hematology	3 yrs	2	2	3
2	Fellowship in Hemato-oncology & BMT	1 yr	2	1	1
	Total Number of Students				4

2. ROUTINE ACADEMIC SESSIONS

4. Weekly academic sessions on Wednesdays and Thursdays for Review topics and journal clubs.
5. Clinico-pathological correlation meetings on the 1st and 3rd Thursday afternoons.
6. Mortality and morbidity meetings.
7. Monthly transplant board meetings, with increased frequency as needed. These meetings involve discussions on planned transplant cases, decision-making, risk assessment, conditioning regimens, and transplant types.

C.RESEARCH ACTIVITIES:

ONGOING PROJECT DETAILS:

1. Induction Related Mortality Score In Acute Myeloid Leukemia : Prospective Validation Study Acronym:Hcc Prism S (Hcc Risk Mortality Score – Dr Chandran K Nair
2. A Retrospective Study Comparing Predicted And Actual Incidence OfVteBy Impede Vte Score In Myeloma Patient InA Tertiary Centre"- Dr Chandran K Nair
3. A Randomized, Open-Label Study OfThe Efficacy And Safety OfGalinpepimut-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
4. A Randomized, Open-Label,C5 Inhibitor-Controlled Study To Evaluate The Efficacy And Safety Of Pozelimab And Cemdisiran Combination Therapy In Patients With Paroxysmal Nocturnal Hemoglobinuria Who Are Complement Inhibitor Treatment-Naive Or Have Not Recently Received Complement Inhibitor Therapy- Dr Chnadran K Nair
5. A Prospective Double-Blind Randomised Phase III Clinical Study To Evaluate The Immunogenicity And Safety Of Single Booster Dose Of Biological E's Corbevax Vaccine When Administered Adult Volunteers Previously Vaccinated With 2- Doses Of Either Covishield OrCovaxinto Covid-19-Negative – Dr Chandran K Nair
6. A Phase 2a Study Of HT-6184 In Subjects With IPSS-R Very Low, Low Or Intermediate Risk Myelodysplastic Syndrome (MDS) And Symptomatic Anemia- Dr Chandran K Nair
7. Development of a clinical risk score to predict Carbapenem resistant gram negative bacteremia in patients with febrile neutropenia
8. Profile and outcomes of Acute Central Nervous System complicationsDuring Treatment of Acute Lymphoblastic Leukemia :A Single-center Experience

PROJECTS COMPLETED IN CURRENT YEAR

1. Factors Determining ICU Care Requirement And Outcomes Following Autologous Stem Cell Transplantation – Dr Chandran K Nair : Main findings- 14 % patients required ICU care. Factors associated with the need for ICU care were time to platelet engraftment ,and presence of peri-transplant infection
2. A Retrospective AnalysisOfInotuzumabOzogamicin (Ino) Usage In Adult Patient With Relapsed / Refractory(R/R) B- Cell Acute Lymphoblastic Leukemia (All)- Dr Chandran K Nair :Multicentre retrospective study . Main outcomes: Overall response rate was 60 % in relapsed/refractory B ALL cases.
3. Safety And Response To Treatment OfCarfilzomib At 70 Mg/M2 Once Weekly , Real World Data – Dr Chandran K Nair : Main findings- More than 90 % patients had some amount of toxicity, however only 1 patient had significant cardiotoxicity.

PUBLICATIONS:

1. Singuluri LS, Jayachandran PK, Goenka L, Shenoy PK, Rathnam KK, Seshachalam A, Mehra N, Kumar MR, Suseela MM, Raghavan V, Nair CK, Dubashi B, Dhanushkodi M, Ganesan P. Prognostic Factors and Outcomes of Early-Stage Hodgkin's Lymphoma: Multi-Institutional Data From South India. Indian J Hematol Blood Transfus. 2024 Apr;40(2):237-245. doi: 10.1007/s12288-023-01692-9. Epub 2023 Aug 30. PMID: 38708161; PMCID: PMC11065829.
2. Nirmal, Garima MD, DM*; Jithin, TK MD, DM*; Gopakumar, KG MD, DM*; Parthiban, Rudrapathy PhD†; Nair, Chandran MD, DM‡. Prevalence and Outcomes of Carbapenem-resistant Bloodstream Infection in Children With Cancer. Journal of Pediatric Hematology/Oncology 45(6):p e678-e682, August 2023. | DOI: 10.1097/MPH.0000000000002679

AWARDS, HONOURS AND RECOGNITIONS:

3. Dr.Chandran K Nair was appointed by National Cancer Grid as the chair for the committee for preparing complete Medical oncology module in future EMR to be implemented across NCG centers in India.

STAFF

ACADEMIC STAFF		
Sl No	NAME OF STAFF	DESIGNATION
1	Dr Chandran K Nair	Professor
2	Dr Abhilash Menon	Assistant Professor

DIVISION OF MEDICAL ONCOLOGY

DIVISION IN- CHARGE: DR PRAVEEN KUMAR SHENOY V P, MD (GENERAL MEDICINE) DM (MEDICAL ONCOLOGY)

INTRODUCTION

Medical oncology division deals with comprehensive evaluation and medical treatment of various types of solid in adults with chemotherapy, immunotherapy and targeted agents. Spectrum of cases seen in Medical Oncology division include Breast cancer, Gastrointestinal cancers, Lung cancer, Head and Neck cancers, Gynaecological cancers, Endocrine cancers, Thoracic cancers, Genitourinary cancers, Brain cancers and cancers of bone and soft tissues. The division is well versed in administration of intraperitoneal and intravesical chemotherapy. The division participates in site specific multidisciplinary tumor boards (MDT) held thrice a week with General surgical MDT on Monday, Wednesday & Friday. Breast and gynecology MDT on Monday, Tuesday and Thursday. Head and Neck MDT on Tuesday, Wednesday and Friday. The division closely associates with surgical oncology department in planning complex procedures like cytoreductive surgery with hyperthermic intraperitoneal chemotherapy in peritoneal surface malignancies.

The division has experience with running early phase clinical trials, Phase 3 randomised control trials, both industry sponsored and investigator initiated multicenter clinical trials. The division has collaborated with numerous prestigious institutions across India for various clinical trials and collaborative studies.

AVAILABLE FACILITIES

1. Evaluation and treatment of malignant solid tumors.
2. Inpatient care is given in general wards and private wards.
3. Outpatient department caters to around 20000 patients in a year
4. Day care chemotherapy is administered in a day chemo ward equipped with biosafety cabinets and state of the art facilities.
5. The division associates with the surgical oncology department in planning hyperthermic intraperitoneal chemotherapies.
6. The division has expertise in administration of a wide range of therapeutics including immunotherapies.
7. The division has a great deal of expertise in handling clinical trials from Phase 1 to Phase 4 and industry sponsored as well as investigator -initiated collaborative trials.

ACTIVITIES

A. CLINICAL ACTIVITIES

Month	OPD Attendance Medical Oncology	Day Chemo administered
April 2023 to March 2024	23569	18546

B. ACADEMIC ACTIVITIES:

1. COURSES AND TRAINING PROGRAMS:

SL NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	Dr NB Medical Oncology	3 yrs	2	2	2

2. ROUTINE ACADEMIC SESSIONS

1. Weekly academic sessions on Monday to Thursday for Review topics, case presentations and journal clubs.
2. Molecular Tumor Board - Twice a month - 1st and 3rd Monday
3. Mortality and morbidity meetings - Monthly
4. Monthly transplant board meetings, with increased frequency as needed. These meetings involve discussions on planned transplant cases, decision-making, risk assessment, conditioning regimens, and transplant types.

C.RESEARCH ACTIVITIES:

ONGOING PROJECT DETAILS:

1. Safety And Outcome of Different Schedules of Adjuvant Trastuzumab in HER 2 Positive EBC- Our Experience
2. A Multicenter, Double-blind, Randomized, Parallel-group, Phase 3 Study to Compare the Efficacy and Safety of the Proposed Biosimilar PERT-IJS and EU-Perjeta® along with Trastuzumab and Chemotherapy (Carboplatin and Docetaxel) as Neoadjuvant Treatment in Patients with Hormone Receptor Negative (HR-ve) Human Epidermal Growth Factor Receptor 2 (HER2)-positive Early Stage or Locally Advanced Breast Cancer.
3. Reduced Dose Sorafenib ForThe Treatment of Hepatocellular Carcinoma: A Retrospective, Single Institutional Experience
4. Designing and Implementation of Health Care Model InPatientswith Stage 2 Breast Cancer.
5. Retrospective study to analyse the effectiveness and toxicity profile of patients treated with oral metronomic chemotherapy in ovarian cancer.
6. Is patient's self-reported performance status comparable to the clinician-reported performance status in predicting 30-day morbidity - prospective comparative study from a tertiary cancer centre in south India?

PROJECTS COMPLETED IN CURRENT YEAR

1. Safety And Outcome of Different Schedules of Adjuvant Trastuzumab in HER 2 Positive EBC- Our Experience - The 4-year disease-free survival for shorter durations of adjuvant trastuzumab was 98% compared with 96.7% in 1-year trastuzumab therapy group.
2. Reduced Dose Sorafenib for The Treatment of Hepatocellular Carcinoma: A Retrospective, Single Institutional Experience - The median progression-free survival (PFS) and overall survival (OS) were 3.68 (CI 2.89-4.46) and 5.26 (CI 3.26-7.27) months respectively.
3. Retrospective study to analyse the effectiveness and toxicity profile of patients treated with oral metronomic chemotherapy in ovarian cancer - The clinical benefit rate was 59% and the overall response rate was 22.9%. Ca-125 response was seen in 40.4% of patients. The median PFS for the overall group was 6.7 months.
4. Is patient's self-reported performance status comparable to the clinician-reported performance status in predicting 30-day morbidity - prospective comparative study from a tertiary cancer centre in south India? - Awaiting publication

PUBLICATIONS:

1. Prasanth Ganesan, Mehak Trikha, Hasmukh Jain, Uday Prakash Kulkarni, Sushil Selvarajan, Anu Korula, Parathan Karunakaran, Smitha Carol Saldanha, Smita Kayal, SadashivuduGundeti, Gaurav Chatterjee, Praveen Kumar Shenoy,Dhanlaxmi Lalit Shetty, Rajan Kapoor, Rasmi Palassery, Mobin Paul, Om Prakash, Maya P Ganesan, Prasanna Samuel; Outcomes of Philadelphia Chromosome (Ph) Positive Acute Lymphoblastic Leukemia: An Indian Multi-Institution, Prospective Study from the Haematology Cancer Consortium (HCC). Blood 2023; 142 (Supplement 1): 5821

2. Nandini Devi R, Praveen Kumar Shenoy VP, Ismail I, Avaronnan M. Outcomes and toxicity of oral Fosfestrol in metastatic castration-resistant prostate cancer-a real-world experience. Ecancermedicalscience. 2023 Aug 14;17:1589.

AWARDS, HONOURS AND RECOGNITIONS:

1. Dr Praveen Kumar Shenoy and Dr Nandini Devi were invited as experts for "Developing standards for Centre of Excellence - Oncology" organized by Quality control of India on 3 rd March 2024.
2. Dr Nandini Devi was invited expert for development of uniform Healthcare Model for Stage 2 Breast Cancer in India as part of NHRP-ICMR BCSS project

STAFF

ACADEMIC STAFF		
Sl No	NAME OF STAFF	DESIGNATION
1	Dr Praveen Kumar Shenoy V P	Associate Professor
2	Dr Nandini Devi	Assistant Professor
3	Dr Shoaib Nawas	Assistant Professor
4	Dr Arun Krishnan	Assistant Professor

DIVISION OF PEDIATRIC ONCOLOGY

DIVISION IN- CHARGE: DR JITHIN T.K, ASSISTANT PROFESSOR

INTRODUCTION:

Pediatric oncology division at MCC caters to management of childhood cancer in children below 15 years of age. The division is equipped with two pediatric oncologists, ten staff nurses, a ward assistant, a dietician, a social worker and a clinical psychologist, along with other state-of-the-art facilities for administering chemotherapy, including a bio-safety cabinet and 16-bed ward with temperature regulation facility. Chemotherapy is administered via a central line (PICC line, Broviac line or chemo-port) which is inserted at the CVAD clinic or in the OT by the surgeon. Having a bed occupancy rate of nearly 70-80%, children are admitted on a regular basis for evaluation, providing intensive chemotherapy as well as for managing complications like febrile neutropenia. Children who take chemotherapy on OPD basis do so from the day chemo ward. Sick children are managed at present in the Medical ICU, whenever required. With inter-department support, we are able to provide multidisciplinary state-of-the-art care for children with cancer.

Various Government Schemes (Arogyakiranam, Karunya Arogya Suraksha Padhathi, Thalolam, Karunya BenevolentFund etc.) are utilized for providing financial support for children who are residents of the State. The Social worker helps families in finding NGO support to provide financial assistance to those children who are residents of nearby states and hence not eligible for the various Kerala Govt. Schemes.

Parent support programmesand survivor meetings are conducted on a regular basis where children (and parents) undergoing active treatment interact with medical professionals and survivors. MCC has MoU with NGOs like Cuddles Foundation, HOPE child cancer care foundation and Aroh foundation who provide manpower support (including dietician, clinical psychologists and social workers), other facilities like residential facilities (home away from home), Nutritional support, transport facilities and financial assistance.

AVAILABLE FACILITIES

1. 16 bedded pediatric oncology ward with play area
2. Chemotherapy preparation area with Bio safety cabinet
3. Separate play area with park, home theatre and a conference hall
4. Dedicated Procedure room

ACTIVITIES:

Month	OPDattendance Pediatric oncology	New CasesPediatric oncology	Bone marrow studies	Lumbar puncture with I.T MTX
Total	**3550**	**124**	**114**	**402**

ACADEMIC ACTIVITIES:

1. Routine academic activities are conducted in the department 3-4 days a week where pediatric oncology topics are presented and discussed by faculty and residents.

RESEARCH ACTIVITIES:

ONGOING PROJECT DETAILS:

1. Quality Improvement Project – NCG EQUIP Program - Reducing delay in antibiotic administration in children with cancer(Dr Jithin T K)
2. Effectiveness of structured video-assisted teaching module in improving knowledge and practice of hand hygiene among primary caregivers of children with cancer(Dr Jithin T K)
3. Salvage of long term central venous catheter in children with cancer having central venous catheter-related bloodstream infection using antibiotic lock therapy(Dr Jithin T K)
4. A structured nursing handover technique using ANTICipate format in a paediatric oncology unit(Dr Jithin T K)
5. Clinical characteristics and outcomes of Culture-negative sepsis in children with cancer (Dr Jithin T K)
6. Prevalence and Parental perspectives on the use of complementary and alternative medicine (CAM) in children with cancer (Dr K G Gopakumar)
7. Incidence and outcomes of oncological emergencies at diagnosis in children with cancer (Dr K G Gopakumar)
8. Compliance to vaccination in childhood cancer survivors & knowledge attitude and practice among parents(Dr K G Gopakumar)

PROJECTS COMPLETED IN THE CURRENT YEAR:

1. Influenza-like illness during treatment for cancerin children(Dr Jithin T K)
2. Parental perspectives on unmet needs of home-based palliative care in children with advanced cancer(Dr Jithin T K)
3. Expectations of parents having children with newly diagnosed cancer (Dr Jithin T K)
4. Moderate sedation/analgesia for procedures during treatment for pediatric malignancies; a retrospective observational study (Dr K G Gopakumar)

   In the calendar year 2023, a total of 449 procedures were done in 70 patients. Of these 75% (n=334) procedures done in 59 children were performed under moderate sedation/analgesia. Children underwent diagnostic (n=7), therapeutic (n=317) procedures as well as PICC line insertions (n=10). Common diagnostic/therapeutic procedures done included Bone marrow studies (n=7), intrathecal drug administration (n=231), clubbed bone marrow studies and intrathecal drug administrations (n=85) and diagnostic biopsies (n=1). The procedure chart had missing doctor's signature (n=2), signature of staff nurse (n=6), and Aldrete recovery score (n=64). In total, documentation was deemed incomplete in 22% medical records (73/334). With minimal infrastructure for providing hemodynamic support, administration of moderate sedation is very much feasible for the safe and proper conduct of common pediatric oncological procedures. However, with an increasing trend of medical litigations against health professionals, proper documentation remains obligatory.

5. Intrathecal administration of drugs during treatment of pediatric acute leukemia; practices among clinicians in India (Dr K G Gopakumar)

   With a total response rate of 32.8% (282/858), respondents included pediatric hemato-oncologists (54.2%, n=153), medical oncologists (38.4%, n=107) and hematologists (7.9%, n=22). Responses were obtained from 18/28 states and 3/8 union territories. Intrathecal procedures were performed in a dedicated procedure room (59.5%, n=168), maintaining a platelet count above 50,000 cells/cu.mm (55%, n=155) after preparing the area with chlorhexidine+alcohol solution and betadine (54%, n =152). Children received sedation /analgesia (61%, n=172) and post-procedural monitoring (71.6%, n=202). The procedure was in a lateral position (94.3%, n=266), the LP needle was introduced with a bevel upwards (89.4%, n=252), and CSF was let down before drug administration (78.3%, n=221). Clinicians (95.4%, n=273) were unanimous about the need for a consensus recommendation for the intrathecal administration of drugs during the management of acute leukemia.

CONFERENCES AND WORKSHOPS ATTENDED:

1. Dr Jithin T K attended a training on infectious diseases in children with cancer at St Jude Children's research hospital, Memphis, USA as part of Global ID program. It was a 2 weeks program - 20/02/2023 - 04/03/2023
2. Dr Jithin T K - Completed online training (20 weeks) in - "Use of Health Technology Assessment in Decision making" - conducted by Institute for Clinical Effectiveness and Health Policy-IECS Argentina,Center for Global Development-CGD, International Decision Support Initiative - iDSI and NCG, India
3. Dr Jithin T K attended and delivered a talk on "Recent advances in Pediatric ALL" at the Mid-term conference of Association of Medical and Pediatric Oncologists of Kerala (AMPOK) held on June 25th 2023.
4. Dr K G Gopakumar attended and was faculty for Panel Discussion on Pediatric ALL at the Mid-term conference of Association of Medical and Pediatric Oncologists of Kerala (AMPOK) held on June 25th 2023.
5. Dr Jithin T K attended Kerala PHOCON on 30/7/23 as faculty and presented a topic on "Retinoblastoma - What a pediatrician should know"
6. Dr Jithin T K attended Equip India - NCG workshops on 15/7/23 and 29/7/23
7. Dr Jithin attended and cleared GCP training online on 5th August
8. Dr Jithin attended INPHOG annual GB meeting online on 16/9/23
9. Dr Jithin attended ICCi (Indian childhood cancer initiative) meeting with MOHFW and other stakeholders like ICMR and WHO on 30/9/23 at New Delhi.
10. Dr Jithin presented a case of Tuberculosis with HLH in a child with cancer in St Jude Global Case Kiosk held on 8/11/23
11. Dr Jithin attended PHOCON 2023 as a faculty in the preconference workshop and presented 2 posters
12. Dr K G Gopakumar attended and completed the Online Good Clinical Practice (GCP) Training Program conducted on Saturday, 16th September 2023
13. Dr K G Gopakumar attended PHOCON 2023 as a faculty in the preconference workshop and presented a poster on "Intrathecal administration of drugs during treatment of pediatric acute leukemia; practices among clinicians in India"

EVENTS:

Events organized including CME/Workshop/Observation days if any:

Name of Programme:

1. **Onam celebrations**

   Onam celebrations were conducted on 26th August 2023 with pomp and splendour. Around 40 children and their families attended the function. Programmers included - various entertainment activities by children, parents and staff members. Experience sharing was also a highlight of the programme. Progarmmes concluded with Onam sadya and games in the afternoon.

2. **Ray of HOPE**

   Ray of Hope 2024 - Annual program of Mukulamparent support group which involves survivor meet was conducted on 23/12/23

3. **International Childhood Cancer Day programme**

   Date: 15/2/2024

   The event was organized in collaboration with Dreams Foundation as part of ICCD.As part of this initiative, an art exhibition programme when drawings of children were exhibited in venue

near Thalssery bus stand. Dr Jithin delivered a public awareness talk in the inaugural function of the same. Along with the Indian Academy of Pediatrics, ICCD relatedpamphlets were distributed across Kerala through IAP branches in each district. ICCD related cancer awareness video involving children, their parents, doctors and other supporting staff was shared in online social media as part of public awareness.

STAFF

ACADEMIC STAFF		
Sl No	**NAME OF STAFF**	**DESIGNATION**
1	Dr Jithin T K	Assistant Professor
2	Dr K.G Gopakumar	Assistant Professor

DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH

HEAD OF THE DEPT

Dr. SANGEETHA K NAYANAR
MD PATHOLOGY, DNB
PATHOLOGY, *PROFESSOR*

INTRODUCTION

Diagnostic services in the Clinical laboratory services and Translational Research grew several folds since its inception in 2001. There are five divisions in the Department of CLSTR namely, Biochemistry, Microbiology, Transfusion medicine, Molecular Oncology & Cancer genetics and oncopathology.

DIVISIONS UNDER THE DEPARTMENT

1. **BIOCHEMISTRY DIVISION**
2. **CANCER GENETICS DIVISION**
3. **MICROBIOLOGY DIVISION**
4. **MOLECULAR ONCOLOGY DIVISION**
5. **ONCO-PATHOLOGY DIVISION**
6. **TRANSFUSION MEDICINE DIVISION**

BIOCHEMISTRY DIVISION

DIVISION INCHARGE: DR. SINDHU E.R., M.Sc., PHD, ASSISTANT PROFESSOR

INTRODUCTION:

The division of Biochemistry at Malabar cancer Centre is committed to providing accurate and reproducible results on clinical material within the shortest possible time. It is a well-equipped, computerized, fully airconditioned 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 the Hospital Information System for electronic reporting of results within the turnaround time. The quality systems are compliant with the ISO 15189 standard guidelines.

SL. NO	NAME OF THE EQUIPMENT
1	Blood Gas Analyzer (ABG Machine)
2	Coagulometer (STAGO fully automated system)
3	CardiomarkeranalyserMini Vidas
4	Vitros 250 Biochemistry Analyser
5	Vitros 5600 Biochemistry Analyser
6	Access 2 tumor marker analyser (Beckman Coulter)
7	Blood cell counter Mindray BC-6200-2no
8	Vein Viewer
9	Electrophoresis apparatus with immunofixation
10	Blood Gas Analyzer (ABG Machine)
11	Coagulometer (STAGO fully automated system)
12	Cardio marker analyserMini Vidas

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

NEW EQUIPMENT AND FACILITIES

New tests started-Anti Hbc total Antibody, Procalcitonin, Factor assay, Lupus antibody, CMV – Ig G, CMV-Ig M

SL NO.	NAME OF EQUIPMENTS	PURPOSE
1	Blood Gas Analyzer (ABG Machine)	Blood gas analysis
2	Coagulometer (STAGO fully automated system)	Coagulation studies
3	CardiomarkeranalyserMini Vidas	Chemi luminous immuno assays
4	Vitros 250 Biochemistry Analyser	Biochemistry assays
5	Vitros 5600 Biochemistry Analyser	Biochemistry and immuno assays
6	Access 2 tumor marker analyser (Beckman Coulter)	Chemi luminous immuno assays

7	Blood cell counter Mindray BC-6200-2no	Complete Blood Cell count
8	Vein Viewer	To view vein for blood collection
9	Electrophoresis apparatus with immunofixation	Electrophoresis with immunofixation of serum protein

ACTIVITIES:

- One Month training/observer Program conducted for undergraduate and post graduate students of various colleges. M. Sc.Student's projects are carried out in our division under the supervision of Dr. Sindhu E. R.
- Various clinical samples from outside hospitals are also being tested and reported.

A.CLINICAL ACTIVITIES

STATISTICS		
SL NO	**NAME OF TESTS**	**NUMBER**
1	CBC	49816
2	Biochemistry	601980
3	Urine Analysis	1958
4	Coagulation tests	9079
5	Tumor marker	10718
6	Serology	3403
7	ABG	1067
8	Electrophoresis with immunofixation	1760
	TOTAL	**679,781**

B.ACADEMIC ACTIVITIES:

1. COURSES AND TRAINING PROGRAMS:

SL NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	Certificate course in phlebotomy	1 year	5	5	5
	TOTAL NUMBER OF STUDENTS				5

2. ROUTINE ACADEMIC SESSIONS:

Clinical classes on Friday, Academic sessions on Saturday

3. OBSERVERSHIP

SL NO	COURSE	INSTITUTION	NUMBER OF OBSERVERS
1	M.Sc. Biochemistry, Chemistry	Calicut University, Central University	3
	TOTAL NUMBER OF OBSERVERS		3

C.RESEARCH ACTIVITIES:

ONGOING RESEARCH PROJECTS

1. Prognostic significance of pre-treatment derived hematological markers and serum biochemical parameters on the overall survival rate in individuals diagnosed with cervical cancer-Dr. Sindhu (PI)
2. Research collaboration for cancer research with Dr. Ruby John Anto, Rajiv Gandhi centre for Biotechnology Dr. Sindhu (PI)

PUBLICATIONS

BOOKS / JOURNALS (INTERNATIONAL, NATIONAL):

1. Prathyusha P, Sindhu ER. Nanocurcumin - Therapeutic aspects in Cancer. In: Advances in Pharmaceutical Sciences (Volume 2). 1st ed. ISBN: 978-93-91342-23-4. Chapter 8, Pages 93-111.
2. Tomcy AT, Sindhu ER. Mesenchymal Stem Cells - Advances in Stem Cell Therapy. In: Advances in Pharmaceutical Sciences (Volume 2). 1st ed. ISBN: 978-93-91342-23-4. Chapter 4, Pages 29-54.

PAPERS

1. Kurup AR, Nandhana S, Dyana K, Mohandoss M, Sindhu ER. Analyzing the Requirement for Screening Platelet Donors for Iron Deficiency: A Critical Appraisal. Int J Pharma Bio Sci. 2024;15(2):B9-17. doi:10.22376/ijpbs.2024.15.2.b9-17.
2. Sindhu ER, Aathira KK, Adarsh D, Padmanabhan M, Nayanar SK. Retrospective Analysis of Serum CA 125 Levels for Staging Ovarian Cancer: Insights from A Tertiary Care Cancer Centre. Int J Pharm Sci. 2024;15(1):B80-87. doi:10.22376/ijpbs.2024.15.1.b80-87.
3. Tomcy AT, Sindhu ER. Mesenchymal stem cells- an excellent therapeutic agent for cancer. Asian Pac J Clin Oncol. 2023:1-9.
4. Sindhu ER, Das AY, Padmanabhan M, Nair CK. Correlation of Plasma Cell Percentage and Monoclonal Gammapathies with Biochemical Parameters in Multiple Myeloma Patients: A Retrospective Study. Asian Pac J Cancer Care. 2023;8(4):685-689.

CONFERENCE & WORKSHOP DETAILS

1. International conference on 'Environmental, Agricultural, Chemical and Biological Sciences' organized by Voice of Indian concern for the environment on May 13-14, 023'at SrimadAndavan college, Thruchirapilly, Tamilnadu (Hybrid)Paper: Correlation of Ig G and Ig A monoclonal gammopathy with CRAB criteria in newly diagnosed multiple myeloma patients' – Paper presented by Dr. Sindhu ER
2. Exploring analytical performance of two diverse model dry chemistry biochemistry analyzers using consistent performance and quality control material, Paper presented in national conference INVICTA at Thalassery, October 19-20 th 2023 conducted by Kerala Cooperative Hospital Federation Ltd – Paper presented by Dr. Sindhu ER

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr. Sindhu ER	Assistant Professor
NON ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mrs. Mini	Lab Technician
2	Mr. Aneesh	Lab Technician
3	Mrs. Soumya	Lab Technician
4	Mrs. Dhanya Prabha N	Lab Technician
5	Mrs. Aneesha	Lab Technician
6	Mrs. Sinsha NP	Lab Technician
7	Mrs. AnusreeValsan	Lab Technician
8	Mrs. Akhila	Lab assistant

CANCER GENETICS DIVISION

DIVISION IN CHARGE: DR DEEPAK ROSHAN VG PhD (CANCER BIOLOGY)

INTRODUCTION

The Division of Cancer Genetics and Division of Molecular oncology is at the forefront of molecular diagnosis and research aimed at advancing the understanding and treatment of cancer. The division is dedicated to conducting cutting-edge research in various areas, including the identification of anticancer compounds, development of 3D culture systems, and investigation of signaling pathways associated with cancer progression. Division is equipped with high-end diagnostic techniques such as PCR (Polymerase Chain Reaction), real-time PCR, FISH (Fluorescence In Situ Hybridization), and sequencing technologies. These methods enable us to perform precise molecular analyses crucial for diagnosing cancer, predicting treatment responses, and studying genetic mutations underlying oncogenesis.

As part of its commitment to nurturing future leaders in life sciences, the Division is affiliated with Kannur University to offer a comprehensive PhD program. This program focuses on cutting-edge research in cancer genetics, cancer biology, cancer proteomics, and photochemistry providing students with opportunities to contribute to groundbreaking discoveries in the field. The division also offers a one-year fellowship program in Molecular Oncology tailored for MD Pathology candidates. This intensive program equips participants with advanced skills and knowledge essential for pursuing careers in cancer research and molecular diagnostics.Recognizing the importance of continuous learning and skill enhancement, the division provides state-of-the-art PG dissertation facilities for students. Additionally, offering non-stipendiary trainee positions. This initiative aims to bridge the gap between academic learning and practical application, preparing young professionals for successful careers in the biotechnology industry.

AVAILABLE FACILITIES:

SL NO	NAME OF THE EQUIPMENT
1	DNA sequencer
2	miSeq Next generation sequencer
3	Real time PCR
4	FISH work station

FACILITIES:

1. Molecular analysis of hematological cancer like : BCR-Abl, PML –RARa, AML panel ALL panel, NPM panel
2. Molecular analysis of Solid tumors like : EGFR mutation,
3. FISH analysis for cancer:- HER2, ALK, ROS, EWSR, SS18
4. MTT assay
5. Real Time PCR expression assay
6. Western blotting

NEW EQUIPMENT AND FACILITIES

SL NO	NAME OF FACILITY	CARDINAL FEATURE OF THE FACILITY
1	FISH Multiple Myeloma panel	For treatment Multiple Myeloma

ACTIVITIES:

A. CLINICAL ACTIVITIES

SL NO	TEST NAME	NUMBER OF TESTS
1	BCR ABL QUANTITATIVE	365
2	BCR ABL QUALITATIVE	49
3	EGFR	55
4	PML RARa	34
5	JAK2	33
6	AML PANEL	66
7	ALL PANEL	51
8	FISH BCR ABL	17
9	FISH PML RARa	06
10	FISH ALK	04
11	FISH ROS	03
12	FISH EWSR	02
13	FISH MYELOMA PANEL	62
14	FISH HER2	57
15	FISH SS18	06
16	FISH CHIMERISAM	03
17	FISH TRIPLE HIT	09
18	DPYD MUTATION	08
19	MPN PANEL	40
	TOTAL	**829**

B. ACADEMIC ACTIVITIES

1. **COURSES AND TRAINING PROGRAMS:**

SL NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	PhD in Life Science	5	3	1	3
2	Fellowship in molecular Oncology	1	1	1	1
	TOTAL NUMBER OF STUDENTS				4

2. ROUTINE ACADEMIC SESSIONS

SL NO	CLASS DETAILS	DAY
1	Journal club	Friday
2	Class	Wednesday
3	Discussion on selected topic	Last Saturday

3. OBSERVERSHIP

SL NO	NUMBER OF OBSERVERS	COURSE	INSTITUTION
1	1	Biotechnology	Chinmaya arts and science collage
2	1	Biotechnology	Atlantic Technical University, UK
3	2	Biotechnology	Amritha school of biotechnology
TOTAL: 4			

4. PG DESSERTATIONS

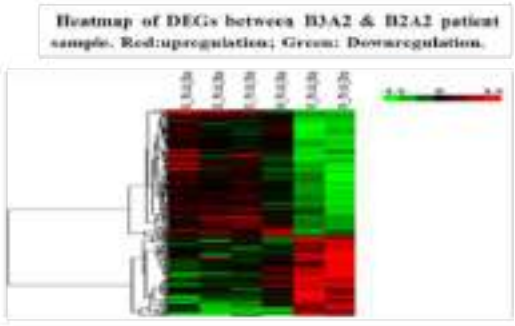
SL NO	NAME	INSTITUTE	TOPIC
1	Akshaya P V	Dr. Janaki Ammal campus, Palayad	To evaluate the anticancer activity of *Bacopa Monneiri* on triple negative breast cancer cell line MDA - MB 231
2	Aiswarya S	Dr. Janaki Ammal campus, Palayad	3D co culture of breast cancer cell lines & differentiated adipocyte cell lines
3	Anashwar S B	Hindusthan college of arts &science Coimbatore	Study of anticancer effect of Thymoquinone in breast cancer
4	Kavya K	Dr. Janaki Ammal campus, Palayad	Explore the anticancer properties of dapsone in breast cancer
5	Theertha K	Dr. Janaki Ammal campus, Palayad	Assessing anticancer effect of multikinase inhibitor PP121 in breast
6	Sreelakshmi P A	Dr. Janaki Ammal campus, Palayad	Evaluating the anticancer potential of antibiotic doxycycline against breast cancer
7	Anupama Pradeepkumar	Chinmaya arts & science college	Evaluating the frequency of fusobacteriumnucleatum in tissue samples from colon cancer patients treated at malabar cancer centre

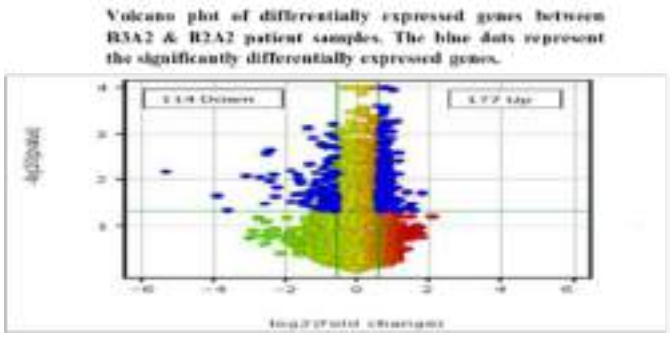
C. RESEARCH ACTIVITIES:

ONGOING PROJECT DETAILS:

1. Study the stat and mTOR pathway signaling in CML cell lines with B3A2 and B2A2 subtypes of BCR-Abl fusion protein

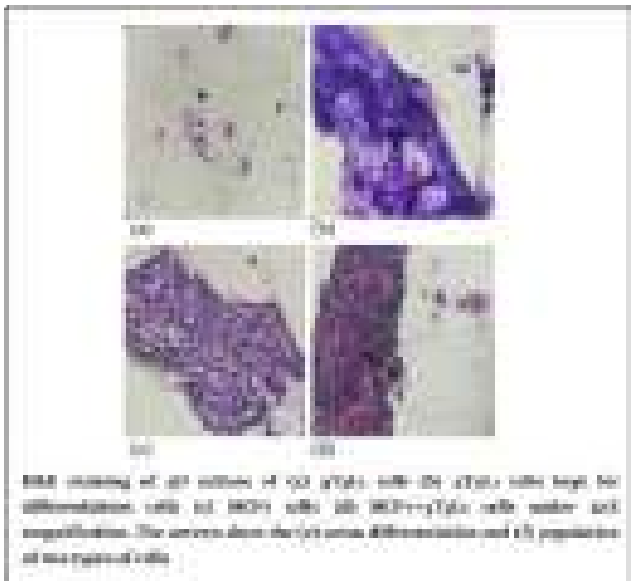
Study aimed to analyse influence of B3A2 and B2A2 transcript types on hematological parameters and clinical outcomes. According to the study, B2A2 subtype have faster molecular response than those with B3A2 transcript type. The data resulting from Microarray, RNA seq and MS experiments and observed that metabolic pathways & cancer pathways are the most significantly altered pathways between B3A2 &B2A2.





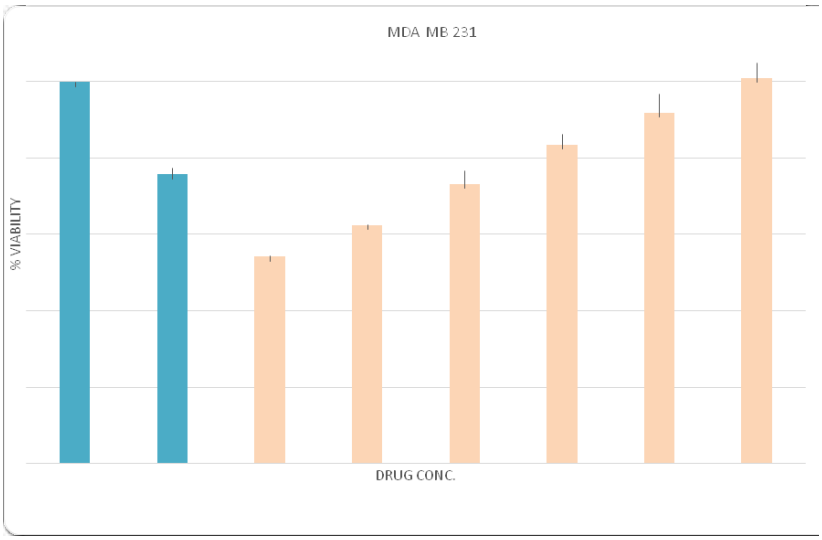
2. 3D co-culture of breast cancer cell line and differentiated adipocyte cell lines

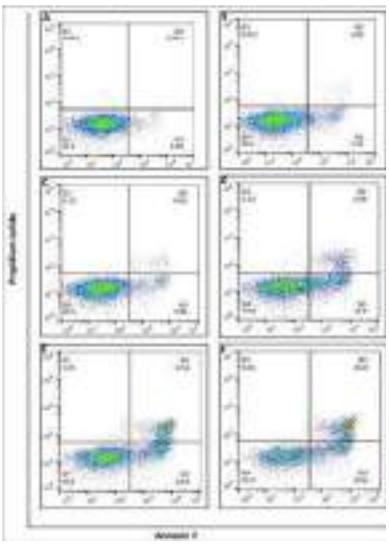
In this study, we established a 3D co culture system of MCF7 and adipocytes. Fibrinogen was used as a matrix in combination with agarose, and this helped in maintaining the3D structures in culture for an extended period. H&E staining analysis revealed tumor similar morphology indicating that we have established an in vitro tumor model.

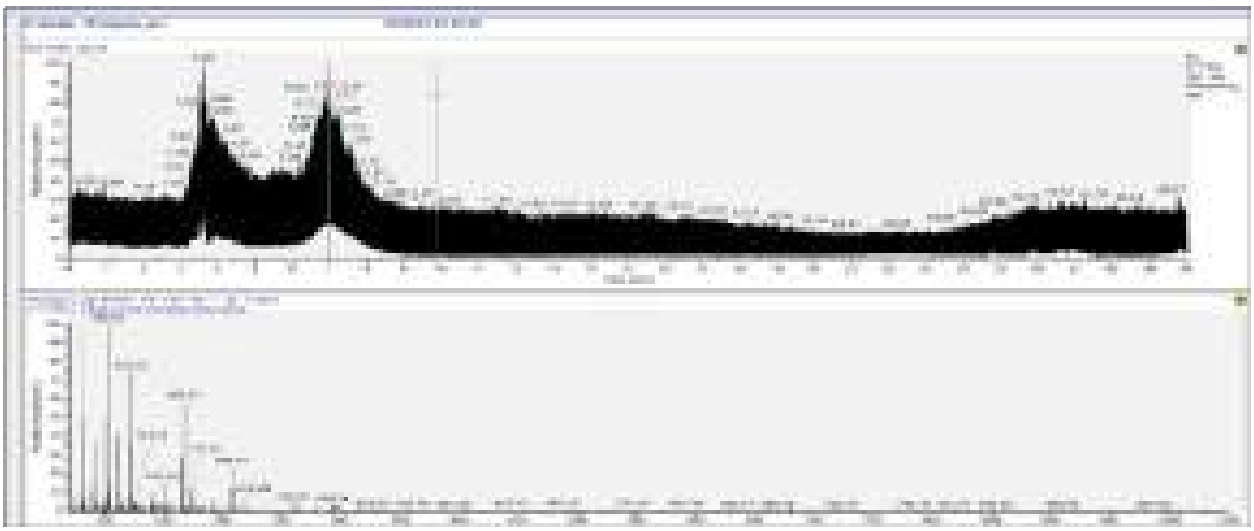


3. Evaluating the anti-cancer potential of *Tinospora cordifolia* derived compounds against breast cancer

We evaluated anticancer effect of *T.cordifolia*in combination with conventional chemotherapeutics on breast cancer. anticancer active fractions and possible bioactive molecule from the *T.cordifoila*are identified. Anticancer potential of identified molecules evaluated on breast cancer cell lines alone and in combinations. These bioactive principles are tested in combination with conventional chemotherapeutic drugs in order to improve their efficacy. The combinations induced apoptosis and cell cycle arrest in breast cancer lines.





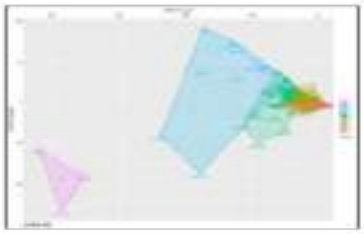


4. Study the biology of early-stage oral squamous cell carcinoma with poor clinical outcome

To study the differential gene expression patterns among oral cavity squamous cell carcinomas compared to oral cavity normal squamous cells utilising GDC portal datasets. Using R studio we downloaded database from GDC portal to identify Differential expressed genes and to classify genes through various downstream analysis to identify various pathways and biomarkers for detection of OSCC.

Gene Ontology of Different processes

Heatmap of Data Collected



Cluster Analysis of Data collected After Normalization

1. **Deciphering specific genetic alterations in oral precancer and cancer as possible therapeutic and prognostic markers**

   The main objectives of the project include Identification of altered pathways and genes in oral pre-cancer and cancer and the Correlation of these gene markers with oral habits, clinicopathological parameters and prognosis are evaluated. Using Next Generation Sequencing differentially expressed genes were identified. Expression patterns of several genes were processed using microarray.

2. **Cancer vaccine development against triple negative breast cancer**

   The proposed study is being conducted in collaboration with Kannur University and Calicut University. The primary objective is to develop a peptide-based conjugate vaccine against triple-negative breast cancer.

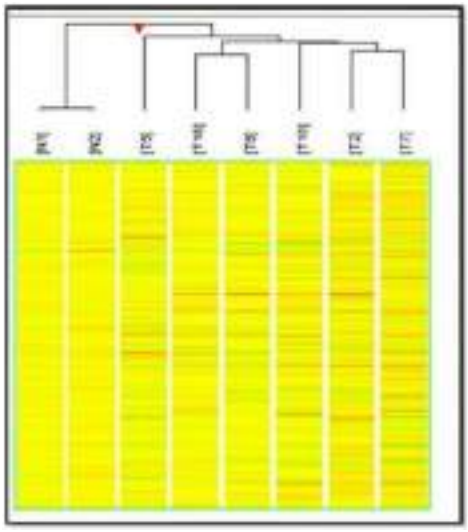
3. **Develop indigenous dual CART**

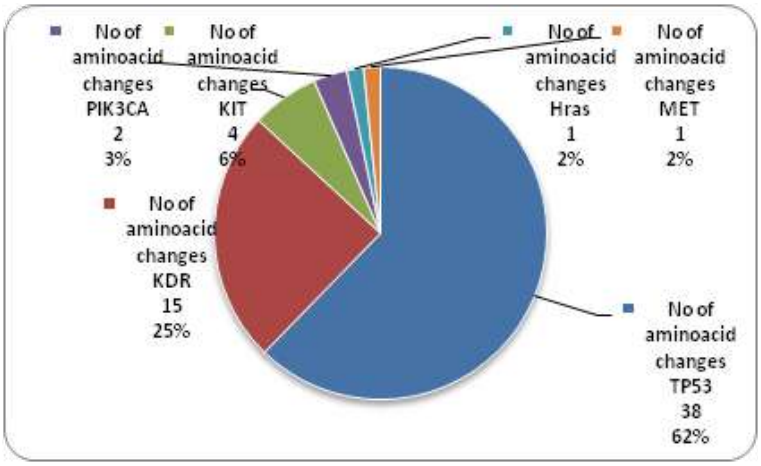
   The proposed study is being conducted in collaboration with Central University, SSSIHL and SRM University. The primary objective is to develop a novel indigenous dual CART.

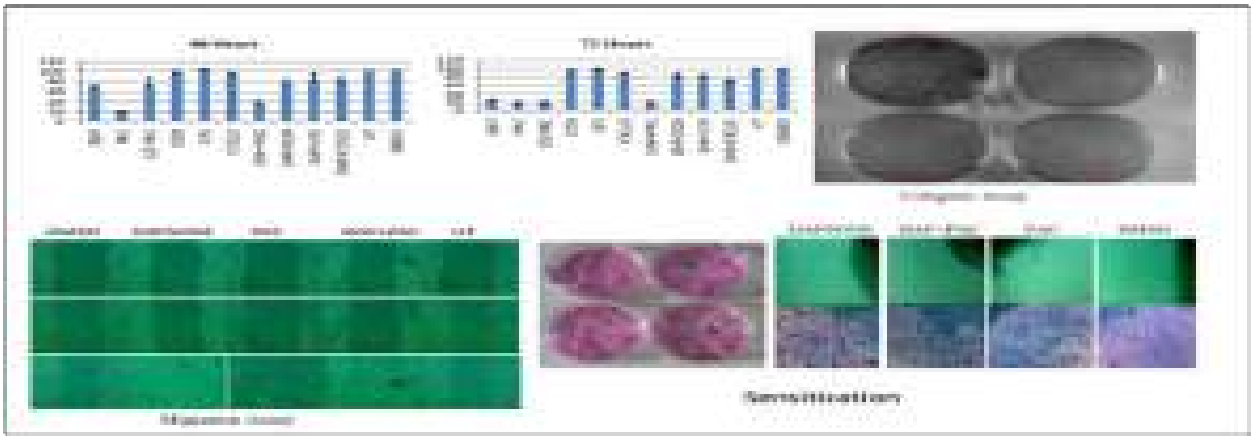
PROJECTS COMPLETED IN CURRENT YEAR

1. Cytotoxic effect of Dapson in breast cancer cell line MCF7

The results demonstrated that Dapsone treatment significantly induced cell death in MCF-7 cells in both a dose-dependent and time-dependent manner. Dapsone exhibited a high cytotoxic effect, with a half-maximal inhibitory concentration (IC50) of 4mM on CF7 cells. Consistently, the antiproliferative effect of Dapsone was linked to apoptosis in breast cancer cell lines, as evidenced by observed morphological changes.



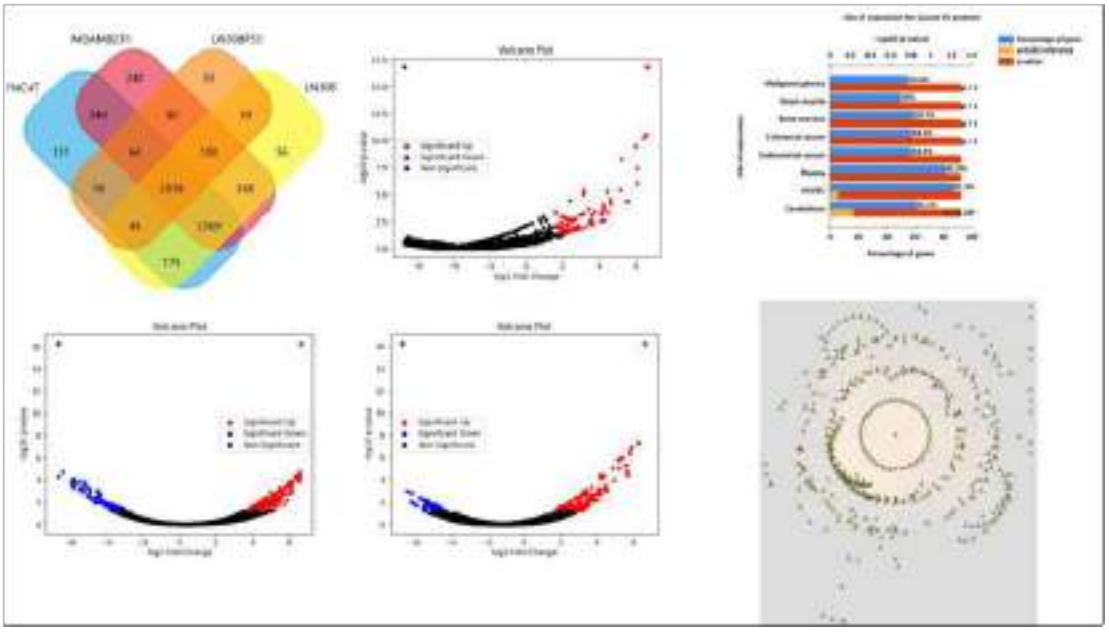




2. System wide analysis to identify a circulating exosome-based biomarker for early detection of brain cancer

An extensive investigation was undertaken to explore the proteomic landscape of Extracellular Vesicles (EVs) derived fromtriple-negative breast cancer cell line MDAMB231, glioblastoma cell lines LN308 and LN308 P53 mutants. Importantly, our research unveiled 32 unique proteins specific to cancerous conditions, which, intriguingly, had not been reported in prior studies or EV protein databases like Exocarta. These newly identified proteins hold promise as novel cancer biomarkers, introducing a fresh perspective to the landscape of extracellular vesicle research

Figure 1 succinctly encapsulates the comprehensive results derived from the EV proteomic study involving various cell lines.



PUBLICTIONS

1. Mohandas S, Gayatri V, Kumaran K, Gopinath V, Paulmurugan R, RamkumarKM. New Frontiers in Three-Dimensional Culture Platforms to ImproveDiabetes Research. Pharmaceutics [Internet]. 2023 Mar 1;15(3):725.
2. Saha J, Gopinath V, Nair CK, Roshan D. Identification of rare atypical BCR-ABL1 transcript: A case report. Indian J PatholMicrobiol. 2023 Jul-Sep;66(3):624-626
3. Nayanar SK, Mohan A, Shenoy P, Saravanan M, Gopinath V, Deepak Roshan VG.Frequency of EGFR mutations in lung adenocarcinoma patients - A study fromtertiary cancer center of South India. J Cancer Res Ther. 2023 Jan 1;19
4. Dharmarajan A, Gopinath V, Keloth Nayanar S, VelandiKunnummal S, Balasubramanian S, Roshan Valiyaparambil Gopi D. Genomic analysis of breast cancer patients from Kerala: A novel BRCA1 mutation detected. Breast Dis. 2023;42(1):341-347.

BOOK CHAPTER

1. Pournami, P.K., Rasheed, N., Raveendran, A., Gopinath, V. (2024).Antineoplastic Drug Leads from Plants and Microbes. In: Haridas, M.,Abdulhameed, S., Francis, D., Kumar, S.S. (eds) Drugs from Nature:Targets, Assay Systems and Leads. Springer, Singapore.

AWARDS , HONOURS AND RECOGNITIONS:

- Dr Deepak Roshan Member, Board of Studies Biotechnology Kannur University.
- Dr Deepak Roshan Member, Translational Research Center-Kerala University of Health Science

- Dr Deepak Roshan Invited faculty for Faculty improvement program Calicut University
- Dr Deepak Roshan Member Doctoral Review Committee Yanopaya University
- Dr Deepak Roshan Member Doctoral Review Committee KVASU
- Dr Vipin Gopinath Invited faculty for Faculty improvement program Kannur University
- Dr. Vipin Gopinath served as an evaluator for the state-level Young Innovators Programme 4.0, organized by the Kerala Development and Innovation Strategic Council (K-DISC), which took place in Kannur
- Dr. Vipin Gopinath is Nodal officer of IEDC

CONFERENCES AND WORKSHOPS ATTENDED:

1. *Tinospora cordifolia* metabolite library revealed potential compounds for targeting triple negative breast cancer Pournami P K, 35th Kerala Science congress, Mar Baselios Christian College of Engineering and Technology, Kuttikkanam, Idukki, 2023.
2. Cytotoxic Effect of Dapsone on breast cancer cell line MCF 7 Swetha K V, , 35th Kerala Science congress, Mar Baselios Christian College of Engineering and Technology, Kuttikkanam, Idukki, 2023.
3. Differential metabolic pathway in B3A2 and B2A2 type Chronic Myeloid Leukemia identified using multiomicsapproach.Athira Raveendran, 35th Kerala Science congress, Mar Baselios Christian College of Engineering and Technology, Kuttikkanam, Idukki, 2023.
4. identification of genes associated with prognosis colorectal cancer: A TCGA analysis.Nasheeda Rasheed K, 35th Kerala Science congress, Mar Baselios Christian College of Engineering and Technology, Kuttikkanam, Idukki, 2023.
5. Molecular landscapes associated with gut microbiome dysbiosis in colorectal cancer progression - A meta data analysis. Nasheeda Rasheed K UAEU Microbiome Conference 2023.
6. Hereditary mutation profile of bilateral breast cancers- a single institution experience from north Kerala. Anushara PrabhakaranETBH 2023, RCC Trivandrum.

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr. Deepak Roshan V G	Associate Professor
2	Dr. Vipin Gopinath	Assistant Professor
NON ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mrs. Sreeja K V	Laboratory Assistant
2	Mr. Sreehari O P	Laboratory Technician

MICROBIOLOGY DIVISION

DIVISION IN CHARGE: DR. R. PARTHIBAN, M.SC., PH.D (MEDICAL MICROBIOLOGY), ADDITIONAL PROFESSOR

INTRODUCTION

The main focus of the division is to provide high-quality service and improve continuously and innovate Diagnostic Microbiology services. This also helps limit any possibility of nosocomial infections as well. Over the last decade, this division has attained important milestones.

Automated Blood Culture System	2013
Real-Time PCR	2015
Microbial Identification and Antibiotic sensitivity testing – VITEK – 2	2017
Anaerobic Chamber	2018
MALDI-TOF	2019

The Microbiology Division plays a pivotal role within the healthcare system, focusing on diagnostic services, education, and research. Its key responsibilities involve diagnosing infectious diseases associated with hematological cancers and solid tumors caused by various pathogens like bacteria, fungi, and viruses.

The division is proactively involved in creating guidelines to prevent Healthcare-Associated Infections (HCAIs) and performs regular monitoring to track infection rates within the hospital. Additionally, it participates in teaching (B.ScMRT&B.Sc Nursing) and actively supports M.Sc and Ph.D. students' research. The division works closely with the hospital infection control committee and conducts environmental surveillance, including air sampling in critical areas, to ensure a safe and hygienic healthcare setting.

AVAILABLE FACILITIES

SL. NO	EXISTING FACILITIES	PURPOSE
1	VITEK - 2	Automated Bacterial Identification and Susceptibility testing
2	VITEK-MS (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 Microroganisms
8	KingFisher Flex System	Automated Extraction system for RNA/DNA
9	Refrigerated Centrifuge	Used for RNA/DNA Extraction
10	Fluorescence Microscope	For Mycobacterium tuberculosis identification
11	Gradient Thermal Cycler	For Research Purpose

ACTIVITIES

A. CLINICAL ACTIVITIES

1. SERVICES OFFERED BY THE MICROBIOLOGY DIVISION

A) MOLECULAR TESTING

Transplant Associated Infections:

- CMV Quantitative Real time PCR
- EBV Quantitative Real Time PCR
- BK Quantitative Real time PCR

HIV and Hepatitis:

- HIV Quantitative Real-time PCR and GeneXpert
- HCV Quantitative Real-time PCR and GeneXpert
- HBV Quantitative Real-time PCR

Infectious Diseases:

- COVID – 19 testing – Real-time PCR and GeneXpert
- Drug – resistance – Real-time PCR.
- Antibiotic resistance genes Gradient Thermal PCR.
- Tuberculosis - GeneXpert MTB/RIF

B) CONVENTIONAL CULTURE FOR ANAEROBIC BACTERIA

Conventional culture for anaerobic bacteria from clinical specimen other than blood is carried out on the most appropriate media in controlled environment.

C) MICROBIAL IDENTIFICATION AND SENSITIVITY TESTING

- Rapid Microbial Identification – MALDI-TOF
- Blood Culture and sensitivity - BACTEC 9050 and BacT/ALERT 3D.
- Automated Microbial identification and susceptibility testing – VITEK 2- compact

D) SEROLOGY

- *Clostridium difficile* toxin a &b - ELISA
- Serum galactomannan assay - ELISA
- Widal test
- ASO - Anti streptolysin O Titre
- CRP - C-reactive protein
- RA - Rheumatoid factor
- RPR – Rapid Plasma Reagin

2. QUALITY CONTROL (Q.C.) AND QUALITY ASSURANCE (Q.A)

- Quality control (Q.C.) and quality assurance (Q.A) are strictly implemented and usually authenticated by the reproducible results from other laboratories.

3. STATISTICS

SL.NO	NAME OF TESTS	TOTAL NUMBER OF TESTS DONE
1	Blood Culture And Sensitivity	3394
2	Urine Culture And Sensitivity	1995
3	Faeces Culture And Sensitivity	169
4	Respiratory Culture AndSensitivity	552
5	Exudate Culture & Sensitivity	1106
6	Fungal Culture	143
7	Acid Fast Bacilli Staining	304
8	Gram Staining	212
9	Pneumocystis Jirovecii Staining	84
10	10% Potassium Hydroxide/Wet Mount	283
11	Rapid Plasma Reagin Test	76
12	Rheumatoid Arthritis Test	11
13	Anti-Streptolysin O Test	1
14	C-Reactive Protein Test	257
15	Widal Test	12
16	Clostridium Difficile Toxin Test	112
17	Beta Galactomannan Assay	93
18	Environmental Samples	763
19	Blood Bank Quality Control Testing	448
20	Water Analysis	86
21	Disinfectants	155
22	Bacterial Identification(Out Side Samples)	114
23	Molecular Virology (Infectious Disease Testing)	1260
	TOTAL	**11,630**

B. ACADEMIC ACTIVITIES

1. ROUTINE ACADEMIC SESSIONS

NABL and NABH-related academic sessions are held every Thursday of the month.

2. OBSERVERSHIP

SL NO	COURSE	NUMBER OF OBSERVERS	INSTITUTION
1	B.Sc MLT	14	Mothers College, ,Kerala
2	B.Sc MLT	27	Lisieux College Of Paramedical Science,Kerala
3	B.Sc MLT	5	AKG Co-Operative Institute Of Health Sciences,Kerala
4	Ph.D	1	Karaikudi Alagappa University, Tamilnadu

5	Lecturer	1	Kannur Medical College, Kerala
6	M Sc	1	MES College,Kerala
7	MSc	1	CMS College, Tmailnadu
8	BSc	1	Atlantic Technological University: ATU
TOTAL NUMBER OF OBSERVERS: 51			

C. RESEARCH ACTIVITIES

The Division is actively engaged in Antibacterial Resistance mechanisms and Microbiome,

ONGOING PROJECT DETAILS

a) Co-Existence Of Aminoglycoside Resistant Genes InCarbapenemase Producing Enterobacteriaceae isolates from Clinical Samples

b) Genotypic Analysis of Drug Resistance Klebsiella pneumoniae Isolates from a Tertiary Care Cancer Centre, North Kerala.

c) Prevalence Of Colistin Resistance in Multi Drug Resistant Klebsiella pneumoniae Isolated From Cancer Patients.

d) Molecular Characterization of Aminoglycosides and Plasmid Mediated Quinolone Resistance among Gram Negative Isolates

PROJECTS COMPLETED IN CURRENT YEAR

a) Molecular Characterization of virulence genes associated with pathogenicity in *Klebsiella pneumonia* – (PI – Dr. R. PARTHIBAN)

-This study was conducted to characterise the virulence factors inclinical strains of *Klebsiella pneumoniae*.100 clinically relevant, non-duplicate isolates of K. pneumonia were studied. Testing for antibiotic susceptibility and PCR-based identification of resistant genes and virulence genes were carried out.entB, a siderophore, was found in the majority (57%) of the isolates. Out of the 100 isolates were tested, 80 of them had numerous virulence genes.19 had only one and 20 had none of the investigated virulence genes. entB and fimH were the two most frequent combinations of occurrence.

b) Distribution of Resistant Genes Encoding Carbapenemase in Enterobacteriaceae isolated from Various Clinical Samples in Tertiary Care Cancer Centre - (PI – Dr. Sajani Samuel)

-The study was to determine the incidence of carbapenem resistance in Enterobacteriaceae isolates isolated and identified from clinical samples of cancer patients. From the 63 *Enterobacteriaceae* isolates 22 were identified as Carbapenem resistant upon subjected to Antibiotic susceptibility test. Carbapenem resistance were detected in 35% of the isolates .Out of which E.coli were 8(36.3%) followed by *K. pneumoniae* 13(59%). NDM gene was the predominant followed by OXA gene and KPC.

c) Phenotypic Evaluation of Ceftazidime-Avibactam With Aztreonam Synergy among Carbapenem Resistant Enterobacteralesat a Tertiary Care Cancer Centre - (PI – Dr. Sarath.K.E)

Ceftazidime–avibactam combination with aztreonam and role of rapid synergy reporting has not been widely evaluated. Also the synergy correlation with various betalactamases has not been widely studied. The highest synergy was seen in *Klebsiella pneumoniae* followed by and 26% of *E.coli* showed synergy. Molecular methods revealed multiple resistance gene combinations andblaOXA was predominant gene in isolates showing synergy.

PUBLICATIONS

1) Anjali K, Manzoor M, Suryavanshi MV, Rudrapathy P, Rekha PD, Das R, Hameed A, Arun AB. Dysbiosis of the oral microbiota composition is associated with oral squamous cell carcinoma and the impact of radiotherapy: a pilot study. FEMS Microbiology Letters. 2023;370:fnad111.

2) Saravanan M, Samuel S, Sarath KE, Parthiban R. Retrospective Investigation of Antibiotic resistance pattern by Microbial pathogens isolated in surgical site infections in cancer patients. Research Journal of Pharmacy and Technology. 2023;16(10):4635-41.

3) 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 - Asian Journal of Pharmaceutical and clinical research, 2023:16 (6): 67 - 70.

4) Sarath K E and Gufran Ahmed M B. A Prospective Study on Microbiological Profile of Dermatophytosis and Its Susceptibility to Common Antifungal Drugs. Int J Pharm Bio Sci. 2023: 14 (3):36-42.

5) Nirmal G, Jithin TK, Gopakumar KG, Parthiban R, Nair C. Prevalence and Outcomes of Carbapenem-resistant Bloodstream Infection in Children With Cancer. Journal of Pediatric Hematology/Oncology. 2023 Aug 1;45(6):e678-82.

AWARDS/RECOGNITIONS/HONOURS

a) **Dr. R. Parthiban** - awarded Best Oral Presentation award at International conference on Infectious Diseases and Antimicrobial resistance at Saveetha Dental College & Hospitals on 28-29th July 2023.

b) **Dr. R. Parthiban** - received AntiViral Research Society (AVRS) Fellow award by the AVRS at International Conference on Infectious diseases on 01-12-2023, University of Madras, Chennai.

c) **Dr. R. Parthiban** - External Examiner for the MSc (Life Sciences) IV Semester Dissertation Evaluation and Viva - Voce Examinations, JSS University, Mysore on June 2023.

d) **Dr. R. Parthiban** - External Examiner to the candidate D16MS002 Prasada Rao Namburi by Bharath University to conduct the Ph.d Viva -Voce examination on August 2023.

e) **Dr. R. Parthiban** - External Examiner to conduct Ph.D Viva Voce Examination at Bharath University on August 2023.

f) **Dr. R. Parthiban** - as chief superintendent from KUHS ,fortheconductof First Year BSc MRT Supplementary Examinations, September 2023.

g) **Dr. R. Parthiban** - Examiner to conduct the comprehensive exam for the 2Ph.D Candidates - Ms.Yumnum Asha Devi &Ms.HaorongbamJoldy Devi at Sathyabama Institute of Science &Technolog y,SathyabamaUniversity ,Chennai on January 2024.

h) **Dr. R. Parthiban** - Invited speaker - delivered "Point of care (POC) testing in Infectious Disease Diagnosis" for one day Continuing Dental Education programme conducted by Microbiology Department, Mahe Institute of Dental Sciences, Pondicherry University, Mahe, U.T of Puducherry on July 2023.

i) **Dr. R. Parthiban** - Invited speaker - delivered "Automation In Laboratory Diagnosis of Infectious Diseases - An Update" at ManakulaVinayagar Medical College & Hospital, Puducherry on February 2024.

j) **Dr. Saravanan M -** awarded Best E-poster Presentation at International virtual conference on Recent Trends in Clinical Microbiology SAI- MICROCON 2023, held on 20 & 21 July 2023, organized by Department of Microbiology, Shri Sathya Sai Medical College and Research Institute, SBV Chennai Campus.

k) **Dr. Saravanan. M** - External examiner for BDS – General Microbiology Practical Examination at Mahe Institute of Dental Sciences, Mahe, Pondicherry University on May 2023.

CONFERENCES AND WORKSHOPS ATTENDED

a) **Dr. R. Parthiban** attended Molecular characterization of virulence genes associated with pathogenicity in Klebsiella pneumoniae at the conference "International Conference on Infectious Diseases and Antimicrobial Resistance (ICiDAR- 2023)*in association with* Indian Association of Medical Microbiologists (IAMM) Tamilnadu Chapter" at chennai on 27-29th July 2023.

b) **Dr. Sajani samuel** attended Distribution of Resistant genes encoding carbapenemase in Enterobacteriaceae isolated from various clinical samples CIDSCON 2023 (13 th Annual conference of clinical InfectiousDiseases Society) at Chennai held on 7th -9th July 2023.

c) **Dr. Sajani Samuel** attended Carbapenemase Genes In Enterobacteriaceae isolated from various clinical samples In tertiary care cancer centre at 2nd International conference on clinical and Applied Microbiology on 14th -15 th December 2023.

d) **Dr. Saravanan. M**attended Molecular Characterization of Aminoglycosides and plasmid mediated quinolone resistance among gram negative isolates International virtual conference on Recent Trends in Clinical Microbiology SAI- MICROCON 2023, organized by Department of Microbiology, Shri Sathya Sai Medical College and Research Institute, SBV Chennai Campus held on 20 & 21 July 2023.

e) **Dr. Saravanan. M** participated in the Nodal Officers Meet-up and IEDC Summit organized by Kerala Startup Mission in association with College of Engineering, Trivandrum on 11 and 12 October 2023.

f) **Dr. Saravanan. M -** National CME on Anaerobes – Human Microbiome in Health and Dysbiosis – Debunking Myths on 14th October 2023.

g) **Mrs. Ramitha M.G.** (Senior Technician) and **Mrs. Aswathy Maheswar** (Senior Technician) **-** National CME on Anaerobes – Human Microbiome in Health and Dysbiosis – Debunking Myths on 14th October 2023.

WORKSHOPS/TRAININGS ATTENDED

a) **Dr. R. Parthiban** participated in Bio informatics and Antimicrobial stewardship workshop conducted by International Conference on Infectious Diseases and Antimicrobial Resistance (ICiDAR- 2023) *in association with* Indian Association of Medical Microbiologists (IAMM) Tamilnadu Chapter at chennai on 27th July 2023.

b) **Dr. R. Parthiban**underwent Simulation Training for Allied Health Sciences Faculty conducted by Academic Staff College, at KUHS, Thrissur on 15-03-2024.

c) **Dr. Sarath. VK.E** participated in KARS-NET National AMR Surveillance programme jointly organized by National Centre for Disease Control (NCDC) and Government Medical college Thiruvananthapuram, on 07–08 December 2023.

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr. R. Parthiban	Additional Professor and Division In-charge
2	Dr. Sajani Samuel	Associate Professor
3	Dr. Saravanan. M	Assistant Professor
4	Dr. Sarath K.E.	Assistant Professor
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mrs. Ramitha M.G.	Lab Technician
2	Mrs. Aswathy Maheswar	Lab Technician

ONCOPATHOLOGY DIVISION

DIVISION IN CHARGE: DR. SANGEETHA K NAYANAR, MD Pathology, DNB Pathology

DESIGNATION: PROFESSOR

INTRODUCTION:

The Division of Oncopathology 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 &Haematopathology. The technique of frozen sections and automated immune histochemistry enables accurate and specialised cancer treatment and outcome for patients. The Division aims to be the backbone of dedicated cancer research in the upcoming field of molecular pathology, as cancer treatment moves into the realm of personalised medicine. It has the latest technology in Molecular Pathology aimed at providing complete diagnostic and prognostic facility. The division is situated in spacious premises to the new laboratory block which is on par with state of art laboratories in India & abroad. Innovative research which can translate into life changing modalities is our dream.

Division of Oncopathology conducts Senior Residency & two Institutional Fellowship programmes for post-doctoral candidates, one in Oncopathology& second in Head and Neck Pathology to foster specialized training and experience in the field. The faculty and residents are encouraged to do original research projects and create academic publications & presentations. Undergraduate students pursuing BSc.MLT are given rotation posting in all divisions of the service laboratories. The Division also receives a steady intake of Post graduate trainees pursuing MD.Pathology. Government of Kerala has recognised and redesignated MCC as Post Graduate Institute of Oncology Sciences and Research (PGIOSR). DNB Pathology was started in May 2019 with an intake of two trainees. DM Oncopathology, a post MD three year super specialityprogramme under the Medical Council of India was started in 2023 December with an intake of two students

AVAILABL FACILITIES

SL NO	NAME	NUMBERS
1	Automated Cover slipper	01
2	Automated Tissue Processsor	01
3	Automated H & E Stainer	02
5	Digitalincubatorbacteriological	01
6	Electronic Timer With Battery	06
7	Electric saw for bone cutting	01
8	Electronicbalance	01
9	Grossing Station	01
10	Hot Air oven	02
11	Micropipette	02
12	Cryostat	01
13	pH meter	02
14	Pressurecooker	01
15	Refrigerator	04
16	Rotarymicrotome	03
17	Slidecabinet	10
18	Tissueembedder	01

19	Tissuefloatationbath	02
20	Kitchenweighingbalance	01
21	Hygrometer	04
22	Barcodescanner	01
23	Biosensor-Refrigerator	03
24	Barcodeprinter	01
25	Microscope	21
26	Multiheadteachingmicroscope	01
27	Centrifuge	02
28	Liquidbased cytology–thinprepprocessor	01
29	Trinocularmicroscope	01
30	Automated IHC strainer	03
31	Microwaveoven	01
32	Liquidbasedcytology	01
33	Cytocentrifuge	01
34	Printer	04
35	Multipurpose vortexer	01
36	Biosafety hood	01
37	Hygrometer	04
38	Formalin monitor	01
39	Blood cellcounter	02
40	Slidefilingcabinet	14
41	Blockfilingcabinet	08
42	DigitalPathologysystem	01
43	Flow cytometry	01
44	Desk top PCs	15
45	Photocopier cum Printer	01
46	Digital Pathology	01
47	IHC Machine	01

FACILITIES

- 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 FNA & fluid aspiration samples using Cytocentrifuges and the automated Liquid based cytology which has technical advantages over conventional cytology.
- Diagnostic reporting of Peripheral blood & bone marrow aspiration/biopsy samples with immunophenotyping on Flow Cytometry.
- Receipt & issue of samples and reports through hospital information system.
- Fluorescent InsituHybridisation for blood, breast and soft tissue cancers.
- Archiving of tissue paraffin blocks & slides for future reference.
- Academic seminars and discussions for undergraduate & postgraduate students.
- Research projects and publications in collaboration with clinical and research divisions.

NEW EQUIPMENT

SL NO	NAME OF EQUIPMENT	PURPOSE
1	Automatic tissue processor	Tissue processing

ACTIVITIES

A. CLINICAL ACTIVITIES

	STATISTICS	
SL NO	NAME OF TESTS	NUMBER
1	Biopsy small	2564
2	Biopsy Radical	1573
3	Biopsy Second Opinion	2761
4	FNAC	220
5	FNAC with Cell Block	625
6	FNAC Second Opinion	245
7	Effusion Fluid Cytology	379
8	Effusion Fluid Cytology with Cell Block	377
9	Peripheral Smear	1302
10	Gynaec cytology	76
11	Bonemarrow aspiration	717
12	Bone marrow biopsy	700
13	BM Aspiration 2nd opinion	123
14	BM biopsy 2nd opinion	121
15	Frozen	778
16	Flowcytometry	305
	Total	**12866**

B. ACADEMIC ACTIVITIES

1. COURSES AND TRAINING PROGRAMS:

SL NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	DM Oncopathology	3 years	2	2	2
2	DNB	3 years	1	0	1
3	Post Diploma DNB	2 years	1	0	1
4	Certificate course in Histopathology techniques	1 year	1	1	1
5	Certificate course in Flowcytometry	1 year	1	1	1
	TOTAL NUMBER OF STUDENTS				**6**

2. ROUTINE ACADEMIC SESSIONS

SL. NO	DAY	ACADEMIC SESSION/ ACTIVITY	TIME
1	Monday	Journal club	8.30 am
2	Tuesday	Seminar on grossing techniques	3.30 pm
3	Wednesday	Pathboard+ Case Presentation	12.30 pm
4	Thursday	CPC hematology (1st and 3rd Thursday)	2.30 pm
		Topic presentation from Molecular Division (2nd&4th Thursday)	2.30 pm
5	Friday	CPR club (1st Friday)	8.30 am
		Topic presentation (2nd and 4th Friday)	8.30 am
		Post op Pathology discussion (3rd Friday)	8.30 am
		NABL class (Alternate Friday)	α.30 m

3. OBSERVERSHIP

SL NO	NUMBER OF OBSERVERS	COURSE	INSTITUTION
1	01	B.Sc MLT	Sree Narayana Guru College, coimbatore
2	14	B.Sc MLT	Lisieux college of Paramedical Sciences, Ernakulam
3	13	B.Sc MLT	Lisieux college of Paramedical Sciences, Ernakulam
4	15	B.Sc MLT	MIMS college of Allied Sciences, Kozhikode
5	15	B.Sc MLT	WIMS, Thrissur
6	15	B.Sc MLT	WIMS, Thrissur
7	01	B.SC MLT	RPH Lab, Kannur
8	14	B.Sc MLT	Mother College of Paramedical Sciences, Thrissur
9	15	B.Sc MLT	Mother College of Paramedical Sciences, Thrissur
10	14	B.Sc MLT	Co-Operative Institute of Health Sciences - [CIHS] Thalassery,
11	01	MD Pathology	RPH Lab, Kannur
TOTAL NUMBER OF OBSERVERS: 128			

C.RESEARCH ACTIVITIES

ONGOING PROJECT DETAILS

1. Assessment of key immune factors in the pathogenesis of HPV associated oral and orapharyngeal Squamous Cell Carcinoma- (Funding Agency- Indian Council of Medical Research (ICMR), (Dr. Sangeetha K Nayanar)
2. Clinicopathologic and Genetic Profiling of Bilateral Breast Cancer Patients - (Funding Agency- Kerala State Council for Science, Technology and Environment (KSCSTE), (Dr. Sithara Aravind)

PUBLICTIONS:

1. Vg DR, Nayanar SK, Gopinath V, Philip KJ, Aryadan N, Nair V, Perumal V. Testing for Microsatellite Instability in Colorectal Cancer - a Comparative Evaluation of Immunohistochemical and Molecular Methods. Gulf J Oncolog. 2022 May;1(39):70-78. PMID: 35695349.

2. Nayanar SK, Mohan A, Shenoy P, Saravanan M, Gopinath V, Deepak Roshan VG. The frequency of EGFR mutation in lung adenocarcinoma patients form a tertiary cancer center of South India. J Can Res Ther 2023
3. Phenotypic and genotypic appraisal of pulmonary mucinous adenocarcinoma : a retrospective study. VG Deepak Roshan , Ashwini Ramji , M Saravanan , Vipin Gopinath, Sangeetha K Nayanar National Journal of Laboratory Medicine.DOI: 10.7860/NJLM/2023/58014.0000
4. Nayanar SK, Markose AJ, Avaronnan M, Dharmarajan A. Origin and survival outcomes of Pseudomyxoma peritonei—A retrospective study. J Can Res Ther 2023
5. Aravind S, Jose J, Shenoy PK, Avaronnan M, Thavarool SB, Nayanar SK. The Spectrum of Histomorphological Changes and Pathological Tumor Response following Preoperative Oral Metronomic Chemotherapy in Oral Squamous Cell Carcinoma. South Asian J Cancer. 2022;11(2):146-151. PMID: 36466986; PMCID: PMC9718607.
6. James S, Aravind S, Gopinath V, Nayanar SK. Phenotypic Appraisal of Collision Tumors of Thyroid – Initial Experience of a Rare Entity at a Cancer Center in South India. Asian Pac J Cancer Care. 2022;7(2):415-419. DOI: 10.31557/APJCC.2022.7.2.415.
7. Aravind S, Jose J, Nayanar SK, T P SB. Ghost Cell Odontogenic Carcinoma with Sarcomatous Transformation: Report of a Rare Case with Review of Literature. Gulf J Oncolog. 2023 Jan;1(41):111-116. PMID: 36804166
8. Vijayakumar G, Narayanan AV, Srikiran TK, Aravind S, Sandeep Vijay P. Importance of radio-histo-cytopathological correlation, A retrospective study of cyto-histological and radiological correlation of salivary gland lesions using Milan System for Reporting Salivary Gland Cytopathology. J Cancer Res Ther. 2023 Dec 15. doi: 10.4103/jcrt.jcrt_2687_22. Epub ahead of print. PMID: 38102913.
9. Vijayakumar G, Narayanan AV, Aravind S, Vijay SP. Primary Squamous Cell Carcinoma with Thyroid Collision Tumors: A CaseReport of Rare Thyroid Collision Phenomenon. Online J Health Allied Scs. 2023;22(3)
10. DLBCL with rosettes-Vijayakumar G, Narayanan AV, Nayanar SK, Nair CK. Diffuse Large B-Cell Lymphoma with pseudo Rosettes, A Rare Entity: Case Report with Literature Review. International Journal of Surgical Pathology. 2023 Aug;31(5):738-741. DOI: 10.1177/10668969221125794. PMID: 36172636.

CONFERENCES AND WORKSHOPS ATTENDED

- Dr. Anand Vijaya Narayanan participated in the following conferences:
    - MVR cancon - Flow cytometry workshop at Calicut on 9/9/23 as faculty.
    - National CME in molecular pathology- Amala hospital Thrissur in 15/10/23
    - Head and Neck Cance Summit, from 16th 18 th February, 2024 at Chennai.
- Dr. SeenaTresa Samuel, Dr. Krishnapriya , Dr. Sanooba& Dr. Yaazhini , participated in Flowcytometric immunophenotyping Workshop at MVR cancer Centre on 09/09/23.
- Dr. SeenaTresa Samuel, Dr. Krishnapriya& Dr. Yaazhini, participated in Molecular Pathology Conference at Amala Institute of Medical Science, Thrissur on 15/10/23.
- Dr. Krishnapriya, Dr. Yaazhini , participated in IAPM Kerala chapter meeting at Government
    - Medical College, kottayam on 15/10/23.
- Dr. Sanooba participated in Calipath workshop at Government Medical College, Calicut on 13/
    - 10 /2023 -15/10/2023
- Dr. Vivek participated in the International Pathology Conference on Diagnostic updates and molecular advances in cancer, at AIIMS, Mangalagiri on 4th and 5th of November 2023, Conducted by AIIMS, Mangalagiri
- The following faculties attended the IAPM chapter meeting on 11th February, 2024 at Govt. Medical college, Thrissur.

- Dr. Sangeetha K Nayanar
- Dr. Sithara Aravind
- Dr. Aswathi Krishnan

EVENTS

- Conducted DNB Formative Assessment Exam (FAT 2022)
- NABL inspection held on 21, 22 and 23 rd of April, 2023.

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr.Sangeetha.k.Nayanar	Professor& HOD
2	Dr. Sithara Aravind	Additional Professor
3	Dr.Aswathi Krishnan M	Associate professor
4	Dr. Kandathil Joseph Philip	Assistant Professor
5	Dr. Anand Narayanan	Assistant Professor
6	Dr.Vivek Nair	Assistant Professor
7	Dr. Saranya Puruhothaman	Assistant Professor
8	Dr. KrishnapriyaUmasankar	Assistant Professor

NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Sabna Dev S K	Cyto Technologist
2	Nimi G K	Cyto Technologist
3	Subitha S	Cyto Technician
4	NamithaP 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 N	Attender

TRANSFUSION MEDICINE DIVISION

DIVISION IN CHARGE: DR MOHANDOSS M, MD, ADDITIONAL PROFESSOR

INTRODUCTION

The division of Transfusion Medicine and Blood Bank was founded in 2002, initially focusing on whole blood collection. By 2006, it had expanded its services to include blood component therapy, making it one of the pioneering centers in North Kerala at that time. In 2013, the facility introduced apheresis for platelet donation and stem cell collection, alongside offering flow cytometry for CD34 enumeration and diagnostic hematology assessments. In 2015, the blood center became one of the earliest in South India to install a Caesium Irradiator for irradiating blood components. The introduction of Nucleic Acid Testing in 2018 allowed for the early detection of infectious diseases in blood donors, aiming to prevent the transmission of viral infections to patients. Finally, in 2021, the blood center inaugurated a cellular therapy lab dedicated to processing stem cells and producing virus-specific T cells for patients undergoing bone marrow transplants.

AVAILABLE FACILITIES

SL NO	NAME OF THE EQUIPMENT
1	Apheresis machines for donor and therapeutic apheresis
2	Automated Blood Grouping Equipment
3	Automated Blood Component Extractor
4	Chemiluminescence for infectious disease testing
5	Nucleic Acid Testing for infectious disease testing on blood donors
6	Bact/ALERT – blood culture of blood components
7	Gamma Irradiator – for irradiation of blood components
8	Flowcytometry – for enumeration of Stem cells
9	CliniMACS Prodigy - GMP compliant automated cell processing system
10	Blood Mobile – For conducting outdoor blood donation camps
11	Thromboelastography – to assess coagulation status

FACILITIES

1. Blood Components: The blood centre performs 100% component therapy. The components facility available are Packed Red cells, Platelet concentrate, Fresh Frozen Plasma, Cryoprecipitate and by Apheresis – Platelets, Plasma, Granulocytes
2. Leukodepletion of Blood Components- More than 60% of Red Cells transfused are leukodepleted, which will minimize transfusion reactions in patients requiring regular transfusions.
3. Irradiation of blood components – by dedicated Caesium irradiator. This will prevent Graft versus Host disease following blood transfusions. All hematology and pediatric patients at our centre are transfused with leukodepleted and irradiated blood components.
4. Flow cytometry for CD34 Enumeration, Paroxysmal Nocturnal Hemoglobinuria,
5. Stem Cell Collection and Cryopreservation – The centre has facility for collecting peripheral blood stem cells by apheresis and store them in for later usage.

6. Cellular Therapy Lab – TCRab and CD19 depletion of stem cell product for Graft versus host disease prophylaxis without chemotherapy.Also generation of virus specific T cells for managing post transplant viral reactivation. The centre also has performed a validation procedure for T cell Transduction for generation of CAR T cells.
7. Thromboelastography – to assess perioperative coagulation statusfor patients undergoing major surgeries.

ACTIVITIES

A. CLINICAL ACTIVITIES:

SL NO	CATEGORY	NAME OF TESTS	NUMBER
1	Immunohematology	Patient Blood grouping	4237
		Crossmatch	3065
		Direct Antiglobulin test	255
		Indirect Antiglobulin test	2212
		Total Immunohematology tests	**9769**
2	Flow Cytometry	CD34 Enumeration	88
		Paroxysmal Nocturnal Hemoglobinuria	22
		Chronic Lymphoproliferative Disorder	15
		Total Flowcytometry tests	**125**
3	Blood Donations	Whole Blood Donations	3522
		Platelet Donations	875
		Stem Cell Collections	46
		Granulocyte Collections	6
		Total Collections	**4449**
4	Therapeutic	Therapeutic Plasma Exchange	15
		Therapeutic Phlebotomy	207
		Therapeutic Procedures	**222**
5	Cellular Therapy	TCRab Depletion in Stem Cells	7
		IFN –g Specific T cells for Haplotransplant	4
		T cell Transduction for CAR T cells	1
		Total Cellular Therapy procedures	**12**
6	Hemostasis	Thromboelastography	20

BLOOD COMPONENTS ISSUED (APRIL 2023 TO MARCH 2024)		
SL NO	BLOOD COMPONENTS	NO. OF UNITS
1	Packed Red Cells	1287
2	Leukodepleted and Irradiated Packed Red Cells	2092
3	Platelet Concentrates	2053
4	Single Donor Platelets	1556
5	Fresh Frozen Plasma	1217

6	Granulocyte Concentrate	6
7	Cryoprecipitate	64
8	Units Issued	8275
9	Plasma sent for fractionation	2544
	TOTAL BLOOD COMPONENTS ISSUED	**10,819**

B. ACADEMIC ACTIVITIES

1. COURSES AND TRAINING PROGRAMS:

SL NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	Certificate Course in Blood Bank Technology	1 year	1	2023	1
TOTAL NUMBER OF STUDENTS: 01					

2. ROUTINE ACADEMIC SESSIONS-

Journal Club – once a week

3. OBSERVERSHIP

SL NO	NUMBER OF OBSERVERS	COURSE	INSTITUTION
1	1	MD Transfusion Medicine	Government Medical College, Trivandrum
2	1	MD Transfusion Medicine	Sree Chitra Tirunal Institute of Medical Sciences and Technology
3	1	MD Transfusion Medicine	Government TD Medical College, Alappuzha
TOTAL NUMBER OF OBSERVERS:03			

C.RESEARCH ACTIVITIES

ONGOING PROJECT DETAILS

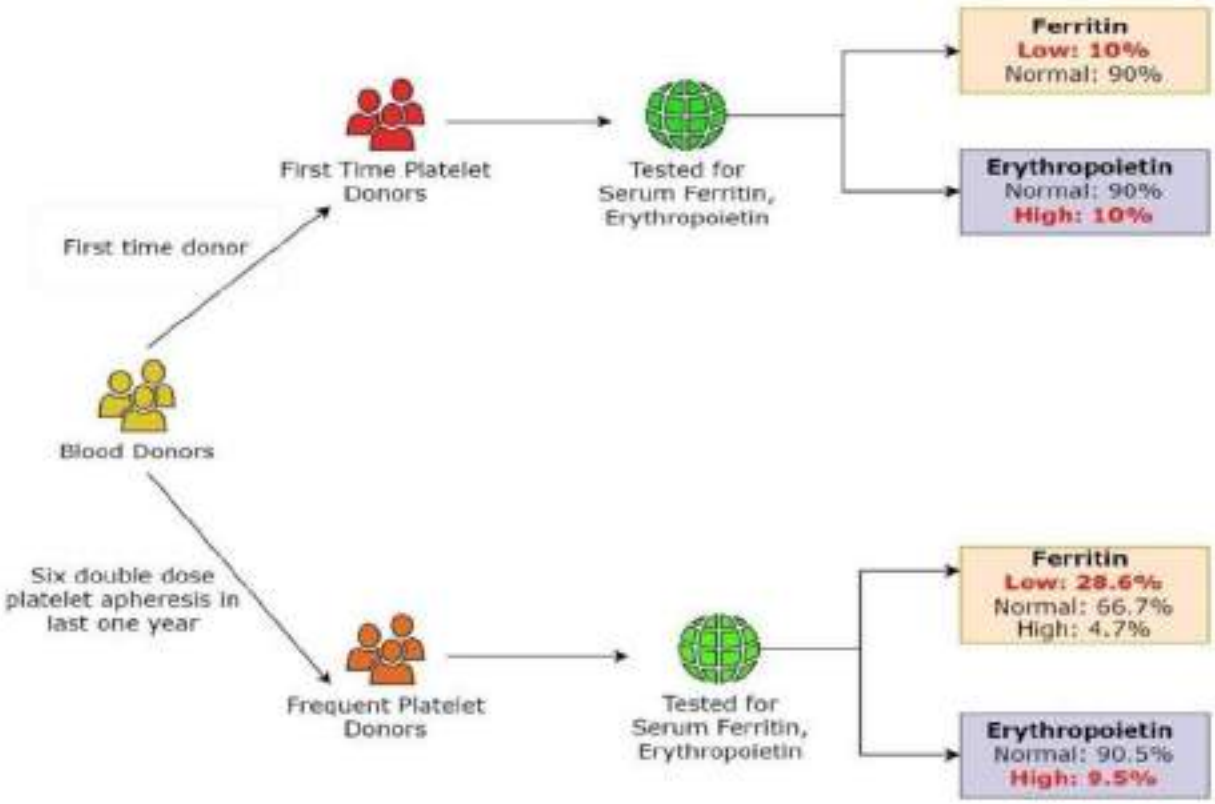
1) Utility of thromboelastography in perioperative coagulation and its effect on the clinical outcome in patients undergoing very major oncosurgery (Dr Mohandoss M)
2) Perioperative Blood Transfusion in Flap Reconstruction Surgeries for Oral Cancer: A Retrospective Analysis(Dr Mohandoss M)
3) Analysis of Return in Platelet Donor Using Count Data Models(Dr Mohandoss M)

PROJECTS COMPLETED IN CURRENT YEAR

1. **Analyzing the Requirement for Screening Platelet Donors for Iron Deficiency: A Critical Appraisal** (Dr. Anju R Kurup)

   Platelet apheresis is a critical medical procedure that relies heavily on the health and well-being of donors. While donors can undergo platelet apheresis up to 24 times a year, concerns have arisen regarding the potential impact on their iron stores. This study aims to assess the iron status of first-time apheresis donors and frequent plateletpheresis donors, exploring the use of serum ferritin measurements in optimizing donor management and preventing iron deficiency anemia. Frequent platelet donors exhibited lower median ferritin levels and higher serum erythropoietin levels than first-time donors. Among frequent donors, low ferritin levels were observed in 28.6% of donors, while

in first time platelet donors, low ferritin levels were seen in 10%. Our study suggests that the need for occasional testing of ferritin and erythropoietin, such as at the first donation and every eighth donation thereafter, may be sufficient to identify and defer anemic donors.



1. **Perioperative blood transfusion in ovarian cancer patients with post neoadjuvant chemotherapy and interval cytoreduction surgery** (Dr Mohandoss M)

The adoption of neoadjuvant chemotherapy (NACT) preceding interval cytoreductive surgery (ICS) has become increasingly favoured in the management of ovarian cancer. The main goal was to assess the incidence of perioperative blood transfusion (PBT) in ovarian cancer patients undergoing ICS following NACT. The secondary objective involved examining the impact of perioperative blood transfusion on disease-free survival (DFS) in these individuals.PBT was observed in 54% of ca ovary patients who underwent NACT and ICS. Patients exposed to PBT experienced a decrease in DFS compared to those without PBT, although this difference was not statistically significant.

RBC transfusions in Ca Ovary patients	N (%)	RBC units transfused	
		Mean (SD)	Median (Range)
Preoperative	6 (9)	0.1 (0.35)	0 (0-2)
Perioperative	37 (54)	1.0 (1.25)	1 (0-5)
Postoperative	26 (38)	0.45(0.65)	0 (0-2)
During Admission	53 (77)	1.57 (1.4)	1 (0-6)

RBC Transfusions in Ca Ovary patients who underwent interval cytoreduction surgery (n=69)

PUBLICATIONS

Anju Radhakrishna Kurup, Sheeja Nandhana, Kongodantavida Dyana, Murugesan Mohandoss and Edakkadath Raghavan Sindhu , Analyzingthe Requirement for Screening Platelet Donors for Iron Deficiency: A Critical Appraisal.(2024).Int J Pharm Sci.15(2), b9-17 http://dx.doi.org/10.22376/ijpbs.2024.15.2.b9-17

Fathima VJ, Murugesan M, Anju RK. Spectrum of hemolytic transfusion reactions from tertiary cancer center over a 1-year period. Glob J Transfus Med 2023;8:197-201

AWARDS, HONOURS AND RECOGNITIONS

1. Dr Mohandoss M as expert for Transfusion Medicine speciality in technical committee for equipment purchase in Cochin Cancer Research Centre.
2. Dr Mohandoss M – External Examiner for PDCC –Apheresis at JIPMER, Puducherry.
3. Dr Mohandoss M- Faculty at Kerala Start up Mission program at Pinarayi
4. Dr Mohandoss M – attended as subject expert in Joint inspection of renewal of Blood Centres license with State and Central Drug Controllers

CONFERENCES AND WORKSHOPS ATTENDED

1. Reversible Coagulopathy – in cryopreserved hematopoietic stem cell infusion - Dr Anju R Kurup at ISBMT Conference held in Bengaluru, on 4/5/2023 to 5/5/2023.
2. Quality Control of Plasma for Fractionation – Renaissance against use of excess plasma -Dr Mohandoss M at TRANSCON 2023- Annual Conference of Indian Society of Blood Transfusion and Immunohematologyin Lucknow 06/10/23 to 08/10/2023
3. Step by Step Approach to Blood Group Discrepancy -Dr Anju R Kurup at ISBTI State Conference at MVR in Calicut 29/10/2023
4. Analysing the requirements for screening platelet donors for iron deficiency – A critical appraisal - Dr Anju R Kurup at XVIII Annual Congress of AATM and 4th Joint Meeting of AABB-AATM in New Delhi, 1/12/2023 to 2/12/2023

EVENTS

World Blood Donor Day – 14th June 2023, Seminar Hall, MCC.

1. **Training Programs for Blood Bank Technicians – 05th & 06th December, 2023**

Staffs from Blood Centres, North Kerala attended refresher training program.

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr. Mohandoss M	Additional Professor
2	Dr Anju R Kurup	Lecturer
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mrs Maya PK	Staff Nurse
2	Mr. Sabeesh P	Blood Bank Technician
3	Mr. Sajeesh VM	Blood Bank Technician
4	Mr. Shibin CV	Blood Bank Technician
5	Mr. Anoop Joy	Blood Bank Technician
6	Mrs. Thahira D	Blood Bank Technician
7	Mr. Arun KV	Attender

DEPARTMENTOF DENTISTRY AND REHABILITATION

HEAD OF THE DEPT ▶ **Dr. PRAMOD SANKAR S** MDS
ASSOCIATE PROFESSOR

INTRODUCTION

Rehabilitation, an integral part of the treatment of cancer patients, can open up possibilities to patients on how to treat and compensate for the consequences of cancer diseases and anti-tumor therapy independently in the long term. This comprehensive approach involves multidisciplinary support from diagnosis through treatment and beyond.

DIVISIONS UNDER THE DEPARTMENT

1. **DENTISTRY**
2. **REHABILITATION ONCOLOGY**
   - i. **PHYSIOTHERAPY UNIT**
   - ii. **SPEECH AND SWALLOW THERAPY UNIT**

DENTISTRY DIVISION

DIVIASION IN CHARGE: **DR PRAMOD SANKAR S MDS**

OFFICIAL DESIGNATION: **ASSOCIATE PROFESSOR**

INTRODUCTION

The Department of Dentistry, established in 2010,expanded its services in 2015. Current offerings include dental cleanings, tooth removal, restorative work, root canals, and various prosthetic solutions such as removable partial dentures, fixed dental prostheses, implants, and maxillofacial prosthetics. The department specializes in dental rehabilitation for cancer patients to enhance their quality of life.

AVAILABL FACILITIES

SL NO	NAME OF THE EQUIPMENT	NUMBER
1	Electronic Dental chair	2
2	Dental scaler units	2
3	Implant Physiodispensor and surgical drill set	1
4	Rotory endodontic equipments	1
5	Digital IOPA Xray	1

FACILITIES

1. Dental extractions and impactions
2. Endodontics & Restorations
3. Prosthodontics
4. Paedodontics
5. Maxollofacial prosthesis

NEW EQUIPMENT AND INITIATIVES /FACILITIES

Fully functional electronic dental chair with accessories were supplied and installed in 2023.

ACTIVITIES

A. CLINICAL ACTIVITIES

STATISTICS- April 2023-2024		
SL NO	**FACILITIES**	**NUMBER**
1	OP patients	4184
2	Extractions	1744
3	Impactions	1
4	Scaling	61
5	Complete denture	11
6	Removable partial denture	26
7	Fixed partial denture	17
8	Glass ionomer / +restorations	150
9	Root canal treatment	11
10	Obturators	25
11	Implants	03
	TOTAL	**6230**

B.ACADEMIC ACTIVITIES

1. **COURSES AND TRAINING PROGRAMS:**

SL. NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	Senior House surgeoncy program in Dentistry for BDS Graduates	One Year	1	1	1
Total Number of Students:01					

2. **ROUTINE ACADEMIC SESSIONS:**

Morning academic sessions with rehabilitation team (Physiotherapy, speech swallow therapy, Dietetics, Psycho oncology and Palliative) - 2 sessions /week.

Includes – Lectures, Journal clubs, case discussions and Quality related sessions,

3. OBSERVERSHIP

SL NO	NUMBER OF OBSERVERS	COURSE	INSTITUTION
1	6 (One month observer ship)	Post Graduate students in Prosthodontics	Kannur Dental College, Anjarakandy
TOTAL NUMBER OF OBSERVERS:06			

C.RESEARCH ACTIVITIES

ONGOING PROJECT DETAILS

- **Co-PI for the Project** - AI-Driven Large-scale Screening for Oral and Oropharyngeal Cancer (AIDOScan) – In collaboration with CDAC, RCC Trivandrum and Cochin Cancer and Research centre.

CONFERENCES AND WORKSHOPS ATTENDED

1. Attended First International Quality conference organised by EQuIP India at Bangalore on 14th and 15th March ,2023
2. Attended Patient Safety Conclave '23 at KIMS Alshifa Super specialty Hospital, Perinthalmanna, Kerala on SEP 13 2023
3. Attended 51st conference of Indian Prosthodontic society at Goa from 8-10 of December 2023. Presented paper.
4. Completed ONLINE GCP Training- SHODH CLINICALS on Feb 03, 2024
5. Completed Online GCP training NIDA certification – 30 JAN 2024
6. Completed International Society for Quality In Healthcare (ISQua) Fellowship Program in March 2024

PRESENTATIONS

Oral Presentation- Bisphosphonate related Osteonecrosis of the Jaw- Dental and Drug related Factors- A five year Prospective study from a Tertiary Cancer Centre – In 51st Indian Prosthodontic Conference, 8-10 December 2023, Goa, India.

STAFF

ACADEMIC STAFF		
SL NO	NAME OF STAFF	DESIGNATION
1	Dr Pramod Sankar S	Associate Professor

REHABILITATION ONCOLOGY DIVISION

SPEECH AND SWALLOWING THERAPY UNIT

STAFF: Mr. ANEETH MV-MASLP, SPEECH THERAPIST

AVAILABLE SERVICES

1. Counseling- Pre and post treatment counseling
2. Swallowing assessment- Clinical, subjective and objective
3. Swallowing therapy- Postures, maneuvers and ROM exercises
4. Speech therapy- A Laryngeal speech training
5. Voice therapy

ACTIVITIES

A. CLINICAL ACTIVITIES

Sl No	Name of Tests	Number
1	Fiber optic endoscopic evaluation of swallowing	236
2	Op consultation	3477
3	Ip consultation	1122

CONFERENCES AND WORKSHOPS ATTENDED

CONFERENCES & WORKSHOPS

1) Attended the national conference DYSPHAGIA 2023 as Guest faculty – at AIMS Kochi on 27/10/2023 and participated in panel discussion on the topic - OncoDeglutology
2) Attended one day workshop at Marthoma College of special education(MISH) on 29/9/2023 and given a lecture on topic Assessment And Management of Laryngectomy.
3) Attended the online fellowship program on speech and swallowing rehabilitation in head and neck cancer as Guest Faculty, organized by DR Chandrashekara ISH,banglore, and given lecture on the topics.
4) Certificate Course on Video-fluoroscopic Swallow study: "Objective Assessment for Oropharyngeal Dysphagia Diagnosis and interventions" (TMH Mumbai) - 2/11/2023.

TRAINING

1) Mr.Aneeth M V, Certificate course on Videofluoroscopic swallowing study (VFSS) – Objective assessment for Oropharyngeal Dysphagia Diagnosis and Intervention at Tata Memorial Hospital, Mumbai on 02nd November, 2023.
2) Mr.Aneeth M V, trainingInstrumental Evaluation of Swallowing at Tata Memorial Hospital, Mumbai on 02nd November 2023.

PHYSIOTHERAPY UNIT

STAFF: ROOPA V, BPT, PHYSIOTHERAPIST

AVAILABLE SERVICES & FACILITIES

1. Continuous passive mobilization machine lower limb
2. Gait training unit including parallel bar, stair case corner, orthotics device
3. Electrotherapy modality -Interferential Therapy,Trascutaneous Electrical Nerve Stimulation(TENS), Electrical Stimulator
4. Exercise Therapy Unit -Tilt Table, Exercise Ball, Shoulder wheel, Over head pulley,Suspension Therapy Unit, Hand grip Exerciser
5. Manual therapy and Neuro muscular Rehabilitation
6. Orthotics Prescription

ACTIVITIES

A. CLINICAL ACTIVITIES

Sl No	Facilities	Number
1	In-patients	3391
2	Out-patients	1842

B. ACADEMIC ACTIVITIES

Internship Program in Speech swallow therapy Unit- One month program- 21 candidates underwent training in the current academic year.

1. Oncophysiotherapy Fellowship program in collaboration with JDT Islam College of Physiotherapy was started in 2024 with an intake capacity of 5 students an year. 2 students were admitted in the Current year.
2. Attends morning academic sessions- 2 sessions/week and presented Lectures/Journal clubs/ Case studies.
3. Actively participates in research projects. Currently involved in 3 ongoing study projects.

CONFERENCES AND WORKSHOPS ATTENDED

1) Critical care management in Gphycon10th& 11thSeptember 2023- Trivandrum, Kerala
2) Participated delegate in online webinar- Physiotherapy management in haematological malignancy organized by Tata Memorial Hospital- 10/09/2023
3) Participated delegate in Radiological diagnosis “WISSEN- 2023” organized by Indian association Of Physiotherapist, Kannur Chapter 3/12/2023
4) Mr.Aneeth M V, Certificate course on Videofluoroscopic swallowing study (VFSS) – Objective assessment for Oropharyngeal Dysphagia Diagnosis and Intervention at Tata Memorial Hospital, Mumbai on 02nd November, 2023.
5) Mr.Aneeth M V, trainingInstrumental Evaluation of Swallowing at Tata Memorial Hospital, Mumbai on 02nd November 2023.

STAFF

NON-ACADEMIC STAFF		
Sl No	**Name Of Staff**	**Designation**
1	Mr. Aneeth MV	Speech Therapist
2	Roopa V	Physiotherapist

DEPARTMENT OF NUCLEAR MEDICINE

HEAD IN CHARGE

Dr. NIKHIL MOHAN MBBS, MD
(NUCLEAR MEDICINE)
ASSISTANT PROFESSOR

INTRODUCTION:

The Department of Nuclear Medicine at Malabar Cancer Centre was established in September 2020 under the auspices of the Atomic Energy Regulatory Board (AERB). Clinical services commenced in February 2021 with the introduction of SPECT-CT and PET-CT scanners. Low-dose iodine therapy began in September 2021, followed by the inauguration of a two-bed therapy ward for high-dose radioiodine therapy in November 2021.

As the sole Nuclear Medicine facility in Kannur district and one of two in North Kerala's public sector, the department serves numerous patients from nearby districts and parts of Karnataka and Tamil Nadu.

The year 2022 saw the introduction of targeted therapies using beta emitters, including Lu-PSMA and Lu-DOTA treatments. In 2023, a gallium generator was installed, further enhancing diagnostic capabilities and expanding the range of services available to patients.

AVAILABLE FACILITIES

SL NO	NAME OF THE EQUIPMENT
1	GE 640 NMCT GAMMA CAMERA SPECT CT
2	SIEMENS BIOGRAPH HORIZON PET CT
3	ITG Ge68 Ga68 AUTOMATIC GENERATOR

FACILITIES

1. Gamma-Camera Imaging
2. PET-CT Imaging
3. Low dose Iodine Therapy
4. Two bedded High dose Iodine therapy ward
5. Beta Therapy (Lu177PSMA, DOTA, Sm157 Therapy)

NEW EQUIPMENT AND INITIATIVES /FACILITIES

SL NO	NAME OF EQUIPMENT	FACILITY
1	ITG Ge68 Ga68 Automatic generator	PSMA scan, DOTA scan, FAPI scan

ACTIVITIES

A. CLINICAL ACTIVITIES

SL NO	FACILITIES	NUMBER
1	PET-CT Scanner	1798
2	Gamma Camera	927
3	High Dose Iodine therapy	420
4	Beta Therapy (Lu177PSMA, DOTA, Sm157 Therapy)	8
	TOTAL	**3153**

B. ACADEMIC ACTIVITIES

1. **ROUTINE ACADEMIC SESSIONS**

   Weekly classes on Saturday 11:30am

2. **OBSERVERSHIP**

SL NO	NUMBER OF OBSERVERS	COURSE	INSTITUTION
1	**1**	**MHA**	**TISS, MUMBAI**
TOTAL NUMBER OF OBSERVERS:01			

CONFERENCES AND WORKSHOPS ATTENDED

CMC Vellore Nuclear Hepatobiliary and Gastroenterology CME

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr Nikhil Mohan	Assistant Professor
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Gireeshma G K	Dosimetrist
2	Asalah T H	Technician
3	Divya V	Technician

DEPARTMENT OF PREVENTIVE AND COMMUNITY ONCOLOGY

HEAD IN CHARGE

Dr. NEETHU AP MBBS, MHSc
Public Health, Ph.D
LECTURER

INTRODUCTION

The Community Oncology Department began its full-fledged functioning in January 2010. By 2013, it had relocated to a dedicated space equipped with facilities for tobacco cessation counseling, online public outreach, a specimen museum, a specimen mounting area, and storage for Information, Education, and Communication (IEC) materials. The department has consistently organized cancer awareness initiatives, volunteer training sessions, health exhibitions, school-based tobacco education programs, and community health research across six districts in Kerala (Kozhikode, Kannur, Wayanad, Malappuram, Kasaragod, Palakkad) and Mahe in the Union Territory of Puducherry.

Since its establishment, the department has undertaken various routine activities. From 2011 to March 2024, it has conducted 1447 cancer screening camps, 719 cancer awareness programs, 190 school tobacco programs, 285 volunteer training programs, and 167 health exhibition days. Additionally, regular visits to Associate centers (Early Cancer Detection Centers - ECDC) have been carried out. Malabar Cancer Centre (MCC) has set up Associate centers with early cancer detection capabilities in various locations within Kannur and Kasaragod districts, maintaining regular follow-up visits to these facilities.

The department's activities include:

1. **Cancer awareness campaigns:** Educational sessions for the general public and healthcare workers in collaboration with various organizations, residential groups, and clubs.
2. **School-based tobacco and cancer awareness programs:** Anti-tobacco education using audiovisual aids in different schools.
3. **Exhibitions and health day observations:** Cancer and tobacco-related health exhibitions at public events and schools, with significant public programs on No Tobacco Day and Cancer Awareness Day.
4. **Training and workshops:** Regular sessions on tobacco control and cancer screening for health workers, volunteers, Junior Public Health Nurses (JPHNs), nurses, and doctors.
5. **Public awareness competitions:** Organizing painting, literary, and online contests for school children and the general public on tobacco control and cancer prevention.
6. **Quarterly newsletter:** Distribution of "NETHI," focusing on tobacco awareness for school children.
7. **IEC material production:** Creating and distributing awareness-generating materials.
8. **Short film screenings:** Showing "U-Turn," a tobacco awareness short film, in schools and public programs.

9. **Community-based research:** Conducting participatory research activities.
10. **Collaborative projects:** Initiating community-focused projects in partnership with universities affiliated with MCC.

AVAILABLE FACILITIES

1) ANTI-TOBACCO CELL

The anti-tobacco cell was established under the department on 31-10-11 with the purpose of informing students about the dangers of tobacco use. This group includes prominent individuals from various fields such as education, journalism, social activism, writing, and community policing. The unit's Executive Committee is led by Dr. Satheesan B as Chairman, with Dr. Ramachandran V serving as Joint Convener. Dr. Neethu A. P and Dr. Phinse M. Philip act as Member conveners, while Major P Govindan, Dayanandan Master, ChalakkaraPurushu, and Pradeep Master serve as Executive members. The cell is actively involved in anti-tobacco initiatives, editorial work, and the publication of the NETHI newsletter.

Members of Anti Tobacco Cell of MCC(PGIOSR)

2) NETHI- THE PUBLICATION OF ANTI TOBACCO CELL OF MCC (PGIOSR)

NETHI, a quarterly publication by MCC's anti-tobacco unit, aims to raise awareness among students about tobacco-related health risks. The publication features various creative contributions from students in northern Kerala schools and colleges, including poems, stories, personal accounts, artwork, posters, and cartoons. NETHI is available in both print and digital formats, with the electronic version accessible on the MCC (PGIOSR) website as e NETHI.

3) TOBACCO CESSATION CLINIC

Tobacco cessation services were initially offered in the dental OPD in 2011. In 2013, a dedicated clinic was established within the community oncology department after its relocation. The clinic provides treatment for all forms of tobacco addiction, with individuals identified during outreach camps referred to the department OPD. The division also conducts public awareness programs and research on tobacco use. The tobacco cessation OPD operates every Wednesday.

4) MUSEUM

The department maintains a museum of cancer-inflicted organs, which is used in health exhibitions to educate the public about cancer.

5) KANNUR DISTRICT CANCER CONTROL CONSORTIUM (KCCC)

As a part of including socially committed individuals and organizations in the cancer control activities, MCC formed the Kannur district cancer control consortium for cancer control activities. This initiative aims to promote community-based healthcare, raise awareness about cancer prevention, reduce fear and stigma, emphasize cancer curability, and support cancer survivors. The consortium operates under the guidance and technical support of MCC. KCCC was officially launched on February 4, 2021, by the Honorable Chief Minister of Kerala.

6) ASSOCIATE CENTERS FOR EARLY CANCER DETECTION

MCC has established early cancer detection clinics in various panchayats within Kannur and Kasaragod districts, managed by trained nurses. These clinics are located at Cherukunnu PHC in Kannapuram, Keezhpally PHC in Aralam, Cheruvathur CHC, and Neeleswaram Taluk hospital. Additionally, MCC has partnered with NGOs to set up well-functioning clinics in Alakkode, Chittarikkal, Thomapuram, and Nellikkampoyil, in collaboration with Thalassery Social Service Society. A new center was launched in Thamarassery in December 2021.

7) CANCER CARE CENTRES

Two cancer care centers operate under MCC's technical guidance: SCDTC Edavanna in Malappuram and Cancer Care Centre THQH Ottappalam in Palakkad district. These facilities offer early cancer detection and basic chemotherapy services, providing accessible and affordable care in areas lacking comprehensive cancer treatment centers. Treatment decisions at these centers are made through MCC-PGIOSR's virtual MSB.

ACTIVITIES

A. NEW ACTIVITIES

- **Adoption of Panniyannur Gramapanchayath for improving Health Literacy**

As part of the project, MCC regularly conducts health awareness programs for students and the general public throughout the year. An initial meeting to adopt a panchayat took place on 15-6-23, followed by MCC signing an MOU with Panniannur grama panchayat on June 24, 2023.

B. ROUTINE ACTIVITIES

SLNO	NAME OF ACTIVITY	NO. OF PROGRAMS	NO. OF BENEFICIARIES
1	Public awareness class	35	1988
2	Public awareness webinar	1	21
3	School/College awareness program	9	774
4	Volunteer /health worker training program	39	850
5	Tobacco clinic observers' training	23	71
6	Health exhibition Days	14	1265
7	AIDOSCAN Camp	24	835
8	ECDC follow-up clinic	12	72
9	BSc MRT class	18	25

TOBACCO CESSATION CLINIC DATA		
TOTAL	NEW CASE	FOLLOW UP
155	90	65

DATA FROM CANCER CARE CENTRES FUNCTIONING UNDER THE TECHNICAL SUPPORT OF MCC(PGIOSR) (JANUARY, 2023 TO FEB 2024)		
	SeethiHaji Cancer Detection and Treatment Centre, Edavanna, Malappuram	**Ottappalam THQH Cancer Care Centre, Palakkad**
Total screened	331	4699
New cases detected	9cases [7(Ca Breast), 2(oral cancer)]	25 cases(Ca Breast -5), (oral -10), (others 10)
Total chemotherapy given	1246	2808

C. ACADEMIC ACTIVITIES

1. ROUTINE ACADEMIC SESSIONS

ACTIVITY	NUMBERS
Journal club	12
Seminar Topic presentation	12

2. OBSERVERSHIP AND TRAINING

SL NO	NUMBER OF OBSERVERS	COURSE	INSTITUTION
1	7	MSW	Ideal College for Advanced Studies, Thavanur, Malappuram
2	6	MSW	Mariyan College, Kuttikkanam, Kottayam
3	12	MSW	LIssah College, Kozhikode
4	9	MSW	Centre for PG studies in Social Work, University of Calicut, Sultan Bathery, Wayanad
5	3	BA	St Agnes College, Manglore
6	5	MSW	DON Bosco Arts and Science College, Angadikkadavu
7	5	MSW	SreeSankaracharya University of Sanskrit, Regional Campus, Tirur
8	3	MSW	St Thomas College , Konni, Pathanamthitta
9	2	MSW	St Joseph's College, Devagiri,Kozhikode
10	3	MSW	Sahrdaya College of Advanced Studies, Kodakara, Thrissur
11	1	MSW	Jamia Hamdard Kannur Campus
12	4	Psycho oncology Fellows	Malabar Cancer Centre
13	1	Project staff	Malabar Cancer Centre
	TOTAL NUMBER OF OBSERVERS: 61		

3. INTERNSHIP

SL NO	NUMBER OF INTERNS	COURSE	INSTITUTION
1	1	MPH	Hamburg University of Applied Science, Germany

D.RESEARCH ACTIVITIES

ONGOING PROJECT DETAILS

1) AI-driven large-scale screening for oral and oropharyngeal cancer (AIDO Scan) (Funding agency: DBT) (PI: Dr Satheesan Balasubramanian)

2) Epidemiological profile of indigenous cancer patients: a retrospective study from a comprehensive cancer care centre in northern Kerala, India during the period 2016-2020(PI: Dr Phinse M Philip)

PROJECTS COMPLETED IN CURRENT YEAR

1. **Breast cancer survivorship experiences: A retrospective cohort study from 2016 Hospital Based Cancer Registry of a Tertiary Cancer Centre in northern Kerala (PI: Dr Neethu AP)**

The project aimed to understand the experiences and challenges of breast cancer survivors who have completed 6 years of treatment. The cohort of survivors was identified from Hospital Based Cancer Registry of the year 2016.With advanced strategies for early detection and treatment, women live long beyond treatment.About one fourth experienced health issues such as fatigue, lymphedema, and early menopause in the study. Good work ability, an indicator of better survivorship was found in the majority of survivors, though sub optimal work ability was seen in 18% .9.6% of the survivors were having depression and 18.6% were having anxiety. In-depth interviews conducted among the survivors brought forth issues like body image concerns, post-treatment sexual life, and fear of recurrence, social

exclusion,socioeconomic support, and service needs of the survivors. It was seen that survivors were unknowingly becoming ambassadors/advocates, and can be effectively utilized in disseminating the message of curability and early detection of breast cancer.

PUBLICATIONS

a) AmbaliParambil N, Kannan S. Work Ability, Anxiety, and Depression among Long-Term Breast Cancer Survivors of Northern Kerala, India; A Historical Cohort Study. Asian Pac J Cancer Prev. 2024 Jan 1;25(1):115-122. doi: 10.31557/APJCP.2024.25.1.115. PMID: 38285775; PMCID: PMC10911738.

AWARDS, HONOURS AND RECOGNITIONS

a) Dr Neethu A P was awarded Ph.D from Sree Chitra Tirunal Institute for Medical Sciences and

b) Technology, Trivandrum in January 2024 for the topic Breast cancer Survivorship experiences; ARetrospective cohort study based on registry in Northern Kerala.

CONFERENCES AND WORKSHOPS ATTENDED

α) **CReDO 2024 workshop**
Dr Phinse M Philip attended the 7thCReDO workshop organized by The Tata Memorial Centre, Mumbai and the National Cancer Grid of India at Lonavla, near Mumbai between 3rd and 9th March 2024.

EVENTS

1. **Activities at Adopted Panchayath-Panniannur**

Meeting at panchayath on 7th July regarding the future course of activities.

- **Visit of Panniyannur 25 LSGI members to MCC on July 13th**

- Awareness classes on basic sanitation and hand hygiene for students of Chodavaram HSS on 26th July by Dr Sarath and Sister Sajitha. ,Anaemia prevention on 24th June 2023 , Awareness on Tobacco control on 24th June 2023 ,Awareness session on career guidance on 24th June 2023,andAwareness on cancer for studentsofChodavuram HSS, Panniyannur on 31st October

- **Volunteer training for baseline survey**: Training was conducted on 8th August at two places in Panniyannur panchayath – PHC, Panniyannur and Panoor block panchayath hall. 150 volunteers participated in the survey training.
- **Survey at Panniyannur panchayath on 20/08/23:** Students from BScMRT and nursing participated in the survey along with the volunteers from the panchayath. 6000 houses were surveyed. Survey forms were handed over to MCC on 14/9/23
- **House to house survey activities at Panniyannur**

- **Volunteer trainings (TOT at Panniyannur by Community Oncology)**

- **First Volunteer training (TOT):** was conducted on 5thSeptember at Panoor block panchayath hall in Panniyannur.60 volunteers participated in the training. Six TOT on various topics related to cancer were conducted in the panchayath. These trained volunteers conducted awareness programs for a public in ward based clusters. So far, six volunteer trainings were conducted.

- **Field activities in the panchayath**

- **Observing National Cancer Awareness and World cancer day observation: The birthday challenge program was inaugurated in the panchayath on November 7th. 70 public participated. Survivors meet on 6th February.**
- **Pledge taking by students in schools of Panniyannur**

- **Regular monthly review meeting** for assessing activities of the month and planning next month's activities were conducted
- **Awareness classes for public in various Panchayats** Cancer awareness classes for the general public and health workers in collaboration with various organizations, LSGIs, residential

groups, clubs, etc.. The classes will be conducted using audiovisual aids and covers General overview of cancer and Oral cancer, women cancers, training in self breast examination using a mannequin model.

3. Health Exhibitions for Cancer Awareness

EnteKeralam' Exhibition: As part of the state wide observation of the 2nd anniversary of state government, an exhibition was conducted by various government departments from April 3rd to April 14th. An exclusive pavilion of MCC with exhibits, specimens and miniature models of equipment were also displayed.

4. Health Exhibitions for Cancer Awareness

EnteKeralam' Exhibition: As part of the state wide observation of the 2nd anniversary of state government, an exhibition was conducted by various government departments from April 3rd to April 14th. An exclusive pavilion of MCC with exhibits, specimens and miniature models of equipment were also displayed.

കേരള കൗമുദി

Kannur 07 Jun 2023

എം.സി.സി ക്യാമ്പസ് ശുചീകരിച്ചു

തലശ്ശേരി: മലബാർ കാൻസർ സെന്റർ, കണ്ണൂർ ഡിസ്ട്രിക്ട് കാൻസർ കൺട്രോൾ കൺസോർഷ്യം എന്നിവയുടെ നേതൃത്വത്തിൽ എം.സി.സി ക്യാമ്പസ് ശുചീകരിച്ചു കൊണ്ട് പരിസ്ഥിതി ദിനം ആചരിച്ചു. ജില്ലാ ലീഗൽ സർവീസസ് അതോറിറ്റി സെക്രട്ടറി സബ് ജഡ്ജ് വിനോദ് ഉദ്ഘാടനം ചെയ്ത ചടങ്ങിൽ കൺസോർഷ്യം പ്രസിഡന്റ് നാരായണൻ പുതുക്കുടി അദ്ധ്യക്ഷത വഹിച്ചു. പി.കെ സുരേഷ്, മേജർ പി. ഗോവിന്ദൻ, ഡോ. ഫിൻസ് എം. ഫിലിപ്, ഡോ. എ.പി നിഖിൽ എന്നിവർ സംസാരിച്ചു. കൺസോർഷ്യം വളണ്ടിയർമാർ, പാരാലീഗൽ വളണ്ടിയർമാർ, ബി.എസ്.സി, എം.ആർ.ടി വിദ്യാർത്ഥികൾ, മട്ടന്നൂർ അമ്മ പാലിയേറ്റീവ് കെയർ വളണ്ടിയർമാർ, മട്ടന്നൂർ പി.ആർ.എൻ.എസ്.എസ് കോളേജ് എൻ.എസ്.എസ് വളണ്ടിയർമാർ എന്നിവർ ചേർന്നാണ് ശുചീകരണം നടത്തിയത്. കൺസോർഷ്യം സെക്രട്ടറി കെ.എം ചന്ദ്രൻ, അഡ്വ. വി.ടി ഷില, ഉഹമ്മദ് നിസാർ, ഷില സുരേഷ്, എൻ. പ്രകാശൻ, സി.സി ബസന്ത്, പി.ഒ ജാബിർ നേതൃത്വം നൽകി.

KERALA KAUMUDI EPAPER

5. KCCC Review Meetings and Other Activities

6. AIDOSCAN (AI-Driven Large-scale Screening for Oral and Oropharyngeal Cancer)
As part of the Project, community level oral cancer screening camps were conducted in Kannur District.

7. World No tobacco day Observation 31st May 2023

8. Observation of International day against Drug abuse and illicit trafficking (June 26)

9. Cancer Awareness programs as part of Kannur Fights Cancer Project

10. National cancer awareness day observation- Launch of Birthday challenge- an opportunity for students to help cancer patients

11. Cancer Control activities at Kannapuram Gramapanchayath

12. Environmental cancer risk assessment and water testing at Panniannur and Ezhome

13. Training for Medical officers from various institutions in Kannur district under the Directorate of Health Sciences in early cancer detection as part of District Cancer Control Program on 1st and 2nd of November. 25 medical officers participated

14. Training for nursing staff from various institutions in Kannur district under the Directorate of Health Sciences in early cancer detection as part of District Cancer Control Program on 30th November and 1st December

15. Setting of Early Cancer Detection Centres at Primary Health Centres/Family health Centres in Kannur District

16. MLSP and Staff nurse Training in early cancer detection: Nurses training was conducted as part of DCCP. 88 nursing officers from various PHC, FHC, Taluk hospital, CHC, GH Thalassery and DH, Kannur were trained in early cancer detection.

17. Observation of World Cancer Day on February 4th 2024

STAFF

ACADEMIC STAFF		
SL. NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr Neethu A P	HOD-in-charge
2	Dr Phinse M Philip	Assistant Professor
NON ACADEMIC STAFF		
SL. NO	**NAME OF STAFF**	**DESIGNATION**
1	Santhosh Kumar K	Lab/ Pharmacy Assistant
2	Nisha T	Nursing Assistant

DEPARTMENT OF RADIATION ONCOLOGY

HEAD OF THE DEPT

Dr. GEETHA M MD
PROFESSOR

INTRODUCTION:

The Department of Radiation Oncology is equipped to deliver state of art radiation therapy for cancer patients. The department focuses on evidence based clinical practice to provide precision treatment to patients . Beyond clinical services, the department engages in academic pursuits and trains postgraduate students. Research is also a key focus, with staff and students actively participating in and presenting papers at national and international conferences.

MAJOR MILESTONES

- Department of Radiation Oncology was formed in 2005.
- 2005- Telecobalt machine – ELITE -80 - decommissioned in 2018
- 2007- HDR Brachytherapy unit 16 channel - (Neucleatron). – Decommissioned in 2020
- 2008- Conventional Simulator (Neucleatron- Simulix)- decommissioned in 2018
- 2011 – First High end Linear accelerator (Varian – Clina ix) installed
- 2013 - CT simulator (GE- Optima 580 W)
- 2015- Linear accelerator with FFF and hexapod couch (Elekta – Versa- HD)
- 2017- Teklecobalt – machine – Theratron Equinox- Team Best)
- 2019 – Upgraded version of HDR brachytherapy Unit with 20 channels (Elekta- Flexitron)
- 2022- Treatment delivery using Active breath coordinator
- 2023- Started Total Body Irradiation
- 2024 Started Plaque brachytherapy for ocular tumors (Ruthenium 106- Plaque- BARC)

DIVISIONS UNDER THE DEPARTMENT

1. **Division of Radiation Oncology**
2. **Division of Radiation Physics**

Both the divisions are interdependent and work in unison. The activities of both divisions are listed together

AVAILABLE FACILITIES:

SL NO	NAME OF THE EQUIPMENT
	TELETHERAPY
1	Varian ClinaciX Linear Accelerator
2	Elekta Versa HD Linear Accelerator
3	TheratronEquinox Co-60 Teletherapy Machine
	SIMULATORS
4	GE Optima 580 CT simulator
	BRACHYTHERAPY
5	Flexitron – HDR Brachytherapy Unit with 20 channels
6	Plaque Brachy therapy (S/N A082)

NEW EQUIPMENT AND INITIATIVES /FACILITIES

1. Plaque Brachytherapy
2. Total Body Irradiation (TBI) using VMAT technique

ACTIVITIES

A. CLINICAL ACTIVITIES

a. Management of patients – OPD consultations, treatment decision, treatment planning , plan evaluation and approval and treatment setup verification, and treatment delivery.

b. Quality assurance tests done by radiation physicist daily, weekly, monthly and annually and patient specific QA prior to the delivery of treatment planned using advanced treatment techniques

c. Brachytherapy planning and treatment delivery.

SL NO	FACILITIES	NUMBER
1	In-patients	453
2	Out-patients	15411
	Treatment details	
3	Total external beam radiotherapy	2235
4	Patients treated with curative intent	1199
5	Patients treated with palliative intent	1043
6	3Dimensional conformal radiotherapy	424
7	Intensity modulated radiotherapy/ volumetric modulated arc therapy	654
8	Hybrid arc	9
9	Stereo tactic radiosurgery/stereotactic radiation therapy/stereotactic body radiotherapy	15
10	Active breath coordinator- breath hold techniquebc	53
11	Electron beam therapy	5
12	Electron boost	24
13	Total body irradiation	3

14	Extracorporeal irradiation	2
15	2 Dimensional(conventional) radiotherapy	149
16	Brachytherapy total	406
17	Intracavitary application	210
18	Vaginal brachytherapy	184
19	Interstitial implantation	13
20	CT simulation	2248
22	Brachy therapy simulation	225

B. ACADEMIC ACTIVITIES

1.COURSES AND TRAINING PROGRAMS:

SL.NO	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	DNB Radiation Oncology	3 years	2 per year	1	4
2	BSc Medical Radiological Technology	4 years	25	-	100
TOTAL NUMBER OF STUDENTS: 104					

2.ROUTINE ACADEMIC SESSIONS-The academic schedule includes topic presentations on Mondays, Tuesdays, and Thursdays, journal club on Wednesdays, and clinical classes on Saturdays. Daily Radiotherapy Board meetings and discussions take place, with chart rounds held on Saturdays. The major activities are;

a. Daily academic presentations, seminars and journal presentations.
b. Weekly academic sessions for radiation physics
c. Clinical case presentations and discussion
d. Daily Radiation Therapy board discussions

C. RESEARCH ACTIVITIES

a. Prospective and retrospective studies
b. Student's thesis

ONGOING PROJECT DETAILS:

a) Dr. Geetha.M (PI Dr. Anitta Francis): Dosimetric evaluation and toxicities ofDARS in laryngopharyngeal cancer patients- A prospective study, **Intramural Fund**

b) (PI DrVinin): Clinical Outcome of Muscle invasive Bladder Cancer treated with Definitive Radiotherapy

c) (PI Dr Vinin): Outcomes of high risk localized prostate cancer treated with definitive radiation at a tertiary cancer center in india Completed

d) (PI Dr Arun P Narendran): Clinical outcome of Carcinoma Breast with subcentimetric Internal mammary node

e) (PI Dr Akhil P Suresh): Locoregional Recurrence Following Post-Operative Volumetric-Modulated Arc Radiotherapy In Oral Cavity Cancer: Analysis Using A Deformable Registration Workflow

f) (PI Suja.C.A): Dosimetric evaluation of calculated dose distributions reported as dose to water and

dose to medium for nasopharyngeal and oropharyngeal VMAT cases using Monaco planning system.

g) **(PI Resmi.K.Bharathan):**Penumbral dose distribution of enhanced Dynamic and physical wedge fields

h) **(PI DrJoneetha Jones):**90 day mortality post radical radiotherapy in head and neck cancers.

i) **(PI Dr.Greeshma.K.E):** Retrospective analysis of the survival outcome in patients with uncommon uterine malignancies at a tertiary cancer centre in North Kerala .As a part of WHO SORT IT programme.

j) **Dr.Greeshma.K.E (PI : Dr. SUBIN S):**RoleOf Pet/Ct ScanIn Post Chemoradiation Response Assessment In Patients With Carcinoma Lung. Intramural funding Interdepartmental study(Radiation Oncology, Radiodiagnosis, Nuclear Medicine)

k) **(PI Dr.Greeshma.K.E):** Analysis of radiation dose received by cardiac substructures in patients with carcinoma lung treated with radical radiotherapy. Intra departmental study.

PROJECTS COMPLETED IN CURRENT YEAR

a) **Survival outcome in node positive oral tongue cancer patients. Dr. Geetha.M**

A total of 157 patients were analysed. The 5 year OS and DFS was 54.7% and 67.3%. Commonest site of recurrence was regional nodal relapse (17.2%). The grade of the tumour , multiple habits, number of nodes, site of involved nodes and chemotherapy cycles showed a statistically significant association with survival.

b) **Clinical outcome of oral tongue cancers treated with postoperative radiotherapy (PORT) –Dr. Geetha.M**

246 patients were retrospectively analysed. The majority of patients were T3 and the nodal stage was N0 followed by N2b. Median follow up was 47 months. The 5 year overall survival was 83.6%. Three year DFS was 92.9%. The factors in influencing survival outcome were analysed. Statistically significant association was seen only with the grade of tumour.

c) **Survival outcome in early breast cancer patients treated with breast conservation surgery- Dr. Geetha.M**

223 patients were analyzed. At a median follow up of 86 months the OS and DFS were 97.5% and 94.6%. On comparison of survival among molecular subgroups no statistically significant difference was seen. Among the 223 patients 7% (16/223) of patients recurred. Local recurrence was seen in 6 patients and distant metastasis in 11 patients. N stage (p- 0.24) and LVSI (p- 0.049) showed association with recurrence and Age was significantly associated with overall survival.

d) **Survival outcome in patients with locoregional recurrence following breast conserving surgery in early breast cancer Dr. Geetha.M**

223 patients were retrospectively analyzed. At median follow up of 86 months 7% 16/223) of patients had recurrence among which 2.7% 96/223) had isolated local recurrence among which one patient developed distant metastasis. 0.9% of patients developed metastasis in the supraclavicular fossa along with distant metastasis. All patients who developed locoregional recurrence were alive at the time of analysis. Hence overall survival could not be determined. N stage and LVSI show statically significant association with recurrence

e) **Clinical outcome and tolerance of radical chemoradiation for anal canal carcinoma(PI: Dr.Vinin N V)**

A total of 18 patients were analysed and the median age of patient population was 59 years. Patients were predominantly males (72%), most common T stage was T3 (72%) and were mostly node positive (67%). Conformal radiotherapy technique was used in all patients, with VMAT (83%) being commonest and 3DCRT in the rest. RT dose ranged from 50 Gy to 59.4 Gy, common schedules being 54 Gy in 30 fractions (44%) and 59.4 Gy in 33 fractions (28%). 7 (39%) patients had interruption in chemotherapy and 3 (17%) patients had radiotherapy treatment break. 17 (94%) patients had acute Grade 3 dermatitis, but Grade 3 or more hematological (2,11%) and gastrointestinal toxicities (1,5%) were less. Out of the 18 patients only one patient could not complete the planned course of RT.Disease free survival at 1

year, 2 years and 3 years were 82.6%, 67.6% and 56.3% respectively. Overall survival at 1 year, 2 years and 3 years were 88.1%, 80.1% and 70.1% respectively.

f) Survival outcome and recurrence pattern in low to intermediate risk carcinoma endometrium (Dr.Arun P Narendran)

The 5 year DFS was 82 % for low intermediate risk and 71% for high intermediate risk

g) Survival outcome and recurrence pattern in high risk carcinoma endometrium

The overall survival rate was 68% and recurrence free survival 83% . Most recurrences occurred within the first 3 years

h) Prognostic impact of FIGO 2023 in Carcinoma Endometrium with high risk histology (Dr.Megha Prem)

The study confirmed the accuracy and higher prognostic precision of the FIGO 2023 staging system for endometrial carcinoma with high risk histology

The survival rates were not different for both staging systems .However after comparing the AIC values for both staging systems, the AIC value is minimum for the 2009 staging system , this could be due to small sample size and under representation of certain stages

ı) **Patterns of failure in soft tissue sarcoma (PI-Dr Akhil PSuresh)**

143 patients were included in the study. Median age was 48 years (18-82 years). 73 patients (51.%) had disease recurrence- local recurrence (45, 31.4% of total patients and 61.6% of total recurrences), distant metastasis(26,18.8% of all patients 35.6% of total recurrence) Lung metastasis was the most common site of distant metastasis (19,73.1%). 8 patients had local recurrence after RT (11.3%).39 patients underwent surgery for 1st recurrence. 20 patients recurred after first surgery (56.4%). 5years and 10 years OS were 78.9% and 70.1% respectively. Median DFS was 54 months. 5years and 10 years DFS were 45.6% and DFS 32.4% respectively. 5years and 10 years OS after surgery for 1st recurrence was 81% and 69.4% respectively. Median DFS after surgery for 1st recurrence was 24.4 months. 5years DFS after surgery for 1st recurrence was 34.1%.

j) Clinical outcome of patients with malignant major salivary gland tumours treated with curative intent (PI Dr Akhil P Suresh, Dr Sandeep Vijay)

75 patients were analysed. Median age of 52 years. 47 were females(62.7%). The most commonly involved site was Parotid (57, 76.0%), and in parotid 35.1% (n=28) had deep lobe involvement. Most common was p T2 (25,57.3%), pN0(63,84.0%), Stage II (24,32.0%), Mucoepidermoid carcinoma (34,45.3%), Grade 1(38,50.7%), LVI absent(38,50.7%), Extra parenchymal extension absent (50,66.7%), negative resection margin status (44,58.7%), Extra nodal extension absent (65,86.7%), Intermediate risk group (31, 41.3%). Median OS and DFS was not attained.10 year OS was 81.5%. 10 year DFS was 61.3%. OS depends on Stage, Deep lobe of Parotid involvement, Nodal dissection done, N stage, Grade, Extraparenchymal extension, ENE, Risk group, Recurrence. DFS depends on N stage, Stage, Grade, ENE , Risk group.

k) Clinicopathological characteristics and outcome of sinonasal malignancies (PI Dr Akhil P Suresh, Dr Anoop A)

86 patients were analysed, male:female ratio was 1.5:1, Most common site was maxillary sinus (47.7%) followed by nasal cavity (36.0%), stage StageIV(64%) and histology was squamous cell carcinoma(43%). Median survival was 108 months. 5year and 10 year Overall survival was 56% and 29% respectively.48 patients treated with curative intent was analysed separately. Nasal cavity was most common (52.1%) and squamous cell carcinoma was most common histology in this group. Median EFS was 40 months. 5 years EFS was 42.2%. Median OS was 112.8 months .5 years and 10 years OS was 63.8% and 28.7% respectively. OS, DFS and EFS depend on radiotherapy given. Further multicentreprospective studies are required to identify the treatment outcomes of this rare type of malignancy.

l) Treatment outcomes of patients with meningioma treated with radiation therapy (PI Dr Akhil P Suresh, Dr Nabeel Yahiya E K)

38 patients with meningioma treated with radiation therapy were analysed. Median age was 56 years (29- 80 years). 37 patients underwent surgical excision. 17 patients (44.7%) underwent Gross total resection (GTR) and 20 patients (52.6 %) subtotal resection (STR). 15 patients were given RT on recurrent settings. The most common RT dose schedule was 54 Gy in 30 fractions. On a median follow up of 26 months, 7 patients had disease progression. OS was 82% and 69.4% at 5years and 10 years. Median PFS was 73 months. 5year PFS was 61.9%.PFS shows no significant association with factors like age, gender, tumour size, location, histology, grade, RT setting, RT dose, technique, GTV-CTV margins, however OS show statistically significant association with recurrence status (p=0.009).

m) Determination Of Optimal Virtual Skin Flash Requirements For VMAT Breast Radiotherapy(PI- Silpa AjayKumar)

The purpose of this study is to find an optimal virtual skin flash thickness in volumetric modulated arc radiotherapy using eclipse treatment planning system. Plans were optimized to obtain the optimum PTV and bolus combination to provide sufficient skin flash. The combination of PTV 0.5cm and bolus of 1 to 1.5cm optimization bolus was demonstrated to be the optimum combination. Larger bolus and PTV extension is not recommended based on this study. With this we can use this combination for skinflash creation and be able to perform VMAT breast planning in the Eclipse treatment planning system.

n) Evaluation Of CT Simulator Parameters Affecting Image Quality And Planning In Radiotherapy. (Pi-Silpa AjayKumar)

In this study using head and neck, Thorax and Pelvic CT scans, the image quality and patient dose were evaluated. The voltage and current combination that gives optimized image quality and patient dose are 120KVp-100mA and 120KVp-200mA. The study also shows monitor unit dependence on the image quality. Study highlights the importance of proper KVp –mA selection towards radiation protection.

o) Evaluation of ion recombination correction factor in high dose rate electron beam. (P.I- Suja.C.A)

The results showed that the value of k s was found to decrease little over the investigated dose range for each collecting voltage. The decrease in collection efficiency indicates that understanding the process of ion collection in the chamber will be fundamental in the translation of high dose rate electron beam into clinical practice. The values show that k s was measured to be less than 1 for both chambers using Boag's improved model. But in two voltage methods the value of Ks is almost 1. This corresponds to a collection efficiency greater than 100%. This is likely the result of uncertainty of charge multiplication effects at high voltages, where the ions are provided enough energy by the electric field that they themselves can further ionise the gas within the cavity. This leads to an increase in the charge collected by the chamber which did not originate from the initial electron pulse, therefore overestimating the dose delivered.

P) Inclusive alpha production from ^{12}C (Y,$\dot{\alpha}$) ^{8}Be and its implication on Radiotherapy (PI Resmi.K.bharathan)

Experiment reveals a continuous range of alpha energies up to 7 MeV with double differential cross sections observed at fractions of millibarns. Theoretical calculations closely match experimental data, highlighting the importance of understanding nuclear reactions in medical treatments, given the abundance of carbon in biological tissue. Micro hotspots are emerged as a consequence of the limited range of alpha particles produced during the ^{2}C (Y,$\dot{\alpha}$) ^{8}Be reaction with ranges spanning only a few micrometers within the tissue. Despite their small size, these micro hotspots can exert a profound impact , capable of delivering concentrated doses of high linear energy transfer radiation to surrounding cellular structures

q) Evaluation of Varian MLC log files in VMAT delivery (PI: Lisha Jose)

The study utilized information from Varian MLC Dynalog files with a focus on evaluating the performance of the Multi Leaf Collimator (MLC) in the context of VMAT (Volumetric Modulated Arc Therapy) Patient Specific QA plans. The primary objective was to assess MLC performance by analyzing mechanical parameters such as MLC leaf motions and leaf positions. Matrices, such as mean leaf rms

error and 95th percentile error, were employed for the analysis of theseMechanical parameters. Results, including max and mean leaf rms error (0.41mm and 0.1mm) and 95th percentile error (1.22mm max, 0.61mm min), were compared to TG-142 standards, showing values well below tolerance. In conclusion, the study emphasized the importance of evaluating MLC mechanical performance during VMAT, ensuring reliability in treatments.

r) Outcome in male patients with breast cancer treated at a tertiary cancer center- 10 yearexperience(PI:Dr.Joneetha Jones)

A total of 49 patients were included in the study.The median age of our study population was 67 years.51% of patients had ECOG performance status of 0 or 1. 22% had history of smoking and 16% had history of alcoholism.61% had left sided breast cancers.60% of patients had stage III and stage IV disease at presentation.94% of patients had invasive duct carcinoma histology.82% had ER and PR positivity and 19% had her 2 neu positivity.29 patients underwent curative intent treatment.The median follow up time was 96 months.The 3 and 5 year DFS were 69% and 64%.The 3 and 5 year OS was 72% and 50% respectively.

s) Outcome in small cell lung cancer patients treated with chemoradiation (Dr.Nabeel Yahiya E K)

To estimate the overall survival (OS) in patients with small cell lung cancer treated with radical intent Radiotherapy or chemoradiation during 1 st January 2016 to December 31 st 2021.Fourteen patients were included in this study, all but one were males. Median age in this study was 61.5 years (Range 50-72). Majority of the patient (50%) were of ECOG Performance status 2. Median OS in our study was 22.5 months with a PFS of 20 months .In our study 2 year OS and 5 year S was 50% and 14%

t) Analysis of radiation dose received by heart in patients with left sided breast cancer receiving adjuvant radiotherapy(PI :DR.GREESHMA.K.E)

This study analysed the dose received by the cardiac substructures, mainly LAD and left ventricle in patients with left sidedbreast cancer in post MRM and BCS cases receiving adjuvant radiotherapy. To analyse the dose received by cardiac substructures during radiotherapy for left sided breast cancer. Secondary : To compare the dose volume parameters achieved by cardiac sub structures in patient subgroups according to the sites irradiated, according to the RT technique used, To assess the degree of compliance of dose volume parameters to the available dose constraints.The study population included all patients with left sided breast cancers receiving adjuvant radiotherapy to the whole breast or chest wall with or without regional nodal irradiation during January 2021 to December 2023. Results: The recommended dose volume constraints for V13Gy, V17Gy and V35Gy could be achieved in the majority of our patients. But, the median MHD and LADCAmax were almost double the recommended dose in our patients. The MHD(6.12 vs 3.75Gy, p <0.001) and V13Gy(10.35 vs 6.67%, p 0.001) significantly increased when IMN irradiation was given when compared to no regional RT, RT to SCF as well as RT to SCF and Axilla. ABC technique significantly reduced V35Gy and LADCAmax

U) Clinical outcome in patients with carcinoma oropharynx treated with radical radiotherapy: retrospective analysis (PI :DR.GREESHMA.K.E)

In this study, we analysed the survival outcome and recurrence pattern in patients with carcinoma oropharynx treated with radical radiation/chemo radiation from January 2013 to December 2020 at our centre. Total of 206 patients were included in the study. Median follow up was 28months. 33% had recurrence, 40% distal, 37% at primary and 12% nodal. Median OS was 49months and median DFS was 31 months. Stage 1&2 cancers had better OS and DFS compared to locally advanced stages(p 0.024). no significant difference in OS and DFS according to the subsite, histological differentiation, age, p16 status and weekly vs 3 weekly chemotherapy were noted. The survival rates of oropharyngeal carcinomas treated with radical chemoradiation at our centre are comparable with the available literature data.

PUBLICTIONS

- Small Cell Carcinoma of Anal Canal: A Rare Case Report from a Tertiary Cancer Centre; Asian Pac J Cancer Care, 9 (2),339-402

CONFERENCES AND WORKSHOPS ATTENDED:

- **CONFERENCES**

1. Dr. Geetha.M- Indian Cancer Congress - Conductedon 2nd – 5th November 2023, Organised by IASO, AROI,IMPSO and ISO at Mumbai Lung in Cancer women – A survival Analysis. Presented a paper on Lung Cancer in women – a survival analysis
2. **Dr.Megha Prem** -Cochin oncology conference conducted on march 8 , 9 and 10 2024 Organizing Cancer Central and research institute Kochi , KERALA Presented paper Dosimetric analysis of incidental hippocampal radiationin carcinoma nasopharynx treated with IMRT
3. **Dr.Arun P Narendran-** Third Indian cancer congress 2nd to 5th November 2023 Organizing MUMBAI, Jio WORLD CONVENTION CENTRE. Presented ORAL PRESENTATION : Survival outcome and recurrence pattern in low to intermediate risk carcinoma endometrium
4. **Dr.Akhil P Suresh**-Training On Plaque Brachytherapy in ocular malignancies from 04/09/2023 to 09/09/2023 at L V Prasad Eye Institute, Hyderabad , Centre for Sight, Hyderabad, Apollo Hospitals, Hyderabad.
5. **Lisha jose-** Research within Reach, organized by Govt. Dental Medical College, Kozhikode.April10-13th 2023) .
6. **Dr.Akhil P Suresh** - Patterns of failure in soft tissue sarcoma November 2-5, 2023 at Mumbai 3rd Indian Cancer Congress
7. **Dr.Akhil P Suresh:** Clinical outcome of patients with malignant major salivary gland tumours treated with curative intent February 16-18, 2024 at Chennai Head and neck cancer summit
8. **Dr Vinin N V:** Indian Cancer Congress at Mumbai in November 2023 and presented a poster " clinical outcome and tolerance of radical chemoradiation for anal canal carcinoma".
9. **Dr.Joneetha Jones:** Indian cancer congress 2023-Mumbai(2/11/23-5/11/23) clinicopathological characteristics and treatment outcome in female patients with carcinoma tongue
10. **Dr.JoneethaJones :**Oncology 2024- Kochi(8/3/24-10/3/24)
    1. Outcome in patients with carcinoma hypopharynx treated with definitive radiation therapy
11. **Dr Nabeel Yahiya E K :** neoadjuvant chemoradiation in the treatment of carcinoma esophagus - a single institution experience 3rd Indian Cancer Congress, Mumbai, 2ND November to 5th November 2023
12. **Dr Nabeel Yahiya E K :** organ at risk doses in short course radiotherapy for carcinoma rectum: a dosimetric study, 3rd INDIAN CANCER CONGRESS, MUMBAI, 2ND November to 5th November 2023
13. **Dr.Greeshma K E:** ONCOLOGY 2024 : 8TH -10TH March 2024.

    Oral presentation : Clinical Outcome In Patients With Carcinoma Oropharynx Treated With Radical Radiotherapy: Retrospective Analysis

B. TRAINING:

a. On Plaque Brachytherapy in ocular malignancies from 04/09/2023 to 09/09/2023 at L V Prasad Eye Institute, Hyderabad , Centre for Sight, Hyderabad, Apollo Hospitals, Hyderabad,Attendees-Dr. Geetha M, Dr.Akhil P Suresh

b. On Total Body Irradiation

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr. Geetha. M	Professor
2	Dr. Vinin. N.V	Additional Professor
3	Dr. Joneetha Jones	Associative Professor
4	Dr. Greeshma. K.E	Associative Professor
5	Dr. Arun. P. Narendran	Assistant Professor
6	Dr. Nabeel Yahiya	Assistant Professor
7	Dr. Akhil. P. Suresh	Assistant Professor
8	Dr. Megha Prem Parambath	Assistant Professor
9	Dr.Silpa Ajaykumar	Lecturer
10	Suja C A	Lecturer
11	Resmi K Bharathan	Lecturer
12	Lisha Jose	Lecturer
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Arun Kumar E S	Dosimetris
2	Preethy U P	Dosimetris
3	Sriji Soman	X-Ray Technician
4	Nijeesh P T	Radiographer
5	Dhanya V	Radiographer
6	Beena P K	Radiographer
7	Harshal C H	X-Ray Technician
8	Faisal Anchukandan	Technician
9	Gayathry S S	Technician
10	Rejitha Mohan	Technician
11	Sunoj K Anand	Technician
12	Sandeep Kumar P	Attender
13	Sujith T	Attender

DEPARTMENT OF RADIOLOGY/ RADIO-DIAGNOSIS

HEAD OF THE DEPT ▶ **Dr. NRITHI S PRASAD** MD
ASSISTANT PROFESSOR

INTRODUCTION

Radiology plays a crucial role in cancer management, offering various tools and techniques for detection, staging, and treatment. Imaging is vital for cancer detection, providing detailed insights into the disease's location and extent, as well as structural or cancer-related changes. Advanced molecular imaging techniques, combining traditional imaging and nuclear medicine, offer more detailed information about abnormalities, including their specific metabolism. As technology advances, imaging modalities are expected to become increasingly accurate and reliable.

DIVISION OF INTERVENTIONAL RADIOLOGY (IR)

In January 2020, the department acquired and implemented a high-end Digital Subtraction Angiography machine (Siemens Artis Zee Pure). A dedicated interventional suite and 5-bed recovery area are available in Interventional Radiology (IR). The Solero Microwave Tissue Ablation System is used for tumor ablation in the liver, lung, and kidney. IR currently performs both vascular and non-vascular procedures.

FACILITIES AVAILABLE

- 128 slice GE Revolution Evo with facility for CT fluoroscopy
- Clinical MR scanner:
  - GE- Signa HDxT1.5T
  - Siemens VIDA 3T (new)
- USG scanner– Toshiba Apollo(high-end USG machine), Samsung USG machine,2 portable machines(Acusonfreestyle wireless USG by Siemens, and Acuson P500 by Siemens), Automated breast ultrasound (iABUS by Episonica).
- Maxio Robot for robotic interventions
- 3D breast tomosynthesis – Upgraded for contrast mammogram & synthesized tomography.
- Vacuum Assisted Biopsy Machine(VAB)
- ConventionalX-ray and Digital Radiography(DR).
- High-end mobile DR.-SamsungGM85, Carestream
- GE centricity Enterprise PACS – Upgraded.
- DSA suite (Siemens ArtisZee Pure)
- Starburst Radiofrequency Ablation system by Angiodynamics.

- Solero Microwave ablation system.
- Ziehm C-Arm machine.
- Hologic Horizon – Dexascan

NEW FACILITIES

1. Clinical MR scanner - Siemens VIDA 3T

ACTIVITIES

A.CLINICAL ACTIVITIES

Total studies: 25,820

SL NO	MODALITY	INVESTIGATION/PROCEDURE	NUMBER
1	**MRI**	No of Patients Imaged	1741
2		Full Study	2016
3		Screening	311
4		MR RT Planning	148
5	**CT**	No of Patients Imaged	5289
6		Full Study	8962
7		Biopsy	254
8		Robotic Biopsy	1
9	**Pigtail**	USG guided	7
10		CT guided	21
11	**Portable X-ray**		1071
12	**Digital Radiography**	No of Patients	5891
13		Studies	6613
14		Barium Studies	24
15	**C-arm Procedure**		15
16	**Mammography**	Studies	2803
17		Stereotactic biopsy	7
18	**Ultrasound**	Studies	2667
19		Biopsy	264
20		FNAC	311
21		Aspiration	106
22		Wire localization	77
23		Coil marking	33
24	**Interventional Radiology**	Trans arterial Chemoembolization	6
25		Radiofrequency ablation	1

26		Microwave ablation	13
27		PTBD	15
28		Nephrostomy	6
29		IAC	1
30		NJ/NG Tube insertion	7
31		Fluoroscopic balloon dilatation of RIES	3
32		Coiling / embolization	3

B. ACADEMIC ACTIVITIES

COURSES OFFERED IN THE DEPARTMENT:

- BSc. Medical Radiological Technology
- Diploma in Radio diagnosis under NBEMS– Department was allotted 2 seats under DMRD by NBEMS

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr Nrithi S Prasad	Assistant Professor
2	Dr Suryakala R	Assistant Professor
3	Dr AsishPavanan	Assistant Professor
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Shamna P	EDP Assistant
2	Sheena T P	Radiographer
3	Sindhu K U	Technician/ Radiographer
4	Vini Raveendran	X-Ray Technician
5	Nimmya Parameswaran	Radiographer
6	Muhammed Naseem	Radiographer
7	Srinsi N K	Radiographer
8	Praveen Kumar	Radiographer
9	Nidhu C D	Radiographer
10	Anu AnandhanAchari	Radiographer
11	Shajeena	Radiographer
12	Noufal P	Radiographer
13	Shikha M K	Radiographer
14	Sabina C V	Radiographer

DEPARTMENT OF RESPIRATORY MEDICINE AND CRITICAL CARE

HEAD IN CHARGE

Dr. ANU MARIYAM NINAN
M.B.BS, M.D (RESPIRATORY MEDICINE)
ASSISTANT PROFESSOR

INTRODUCTION

Although Malabar Cancer Centre primarily focuses on oncology, patients may also suffer from chronic lung diseases such as Chronic obstructive pulmonary disease, Bronchial asthma, Interstitial lung disease, and Bronchiectasis. Cancer treatment patients may develop pulmonary complications like infections, acute exacerbations of underlying lung diseases, chemotherapy-related pulmonary issues, post-operative pulmonary complications, and pleural diseases such as pleural effusion or pneumothorax. To address these needs, the Respiratory Medicine and Critical Care department was established in 2019, offering outpatient and inpatient consultations.

Outpatient services include assessing fitness for surgery, chemotherapy, and bone marrow transplantation using spirometry. The department also evaluates and treats pulmonary infections, acute exacerbations of underlying lung diseases, and performs diagnostic and therapeutic pleural tapping. Diffusion Capacity of Lungs for Carbon monoxide (DLCO) testing, introduced in 2019, helps identify early chemotherapy or transplant-related complications and assess surgical fitness for lung resection. Diagnostic bronchoscopy procedures, including broncho-alveolar lavage for undiagnosed lung infections and bronchoscopic lung biopsy for endobronchial lesions, are performed. In 2022, Endoscopic ultrasound bronchoscopy (EBUS) was introduced for guided biopsies of extra-luminal hilar lung masses or mediastinal lymph nodes.

DIVISIONS UNDER THE DEPARTMENT

1. Pulmonology
2. Critical care

Currently both the divisions are headed by a single faculty.

AVAILABL FACILITIES

SL NO	NAME OF THE EQUIPMENT
1	Pulmonary function tests including spirometry and Diffusion Capacity of Lungs for Carbon monoxide (DLCO)
2	Bronchoscopy – diagnostic procedures like Bronchoalveolar lavage (BAL) and Bronchoscopic Lung biopsy
3	Endoscopic ultrasound bronchoscopy (EBUS)

ACTIVITIES:

A.CLINICAL ACTIVITIES

1. Outpatient and In- patient consultations
2. Pulmonary function tests including spirometry and Diffusion Capacity of Lungs for Carbon monoxide (DLCO)
3. Bronchoscopy – diagnostic procedures like Bronchoalveolar lavage(BAL) and Bronchoscopic Lung biopsy
4. Endoscopic ultrasound bronchoscopy (EBUS) lung biopsy
5. Thoracocentesis and management of Inter-costal drainage tubes

SL NO	FACILITIES	NUMBER
1	Out-Patients	3509
2	Pulmonary Function Tests:	
a.	Spirometry	1388
b.	Diffusion Capacity Of Lungs For Carbon Monoxide (Dlco)	15
3	Pleural Tapping	126
4	Bronchoscopy	112
5	Endoscopic Ultrasound Bronchoscopy (Ebus)	16

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr. Anu Mariyam Ninan	Assistant Professor
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mr. Shibu S	Nursing assistant

DEPARTMENT OF SURGICAL ONCOLOGY

HEAD OF THE DEPT **Dr. NIZAMUDHEEN** M P. MS, MCh.
ADDITIONAL PROFESSOR

INTRODUCTION

The department of surgical oncology was one of the oldest in MCC. It was formed in 2001 under Dr Iqbal Ahmed when the institute was formed, who was the director then. The department started to grow and the patient services expanded after 2009. Since then there is a steady increase in the number of surgeries performed every year and new services and procedures were added to the list. The department was functioning as a single division till 2009. Today there are four divisions and three units under it.

Initially the department was functioning by using two operation rooms and 5 ICU beds . It was gradually expanded to four state of the art operating rooms and 14 ICU beds recently. The department regularly performs challenging procedures like free flap reconstructions, heated intraperitoneal chemotherapy (HIPEC), minimally invasive surgeries for cancers of colorectum, esophagus, stomach etc

Academic activities were initiated way back in 2010. Institutional fellowships in head and oncology and gynae oncology were the first to start with. This was followed by fellowships in surgical oncology, nutritional oncology, and oral oncology. In 2017, DrNB in surgical oncology training was started. FNB HN oncology was started in the year 2023. DrNB Gynae oncology was permitted recently and the course is expected to be started by the next academic year. The department is hopeful of starting MCh surgical oncology by next academic year.

Minimally invasive surgeries are regularly being performed from 2017. HIPEC procedures are being done from 2019. Pediatric cancer surgery was started in 2019. Neurosurgery and ocular oncology have been started from 2022. Today the department performs more than 2000 major cases every year and trains more than 20 surgeons in various areas of surgical oncology annually.

MAJOR FACILITIES AVAILABLE

SL NO	NAME OF THE EQUIPMENT	DESCRIPTION
1	Operation rooms - 4 numbers.	With the state of the art facilities.
2	Nasal endoscopy	used to visualize the interior of the nasal cavity and nasopharynx for diagnosis and assessment of tumors occupying those areas.
3	Pediatric laparoscopic instruments	for minimally invasive surgery in children.
4	Mediastinoscope	For obtaining lymph node samples from mediastinum and occasionally for lymph node clearance of the area.

5	Advanced microscope	For performing microvascular free flap reconstruction and certain procedures in neurosurgery and head and neck surgery.
6	Skull base surgery instruments	Stainless steel instruments for performing advanced procedures for resection of skull base tumors.
7	ICG fluorescence system	Used in endometrial cancer for minimally invasive lymph node sampling to reduce morbidity, ensure vascularity of the colon in surgeries of colorectal cancer.
8	Cavitronic Ultrasonic Surgical Aspirator (CUSA)	For bloodless surgeries on liver and brain.
9	Laser surgery	For laryngeal cancers
10	Navigation system.	For precise biopsy or resection of brain and skull base tumors.
11	Trans Anal Endoscopic Operation platform	For minimally invasive transanal surgeries for early rectal cancer.
12	Vessel sealer devices - Ligasure, Enseal and thunderbeat.	For blood less field in the open as well as minimally invasive surgeries for cancer.
13	Medtronic advanced Drill system	For drilling and cutting of bones during head and neck and neurosurgery.
14	3D laparoscope	For precise minimally invasive surgery with low morbidity.
15	Endourology system	For endoscopic resection of bladder cancer and channel transurethral resection of prostate cancer.
16	Advanced cautery systems - Medtronic, Olympus and J&J.	For cutting and hemostasis during surgery.
17	Medtronic Nerve monitor	For monitoring nerves in order to protect them during surgeries of high risk areas like thyroid and parotid cancer.
18	2D laparoscope.	For minimally invasive surgery in colorectum, stomach, endometrium, esophagus etc.
19	HIPEC machine	heated intraperitoneal chemotherapy for peritoneal carcinomatosis.
20	Colposuite	For examination, biopsy and resection of small lesions from the uterine cervix.
21	Endoscopy system - OGD scope, Colono-scope, Side viewing scope, Bronchoscope	For endoscopic examinations and biopsy from various hollow viscus of the human body.
22	Endobronchial UltraSound (EBUS) and Endo Ultrasound (EUS)	Advanced technology for taking samples from mediastinal nodes, intra abdominal organs etc using endoscopy guided ultrasound detection.
23	Savory Gillard dilators Facilities for ERCP and esophageal stenting	for dilatation of esophagus affected by cancer and sometimes stricture after radiation therapy.
24	Advanced camera system for documentation of cases.	Department camera for video recording for surgeries.

ACTIVITIES

1. Initial evaluation and work up of all patients with solid tumors except lung cancer.
2. Endoscopic evaluation and interventions.
3. Participates in multidisciplinary tumor boards.
4. Minor procedures, cystoscopies, biopsies.
5. Four major operation rooms.
6. Theory discussions, clinical classes, journal clubs, grand rounds and other academic activities.

DIVISIONS AND UNITS UNDER THE DEPARTMENT

DIVISIONS	UNITS
1) General Surgical Oncology	Nutrition and Dietetics Endoscopy
2) Gynecological Oncology	
3) Head and Neck Oncology	Neurosurgery
4) Ocular Oncology	

GENERAL SURGICAL ONCOLOGY DIVISION

HEAD OF THE DEPARTMENT - DR NIZAMUDHEEN M P, MS, MCH

The division was established way back in 2001. The division takes care of evaluation and management of cancers involving gastrointestinal, thoracic, genitourinary, breast and musculoskeletal organs and pediatric cases. Regular surgeries include major resections of cancer involving colorectum, stomach, esophagus, pancreas, retroperitoneum, urological organs, genital organs in men, lung, mediastinum, chest wall, bone and soft tissues and pediatric cancers. Vascular access procedures are done regularly in adults as well as pediatric patients under this division. The division has newly started using ICG fluorescence for colorectal surgeries.

- **UNIT OF ENDOSCOPY**

Staff:Mr. Rasiq PE, Endoscopy Technician

The unit of endoscopy provides comprehensive diagnostic and interventional endoscopic services to the cancer patients in MCC. Current facilities include OGD scope, colonoscope, side viewing scope, bronchoscope, EBUS/EUS, Savory Gillard dilators. ERCP and esophageal stenting are offered.

- **UNIT OF NUTRITION AND DIETETICS**

Staff: Mrs. Reena C, Dietician

The unit specializes in prehabilitation and rehabilitation of cancer patients undergoing surgery, radiation, and chemotherapy. Additionally, the unit offers a fellowship program in nutrition oncology.

NEW EQUIPMENT AND FACILITIES

- Indocyanine green (ICG) upgradation of laparoscopy system

ACTIVITIES

A.CLINICAL ACTIVITIES

SL NO	FACILITIES	NUMBER
1	Out-patients	13159
2	Major cases operated	680
3	Minor cases	346
4	Endoscopy procedures	2317
5	Out-patients	13159

B.ACADEMIC ACTIVITIES

1. COURSES AND TRAINING PROGRAMS:

SLNO	NAME OF THE COURSE	DURATION (YEARS)	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1.	**DrNB surgical oncology**	3	2	2	7
2.	**Gastrointestinal oncology fellowship**	1	2	1	1
3.	**Fellowship in nutrition oncology**	1	2	1	0
	Total Number of Students				**8**

2. ROUTINE ACADEMIC SESSIONS-

DAY	ACADEMIC ACTIVITY	NOS.
Monday	Oncologic topic discussion/dept meeting	43
Tuesday	Journal club/morbidity discussion	37
Wednesday	Clinical case discussion	44
Thursday	Theory topic presentation	48
Friday	Academic debates, mortality discussion	18
Saturday	Grand rounds	5
Total Number of Academic activity		**195**

3. GUEST FACULTY/VISITING FACULTY

Dr Vijayaraj Patil, Assistant professor, dept of surgical oncology Kidwai Memorial institute of Oncology Bangalore visited the institute on a visiting faculty program on 27/10/2023 and 28/10/2024. He performed VATS lobectomy and sleeve lobectomy for demonstration and conducted classes on airway isolation and management of lung cancer for the faculty and residents of the dept of surgical oncology and dept of anesthesia.

C.RESEARCH ACTIVITIES

ONGOING STUDY PROJECT DETAILS:

- NAGA study (Neoadjuvant v/s Adjuvant Gastric Adenocarcinoma) (PI: Dr. Nizamudheen M P, Additional professor, Surgical Oncology, Malabar Cancer CentreThalassery) - Funding -ICMR

ONGOING PROJECT DETAILS

1. Role of geriatric clinic in treating oral cancer, Dr Ferhana, SOG DrNB Resident
2. Malignant odontogenic tumors- clinical experience and literature review,Dr Ferhana,SOG DrNB Resident
3. Initial Experience of Complete Cytoreductive Surgery with HIPEC in a Tertiary Cancer Care Centre -India(2019-2022),Dr Ferhana, SOG DrNB Resident.
4. Prosthetic coverage in amputations in a tertiary care center,Dr Ferhana, SOG DrNB Resident.
5. Compliance to strict follow up protocol among surgically treated oral cancer patients,Dr.Sivakumar, SOG DrNBResident .
6. outcomes and prognostic factors of patients with colorectal cancer who underwent metastasectomy,Dr.Sivakumar, SOG DrNB Resident.
7. Outcome of multiorgan resection as a part of cytoreductive surgery in patients with ovarian cancer,Dr Alex Xavier Chakiath, SOG DrNB Resident.
8. Transanal excision in ca rectum,Dr Alex Xavier Chakiath,SOGDrNB Resident.
9. Incidence and factors affecting LARS following curative rectal surgery,DrSano, SOGDrNB Resident.
10. Oncological outcomes after Whipple's resection in a tertiary cancer center, DrSano, SOGDrNB Resident.
11. Clinicopathological features and oncological outcomes of borderline ovarian tumors, Dr Abhiram,SOGDrNB Resident.
12. clinicopathological features in gastric signet ring cell carcinoma,Dr Aishwarya, SOG DrNB Resident.
13. Oncological outcomes in management of locoregional recurrence in carcinoma breast- Dr Ashok,SOGDrNB Resident.
14. Study on outcomes of ERAS protocol with conventional method of management of patients undergoing GI surgeries,Dr.Sunil,SOG Fellow.
15. Evaluation of psoas muscle index as a predictor of postoperative morbidity and mortality in patients undergoing surgery for gastrointestinal and urinary tract cancers, Dr Vivek,SOGDrNB Resident

PROJECTS COMPLETED IN THE CURRENT YEAR

- Compliance to quality indicators during rectal cancer surgery in a tertiary cancer center, Dr Ganesh, SOG Dr NB Resident.
- APR with prostatectomy in locally advanced rectal cancer-retrospective analysis, Dr Ganesh, SOG Dr NB Resident.
- Impact of complete treatment at a comprehensive cancer center on rectal cancer outcome, Dr Kishore, SOG Dr NB Resident.
- Outcomes of treatment for retroperitoneal sarcoma at a tertiary cancer center, Dr Kishore, SOG Dr NB Resident.

PUBLICATIONS

1.Poolakkil, Prasanth; Pareekutty, Nizamudheen M.; Balasubramanian, Satheesan; Nethrakare, Aravind; Anilkumar, Bindu. Real-world data on the pattern of recurrence of colorectal cancer at a tertiary cancer center in South India: A retrospective observational study. Cancer Research, Statistics, and Treatment 7(1):p 36-44, Jan–Mar 2024. | DOI: 10.4103/crst.crst_209_23

2. Aravind, N; Pareekutty, Nizamudheen M.; Balasubramanian, Satheesan; Suresh, Akhil P.1; Kumbakara, Ratheesan2. The LapPath study: Comparison of pathologic outcomes of laparoscopic

versus open rectal cancer surgery—A retrospective analysis from a tertiary cancer center in South India. Cancer Research, Statistics, and Treatment 6(3):p 384-391, Jul–Sep 2023. | DOI: 10.4103/crst.crst_168_23

CONFERENCES/PRESENTATIONS

1) Debate on role of segmentectomy", Dr. Nizamudheen M P– conference -Controversies and advances in common malignancies at MIMS, Calicut on 29th April 2023.
2) "Neoadjuvant chemotherapy in metastatic colon cancer, panel discussion (moderator)" , Dr. Nizamudheen M P – MASOCON-2023 at Manipal on 12th & 13th of May 2023.
3) "A retrospective study on the incidence and clinical profile of hyponatremia in postoperative patients with carcinomas"Mrs.Reena - ICC 2023 at Mumbai from 02nd November 2023 to 05th November, 2023.
4) "Neoadjuvant chemotherapy in gastric cancer" - debate, Dr.Nizamudheen M P KASOCON 2023 at Thiruvananthapuram on 19th& 20th August, 2023.
5) "Role of sphincter preservation in low rectal cancer, panelist, Dr.Nizamudheen M P - ICC - 2023 at Mumbai from 02nd to 05thNovember, 2023.
6) "Immunotherapy in colon cancer", Dr.Nizamudheen M P -ASICON - 2023 at Visakhapatnam on 15thDecember, 2023.
7) " Nutrition management in diarrhea and constipation" Mrs.Reena C, NUTRICON at Kochi on 17th& 18th November, 2023 .
8) "Role of food safety in present era" Mrs.Reena C, MVR NUTRICON at Kozhikode on 08th September 2023.
9) "Food Safety in present Era"Mrs.ReenaC,MVR NUTRICON Calicut on 08th September, 2023 as presentation
10) "Whipples procedure – Clinical experience and oncological outcomes in a tertiary center." Dr.Sano A S ICC – 2023 at Mumbai from 02nd to 05th November, 2023
11) "Outcome and prognostic factors of patients with colorectal malignancy who underwent metastasectomy ". "Video presentation –sacrococcygeal chordoma:combined approach Dr.Sivakumar ICC – 2023 at Mumbai from 02nd to 05th November, 2023
12) "Impact of complete treatment at a comprehensive cancer center on Rectal cancer outcome."Dr. Kishore Kumar K ICC 2023 at Mumbai from 01st to 04th November, 2023.
13) "Compliance to quality indicators during a Rectal cancer surgery in a tertiary cancer center."Dr. Ganesh Vijaykumar G ICC – 2023 at Mumbai from 02nd to 05th November, 2023
14) "Patient with rectal cancer undergoing local excision : Clinicopathological and oncological outcomes."Dr. Alex Xavier Indian Cancer Congress - 2023 at Mumbai from 02nd to 05th November, 2023
15) ICNC – 2024 – IAPEN India Clinical Nutrition Courses at Mumbai on 10th& 11th February, 2024 Mrs.Reena C.

TRAINING

1. Dr.Prasanth P GCP Training (online) on 03rd February 2024.
2. Dr Nizamudheen M P. GCP training, (online) on 03rd February 2024.
3. Dr.Bonny A Joseph GCP Training (online) on 03rd February 2024.

AWARDS AND HONORS

1. Dr Alex Xavier, DrNB surgical oncology, received the award for best poster at Indian cancer Congress, 2023, Mumbai.
2. Dr Kishore Kumar, DrNB resident qualified for Baroda - GCRI Basavatarakam Indo American IASO traveling minimally invasive surgery fellowship at ICC 2023, Mumbai.

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr. Satheesan B, MS, DNB, MCh	Professor and Director
2	Dr. Nizamudheen M P, MS, MCh	Additional Professor and Head of the Department
3	Dr. Bonny A Joseph, MS, MCh	Assistant Professor
4	Dr. Prasanth. P, DNB, DrNB	Assistant Professor
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Reena C	Dietician
2	Rasiq P E	Endoscopy Technician
3	Hasnath C	Endoscopy technician (contract)

GYNAECOLOGIC ONCOLOGY DIVISION

DIVISION IN CHARGE - DR ADARSH D, MS.

The Gynae division manages gynecological cancers namely Carcinoma of the ovary, cervix, endometrium, vulva, vagina and primary peritoneal carcinoma. Current facilities include provisions for major resections of all gynae cancers. Screening tests including pap smear, liquid based cytology, colposcopy and genetic testing for ovarian cancers, genetic counseling of gynae cancers are performed in the department. HIPEC is regularly performed for advanced ovarian cancers and recurrent cancers. Laparoscopic surgeries are performed regularly for ca endometrium.

ACTIVITIES

A.CLINICAL ACTIVITIES

SL NO	FACILITIES	NUMBER
1	Out-patients	16539
2	Major cases operated	864
3	Minor cases	292

B.ACADEMIC ACTIVITIES:

1. COURSES AND TRAINING PROGRAMS:

	NAME OF THE COURSE	DURATION (YEARS)	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	Gynecologic oncology fellowship	2	2	1	3
Total Number of Students					**3**

2. ROUTINE ACADEMIC SESSIONS-

DAY	ACADEMIC ACTIVITY	NO OF ACADEMIC ACTIVITY IN THE YEAR
Monday	Oncologic topic discussion/dept meeting	42
Tuesday	Journal club/morbidity discussion	40
Wednesday	Clinical case discussion	40
Thursday	Theory topic presentation	39
Friday	Academic debates, mortality discussion	25
Saturday	Grand rounds	16
Total Number of Academic activity		**202**

3. OBSERVERSHIP

SL NO	NUMBER	COURSE	INSTITUTION
1	2	Gynaecologic oncology	DISTRICT HOSPITAL
TOTAL NUMBER OF OBSERVERS:02			

C.RESEARCH ACTIVITIES:

ONGOING PROJECT DETAILS:

1. Outcomes of pelvic exenteration for gynaecmalignancies,Dr.Rachana,Gyn fellow.
2. Pattern of lymph node metastasis based on location and size of tumor in endometrial carcinoma,DrNila,Fellow Gyane onco
3. Prognostic and demographic variables in clear cell carcinoma ovary,Dr.Sreeja,GOG Fellow.

PUBLICATIONS

1. Dharmarajan A, Gopinath V, Keloth Nayanar S, VelandiKunnummal S, Balasubramanian S, Roshan Valiyaparambil Gopi D. Genomic analysis of breast cancer patients from Kerala: A novel BRCA1 mutation detected. Breast Dis. 2023;42(1):341-347. doi: 10.3233/BD-220002. PMID: 37980640.

CONFERENCES PRESENTATIONS

1. "Management of incompletely staged Ca Endometrium "Dr Adarsh D - MIMS Cancer Congress at Calicut from 28th - 30th April, 2023 .
2. ""Role of RMI four in evaluation of adnexalmass"Dr.Ashitha R G, FOGSI at Kodaikanal from 11th& 12th August, 2023

STAFF

ACADEMIC STAFF		
SL NO	NAME OF STAFF	DESIGNATION
1	Dr.Adarsh Dharmarajan, MS (Obstetrics and Gynecology)	Associate Professor
2	Dr.Ashitha.R.G, MS (Obstetrics and Gynecology)	Assistant Professor

HEAD AND NECK ONCOLOGY DIVISION

DIVISION IN CHARGE - DR SANDEEP VIJAY, MS, DNB

The division of HN oncology was established in 2009 by Dr Sajith Babu and Dr Surij Salih. The division takes care of work up and surgical management of cases involving oral cavity, laryngopharynx, maxilla, thyroid, salivary glands and skull base. The division also carries out complicated reconstructions including free flap reconstructions as well. The division is academically active and is involved in training of students under the fellowship programs.

UNIT OF NEUROSURGERY

UNIT IN-CHARGE: DR RAJESH KRISHNA., MS, MCH

MCC(PGIOSR)is one of the country's very few cancer centers with a dedicated Neurosurgical Oncology unit. The full-time dedicated Neurosurgical Oncology service was started in MCC(PGIOSR)in November 2022. 43 cases of major onco-neurosurgeries were performed at MCC(PGIOSR)in the year2023 itself. MCC(PGIOSR) is now equipped with all facilities for complex brain, spine, and peripheral nerve tumor surgeries including awake craniotomy, brain mapping, intraoperative electrophysiological neuromonitoring, and complex spine surgeries, and has advanced equipment including an advanced operating microscope with provision for tumor fluorescence and ultrasound suction aspirator for better tumor resection, endoscopes for transnasal surgeries, and neuronavigation for accurately targeted biopsies. The center aims to provide state-of-the-art care and reduce treatment delays for patients with nervous system cancers in northern Kerala, as well as in the neighboring districts of Karnataka, Tamil Nadu, and Mahe.

ACTIVITIES

A.CLINICAL ACTIVITIES

HEAD AND NECK		
SL NO	**FACILITIES**	**NUMBER**
1	Out-patients	11684
2	Major cases operated	475
3	Minor cases operated	218

NEURO SURGERY		
SL NO	**FACILITIES**	**NUMBER**
1	Out-patients	954
2	Major cases operated	46
3	Minor cases	0

B. ACADEMIC ACTIVITIES

1. COURSES

SL NO	NAME OF THE COURSE	DURATION (YEARS)	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1	**FNB HN oncology**	2	2	2	2
2.	**FHNO fellowship in oral oncology**	2	1	1	2
	Total Number Of Students				4

2. ROUTINE ACADEMIC SESSIONS

DAY	ACADEMIC ACTIVITY	NO OF ACADEMIC ACTIVITY IN THE CURRENT YEAR
Monday	Oncologic topic discussions/dept meetings	49
Tuesday	Journal club/morbidity discussions	44
Wednesday	Clinical case discussions	48
Thursday	Theory topic presentations	40
Friday	Academic debates, mortality discussions	18
Saturday	Grand rounds	4
Total Number of Academic activity		**203**

3. OBSERVERSHIP

SL NO	COURSE	NUMBER	INSTITUTION
1	Oral And Maxillofacial Surgery	6	SGT Hospital
2	Oral And Maxillofacial Surgery	2	Kannur Dental College
3	Oral And Maxillofacial Surgery	2	Junior Consultants
4	Oral And Maxillofacial Surgery	1	Govt Dental College, Kottayam
5	Oral And Maxillofacial Surgery	3	KMCT Dental College
6	Periodontology	1	Kannur Dental College
7	ENT	1	Government Medical College, Kannur
TOTAL NUMBER OF OBSERVERS: 16			

C.RESEARCH ACTIVITIES

The department is part of several multi institutional trials as well as single institutional studies. The research studies concentrate on improving treatment outcomes and reducing morbidity.

ONGOING STUDY PROJECT DETAILS:

- SPT Trial (PI: Dr Satheesan B, Director, Malabar Cancer Centre, Thalassery)
- AREST Trial (PI: Dr Geetha M, Professor & HOD, Dept. of Radiation Oncology, Malabar Cancer Centre, Thalassery)

ONGOING PROJECT DETAILS:

- Evaluation of Speech and Swallowing Outcomes in Early tongue cancer patients treated with Surgery,DrShakshi,FHNO.
- Patterns of failure in early stage oral SCC treated with surgery - A single institutional study,,DrShakshi,FHNO.
- Impact of perineural invasion in outcome of salivary gland tumors,Dr Shalini Kurian,FHNS.
- Incidence and Predictors of shoulder and neck dysfunction in Head and Neck cancer Patients following Neck dissection- a Prospective study,DrPremanand,FNB HN.
- Safety of delayed extubation followed by overnight intubation in advanced tongue cancers,DrIndu,FNB HN.

PROJECTS COMPLETED IN CURRENT YEAR

- Swallowing outcomes following mandibulectomy: soft tissue vs bony reconstruction, Dr Abhipsa Mishra,oral oncology fellow
- Functional and aesthetic outcomes of fascial sling reinforcement for free flap reconstruction of commissural defects in oral cancer patients,Dr Abhipsa Mishra,oral oncology fellow.
- Reconstructive strategies and surgical outcomes in scalp malignancies: a retrospective audit,Dr Abhipsa Mishra,oral oncology fellow.

PUBLICATIONS

1. S, Vijayasarathy., Pareekutty, N.M. & Balasubramanian, S. Outcomes Following Treatment of Pelvic Exenteration for Rectal Cancer in a Tertiary Care Center. Indian J Surg Oncol (2024). https://doi.org/10.1007/s13193-024-01918-w
2. Koruth A, Vijay S, Attakkil A, Nair R, Thomas L, Mullath A. Infrahyoid Flap: Case Series of a Robust & Reliable Flap. MAR Oncology. 2023 ;5(2).
3. Vijay, S., Attakkil, A., Mohan, N., Nair, R., & Thomas, L. (2024). Reoperative Thyroid Bed Surgery: An Evaluation of Complications and Outcomes. Asian Pacific Journal of Cancer Care, 9(1), 29-33. https://doi.org/10.31557/apjcc.2024.9.1.29-33
4. George R, Vijay S, Attakkil A, Nair R, Thomas L, Mullath A. Mini-plate versus Reconstruction Plate: A comparative analysis of complications in free fibula osteocutaneous flaps for oral cancer. Journal of Head & Neck Physicians and Surgeons. 2023;11(2):121-125. doi:10.4103/jhnps.jhnps_58_23
5. Attakkil, Anoop, Raveena R. Nair, Linu Thomas, Aswin Mullath, Faseela Begum, K Ratheesan and Sandeep Vijay. “Evaluation of the Role of Neck Dissection in Patients with Verrucous Squamous Cell Carcinoma of the Oral Cavity: A Cohort Study.” JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH (2023): n. pag.
6. Attakkil, A., Babu, A.K., Vijay, S. et al. Prognostic Heterogeneity Between Oral Tongue and Gingivobuccal Tumours Based on Lymph Node Ratio and Number of Positive Nodes: A Survival Analysis. J. Maxillofac. Oral Surg. (2024). https://doi.org/10.1007/s12663-023-02106-z
7. Attakkil A, Vijay S, Ratheesan K, Mullath A, Nair RR. Survival outcomes and prognostic factors in oral squamous cell carcinoma with Locoregional recurrence: A retrospective analysis. JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH. Published online 2024. doi:10.7860/jcdr/2024/69017.19010

CONFERENCES PRESENTATIONS

1. “Partial Laryngectomy in Recurrent Cancers of Larynx”, Dr.Sandeep Vijay -Aster Cancer Congress 2023 at Calicut on 30th April, 2023 .
2. “Is it safe to retain the facial nerve surrounded by high grade carcinoma with intact facial nerve function?” Dr Anoop A Aster Cancer Congress 2023 at Calicut from 28th - 30th April, 2023.
3. “Trans opercular approach for dominant hemisphere insular glioma with awake mapping”, Dr Rajesh

Krishna P- 5th Masterclass in Neurosurgical oncology at Mumbai on 31st March – 01st April 2023.

4. "Skull base Endoscopy Workshop, Mini symposium, Live surgery sessions", Dr.Rajesh Krishna P at Amrita Institute of Medical Sciences, Kochi on 30th September and 01st October.
5. "CT-Endoscopy Fusion: Dual Modality Approach for Biopsy of Anterior Skull Base Lesions", Dr.Shalini Kurian KENTCON 2023 at Kollam from 15th to 17th September, 2023.
6. "Long term speech & swallowing outcomes following infrahyoid myocutaneous flap reconstruction analysis of 91 patients", Dr.Anoop A 3rd Indian Cancer Congress 2023 at Mumbai from 02nd to 05th November 2023
7. "Mind is what brain does : Need of Psycho Oncologist on Onco-neurosurgery." Mind Can 2023 one day National Conference in Psycho Oncology at MCC Dr.Rajesh Krishna P on 14th October 2023
8. "Assessment & Management of Laryngectomy" at Kasargod Mr.Aneeth M V, One day workshop – on 29thSeptember, 2023.
9. Reconstructive strategies in Scalp malignancy-Retrospective audit, Dr.Abhipsa Mishra "23rd National Conference of the foundation for Head & neck Oncology" at Daman from 22ndto 24th December 2023 e-poster presentation.
10. 'GNRI in Elderly Gastrointestinal cancer patients'." Exploring the variables affecting perioperative blood transfusion in flap reconstruction, Dr.Sandeep Vijay "23rd National Conference of the foundation for Head & neck Oncology" at Daman,Gujaratfrom 22nd to 24th December 2023 e-poster presentation
11. "Pattern of failure in early stage OSCC treated with surgery-single Institutional study". Dr.ShakshiGaneriwal ``23rd National Conference of the foundation for Head & neck Oncology" at Daman, Gujarat from 22nd to 24th December 2023

TRAINING

1. Dr.Anoop.A - Use of health technology assessment in decision making (on line) from 21/4/2022 to 17/4/2023.
2. Dr.Aswin M – Microvascular training at Kochi.(five days from 19.6.23 to 23.6.23).
3. Dr.ShakshiGaneriwal– Symposium on maxilla & mandible reconstruction in oral cancer, hands on microvascular workshop at Sri shankara Cancer Hospital & Research.
4. Dr.Abhipsa Mishra– Symposium on maxilla & mandible reconstruction in oral cancer, hands on microvascular workshop at Sri shankara Cancer Hospital & Research Centre on 19th & 20th May 2023.
5. Dr.Rajesh Krishna P for attending online GCP training on 16th September 2023.

AWARDS AND HONORS

1. Dr. Abhipsa Mishra, fellow in oral oncology was selected for the FHNO travel award during FHNO 2023, held in Daman.

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Dr.Sandeep Vijay, MS, DNB, FHNSO(MCC)	Assistant Professor
2	Dr. Anoop.A, MS, DNB, FHNSO(MCC)	Assistant Professor
3	Dr. RaveenaR.Nair, MS, FHNSO(MCC)	Assistant Professor
4	Dr Rajesh Krishna,MS, MCh.	Assistant Professor (Neurosurgery)
5	Dr Aswin Mullath, MS, Fellowship in oral oncology (MCC)	Assistant Professor (ad hoc)

OCULAR ONCOLOGY DIVISION

DIVISION IN CHARGE - DR DR. HRIDYA H. MS

INTRODUCTION

The Ocular Oncology Division under the Department of Surgical Oncology offers comprehensive eye examinations and is backed by a strong multidisciplinary oncology team. The division offers the best available treatment for Retinoblastoma which includes periodic examination under anesthesia, Intravitreal Chemotherapy, Cryotherapy, Laser therapy, Transpupillary Thermotherapy along with Systemic Chemotherapy. IntraArterial Chemotherapy is the most advanced treatment modality for Retinoblastoma that is available in MCC(PGIOSR). The division has also achieved success in treating conjunctival squamous cell carcinoma, ocular surface squamous neoplasia with topical and intralesional chemotherapeutic agents, avoiding the morbidity of surgery.

The division is one among the few centers who have a plaque brachytherapy unit for the treatment of uveal melanoma. This treatment allows to treat cancer without removing the eye — preserving vision, independence, and quality of life. Also, for eyes which are not salvageable, enucleation with placement of a custom fit prosthesis/ artificial eye is performed.

Apart from diagnosing and treating ocular malignancies, routine ocular screening in pediatric patients diagnosed with leukemia is also performed. Diagnosis and treatment of ocular toxicities of systemic chemotherapeutic agents and radiation and ophthalmic evaluation of patients diagnosed with neurological tumors pre and post surgery is also available.

ACTIVITIES

A.CLINICAL ACTIVITIES

SL NO	FACILITIES	NUMBER
1	Out-patients	921
2	Major cases operated	65
3	Minor cases	0

CONFERENCES PRESENTATIONS

1. 'Bilateral retinoblastoma in a child with Simpson GolabiBehmel phenotype -A possible non fortuitous association.Dr.HridyaH , ISOOVIRTUAL 2024 (Virtual) on 6th and 7th January 2024.

TRAINING

1. Dr.Hridya H- Plaque brachytherapy at L V Prasad Eye Hospital, Hyderabad from 04th to 09th September 2023.

STAFF

ACADEMIC STAFF		
SL NO	NAME OF STAFF	DESIGNATION
1	Dr. Hridya H.	Assistant Professor

NON-ACADEMIC DEPARTMENTS & DIVISIONS

DEPARTMENT OF ENGINEERING & MAINTENANCE

HEAD IN CHARGE

REENA. P.C
SUPERVISOR-ELECTRICAL

INTRODUCTION

The Engineering and Maintenance Department has been operational since the hospital's inception in 2001 and is involved in the maintenance of the vast infrastructure, which includes electro-mechanical equipment and medical devices.

KEY RESPONSIBILITIES

1. **Operation and Maintenance**
    - **Electro-mechanical Installations:** The department handles the operation and maintenance of various installations, including the 11 KV Electrical Substation with a 1600 KVA transformer, diesel generators, lifts, telecommunication systems, pump sets, water supply systems, and sanitary installations.
    - **Medical Equipment:** Maintenance of medical equipment such as MRI, CT , PET SPECT,DEXA scanners, and radioactive devices is performed through Comprehensive Annual Maintenance Contracts (CAMCs).Maintenance and calibration of medical equipment to ensure optimal performance and compliance with safety standards.Support for the smooth functioning of MCC's medical services through timely preventive and corrective maintenance
    - **Building Services:** Routine maintenance of hospital buildings, machinery, and equipment
    - Engagement of departmental staff and various Comprehensive Annual Maintenance Contracts (CAMCs) to ensure uninterrupted functioning of critical infrastructure
2. **Development Activities**
    - The department plays a major role in the development of MCC by providing key inputs and suggesting modifications to ongoing projects to optimize resources.
    - It undertakes major and minor building projects, including design, drawings, estimation, execution through tenders, supervision, and obtaining regulatory approvals.
    - Involvement in ongoing developmental projects including KIIFB Phase I & II.
3. **Infrastructure Maintenance**
    - Ensuring the smooth functioning of all infrastructure amidst construction activities on the campus.

- Careful and dedicated actions to avoid or minimize problems affecting the smooth operation of MCC.
- Optimum utilization of infrastructure, aiding the hospital administration in achieving successful operations.

4. **Administrative Liaison**
   - Liaison with local authorities such as BSNL, KSEB, Electrical Inspectorate, and Municipal Self-Governing Bodies for statutory permits and approvals.
   - Handling insurance processing for hospital equipment, buildings, roads, and other structures, and managing claims for damage or replacement.
5. **Future Developments**
   - Identifying land required for future developments and road widening.
   - Submitting necessary documents for land acquisition along with Detailed Project Reports (DPR) to government authorities.

DIVISIONS UNDER THE DEPARTMENT

- **ENGINEERING &MAINTENANCE DIVISION**
- **BIOMEDICAL ENGINEERING DIVISION**

MAJOR MILESTONES

- **2001**: Establishment of the department and initial setup of electro-mechanical and medical equipment.
- **2005**: Completion of the first phase of infrastructure development. Including Blood Bank
- **2015**: Expansion of hospital facilities Building for Linear Accelerator CT, MRI with significant input from the Engineering Department.
- **2020**: Major works of Nuclear medicine block ,Laboratory block, Child friendly Pediatric block etc Nursing college building completed Initiation of KIIFB Phase I & II projects, contributing to major infrastructural advancements.
- **2023-24**: Overcoming infrastructure challenges posed by ongoing campus construction activities

ACHIEVEMENTS IN 2023-24

During the period of 2023-24, the department successfully executed all tasks skillfully and efficiently without any major incidents affecting the hospital's daily operations. Despite the challenges posed by various construction activities on the campus, the department managed to overcome these issues through careful and dedicated efforts, ensuring the smooth functioning of MCC (PGIOSR).

The Honorable Chief Minister of Kerala laid the foundation stone of the NEW BLOCK project on February 24, 2024. The total built-up area for this prestigious project is approximately 552,000 square feet, spread across 14 floors.Key features of the project include:

- Over 20 specialist departments
- 11 cutting-edge operating theaters (OTs)
- 16 Class 10k Bone Marrow Transplant (BMT) rooms
- 26 intensive chemotherapy rooms
- Integrated Central Sterile Services Department (CSSD) and store
- Transfusion department
- Advanced cellular therapy unit
- Centralized research facility
- Workshops and incubation center
- High-tech digital library

The Honorable Chief Minister also submitted the following completed projects to the state, marking new milestones in MCC developments:

- Water treatment plant 400 KLD
- 3 T MRI Scan
- Dexa Scan
- Gallium Generator
- Biofeedback device

These projects signify significant progress and growth in various sectors, contributing to the overall development and modernization of the region.

Engineering & Maintenance Department created 47 e files in the period

MEETINGS

Engineering & Maintenance Department convened the following meetings

INTERNAL COMMITTEES

SL. NO	COMMITTEE	NO.OFMEETINGS CONDUCTED
1	Energy conservation Monitoring committee	4
2	Facility Management safety Committee	2

EXTERNAL COMMITTEES

SL. NO	COMMITTEE	NO.OFMEETINGS CONDUCTED
1	Building committee of MCC	1
2	Environment monitoring Cell	2
3	Janakeeya committee for land acquisition	1

STATUS OF CONSTRUCTION

S.No	Name of project	Plinth Area inSq.m	AS Amount	AS Details	PMC/ SPV	Current status	Expected date of completion
1	Nursing College-Phase II	552.00	Rs.2 cr Rs.2 cr Rs.0.15 Cr	Plan **2020-21**GO (Rt) No: 1703/2021/F& HWD dated 09-08-2021 Plan **2021-22** GO (Rt) No: 2085/2022/F&amp HWD dated 23-08-2022 Plan 2021-22 GO (Rt) No: 2085/2022/F&HWD dated 23-08-2022 **Total 4.15 Cr**,	M/s HITES	Going on	October 2024
2	Nursing College-Phase III	896.50	Rs.2 cr	Not yet received AS	M/s HITES	Waiting for plan fund 2024-25 AS order for tendering	Dec 2025
3	Radiotherapy Block & Renovation of OP block-KIIFB Phase-I	8678.00	82 Cr	GO(Rt)No.2781-2016 of H&FWD dated 18-10-2016 for Rs. 62 Cr.	KIIFB Fund SPV-BSNL	Going on	August 2024
4	Students Hostel [phase-II& III	8337.90	10.78 Cr	GO (Rt) No: 1598/2024/H&FWD dated 03-07-2024	M/s HITES	Work Commenced	December 2025
5	Construction of MCC's Kitchen (Canteen Kitchen extension)	324.62	1.5 Cr		Kerala PWD	Going on	July 2024

6	Fire Protection Works in Pediatric Block and Main Hospital	3450.04	0.8 Cr	GO (Rt) No: 1703/2021/F&HWD dated 09-08-2021	M/s HITES	Going on	October 2024
7	Truss roofing work	6000	0.2 Cr 3.0 Cr 1.9 Cr	GO (Rt) No: 1703/2021/F&HWD dated 09-08-2021GO (Rt) No: 2085/2022/F&HWD dated 23-08-2022GO (Rt) No: 2287/2023/F&HWD dated 09-03-2023	M/s HITES	Going on	Feb 2025
8	Truss roofing work		1.5 Cr	AS yet to get	M/s HITES	Waiting for plan fund 2024-25 AS order for tendering	Dec 2025
9	SITC of 6 Nos lift & connected civil and electrical works		2.32 Cr	GO (Rt) No. 1915/2020/H&FWD dated 16-10-2020	Self	Going on	Dec 2024

NEW DEVELOPMENTS- CONSTRUCTION INITIATED

Sl. No	Name of project	Plinth area	AS amount	AS Details	PMC/SPV	Current status	Expected date of compl etion
1	Constuction Of Power Laundry Building &Amp; SitcOfEquipments	1325.42	10.75 Cr	GO (Rt) No. 07/2020/H&FWD dated 01-01-2020 Revision of AS under process	M/s HITES	TS to be obtained	Dec 2026
2	Kitchen & Canteen First Floor-Balance works - 23-24	567.8	2.12 Cr	Plan fund 24-25 order awaiting	M/s HITES	Tendered the work	Mar 2025
3	Renovation of Stemcell therapy block (BMT & Cord Blood bank	300	0.40 Cr	Plan fund 24-25 order awaiting	M/s HITES	Tendered the work	Mar 2025
4	Painting & Maintenance works of Doctors Quarters 2023-24		0.20 Cr	GO (Rt) No: 2287/2023/ F&HWD dated 09-03-2023	M/s HITES	Tendered the work	Mar 2025
5	Patch work & re-tarring of Campus main road- [gate to hospital]		0.25 Cr	GO (Rt) No: 2287/2023/ F&HWD dated 09-03-2023	M/s HITES	Tendered the work	Dec 2024
6	SITC of 20 passengers cum Bed lift for OP 2024-25		0.32 Cr	Plan fund 24-25 order awaiting	MCC-PGIOSR	Waiting for plan fund 2024-25 AS order for tendering	Dec 2025

7	Malabar Cancer Centre New Block-KIIFB II	51294.69	406 Cr	GO(Rt) No. 1065/2020/H&FW dated 12-06-2020	**M/s Wapcos**	Going on	2026
8	Procurement of all medical equipment & hospital Furniture for Malabar Cancer Centre- Through KMSCL			KIIFB Financial Sanction amount: Order No: HFW002-70/APR-4/2023/ KIIFB dated 29-11-2023 KIIFB Financial Sanction amount: 56,80,12,500/- (incl. GST) Rupees Fifty six Crore Eighty lakh twelve thousand five hundred only).		Going on	
9	Guest House	3016.96	23.68	**No: GO (Rt) No: 1349/2021/ H&FWD dated 25-06-2021.**	**M/s Wapcos**	Under process	
10	Land Acquisition	18 Acres			**M/s Wapcos**	Under process	

STAFF

NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Reena .P.C	Supervisor-Electrical Engineer –In charge
2	Chandran .K	Supervisor – Grade –II- Plumbing
3	Liji Krishnan	Supervisor Biomedical
4	Shijina .E	Supervisor Civil
5	Susanth .P.P	Electrician
6	Nyju A.C	Electrician
7	Anil Kumar .S	Electrician
8	Rasheed P	Plumber
9	Jinsithlal. O.N	Plumber

DEPARTMENT OF GENERAL ADMINISTRATION

HEAD OF THE DEPT

RAJESH A.K. MA, MBA
ADMINISTRATIVE OFFICER

INTRODUCTION

The General Administration Department, established in 2001, ensures efficient hospital operations and adequate staff training and support. Its key responsibilities include overseeing daily administrative operations, monitoring expenses, proposing cost-effective alternatives, creating budgets, developing and implementing operational policies, preparing work schedules, and maintaining organized medical and employee records. The administration coordinates institute activities, creates policies for efficient staff functioning, and recruits various personnel including doctors, academicians, engineers, nurses, and other paramedical and scientific/technical staff. Employees undergo periodic evaluations and receive guidance and training to maximize their output. The Director and senior officers lead these administrative services and are directly responsible for day-to-day operations.

DIVISIONS UNDER THE DEPARTMENT

- **General Administration Division**
- **Hospital Administration Division**
- **Academic Division and Library & Information Sciences**
- **Accounts Division**
- **Purchase/ Stores and Pharmacy Division**
- **Human Resources and Establishment Division**
- **Security Division**

GENERAL ADMINISTRATION DIVISION

IN CHARGE OF DIVISION: RAJESH A. K(MA, MBA)
OFFICIAL DESIGNATION: ADMINISTRATIVE OFFICER

This Division outlines the duties of those in charge of governance to ensure ethical management of the organization. It defines employee rights and responsibilities, and develops Hospital Policies, organogram, and service updates for the benefit of patients and staff.

HOSPITAL ADMINISTRATION DIVISION

IN CHARGE OF DIVISION: ANITHA.T (MBA)
OFFICIAL DESIGNATION: HOSPITAL ADMINISTRATOR

Division of Hospital Administration handles the day-to-day hospital operations of the Centre with an objective to provide high quality oncology care to the patients. The Division plays a major role in ensuring patient satisfaction. There are two Units/Sub-Divisions, under Hospital Administration namely, Public

Relations and Clinical Services. The Division has different sections such as registration, admission, follow up, Schemes & insurance, Billing, Help desk, certificates& reimbursement, telephones and communications. The Division also arranges and manages funding from different NGOs in order to ensure treatment to the underprivileged patients.

The public relations wing acts as the face of the Hospital communicating with the patients, relatives and other stake holders supporting them to solve queries, concerns and issues they come across during their treatment and follow up at the centre.

ACADEMIC DIVISION AND LIBRARY & INFORMATION SCIENCES

IN CHARGE OF DIVISION: SUBHASH CHANDRAN. A. K (MLIS, MPHIL)
OFFICIAL DESIGNATION: MEDICAL LIBRARIAN

The Medical Library of MCC-PGIOSR offers seamless learning resources to its users. Medical Library acts as a knowledge hub and backbone of research and academic activities, through world class resources and value added information services in all areas of Oncology and related disciplines. Medical Library provides integrated library infrastructure for the effective use of electronic resources. All administrative works related to purchase of medical books, subscription of journals, scrutiny of bills for the payment, calling for tenders, quotations, etc., are carried out, under this Division.

ACCOUNTS DIVISION

IN CHARGE OF DIVISION: REJISANKAR.S.T (MBA)
OFFICIAL DESIGNATION: FINANCE /ACCOUNTS OFFICER

The Accounts Division]is involved in planning, budgeting, accounting, financial reporting, and internal controls including internal audit, procurement, disbursement of funds, and monitoring the physical and financial performance, with the main aim of managing resources efficiently and achieving pre-determined objectives. Sound financial management is a critical input for decision-making and programme success. Accurate and timely financial information provides a basis for informed decisions about the programme, and fund release and assists in reducing delays in necessary delays in the implementation of various activities.

PURCHASE/ STORES AND PHARMACY DIVISION

IN CHARGE OF DIVISION: JIJU T.T.V (MBA)
OFFICIAL DESIGNATION: PURCHASE OFFICER

All purchase matters including medicine purchase 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 important functions of this Division are to ensure competent quality execution of all regular purchasing duties and administrative works, preparation of reports, summarize data including sales report and book value, support relevant Departments with quotations for the purpose of tenders, monitor and co-ordinate deliveries of items between suppliers to ensure that all items are delivered to site/ store on time, plan and manage inventory levels of materials or products etc.

HUMAN RESOURCES AND ESTABLISHMENT DIVISION

IN CHARGE OF DIVISION: REJISANKAR.S.T (MBA)
OFFICIAL DESIGNATION: FINANCE /ACCOUNTS OFFICER

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

SECURITY DIVISION

IN CHARGE OF DIVISION: RAJESH A.K(MA, MBA)

OFFICIAL DESIGNATION: ADMINISTRATIVE OFFICER

The overall security of the Institute is managed by this Division. Security guards are ex-servicemen and are outsourced through KEXCON (Kerala Sate Ex-Servicemen Development and Rehabilitation Corporation). They guard the Campus 24x7 and are posted in various areas of the campus. Vigilant security measures are undertaken as lot of highly sophisticated and costly state of art equipments are installed under Atomic Energy Regulatory Board (AERB) regulations. and handles Fires Safety of the Institution.

INAUGURATIONS CONDUCTED

Inauguration of the following Projects was conducted on 24.02.2024, by the Hon'ble Chief Minister of Kerala.

- Foundation stone laying of KIIFB Project-II
- Establishing 3 Tesla MRI Scanner
- Water treatment Plant
- DEXA scan
- Gallium Generator
- Biofeedback Device

MEETINGS

GOVERNING BODY

The 14thGoverning Body meeting of Malabar Cancer Centre Society was conducted once during the period at the Conference Hall,Hon'ble Chief Minister's Office, Government Secretariat, Thiruvananthapuram, on 13.03.2024

EXECUTIVE COMMITTEE

During the period 4 Executive Committee meetings were conducted

- 85th Executive Committee meeting was held at the Conference Hall of MCC-PGIOSR, on 03.07.2023.
- 86th Executive Committee meeting was held at the Conference Hall no: 610, Kerala Legislative Assembly, Thiruvananthapuram, on 06.11.2023.
- 87th Executive Committee meeting was held at the Chamber of Hon'ble Speaker of Kerala Legislative Assembly, Thiruvananthapuram, on 24.01.2023.
- 88th Executive Committee meeting was conducted on 28.02.2024, via online.

HOD COMMITTEE

Head of Department (HOD) Committee was convened on the following dates:

- 13.05.2023
- 15.07.2023
- 16.09.2023
- 18.11.2023
- 20.01.2024
- 23.03.2024

ADMINISTRATIVE COMMITTEE

Administrative Committeewas convened on the following dates:

- April 2023 (12.04.2023, 22.04.2023, 26.04.2023)
- May 2023 (05.05.2023,10.05.2023, 19.05.2023, 24.05.2023)
- June 2023 (01.06.2023, 08.06.2023, 15.06.2023, 21.06.2023)
- July 2023 (06.07.2023, 12.07.2023, 19.07.2023, 26.07.2023)
- August 2023 (02.08.2023, 11.08.2023, 21.08.2023, 31.08.2023)

- September 2023 (06.09.2023, 13.09.2023, 20.09.2023, 26.09.2023)
- October 2023 (07.10.2023, 11.10.2023, 20.10.2023, 25.10.2023)
- November 2023 (08.11.2023, 15.11.2023, 21.11.2023)
- December 2023 (04.12.2023, 13.12.2023, 19.12.2023, 28.12.2023)
- January 2024 (03.01.2024, 12.01.2024, 17.01.2024, 31.01.2024)
- February 2024 (08.02.2024, 12.02.2024, 21.02.2024, 28.02.2024)
- March 2024 (07.03.2024, 14.03.2024, 20.03.2024, 27.03.2024)

EXTERNAL COMMITTEES

SL. NO	COMMITTEE	NO.OF MEETINGS CONDUCTED
1	Scientific Advisory Committee (SAC)	1
2	Research Advisory Committee (RAC)	0
3	Institutional Ethics Committee (IEC)	4
4	Intra Mural Research Fund Review Committee	1

INTERNAL COMMITTEE-ACADEMIC

SL. NO	COMMITTEE	NO.OF MEETINGS CONDUCTED
1	Academic Council	12
2	Institutional Review Board –Scientific Committee(IRB-SRC)	20
3	Academic Standing Committee	2
4	Academic Monitoring Cell	12

INTERNAL COMMITTEE-ADMIN

SL. NO	COMMITTEE	NO.OF MEETINGS CONDUCTED
1	Hospital Management Committee	10
2	Nursing Administration	6
3	Scheme Review Committee	7
4	Biomedical Waste Management Committee	6
5	Pharmaco Therapeutics Committee	6
6	Hospital Blood Transfusion Committee	3
7	Grievance Committee	

OTHER COMMITTEES

SL. NO	COMMITTEE	NO.OF MEETINGS CONDUCTED
1	Hospital Infection Control	13
2	Medical Records Committee	5
3	Facility Management & Safety Committee eng	3
4	Clinicians Committee	14
5	Grievance Handling Committee	1
6	Internal compliance Committee	5

7	Quality Cell pramod	6
8	Code Blue Committee	2
9	Radiation Safety Committee	3

NEW GUIDELINES/SOP CREATED

- SOP on probation
- Leave policy for contract staff
- Policy on entry of children, visitors, employees' guests,visitingfaculitiesetc'
- Policy on relieving procedures for permanent staff
- Sports policy for staffs and students

E-OFFICE IMPLEMENTED AND TOTAL NUMBERS OF 868 E-FILES HAVE BEEN CREATED.

RIGHT TO INFORMATION ACT - DATA FROM 01.04.2023 TO 31.03.2024

Number of applications received by Public Information Officer-MCC, during the period	26
Number of applications received by Appellate Authority- MCC, during the period	0
Number of hearings conducted by Chief State Information Commission, during the period	0

RIGHT TO SERVICE ACT - DATA FROM 01.04.2023 TO 31.03.2024

MONTH	NO OF CERTIFICATES ISSUED	TOTAL NO OF APPLICATIONS PROCESSED EXCEEDING THE TIME LIMIT	TOTAL NO OF FIRST APPEALS	TOTAL NO OF SECOND APPEALS
April 2023	1007	0	0	0
May 2023	914	0	0	0
June 2023	873	0	0	0
July 2023	947	0	0	0
August 2023	1036	0	0	0
September 2023	944	0	0	0
October 2023	1110	0	0	0
November 2023	1134	0	0	0
December 2023	1068	0	0	0
January 2023	1313	0	0	0
February 2023	1190	0	0	0
MARCH 2023	1107	0	0	0
Total	**12643**	**0**	**0**	**0**

STAFF WHO HAD JOINED THE INSTITUTION DURING THE PERIOD APRIL 2023 TO MARCH 2024

SL.NO	NAME	DESIGNATION	DEPARTMENT	DOJ
1	Dr.Simi Mohan	Associate Professor (child health nursing) INSeR	INSeR	17.04.2023
2	Dr.Binuja.P	Associate Professor (mental health nursing) INSeR	INSeR	10.05.2023
3	Dr.Anu Mariyam Ninan	Assistant Professor in Respiratory Medicine	Respiratory Medicine	22.05.2023
4	Dr.Prasanth.P	Assistant Professor in surgical Oncology	Surgical Oncology	11.07.2023
5	Dr.Megha Prem Paramban	Assistant Professor in Radiation Oncology	Radiation Oncology	11.08.2023
6	Dr.Suryakala.R	Assistant Professor in Radiodiagnosis/Radiology	Radiodiagnosis/ Radiology	21.08.2023
7	Shri.Asalah.T.H	Technician Nuclear Medicine	Nuclear Medicine	01.01.2024
8	Dr.AsishPavanan	Senior Resident/Assistant Professor in Radiology/ Radiodiagnosis	Radiodiagnosis/ Radiology	19.02.2024

STAFF WHO HAD LEFT INSTITUTION DURING THE PERIOD APRIL 2023- MARCH 2024

SL.NO	NAME	DESIGNATION	DEPARTMENT/DIVISION	DATE OF RELIEVING
1	Dr. Priya Jayarajan	Assistant Professor	Respiratory Medicine	19-01-2023
2	Archana V Hari	Staff Nurse Gr II	Onco Nursing	13-02-2023
3	Dr. Vivekanand	Assistant Professor	Radiation Oncology	28-02-2023
4	Anju Baby	Staff Nurse Gr II	Onco Nursing	01-03-2023
5	Sheeba S	Staff Nurse Gr.II	Onco Nursing	08-06-2023
6	Dr.SatheeshBabu.T.V	Associate Professor	Radiology/Radiodiagnosis	08/06/20223
7	Dr.Manuprasad.A	Associate Professor	Clinical Hematology&Medical Oncology	24.07.2023

DISMISSAL FROM SERVICES:

- Shri.Sudeep.K.T, Engineer-MCC (Permanent), was dismissed from the services of MCC, on 11.05.2023, following Domestic Enquiry proceedings.

NON-ACADEMIC STAFF (PERMANENT) STAFF POSITION, AS ON 31.03.2024

1	Padmakumar C.S	Social Investigator
2	Shyni.A.F	Head Nurse
3	Jerry.A	Nursing Assistant
4	Lethiamma.P.R	Nursing Assistant
5	Deepa Prabha	Nursing Assistant
6	Kalamol.A.B	Nursing Assistant
7	Krishnakumar.K	Technician – Anesthesia & Operation Theatre
8	Reena.P.C	Supervisor Electrical
9	Jayanandan.A	Clerk/Cashier/Typist
10	Rejoy.K	Clerk/Cashier/Typist
11	Bindu T K	Clerk/Cashier/Typist
12	Shyni.D.R	Hospital Assitant
13	Mahija.P.M	Hospital Assitant
14	Chandran.K	Supervisor Plumbing
15	Surekha.M.C	Clerk/Cashier/Typist
16	Jayadeep.E.K	Clerk/Cashier/Typist
17	Dineshkumar.T.M	Clerk/Cashier/Typist
18	Prasoonan.P.P	Clerk/Cashier/Typist
19	Pramod.P	Attender
20	Shajith.R.P	Attender
21	Shobitha.L	Nursing Assistant
22	Bindhu.V	Hospital Assistant
23	Reena.K	Hospital Assistant
24	Anupama Achuthan	Hospital Assistant
25	Sreeja.K	Hospital Assistant
26	Bhavanamoukthi	Hospital Assistant
27	Lasitha.K.V	Store Keeper
28	Biju Prasad	Nursing Assistant
29	Reena.K.C	Lab/Pharmacy Asst.
30	Bindhu.K.T	Lab/Pharmacy Asst.
31	Shibu.S	Nursing Assistant
32	Santhoshkumar.K	Lab/Pharmacy Asst.

33	Darly Joseph	Lab/Pharmacy Asst.
34	Sandeepkumar.P	Attender
35	Mary.I.C	Nursing Assistant
36	Ajimol Dominic	Nursing Assistant
37	Mercy John	Nursing Assistant
38	Rajeevan.U	Telephone Operator
39	Sabnadev.S.K	Cytotechnologist
40	Sreelatha.T.N	Staff Nurse Gr.1i
41	Rajesh.A.K	Administrative/Personnelofficer
42	Sabitha.K	Staff Nurse Gr.1i
43	Sindhu.N.R	Staff Nurse Gr.1i
44	Maya.P.K	Staff Nurse Gr.1i
45	Sheeja Nellikka	Staff Nurse Gr.Ii
46	Bijitha.P	Staff Nurse Gr.Ii
47	Abhina.S.S	Staff Nurse Gr.Ii
48	Smitha Grace	Staff Nurse Gr.Ii
49	Sindhu.S	Staff Nurse Gr.Ii
50	Shaija.E	Staff Nurse Gr.1i
51	Navamy.T.C	Staff Nurse Gr.Ii
52	Sriji Soman	X Ray Technician
53	Mini.K.S	Lab Technician
54	Ligy Jose	Staff Nurse Gr.Ii
55	Seena.E	Staff Nurse Gr.Ii
56	Jisha.K	Staff Nurse Gr.Ii
57	Kavitha.C.N	Staff Nurse Gr.Ii
58	Babu.M	Driver
59	Sabeesh.P	Technician- Blood Bank
60	Susanth.P.P	Electrician
61	Bhavina.C	Junior System Analyst
62	Vipin.K	Technician – Anesthesia & Operation Theatre
63	Sreejith.S	Nursing Assistant
64	Sajeesh.V.M	Technician Blood Bank
65	Remya.V	Hospital Assitant

66	Nidheesh.P.V	Driver
67	Sugandham.S	Asst.Pharmacist
68	Nyju.A.C	Electrician
69	Ratheesh.V.P	Driver
70	Saritha.N	Staff Nurse Gr.Ii
71	Nijeesh.P.T	Radiographer
72	Dhanya.P.M	Nursing Assistant
73	Dhanya.E	Nursing Assistant
74	Rehana.T	Nursing Assistant
75	Shibila.K	Nursing Assistant
76	Rekha Muraleedharan	Nursing Assistant
77	Nisha. T	Nursing Assistant
78	Midhun Gopalakrishnan	Nursing Assistant
79	Neethu.B.S	Nursing Assistant
80	Shamla.N	Nursing Assistant
81	Soumya.V.K	Techniciancliniical Lab Services
82	Arun.K.V	Attender
83	Bindhu.K.M	Nursing Assistant
84	Sujith.T	Attender
85	Shibin.C.V	Technician Blood Bank
86	Ragi Sandhya	Nursing Assistant
87	Harish Babu	Assistant Librarian
88	Aneeth.M.V	Speech Therapist
89	Reena.C	Dietician
90	Liji Krishnan	Supervisor Bio Medical
91	Ranjith	System Manager
92	Subhash Chandran.A.K	Medical Librarian
93	Nimi.G.K	Cytotechnologist
94	Jayadev.G	Medical Records Officer
95	Shamna.P	Edp Assistant
96	Mayan John	Dialysis Technician
97	Dhanya.V	Radiographer
98	Sajina.N	Staff Nurse Gr.Ii

99	Smithamol D	Staff Nurse Gr.Ii
100	Sachithra.E	Staff Nurse Gr.Ii
101	Sujatha.K	Staff Nurse Gr.Ii
102	Prajina.E	Staff Nurse Gr.Ii
103	Sheena.C	Staff Nurse Gr.Ii
104	Saritha.K.R	Staff Nurse Gr.Ii
105	Sreeja Kumari.G	Staff Nurse Gr.Ii
106	Shibimol Thomas	Staff Nurse Gr.Ii
107	Sunithakumari.S	Staff Nurse Gr.Ii
108	Ashamol.M.A	Staff Nurse Gr.Ii
109	Roopa.V	Physiotherapist
110	Anuthara.R	Staff Nurse Gr.Ii
111	Jinsithlal.O.N	Plumber
112	Raseed.P	Plumber
113	Shabina Pallipravon	Staff Nurse Gr.Ii
114	Anoop Joy	Technician Blood Bank
115	JemyLaiju	Staff Nurse Gr.Ii
116	Shiji Paulose	Staff Nurse Gr.Ii
117	Beena.P.K	Radiographer
118	Bindu Raman	Staff Nurse Gr.Ii
119	Sumi.P.R	Staff Nurse Gr.Ii
120	Preethu Das T K	Personal Assistant
121	Harshal. C.H	X Ray Technician
122	Blassy.P	Staff Nurse Gr.Ii
123	Sreejith.P.K	Clerk/Cashier
124	Ganesan.V	Clerk/Cashier
125	Sheena.T.P	Radiographer
126	Bindu.T.N	Hospital Assistant
127	Honey Mol.R	Hospital Assistant
128	Athira K Chandran	Staff Nurse Gr.Ii
129	Jeleema M Lawrence	Staff Nurse Gr.Ii
130	Sherjin.A.J	Staff Nurse Gr.Ii
131	Zeenath Battantavida	Nursing Assistant

132	Santhini Chandran	Nursing Assistant
133	Anilkumar	Electrician
134	Sindhu.K.U	Radiographer
135	Shijila.V	Staff Nurse Gr.Ii
136	Sajitha.P	Staff Nurse Gr.Ii
137	Prajina.E.K	Nursing Assistant
138	Jinshi.R.S	Nursing Assistant
139	Sibi K Daniel	Staff Nurse Gr.Ii
140	Jisha.P	Staff Nurse Gr.Ii
141	Asha John.V	Staff Nurse Gr.Ii
142	Sreejisha.P	Staff Nurse Gr.Ii
143	Nirmala Nallachery	Staff Nurse Gr.Ii
144	Surya.C	Nursing Assistant
145	Shiji.P	Staff Nurse Gr.Ii
146	Sumadevi.S	Staff Nurse Gr.Ii
147	Shimna Sebastian	Staff Nurse Gr.Ii
148	Silja Kurian	Staff Nurse Gr.Ii
149	Rajeevan Karayi	Driver
150	Vini Raveendran	X Ray Technician
151	Sabitha.M.V	Pharmacy Assistant
152	Akhila Puthilon Kunnath	Laboratory Assistant
153	Sreeja K V	Laboratory Assistant
154	Arun Kumar E S	Dosimetrist Physics Assistant
155	Ramitha.M.G	Technician Clinical Lab Services
156	Viju V S	Store Keeper
157	Namitha P K	Technician Clinical Lab Services
158	Balukrishnan S R	Technician – Anesthesia & Operation Theatre
159	Aneesh N	Technician Clinical Lab Services
160	Dhanya Prabha N	Technician Clinical Lab Services
161	Biji K R	Technician Clinical Lab Services
162	Nameetha S	Medical Records Attender
163	Thahira D	Technician Blood Bank
164	Sobhith V K	Medical Social Worker

165	Sajitha.P	Assistant Pharmacist
166	Aswini V	Hospital Assistant
167	Sandhya Devi K P	Hospital Assistant
168	Prachith K S	Coding Clerk
169	Sreejesh P P	Technician – Anesthesia & Operation Theatre
170	Mini K P	Clerk/Cashier
171	Anoop V S	Clerk/Cashier
172	Anisha K	Technicianclinical Lab Services
173	Sinsha N P	Technician Clinical Lab Services
174	Safna Sari K K	Hospital Assistant
175	Subitha S	Cytotechnician
176	Vishnu Raj	Attender
177	Gayathry S S	Technician Radiation Oncology
178	Rasiq	Endoscopy Technician
179	Shijina E	Supervisor Civil
180	Faisal Anchukandan	Technician Radiation Oncology
181	Kavitha Prakash	Nursing Assistant
182	Sajna K K	Nursing Assistant
183	Silna K K	Nursing Assistant
184	Abitha C A	Nursing Assistant
185	Jiji P S	Nursing Assistant
186	Suma S	Nursing Assistant
187	Gladish A	Hospital Assistant
188	Soumya Mathew C M	Staff Nurse Gr.Ii
189	Anjana G N	Staff Nurse Gr.Ii
190	Sajika M J	Staff Nurse Gr.Ii
191	Vijina K	Staff Nurse Gr.Ii
192	Divya C M	Staff Nurse Gr.Ii
193	Ameer Sanchani O	Staff Nurse Gr.Ii
194	Rinsha P K	Staff Nurse Gr.Ii
195	Jithin T P	Staff Nurse Gr.Ii
196	Jayasree Vk	Staff Nurse Gr.Ii
197	Shamseer K	Staff Nurse Gr.Ii

198	Nidhina K P	Staff Nurse Gr.Ii
199	Praseeda K	Staff Nurse Gr.Ii
200	Srijil.A	Staff Nurse Gr.Ii
201	Aiswarya.K.S	Staff Nurse Gr.Ii
202	Vineeth Krishnan	Staff Nurse Gr.Ii
203	Praseetha.M	Staff Nurse Gr.Ii
204	Prasanth C Das	Staff Nurse Gr.Ii
205	Sini Ss	Staff Nurse Gr.Ii
206	Shiniraj R	Staff Nurse Gr.Ii
207	Nimmy Pv	Staff Nurse Gr.Ii
208	Akashsurendran	Staff Nurse Gr.Ii
209	Jibin Kv	Staff Nurse Gr.Ii
210	Sijo Augustine	Staff Nurse Gr.Ii
211	Nimmya Parameswaran	Radiographer
212	Muhammed Naseem	Radiographer
213	Eana S	Staff Nurse Gr.Ii
214	Anu Anandan Achari	Radiographer
215	Chithira B	Staff Nurse Gr.Ii
216	JijuTtv	Purchase Officer
217	Reji Sankar St	Finance Officer/ Accounts Officer
218	Jolly K J	Staff Nurse Gr.Ii
219	Jincy Xavier	Staff Nurse Gr.Ii
220	Haseenamol Ka	Staff Nurse Gr.Ii
221	Roni Antony	Staff Nurse Gr.Ii
222	Bhavya Kk	Staff Nurse Gr.Ii
223	Manjima T	Staff Nurse Gr.Ii
224	Sabitha Cs	Staff Nurse Gr.Ii
225	Navya Tk	Staff Nurse Gr.Ii
226	Anjana S R	Staff Nurse Gr.Ii
227	Bijesh Mohan	Staff Nurse Gr.Ii
228	Satheesh M	Staff Nurse Gr.Ii
229	Rajalekshmi V	Staff Nurse Gr.Ii
230	Sunera Rajan	Staff Nurse Gr.Ii

231	Sreeja K	Staff Nurse Gr.Ii
232	Sreenivas	Staff Nurse Gr.Ii
233	Shajeena K	Radiographer
234	Srinsi K	Radiographer
235	Praveenkumar P	Radiographer
236	Noufal P	Radiographer
237	Nidhu C D	Radiographer
238	Simimol V	Staff Nurse Gr.Ii
239	Aneesha S	Staff Nurse Gr.Ii
240	Seena Mathew	Staff Nurse Grade Ii
241	Soumya Jose	Staff Nurse Grade Ii
242	Kasthoori S	Staff Nurse Grade Ii
243	Indhu P	Nursing Assistant
244	Neena A P	Nursing Assistant
245	Anitha T	Hospital Administrator
246	Jayakrishna Prabhu	Staff Nurse Gr Ii
247	Deepa Mathew	Staff Nurse Gr Ii
248	Deepuraj P	Staff Nurse Gr Ii
249	Sabitha Ms	Staff Nurse Gr Ii
250	Rejitha Mohan	Technician Radiation Oncology
251	Sunoj K Anand	Technician Radiation Oncology
252	Ajith N	Staff Nurse Gr Ii
253	Sabeena Mathew	Staff Nurse Gr Ii
254	Abhilash K K	Staff Nurse Gr Ii
255	Sreehari O P	Technician Clinical Lab Services
256	Sindhu M	Staff Nurse Gr Ii
257	Shikha Mk	Radiographer
258	Sabina Cv	Radiographer
259	Jitha Joseph	Staff Nurse Gr Ii
260	Sneha V N	Pharmacist
261	Nidheesh K	Assistant Pharmacist
262	Maneesh P	Staff Nurse Gr Ii
263	Preethy U P	Dosimetric Physics Assistant

264	Meera R Nair	Staff Nurse Gr Ii
265	Neha S	Staff Nurse Gr Ii
266	Asha Gopi G S	Staff Nurse Gr Ii
267	Fathimath Suhara P K	Staff Nurse Gr Ii
268	Ansil M	Staff Nurse Gr Ii
269	Naseema P P	Staff Nurse Gr Ii
270	Tessy Jose	Staff Nurse Gr Ii
271	Remya Raveendran	Staff Nurse Gr Ii
272	Manju Mathew	Staff Nurse Gr Ii
273	Reshma V	Nursing Assistant
274	Riya K	Nursing Assistant
275	Ancy M Panicker	Staff Nurse Grade Ii
276	Aswathy Maheswar	Technician Clinical Lab Services
277	Sreelatha P	Nursing Superintentent
278	Gireeshma G K	Dosimetrist/ Physicist
279	Asalah.T.H	Technician Nuclear Medicine

DEPARTMENT OF ONCOLOGY NURSING

HEAD IN CHARGE

SREELATHA P
(BSC NURSING, PGDHHM)
NURSING SUPERINTEND

INTRODUCTION

In the pursuit of excellence and continuous improvement, the Nursing Department has been at the forefront of innovation and education. Through collaborative efforts, training initiatives and participation in conference, dedicated team of nurses strives to uphold the highest standard of patient care. This document outlines the department's accomplishments, programs, and contributions to the healthcare field, demonstrating its dedication to enhancing quality and fostering professional growth.

Established in November 2000, the Malabar Cancer Centre's Nursing Department began with a staff of 1 Nursing Superintendent, 2 Senior Nurses, 14 Staff Nurses, and 10 Nursing Assistants. In 2007, a specialized nurse was assigned to the Palliative Unit, and subsequently, nurses with palliative care expertise set up Stoma Care and Lymphedema Care Clinics.

In 2008, the BCCPN and CCCPAN courses were introduced, overseen by the Palliative Nurse Coordinator. MCC currently qualified specialist nurses in various departments, with four nurses leading clinics. On January 1, 2011, an 18-bed chemotherapy unit was established. Subsequent expansions included specialized units such as the Bone Marrow Transplant Unit in 2013, starting with one bed, and the Intensive Chemotherapy Unit in November 2014, catering to patients requiring advanced treatment options. In 2017, the Nurse-Led Clinic CVAD was established, utilizing expertise from Tata Memorial Hospital to provide specialized care for central venous access devices. Continuing its commitment to cutting-edge care, the Nuclear Medicine Outpatient Unit opened in February 2021, followed by the expansion to Nuclear Medicine Inpatients with two beds in November 2021.

NURSE LEAD CLINICS

1. CVAD CLINIC

The CVAD clinic, which was established in 2015 with newly trained nurses, now serves an average of 20 patients per day. The clinic provides counselling and education for patients and their relatives.

MONTH	PICC INSERTION	PICC DRESSING	CAT RESUTURING	PICC FRACURE REPAIR	PICC REMOVAL	PRE INSERTION COUNSELLING	SUBCUTANOUS POST DRESSING	BLOOD COLLECTION
April	10	146		1	8	10	25	125
May	18	158		3	10	18	20	135

June	19	179		3	11	21	28	166
July	15	185		3	6	16	32	192
August	10	202			14	10	36	177
September	9	195		4	10	10	27	175
October	11	178		2	8	11	30	148
November	9	170	1	2	10	9	32	121
December	14	167		1	12	15	25	148
January	16	181		3	9	16	36	133
February	10	156		2	11	14	35	134
March	8	125	1	2	11	10	21	100
TOTAL	149	2042	2	27	120	160	347	1754

1. CHEMOTHERAPY WARD

The chemotherapy unit, a specialized area for administering cancer treatments using chemotherapy drugs, was established in 2008 with the necessary medical equipment and facilities to safely and effectively administer chemotherapy. Due to potential side effects such as nausea, fatigue, and weakened immunity, patients receiving chemotherapy often require close monitoring by nursing staff. The chemo ward includes an individual counseling room. A team of healthcare professionals, including oncologists, nurses, clinical pharmacists, and support staff, provides comprehensive care and support to patients throughout their treatment journey. MCC conducts weekly academic sessions aimed at improving patient care and education, with the goal of equipping both patients and their families with the knowledge needed to maximize their quality of life.

	NO:OFCHEMOTHERPY
Total	**18430**

ACADEMIC AND IN HOUSE TRAINING AT DAY CARE CHEMO THERAPY WARD		
MONTH	No.of Classes	
	STAFF EDUCATION	PATIENT EDUCATION
Total	32	38

3. LYMPHEDEMA & STOMA CLINIC

The stoma clinic conducts a range of activities aimed at supporting patients, including preoperative stoma counselling and training sessions for both patients and their relatives, as well as educational programs to provide comprehensive guidance and assistance.

Lymphedema clinics play a crucial role in improving the quality of life for individuals living with this condition by offering specialized care tailored to their unique needs. The services offered at a lymphedema clinic include:

- Assessment and diagnosis.
- Manual lymphatic drainage (MLD).
- Compression therapy.
- Exercise therapy.
- Skin care.
- Education and support.

STOMA	LYMPHEDEMA
2333	1210

ACADEMIC SESSIONS (CNEU)	
NO.OF CLASSES	28

MILESTONES

- BMT started in 2013 and was enhanced to 4 beds in 2018.

  The Bone Marrow Transplantation (BMT) unit at MCC was established in 2013 with a single bed. Initially, it conducted its first autologous transplant with a team of specialists from a renowned institution. The unit experienced substantial growth in July 2018, incorporating advanced technology to support the complex care needed by all BMT patients. As of now, the unit has completed 235 transplants, including both adult and pediatric cases.

- **CATH LAB started in 2009**

  The introduction of the interventional radiology system marked a significant milestone in the history of Malabar Cancer Center. Initiated in January 2020, the system has since facilitated approximately 500 procedures. These include trance arterial chemoembolization, radiofrequency ablation, microwave ablation, percutaneous biliary stenting, and percutaneous nephrostomy and lymphatic leak embolization. Notably, intravascular chemotherapy for retinoblastoma pediatric patients and endovascular foreign body removal were accomplished last year, showcasing MCC's advancement in healthcare services among hospitals in south India. All procedures are minimally invasive, ensuring patients benefit from cutting-edge treatment modalities.

MAJOR ACTIVITIES

- **IV** Cannula team formation
  Collaborated with BD Company since March 17 2023.Regular classes and workshop ongoing.

- Best sample collection practices.

  In November 2023, a workshop was held by the Biochemistry team, with the participation of 20 Nurses.

- Palliative care classes

  Palliative care nurses and their team regularly conduct classes for various categories of staff.

- State level conferences CNE

  COLOQUIUM 2023" : The 'Colloquium 2023' on the role of Interventional Radiology and Nuclear Medicine in Oncology was conducted as a state-level Continuing Nursing Education (CNE) event on January 14th, 2024, with approximately 120 delegates participated."

CRITICON 2K23 "Embrace excellence in critical care"

The 19th CNE on December 2nd, 2023, attracted 103 participants, including 3 delegates and 100 nurses from MCC, ensuring 4 KNMC credit hours. Academic sessions covered swift response mastery, ICU nursing, recent trends in critical care, and recovery after surgery. The event concluded with certificate distribution, fostering knowledge and skill enhancement in critical care nursing.

NURSE'S DAY PROGRAM

IDEATHONE conducted to foster innovative startup ideas from nurses.As part of Nurses Day celebrations, MCC conducted an Ideathon competition, and two nurses, Mrs. Sindhu N R and Ms. Neha , were awarded the 2nd prize.

QUALITY IMPROVEMENT PROJECTS

Nurses from the oncology department are participating in various clinical trials and quality improvement projects like DRIPO and EQUIP

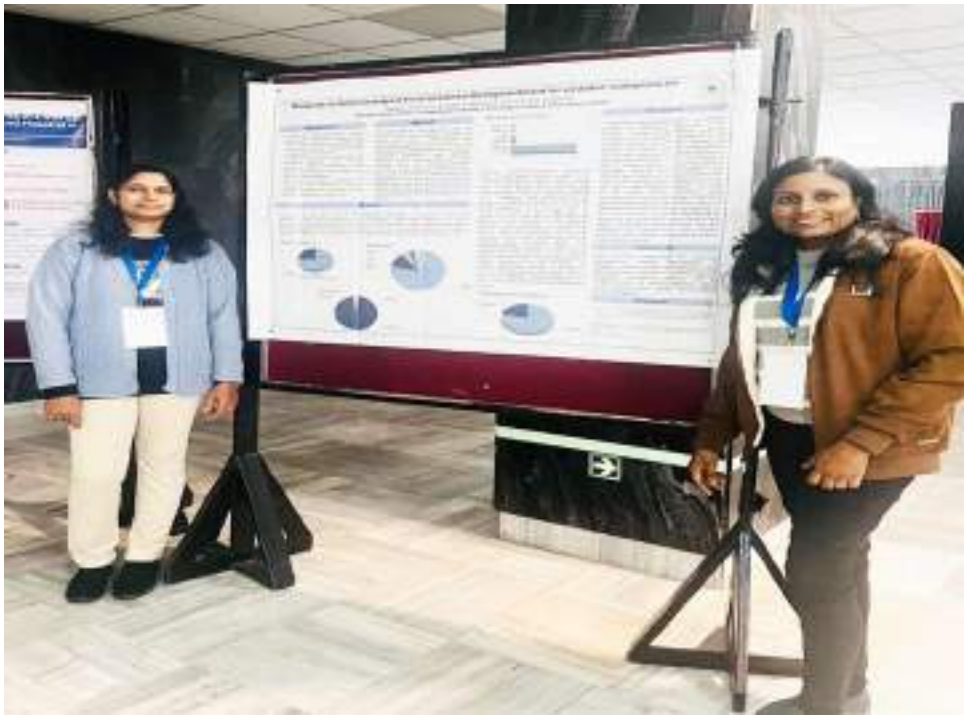
MEMBERSHIP AND PARTICIPATION

Pediatrics nurses from MCC are member of International organization SIOP.Nurses actively contributing to quality improvement activities.

NATIONAL CONFERENCES

Pediatric oncology 2 nurses participated Pediatric Haemato-oncology nursing conference and Presented poster"Moderate analgesia for procedures duringtreatment for pediatric malignancies "at AIMS Hospital New delhi.

Infection control nurse attended infection control National conference atPuducherry .



CERTIFICATE COURSES

Collaborated with ASAP to offer certificate course in chemotherapy nursing, value added courses on stoma care and CVAD care.

CONTINUOUS NURSING EDUCATION

MCC committed to enhancing patient care through ongoing staff education .

- **Basic life support and ACLS Classes**
- **Infection control practices**
- **NABH classes**

DIVISIONS UNDER THE DEPARTMENT

- **CENTRAL STERILIZATION AND SUPPLY UNIT**

  Newly constructed Central Sterile Supply Department began its work in March 2018. The CSSD was designed with three separate zones:

  Zone-1: unclean area

  Zone-2: clean area

  Zone-3: sterile area.

  Equipped with state-of-the-art models,

Sl No	Name of equipment
1	Steam sterilizer
2	Plasma sterilizer
3	ETO sterilizer
4	Sealing machine
5	Washer disinfector
6	Ultrasonic cleaner
7	Hot air oven
8	Hand labeling machine
9	Gauze cutting machine
10	Compressed air gun
11	Stainless steel furniture

CONFERENCES/WORKSHOPS ATTENDED

NAME	DESIGNATION	NAME OF THE CONFERENCE	PLACE	DATE
Anjana G N	Staff Nurse Gr II	National Peadiatric Hematology Nursing conference	AIIMS New Delhi	19.02.2024-20.02.2024
Jisha K	Staff Nurse Gr I	National Peadiatric Hematology Nursing conference	AIIMS New Delhi	19.02.2024-20.02.2024
Sajitha P	Staff Nurse Gr II	7th Advanced national workshop on Hospital Infection Control	JIPMER, Puducherry	23.01.2024-26.01.2024
Shyni A F	Head Nurse	IAPC international conference	NIMHANS Bangaluru	10.2.2023-12.2.23
Sindhu N R	Staff Nurse	IAPC international conference	NIMHANS Bangaluru	10.2.2023-12.2.23

Sabitha K	Staff Nurse	IAPC international conference	NIMHANS Bangaluru	10.2.2023-12.2.23
Bijitha	Staff Nurse	IAPC international conference	NIMHANS Bangaluru	10.2.2023-12.2.23

STAFF

SL NO	NAME OF STAFF	DESIGNATION
1	Sreelatha P	Nursing superintend
2	Shyni AF	Head Nurse
3	Sreelatha T N	Staff Nurse GR.I
4	Sabitha K	Staff Nurse GR.I
5	Sindhu N R	Staff Nurse GR.I
6	Maya P K	Staff Nurse GR.I
7	SheejaNellikka	Staff Nurse GR.I
8	Bijitha P	Staff Nurse GR.I
9	Abhina SS	Staff Nurse GR.I
10	Smitha Grace	Staff Nurse GR.I
11	Sindhu S	Staff Nurse GR.I
12	Shaija E	Staff Nurse GR.I
13	Navamy T C	Staff Nurse GR.I
14	Ligy Jose	Staff Nurse GR.II
15	Seena E	Staff Nurse GR.II
16	Jisha K	Staff Nurse GR.II
17	Kavitha C N	Staff Nurse GR.II
18	Saritha N	Staff Nurse GR.II
19	Sajina N	Staff Nurse GR.II
20	Smithamol D	Staff Nurse GR.II
21	Sachithra E	Staff Nurse GR.II
22	Sujatha K	Staff Nurse GR.II
23	Prajina E	Staff Nurse GR.II
24	Sheena C	Staff Nurse GR.II
25	Saritha K R	Staff Nurse GR.II
26	Sreeja Kumari S	Staff Nurse GR.II
27	Ashamol M A	Staff Nurse GR.II
28	Anuthara R	Staff Nurse GR.II
29	Shabina Pallipravon	Staff Nurse GR.II
30	JemyLaiju	Staff Nurse GR.II
31	Shiji Paulose	Staff Nurse GR.II
32	Bindu Raman	Staff Nurse GR.II
33	Sumi P R	Staff Nurse GR.II

34	Blassy P	Staff Nurse GR.II
35	Athira K Chandran	Staff Nurse GR.II
36	Jeleema Lawrence	Staff Nurse GR.II
37	Sherjin A J	Staff Nurse GR.II
38	Shijila V	Staff Nurse GR.II
39	Sajitha P	Staff Nurse GR.II
40	Sibi K Daniel	Staff Nurse GR.II
41	Jisha P	Staff Nurse GR.II
42	Asha John V	Staff Nurse GR.II
43	Sreejisha P	Staff Nurse GR.II
44	Nirmala Nallachery	Staff Nurse GR.II
45	Shiji P	Staff Nurse GR.II
46	Sumadevi . S	Staff Nurse GR.II
47	Shimna Sebastian	Staff Nurse GR.II
48	Silja Kurian	Staff Nurse GR.II
49	Soumya Mathew C M	Staff Nurse GR.II
50	Anjana G N	Staff Nurse GR.II
51	Sajika M J	Staff Nurse GR.II
52	Vijina K	Staff Nurse GR.II
53	Divya C M	Staff Nurse GR.II
54	Ameer Sanchani O	Staff Nurse GR.II
55	Rinsha P K	Staff Nurse GR.II
56	Jithin T P	Staff Nurse GR.II
57	Jayasree V K	Staff Nurse GR.II
58	Shamseer K	Staff Nurse GR.II
59	Nidhina K P	Staff Nurse GR.II
60	Praseeda K	Staff Nurse GR.II
61	Srijil A	Staff Nurse GR.II
62	Aiswarya K S	Staff Nurse GR.II
63	Vineeth Krishnan	Staff Nurse GR.II
64	Praseetha M	Staff Nurse GR.II
65	Prasanth C Das	Staff Nurse GR.II
66	Sini S S	Staff Nurse GR.II
67	Shiniraj R	Staff Nurse GR.II
68	Nimmy P V	Staff Nurse GR.II
69	Akash Surendran	Staff Nurse GR.II
70	Jibin K V	Staff Nurse GR.II
71	Sijo Augustine	Staff Nurse GR.II
72	Eana S	Staff Nurse GR.II

73	Chithira B	Staff Nurse GR.II
74	Jolly K J	Staff Nurse GR.II
75	Jincy Xavier	Staff Nurse GR.II
76	Haseena mol K A	Staff Nurse GR.II
77	Roni Antony	Staff Nurse GR.II
78	Bhavya K K	Staff Nurse GR.II
79	Manjima T	Staff Nurse GR.II
80	Sabitha C S	Staff Nurse GR.II
81	Navya T K	Staff Nurse GR.II
82	Anjana SR	Staff Nurse GR.II
83	Bijesh Mohan	Staff Nurse GR.II
84	Satheesh M	Staff Nurse GR.II
85	Rajalekshmi V	Staff Nurse GR.II
86	Sunera Rajan	Staff Nurse GR.II
87	Sreeja K	Staff Nurse GR.II
88	Sreenivas	Staff Nurse GR.II
89	Simimol V	Staff Nurse GR.II
90	Aneesha S	Staff Nurse GR.II
91	Seena Mathew	Staff Nurse GR.II
92	Soumya Jose	Staff Nurse GR.II
93	Kasthoori S	Staff Nurse GR.II
94	Jayakrishna Prabhu	Staff Nurse GR.II
95	Deepa Mathew	Staff Nurse GR.II
96	Deepuraj P	Staff Nurse GR.II
97	Sabitha M S	Staff Nurse GR.II
98	Ajith N	Staff Nurse GR.II
99	Sabeena Mathew	Staff Nurse GR.II
100	Abhilash K K	Staff Nurse GR.II
101	Sindhu M	Staff Nurse GR.II
102	Jitha Joseph	Staff Nurse GR.II
103	Maneesh P	Staff Nurse GR.II
104	Meera R Nair	Staff Nurse GR.II
105	Neha S	Staff Nurse GR.II
106	Ash Gopi G S	Staff Nurse GR.II
107	FathimathSuhara P K	Staff Nurse GR.II
108	Ansil M	Staff Nurse GR.II
109	Naseema P P	Staff Nurse GR.II
110	Tessyjose	Staff Nurse GR.II
111	Remya Raveendran	Staff Nurse GR.II

112	Manju Mathew	Staff Nurse GR.II
113	Ancy M Panicker	Staff Nurse GR.II
114	Jerry	Nursing Assistant
115	Lethiamma p r	Nursing Assistant
116	Deepa prabha o b	Nursing Assistant
117	Kalamol a b	Nursing Assistant
118	Shobitha l	Nursing Assistant
119	Biju prasad	Nursing Assistant
120	Shibu s	Nursing Assistant
121	Mary i c	Nursing Assistant
122	Ajimol dominic	Nursing Assistant
123	Mercy john	Nursing Assistant
124	Sreejith s	Nursing Assistant
125	Dhanya p m	Nursing Assistant
126	Dhanya e	Nursing Assistant
127	Rehana t	Nursing Assistant
128	Shibila t	Nursing Assistant
129	Rekha muraleedharan	Nursing Assistant
130	Nisha t	Nursing Assistant
131	Midhun gopalakrishnan	Nursing Assistant
132	Neethu b s	Nursing Assistant
133	Shamla n	Nursing Assistant
134	Ragisandhya	Nursing Assistant
135	Bindhu k m	Nursing Assistant
136	Zeenath bhattantavida	Nursing Assistant
137	Santhini chandran	Nursing Assistant
138	Prajina e k	Nursing Assistant
130	Jinshi r s	Nursing Assistant
140	Surya c	Nursing Assistant
141	Kavitha prakash	Nursing Assistant
142	Sajna k k	Nursing Assistant
143	Silna k k	Nursing Assistant
144	Abitha c a	Nursing Assistant
145	Jiji p s	Nursing Assistant
146	Suma s	Nursing Assistant
147	Indhu p	Nursing Assistant
148	Neena a p	Nursing Assistant
149	Reshma v	Nursing Assistant
150	Riya k	Nursing Assistant

INDEPENDENT DIVISION UNDER DIRECTOR

CLINICAL RESEARCH& BIOSTATISTICS DIVISION

DIVISION IN CHARGE -MRS.MAYA PADMANABHAN, MSc, MPhil (Statistics)

INTRODUCTION

The Clinical Research & Biostatistics (CRB) Division was established in 2013. Its primary purpose is to manage clinical, epidemiological, and translational research at the institution, facilitate collaborative research efforts, and provide education in Biostatistics, Bioethics, and clinical research.

The center focuses on advanced clinical research across major oncological fields, emphasizing interdisciplinary approaches. To ensure research adheres to stringent standards, the Institute has an Institutional Review Board (IRB). The IRB comprises two entities: the Scientific Review Committee (SRC) and the Institutional Ethics Committee (IEC). These bodies are formed in accordance with ICMR and CDSCO guidelines for biomedical research and clinical trials. This structure ensures compliance with Good Clinical Practice (GCP) Guidelines and NDCT rules of India, 2019 throughout the study's conduct, analysis, and publication.

The CRB Division aims to create, share, and implement biostatistical and analytical methods for cancer research, covering both research design and analysis. It also supports clinical data management for trials in line with Indian GCP and NDCT rule 2019.

ACADEMIC ACTIVITIES

The Division offers regular Research Methodology and Biostatistics classes for faculty, DM/DrNB/DNB trainees, fellows, and Senior Residents. Project staff receive Good Clinical Practice training. Additionally, the Division participates in academic sessions, including journal clubs, with the Cancer Registry and Community Oncology Departments.

PROJECT WORK

The Division provides facilities for MSc Statistics/Biostatistics students to complete their postgraduate dissertations or projects. It offers guidance on project preparation, data collection, analysis, and result interpretation. To date, 9 students have successfully finished their PG projects within this Division.

RESEARCH PROJECTS

1. Distribution of recurrence in early breast cancer: An application of Poisson Distribution-PI: Mrs. Maya Padmanabhan
2. Distribution of Survivors in Colorectal Cancer: An Application of Geometric Distribution-PI: Mrs. Maya Padmanabhan
3. Application of mixture cure rate model- a retrospectve study on Colorectal cancer-PI: Mrs.Maya Padmanabhan
4. Comparing The Predictive Performance OfA Decision Tree With Logistic Regression For Lung Cancer Mortality: A Retrospective Study-PI: Mrs.Maya Padmanabhan
5. A Study On Logistic Distribution & its Applications-PI: Mr.Riyas M
6. Multi State Markov Chain Modelling of Multiple Myeloma:A Disease Progression Model-PI:Mr. Riyas M
7. Analysis Of Return In Platelet Donor Using Count Data Models-PI: Mr.Riays
8. Labelling and comparison of outliers in cancer data using univariate and multivariate method-PI: Mrs.Maya Padmanabhan

PUBLICATION (2023-24)

1. Ashok Thomas, Kausik Gangopadhyay, Kulbhushan Balooni, Satheeshan Balasubramanian, and Maya Padmanabhan. Is Government Health Subsidy Targeted Enough in India? Evidence from a Tertiary Hospital. International Journal of Public Administration,March 2024

STATISTICS

RESEARCH PROPOSAL REVIEW

- Expedited Review Committee -86
- Institutional Ethics committee-33
- Intramural Research Committee-3

NUMBER RESEARCH MEETING

- Scientific Review committee-17
- Institutional Ethics Committee-4
- External Review committee-1
- Scientific Advisory Committee-1

EXTRA MURAL RESEARCH

Research is an integral part of any major academic institution for its contribution to mankind. To bolster research activities, MCC sought and secured funding from various government agencies. . Currently, 13 EMR-funded projects are in progress at our location, with 6 projects successfully completed and three patents obtained from these endeavors. The ongoing projects are as follows:

Sl. No	TITLE OF THE STUDY	FUNDING AGENCY	PI
1	Design and implementation health care model in patients with stage 2 breast cancer	Indian Council for Medical Research, Govt of India	Dr. Satheesan B
2	Assessment of key immune factors in the pathogenesis of HPV associate oral and orapharyngeal squamous cell carcinoma	Indian Council for Medical Research, Govt of India	Dr.Sangeetha K Nayanar
3	Deciphering key genetic alternations in oral precancers and cancer as possible therapeutics/Prognostic markers	Indian Council for Medical Research, Govt of India	Dr.Deepak Roshan V G
4	AI-driven Large-Scale screening for oral and oropharyngeal cancer	Department of Biotechnology, Govt of India	Dr.Satheesan B
5	Neoadjuvant chemotherapy followed by Surgery versus Surgery followed by adjuvant chemotherapy for resectable Gastric adenocarcinoma - Phase 3- Multicentre Randomized Controlled Trial(NAGA-Trial	Department of Health Research	Dr. Nizamudheen M P
6	Design and development of ultrasonicTransducer probes for medical imaging	R&D in Medical Electronics and Health Informatics Ministry of Electronics & Information Technology (MeitY), Govt of India	Dr.Nrithi S Prasad
7	Mission Covid Suraksha-Enhancing capacity for conduct of Human clinical trials for COVID-19 Vaccine candidates	Biotechnology Industrial Research council(BIRAC), Govt of India	Dr.Chandran K Nair
8	Clinicopathologic and genetic profile of bilateral breast cancer patients	Kerala State council for Science, Technology and environment, Govt of Kerala	Dr.Sithara Arvind

CLINICAL TRIAL UNIT

In 2023, MCC launched the Clinical Trial Unit with the aim of establishing a Center of Excellence for conducting research and regulatory clinical trials. These facilities comply with relevant standards and regulations, including the Drugs & Cosmetic Act, New Drugs, and Clinical Trial Rules, which govern clinical research practices.

The Clinical Trial Unit features dedicated space exclusively for trial activities. It comprises separate areas for workstations, counseling, sample collection, sample processing and storage, data documentation, IP storage, investigators, and archival purposes. The entire unit is centrally air-conditioned with round-the-clock UPS backup. Additionally, it is equipped with essential tools for clinical trials, such as internet-connected computers, desktops, laptops, tablets, printers, scanners, TV monitors, projectors, copiers, centrifuges, cooling centrifuges, deep freezers (-80°C and -20°C), multi-mode plate readers, wireless temperature loggers, camcorders, data loggers, refrigerators, color photocopiers, IP access control systems, ICU cots with mattresses, weighing machines, measuring tapes, thermometers, stethoscopes, and BP apparatus. The details of ongoing clinical trials are as follows:

SL NO	TRIAL	PI
1	Phase IIb/III study to determine efficacy of Curcumin and Metformin to reduce the incidence of second primary tumors of aero-digestive tract in patients with history of head and neck squamous cell carcinoma	Dr. Satheesan B
2	A Multicenter,Randomised, Double blind,Parallel, Phase III Global Study to Assess the Efficacy and Safety of BP01 (Bevac-izumab) when compared to Avastin®-EU in Combination with Carboplatin and Paclitaxel during Induction phase and Bevaciz-umab 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. Praveen Kumar Shenoy
3	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
4	Adjuvant Radiotherapy in Early Stage Oral Cancers (AREST) – a prospective randomized control trial	Dr. Geetha M
5	A Phase 1, open label first in human study investigating the safety, tolerability Pharmacokinetics, and preliminary antitumor activity of HPKI inhibitor GRC 54276 alone and in combination with Anti-PD-1 monclonal antibody Pembrolizumb or Anti PD-L1 Atezolizumab in subjects with advanced solid tumors and Hodgkin's Lymphoma	Dr. Praveen Kumar Shenoy
6	ALPelisibINdia Safety Study (ALPINIST): a phase IV, prospective, multicentre, 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. Nandini Devi R
7	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. Praveen Kumar Shenoy

8	A Randomized, Multiple-dose, Multicenter, Comparative Parallel Study to Evaluate the Pharmacokinetic, Pharmacodynamic, Efficacy and Safety of Subcutaneous Injection of Denosumab (Hetero) and Reference Medicinal Product (Denosumab, Amgen Inc.) in patients with bone metastases from solid tumors	Dr. Praveen Kumar Shenoy
9	A Phase 3 Study of CCNU verses CCNU Plus Mebendazole in Glioma	Dr. Praveen Kumar Shenoy
10	Neoadjuvant chemotherapy followed by Surgery versus Surgery followed by adjuvant chemotherapy for resectable Gastric adenocarcinoma Phase 3 Multicentric Randomized Controlled trial	Dr. nizamudheen M P
11	Randomized study of neoaduvent systemic therapy in Oral Cavilty cancer	Dr. Praveen Kumar Shenoy
12	A Randomized, Open-Label, C5 Inhibitor-Controlled Study To Evaluate The Efficacy And Safety OfPozelimabAndCemdisiran Combination Therapy In Patients With Paroxysmal Nocturnal Hemoglobinuria Who Are Complement Inhibitor Treatment-Naive Or Have Not Recently Received Complement Inhibitor Therapy	Dr. Chandran K Nair
13	The Multicenter, Double-Blind, Randomized, Parallel-group, Phase 3 Study to Compare the Efficacy and Safety of the Proposed Biosimilar PERT-IJS and EU-Perjeta® Along with Trastuzumab and Chemotherapy (Carboplatin and Docetaxel) as Neoadjuvant Treatment in Patients with Hormone Receptor Negative (HR-ve) Human Epidermal Growth Factor Receptor 2 (HER2)-positive Early Stage or Locally Advanced Breast study	Dr. Praveen Kumar Shenoy
14	A Phase 2a study of HT-6184 in subjects with IPSS-R Very Low, Low or Intermediate Risk Myelodysplastic Syndrome (MDS) and Symptomatic Anemia	Dr. Chandran K Nair
15	single dose, cross-over bioequivalence study of Azacitidine tablets 300 mg and ONUREG® (Azacitidine) tablets 300 mg in adult patients with acute myeloid leukemia (AML) under fasting condition	Dr. Chandran K Nair
16	A Prospective Phase III open label Randomized Controlled Trial evaluating the role of Neo-adjuvant chemotherapy in mandible preservation in oral cavity cancers	Dr. Anoop Akkattil
17	Phase III Open Labelled Randomized Controlled Study to Evaluate the Optimal Dose of All-Trans Retinoic Acid in the Treatment of Acute Promyelocytic Leukemia	Dr. Chandran K Nair

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mrs.Maya Padmanabhan	Lecturer in Biostatistics
2	Mr.Riyas M	Lecturer in Biostatistics

NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mrs.BhavanaMoukthi	Hospital Assistant
PROJECT STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Mr.Somy Kishan	Project Manager
2	Ms.Vinsha N P	Clinical Trial Coordinator
3	Dr.Suramya P	Clinical Trial Coordinator
4	Ms.Amrutha K V	Clinical Trial Coordinator
5	Ms.Subhashini K	Clinical Research Coordinator
6	Ms.Anushara Prabhakaran	Junior Research Fellow
7	Mrs. Sreelakshmi P G	Research Assistant
8	Mrs.Arya Rajan Karat	Research Pharmacist
9	Ms.Nayana Ravindran B	Research Assistant
10	Mr.Kiransanth PP	Research Assistant
11	Ms.Devika K P	Clinical Research Assistant
12	Dr.Safthar Ahammed PP	Project Assistant
13	Mrs.Udayasree	Physiotherapist
14	Mrs.Amrutha E	Psycho Oncologist
15	Mrs.Sneha K	Project Nurse
16	Mr.Nitheesh Gokul M	Project Nurse
17	Mr.Vishnu Kumar M	Lat Technician
18	Ms.Shilna K	Data Entry Operator
19	Ms.Lincy Linet	Data Entry Operator
20	Ms.Ashna P	Data Entry Operator
21	Mrs.Aiswarya K M	Data Entry Operator
22	Ms.Swetha	Data Entry Operator
23	Mr.Sravan O K	Data Entry Operator

PSYCHO-ONCOLOGY DIVISION

DIVISION IN CHARGE : JISHA ABRAHAM, MSc (CLINICAL & COUNSELLING PSYCHOLOGY), M.PHIL (PSYCHO-ONCOLOGY)

INTRODUCTION

The Psycho-oncology division has been operational at this Center since July 2017. Psycho-oncology, a field combining Psychology and Oncology, addresses the behavioral, emotional, cognitive, and social aspects of cancer patients and their families. It focuses on delivering psycho-social interventions from cancer diagnosis through survivorship and palliation, thereby enhancing patients' and families' quality of life. This division integrates Psychology, Medical Social Work, and Psychiatry into cancer care.

MAJOR FACILITIES AVAILABLE

- Psycho-social screening and Assessment for cancer patients
- Sleep interventions
- Mindfulness interventions
- Progressive Muscle Relaxation Therapy
- Biofeedback
- Geriatric Wellness (GET WELL) Clinic
- Genetic clinic
- Neuropsychological screening

MAJOR ACTIVITIES

- Psychological screening /assessment for patients
- Pretreatment counselling and Psycho education for patient and family
- Psycho-social and socio-economic interventions for patients
- Distress management and sleep interventions for patients with clinically significant distress and insomnia respectively.
- Counselling and Psychotherapy for pediatric and adult patients with emotional difficulties due to cancer
- Biofeedback based relaxation methods for patients with distress, anxiety, insomnia.
- Counselling for the family members dealing with cancer patients
- Deaddiction (tobacco and Alcohol) counselling for individuals
- Geriatric Wellness (GETWELL) assessment for patients above 70 years planned for curative treatment.
- Neuropsychological screening for patients undergoing neurosurgery
- Genetic counselling for patients and family
- Organising and coordinating support groups among patient, caregivers, and survivors
- Coordinating stress management, relaxation activities and personal counselling for the staffs
- Research in Psycho-social areas of cancer
- Training in Psycho-oncology and Oncology Social Work

AVAILABLE FACILITIES

SL NO	NAME OF THE EQUIPMENT
1	**Biofeedback Device**

FACILITIES

1. **Psycho-social screening and Assessment for cancer patients:** Individuals admitted to hospital wards or visiting outpatient clinics with psychological concerns are directed to the Psycho-oncology outpatient department. These patients undergo psychological screening and, when necessary, additional psychometric evaluations.
1. **Sleep interventions:** The division assists patients in managing the insomnia or sleep related problems based on the severity of the insomnia using different sleep interventions - Psychoeducation, Sleep hygiene practices, Behavioural methods and/or medications.
2. **Mindfulness interventions:** For patients experiencing distress or worry, mindfulness techniques are integrated with other therapeutic methods. These approaches utilize meditation, relaxation, and awareness exercises to encourage focus on the present moment, aiming to foster non-judgmental and non-reactive responses to daily situations and stressors over time.
3. **Progressive Muscle Relaxation Therapy:** This widely-used technique addresses various psychological challenges such as stress, anxiety, depression, and insomnia. It involves systematically training clients to tense and relax muscle groups while focusing on the resulting sensations of relaxation.
4. **Biofeedback:** This mind-body approach is used to manage stress, anxiety, insomnia, pain, and other psychosomatic issues. It helps control psychological symptoms through physiological changes. Equipment provides visual and auditory feedback to individuals about these changes, enabling them to self-manage symptoms. It serves as an aid in relaxation and other psychotherapeutic methods through feedback mechanisms.
5. **Geriatric Wellness (GET WELL) Clinic:** Established in 2021, this clinic aims to screen patients over 70 years old who are considering curative treatment. Screening involves a comprehensive geriatric assessment, including detailed medical history, comorbidities, medication use, substance and alcohol consumption, psychiatric treatment history, and specific evaluations for cardiac risk, frailty, liver function, cognition, depression, and daily living activities.
6. **Genetic clinic:** Patients meeting the criteria for hereditary cancer syndromes undergo assessment and genetic counseling. Detailed family history analysis is performed, and genetic tests are recommended by the consultant when necessary, accompanied by pre-test counseling.
7. **Neuropsychological screening: N**europsychological assessments - Montreal Cognitive Assessment (MoCA) and Addenbrooke's Cognitive Examination (ACE) - are conducted among all the patients planned to undergo Neurosurgical treatment. The findings help the surgeon, Psycho-oncologists and other rehabilitation staff to plan the patient care and management.

ACTIVITIES:

A.CLINICAL ACTIVITIES

SL NO	NAME OF FACILITY	NUMBER (IN SESSIONS)
1	GET WELL Clinic	128
2	Pretreatment Counselling	783
3	In-patient (IP) Routine counselling	1646
4	Intensive/ Day chemo routine counselling	91
4	IP/ Outpatient (OP) Psycho-oncology Consultation	1049
5	Discharge Counselling	1735
6	Genetic counselling	288
7	Neuropsychological assessment	15

8	Biofeedback	8
	Specialised sessions (OP)	
1	Sleep interventions	130
2	Mindfulness or Progressive Muscle Relaxation therapy	50
3	Deaddiction (Tobacco/Alcohol) counselling	51

B.ACADEMIC ACTIVITIES:

1. COURSES AND TRAINING PROGRAMS:

Sl. No.	NAME OF THE COURSE	DURATION	NUMBER OF CANDIDATES	ADMITTED IN CURRENT YEAR	TOTAL STUDENTS
1.	Fellowship in Psycho-oncology	1 year	2	1	1
2.	Fellowship in Oncology Social Work	1 year	1	1	1
	Total Number of Students				2

2. ROUTINE ACADEMIC SESSIONS

- Journal club/ Case discussion/ Academic session (Rehab) on **Thursday & Saturday**
- Academics Psycho-oncology/Oncology Social Work on **Tuesday/Wednesday**
- Academics Research on **Thursday**
- Case discussions/ Group discussion on **Friday/Saturday**

3. OBSERVERSHIP/INTERNSHIP

SL NO	NO. OF INTERNS	COURSE	INSTITUTION
1	4	MSW	Ideal College of Advanced Studies, Kadakassery
2	2	MSW	Marian College, Kuttikkanam
3	3	MSW	Centre for PG Studies in Social Work, Calicut University
4	6	MSW	Little Flower Institute of Social Sciences and Health (LISSAH), Kaithapoyil
5	3	BSc Psychology	St. Agnes College, Mangalore
6	3	MSW	Sree Sankaracharya University of Sanskrit, Thuravur Centre
7	3	MSW	Don Bosco College, Angadikkadav, Iritty
8	5	MSW	SDM Postgraduate Centre, Ujire
9	1	MSW	MV Shetty Institute of Professional Sciences and Management, Vidyanagar, Mangalore
10.	2	MSW	St. Joseph's College, Devagiri
11.	3	MSW	Sahrudaya College of Advanced Studies, Kodakara
12.	3	MSW	St. Thomas College, Konni

SL No.	NUMBER OF OBSERVER	COURSE	INSTITUTION
1.	**1**	**B Sc Psychology**	**Jamia Hamdard University, Kannur Centre**

C. RESEARCH ACTIVITIES

The Psycho-oncology division focuses on the research activities related to the psycho-social aspects of cancer. It includes the emotional, social, cognitive aspects of individuals and family due to cancer and its treatment.

ONGOING PROJECT DETAILS:

1. Concerns in Breast Cancer Survivors with respect to Sexual Function, Sexual Satisfaction and Distress: A Sequential Explanatory Study, No funding available (Jisha Abraham)
2. Effectiveness of Psycho-social Intervention on Distress, Body Image Satisfaction and Quality of Life among Colo-rectal Cancer Patients: An Intervention Study, No funding available (Jisha Abraham)

PROJECTS COMPLETED IN CURRENT YEAR

1. **Distress and Insomnia among cancer patients admitted for surgery: A Retrospective cross-sectional study (Jisha Abraham)**

   The study aimed to find the distress and insomnia among cancer patients admitted for surgery at MCC(PGIOSR). The study was retrospective study where the data were collected by reviewing the Case Records. Among the 590 patient data collected, 32.5% patients had clinically significant distress as assessed using NCCN Distress Thermometer. On Insomnia Severity Index (ISI), 26.4% had clinically significant insomnia. Among them, 21.2 % had subthreshold or mild insomnia and 5.3% had moderate insomnia.

2. **emory, Cognitive function and Pattern of Distress among Breast Cancer Patients and Survivors: A Cross-Sectional Study** (Jisha Abraham)

   This study aimed to find the Memory, Cognitive function and pattern of Distress among Breast Cancer patients and Survivors. There were 79 study participants - survivors (N=27), post-chemotherapy patients (N=27) and pre-chemotherapy patients (N=25). Results showed that the majority of the survivors and post-chemotherapy patients had increased cognitive impairment and memory impairment when compared to the pre-chemotherapy patients. There was a significant positive relationship between Memory and Cognitive function and a significant negative relationship between Memory and Distress. Participants with higher levels of education had better cognitive functioning and memory levels and older people found to have deterioration in memory. Thus, the study concluded Cognitive decline and Distress among Breast cancer patients and survivors after completing chemotherapy.

CONFERENCES, WORKSHOPS, TRAININGS ATTENDED:

1. 'Perceived Stress, Fatigue, Anxiety and Depression among Adult survivors of Haematological Malignancies' by Ms Jisha Abraham, Lecturer in Psycho-oncology at the 1st National Annual Conference of Clinical Psychology Society of India – *CPSICON2023* at NIMHANS, Bangalore on 10^{th}-12^{th} August.
2. 'Social Work in Oncology' by Mr.Sobhith VK, Medical Social Worker in the Webinar "HEALING HORIZONS: EXPLORING MEDICAL SOCIAL WORK organised by Dept of Social Work, Rajagiri college of Social Sciences (online) on 23rd September 2023
3. 'Psycho-oncology - The MCC Model' by Ms.Jisha Abraham, Lecturer in Psycho-oncology in the One Day National Conference on Psycho-oncology, MIND CAN 2023 at Malabar Cancer Centre, Thalassery on 14th October, 2023
4. 'Gene matters – The role of genetic counselling in cancer care' by Mr. Sobhith V K, Medical Social Worker in the One Day National Conference on Psycho-oncology, MIND CAN 2023 at Malabar Cancer Centre, Thalassery on 14th October, 2023
5. Management of Distress, Insomnia and Anxiety in a Woman Survivor: A Case Study by Neeha Jose, Fellow, in the One Day National Conference on Psycho-oncology, MIND CAN 2023 at Malabar Cancer Centre, Thalassery on 14th October, 2023
6. Sangeetha Udayakumar, Fellow in OSW attended One day Workshop on Qualitative research organized by Ansar College Perumbilavu on 23rd November 2023

7. Ms. Jisha Abraham attended Montreal Cognitive Assessment - Training and Certification conducted by MoCA Cognition Canada (online) in August 2023
8. Mr. Sobhith V K attended Montreal Cognitive Assessment - Training and Certification conducted by MoCA Cognition Canada (online) in August 2023
9. Ms. Neeha Jose attended Montreal Cognitive Assessment - Training and Certification conducted by MoCA Cognition Canada (online) in August 2023

EVENTS

One Day National Conference on Psycho-oncology- MINDCAN 2023: Organized One day National Conference in Psycho-oncology - MIND CAN 2023 with the theme 'The Art and Science of Closing the Care Gap in Cancer' on 14th October 2023 in the Conference hall (Pediatric Hematology Oncology Block) of MCC. Hundred participants including the participants and resource persons attended the conference from different parts of India. There were scientific poster and oral paper presentations.

Preconference on Qualitative Research: Organized half day Pre conference workshop on 'Qualitative Research' on 13th October 2023 in the Conference Hall, MCC. Dr. Gargi S Kumar was the resource person for this session.

STAFF

ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Jisha Abraham	Lecturer
NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Sobhith V K	Medical Social Worker

HEALTH INFORMATION TECHNOLOGY DIVISION

DIVISION IN CHARGE: RANJITH MK, System Manager

The Health Information Technology Division, initially established under the Department of Cancer Registry and Epidemiology in 2012, now operates independently under the Director's supervision. As the core of a Digital Hospital, this division aligns with recent technological advancements to provide, manage, and sustain efficient, adaptable, and user-friendly data systems. These systems support Malabar Cancer Centre-Post Graduate Institute of Oncology Sciences and Research in its pursuit of becoming a center of excellence.

MAJOR FACILITIES AVAILABLE

a) e-Hospital Software, an integrated Hospital Management Information System (HMIS) Software from National Informatics Centre.

b) eBloodbank Software from National Informatics Centre for managing the Bloodbank.

c) e-office Software for automating the entire work flow of official file processing and management.

d) MOCDOC Software for Interfacing of the Laboratory equipments with e-hospital Software and Lab Manager.

e) Picture Achieving and Communication System (PACS) interfaced with e-Hospital Software.

f) ePalliative, a web based online Palliative Care and support system for homecare service. The helps the patient to interact with doctors through video conference mode.

g) A dynamic Official Website with domain www.mcc.kerala.gov.in

h) Online Examination System for conducting online entrance examinations for the selection examination, for contract/temporary/Trainee/project staff recruitment.

i) HR and Payroll Management System for HR management, bio-metric attendance management, leave management and for payroll processing.

j) File Movement Tracking Software for tracking the movement of patient physical file across different divisions and sections.

k) OPPAM: WhatsApp facility for speedy complaints and grievance management.

l) Intra MCC Software developed in-house for managing and tracking the certificates requests. The system also provides SMS alert to applicant if the certificate is ready for issuing.

m) RailC software developed in-house for generating and issuing Railway Concession form for the patients travelling to and back from MCC-PGIOSR.

n) Bio-medical Asset and Maintenance Management System software for managing all the bio-medical assets, break-down maintenance, Preventive maintenance, Calibration, etc.

o) Gofrugal, the software for hospital canteen management and billing

p) IBM SPSS Statistics software for statistical data analysis.

q) Tally 6.5.5 Multiuser gold version software for accounts and finance management

r) e-Procurment System of Govt. of Kerala for e-Tender processing.

s) Official email ID using Govt. of India e-mail service

t) Centralized Procurement and Rate Contract System software of Govt. of Kerala

u) Online Birth & Death Registration using software of Information Kerala Mission

v) GeM: Government e-Market Place of Govt. of India

w) Augnito Voice Recognition/Voice AI software for reporting purpose in Pathology, Nuclear Medicine and Radiology departments.

x) National Knowledge Network (NKN) Dedicated Internet Connection-100 Mbps

y) Power Grid Internet Leased Line Connectivity-100Mbps

z) BSNL Internet Leased Line Connectivity-20Mbps

aa) Structured Cat6 cabling (LAN) with L2 and L3 switches

ab) High Speed Wi-Fi Connectivity

ac) CCTV Security Surveillance System

ad) Public Addressing System

ae) UTM Firewall Facility for Internet Security

af) Hardware Infrastructure-Servers, Workstations, Desktops, Laptops, Printers, Scanners, Barcode Printer and Scanner, Digital Camera, Risograph, Thermal Bill Printer, Touch KIOSK, etc.

MAJOR ACTIVITIES

a) Administration & Management of e-Hospital Software.

b) Maintenance and support of e-Office Software.

c) Updating and maintaining official website of MCC-PGIOSR.

d) Server and Database Administration, Management and Maintenance

e) Desktop Computers (400+), Laptop (60+), Printer (140+), Scanner, Projectors, Local Area Network (70+Switches & 12 Racks), Network devices, UTM, etc. Maintenance and support

f) Maintenance and Management of CCTV Security Surveillance System, PA system & Wi-Fi Connectivity

g) Managing and administrating of Virtual Tumor Board, Zoom meeting, ePalliative software, OPPAM Whatsapp Group and Social media, Webinars, etc.

h) Maintenance and Management of online examination System, Online career applications, IntraMCC software.

i) Managing, Administrating, providing support for e-Procurement Project,Canteen Billing and Management Software, File Tracking System, Online Birth & Death Registration, GeM, HR & Pay Role Management Software, Biometric Punching System and Proximity ID card, Bio-medical Asset Management & Maintenance System, Interfacing Bio chemistry Analyzers, Centralized Procurement and Rate contract System, Official E-mail to all Employees, etc.

j) Managing National Knowledge Network (NKN), PG ILL and BSNL ILL connectivity

k) Interfacing of all Analyzer in labs with e-hospital Software and Lab Manager Software.

l) Implementing various IT related Guidelines for operational enhancement.

NEW DEVELOPMENT

a) Initiated the Implementation of Cancer Care Hospital Information and Management System Software/Electronic Medical Records Softwareas part of 'Leading EMR Adoption Program (LEAP)' Program of National Cancer Grid.

b) Started Certified Specialist in Health Information Technology Course in association with ICT Academy of Kerala.

GUIDELINES/SOP

a) Guidelines for computer users at MCC -Ver. 1.5, Feb.2015.

b) Guidelines for using official email service of MCC-Ver. 1.0 Aug. 2015.

c) Guidelines for using video conferencing-Ver. 1.0 Apr. 2020.

d) IT equipment and communication network maintenance plan-Ver. 1.1, Apr. 2021.

e) Department manual-hospital IT-Issue No. 2, Nov. 2019.

f) CCTV security surveillance system monitoring policy-Ver. 1.0, August 2022.

g) Guideline for bio-metric punching system &employee ID card-Ver. 1.0, Dec 2016.

h) Guidelines for conducting online examinations &interview for the selection of contract/ project/ trainee/ outsourced Staff-Ver.1.0, July, 2021.

i) E-Hospital software: User role-based access control guideline, Ver. 1.0, July 2023.

STATISTICS

BIOMETRIC ATTENDANCE SYSTEM: PERCENTAGE OF STAFF COMING LATE		
MONTH &YEAR	**PERCENTAGE OF STAFF EXCEEDED 180 MINUTES**	**NO. OF STAFF EXCEEDS 180 MINUTE LATE**
Apr-23	0.864	04
May-23	0.404	02
Jun-23	0.200	01
Jul-23	0.203	01
Aug-23	0.601	03
Sep-23	0.190	01
Oct-23	0.0	00
Nov-23	1.318	07
Dec-23	0.188	01
Jan-24	0.788	04
Feb-24	0.588	03
Mar-24	0.584	03

OPPAM: Status	
MONTH & YEAR	**NO. OF COMPLAINT/ TREATMENT & MEDICINE ENQUIRY RECEIVED**
Apr-23	29
May-23	30
Jun-23	36
Jul-23	28
Aug-23	30
Sep-23	33
Oct-23	24
Nov-23	33
Dec-23	51
Jan-24	55
Feb-24	36
Mar-24	36
Total	**421**

STAFF

NON-ACADEMIC STAFF		
SL NO	**NAME OF STAFF**	**DESIGNATION**
1	Ranjith. M.K	System Manager
2	Bhavina. C	Junior System Analyst

RESEARCH AND EDUCATION WING

RESEARCH & EDUCATION WING

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

a. The Scientific Review Committee (SRC)
b. 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

SI.NO	MEMBERS OF SRC		NAME & DESIGNATION		QUORUM REQUIREMENTS
1	Chairperson		Dr. Satheesan B	Director & Professor	At least Chairperson or one of the Vice Chairperson should present
2	Vice Chairperson		Dr. Sangeetha K Nayanar	Professor	
			Dr. Chandran K Nair	Professor	
			Dr. Geetha M	Professor	
3	Clinician/Medical Scientist	Surgical Oncology/ Dentistry/ Anesthesiology	Dr. Nizamudheen MP	Additional Professor	At least one member from each Department/ Division should present, preferably on rotation basis
			Dr. Pramod Sankar	Associate Professor	
			Dr. Adarsh D	Associate Professor	
			Dr. Jashma C	Associate Professor	
		Clinical Hematology & Medical Oncology	Dr. Vineetha Raghavan	Associate Professor	
			Dr. Praveen Kumar Shenoy	Associate Professor	
		Radiation Oncology	Dr. VininN.V	Additional Professor	
			Dr. Joneetha Jones	Associate Professor	
			Dr. Greeshma KE	Associate Professor	
		Clinical Laboratory Services & Translational Research	Dr. Sithara Aravind	Additional Professor	
			Dr. Mohandoss M	Additional Professor	
			Dr. Aswathy Krishnan	Associate Professor	

4	Basic Scientist	Dr. Parthiban R	Additional Professor	At least one member should present, preferably on rotation basis
		Dr. Sajani Samual	Associate Professor	
		Dr. Deepak Roshan	Associate Professor	
5	Statistician	Mr. Ratheesan	Lecturer	At least one member should present, preferably on rotation basis
		Dr. Bindu T	Lecturer	
		Ms. Maya Padmanabhan	Lecturer	
		Mr. Riyas M	Lecturer	

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- No.ECR/780/Inst/KL/2015/RR-21

Sl. NO	NAME	QUALIFICATION WITH SPECIALIZATION	CURRENT ORGANIZATION	ROLE/ DESIGNATION IN ETHICS COMMITTEE COMMITTEE
1	Dr.Srikumar Vasudevan	MBBS,DLO	ENT Surgeon, Josgiri Hospital Thalassery, Kannur, Kerala-67010	Chairman
2	Dr.Chandni Radhakrishnan	MBBS, MD (General Medicine), PhD (Medicine) PGDMLE	Professor of Medicine & HOD of Emergency Medicine Government Medical College, Kozhikode, Kerala, 673008	Clinician
3	Dr.Sangeetha K. Nayanar	MBBS,MD(Pathology), DNB (Pathology)	Professor & Head Department of Clinical service & Translational Research, Malabar Cancer Centre, Kerala, 670103	Member Secretary
4	Dr.Jeeja M.C	MBBS,MD (Pharmacology) PDCR(Professional Diploma In Clinical Research)	Professor, Department of Pharmacology Govt, Medical College, Kozhikode, Kerala,673008	Medical Scientist
5	Dr.Biju George	MBBS, MD (community Medicine), PG Diploma in Applied Statistics, PG Diploma in Applied Population Research	Associate Professor , Department of Community Medicine, Govt. Medical College, Kozhikode, Kerala, 673008	Clinician

6	Dr.Anitha A	MSW, PhD (Social Work)	Assistant Professor & Teacher In Charge, Department of Social Work, Sree Sankaracharya University of Sanskrit, (Kalady) Regional Campus, Payyannur Kannur, Kerala	Social Scientist
7	Dr. Robin E J	B.A (Philosophy) M.A (Philosophy) PhD (Philosophy)	Assistant Professor Department of Philosophy University of Calicut Kozhikode, Kerala, 673635	Social Scientist
8	Dr.V Ramachandran	MA (Hindi) PhD	President Karunya Charitable Society for Pain & Palliative care, Puducherry Mahe,673310	Lay Person
9	Adv.D V Narayanan	B.Sc Physics, LLB	11/452 G, Kuriyal Lane, Calicut, 673032	Legal Expert
10	Adv.M.Jameel Ahmed	B Com, LLB	M K Associates 1st Floor , M K Office, Near L.I.CRoad,P.OTalap, Kannur, Kerala,670002	Legal Expert

SAC COMPOSITION

Sl.NO	NAME	DESIGNATION	POSITION
1	Prof. Kanjaksha Ghosh	Former Director, National Institute of Immune Hematology, ICMR kanjakshaghosh@hotmail.com Ph:9892402588	Chairman
2	Dr.ManojMurahekar	Director, National Institute of Epidemiology, Chennai mmurhekar@gmail.com Ph:9444414663	Member
3	Dr.Mohanasankar Sivaprakasam	Director, HTIC, Associate Professor, Department of Electrical Engineering, IIT Madra s mohan@ee.iitm.ac.in Ph:8825753648	Member
4	Dr. B. Venkatraman	Outstanding Scientist & Director, Health, Safety and Environment Group, Indira Gandhi Centre for Atomic Research, Kalpakkam mohan@ee.iitm.ac.in Ph:9443638974	Member

5	Dr.Moni Kuriakose	Medical Director& CEO, Karkinos Health Care, Kochi, Kerala makuriakose@gmail.com Ph:9902776000	Member
6	Dr. R. Swaminathan	Assistant Director, Professor and Head Department of Epidemiology, Biostatistics and Cancer Registry & Cancer Institute (WIA), Chennai r.swaminathan@cancerinstitutewia.org Ph:9382197899	Member
7	Dr.R.M.Pandey	Dr A.S. Paintal Distinguished Scientist Chair, ICMR Formerly Head, Department of Biostatistics, AIIMS, New Delhi rmpandey@yahoo.com , Ph:9811912117	Member
8	Dr.Sathees C Raghavan	Professor, Department of Biochemistry, Indian Institute of Science, Bangalore sathees@iisc.ac.in Ph:9731017736	Member
9	Dr.ManjuSengar	Professor, Department of Medical Oncology, Tata Memorial Hospital, Mumbai manju.sengar@gmail.com Ph:9769690590	Member
10	Dean, Research	KUHS (Official nomination) dean.research@kuhs.ac.in Ph:9495170655	Member
11	Director	MCC director@mcc.kerala.gov.in Ph:9895848300	Convener

ONGOING CLINICAL TRIAL

Sl. NO	TRIAL	PI
1	Phase IIb/III study to determine efficacy of Curcumin and Metformin to reduce the incidence of second primary tumors of aero-digestive tract in patients with history of head and neck squamous cell carcinoma	Dr. Satheesan B
2	A Multicenter, Randomised, Double blind,Parallel, Phase III Global Study to Assess the Efficacy and Safety of BP01 (Bevac-izumab) when compared to Avastin®-EU in Combination with Carboplatin and Paclitaxel during Induction phase and Bevaciz-umab 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. Praveen Kumar Shenoy

3	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
4	Adjuvant Radiotherapy in Early Stage Oral Cancers (AREST) – a prospective randomized control trial	Dr. Geetha M
5	A Phase 1, open label first in human study investigating the safety, tolerability Pharmacokinetics, and preliminary antitumor activity of HPKI inhibitor GRC 54276 alone and in combination with Anti-PD-1 monclonal antibody Pembrolizumb or Anti PD-L1 Atezolizumab in subjects with advanced solid tumors and Hodgkin's Lymphoma	Dr. Praveen Kumar Shenoy
6	ALPelisibINdia Safety Study (ALPINIST): a phase IV, prospective, multicentre, 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. Nandini Devi R
7	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. Praveen Kumar Shenoy
8	A Randomized, Multiple-dose, Multicenter, Comparative Parallel Study to Evaluate the Pharmacokinetic, Pharmacodynamic, Efficacy and Safety of Subcutaneous Injection of Denosumab (Hetero) and Reference Medicinal Product (Denosumab, Amgen Inc.) in patients with bone metastases from solid tumors	Dr. Praveen Kumar Shenoy
9	A Phase 3 Study of CCNU verses CCNU Plus Mebendazole in Glioma	Dr. Praveen Kumar Shenoy
10	Neoadjuvant chemotherapy followed by Surgery versus Surgery followed by adjuvant chemotherapy for resectable Gastric adenocarcinoma Phase 3 Multicentric Randomized Controlled trial	Dr.nizamudheen M P
11	Randomized study of neoaduvent systemic therapy in Oral Cavilty cancer	Dr. Praveen Kumar Shenoy
12	A Randomized, Open-Label, C5 Inhibitor-Controlled Study To Evaluate The Efficacy And Safety OfPozelimabAndCemdisiran Combination Therapy In Patients With Paroxysmal Nocturnal Hemoglobinuria Who Are Complement Inhibitor Treatment-Naive Or Have Not Recently Received Complement Inhibitor Therapy	Dr. Chandran K Nair
13	The Multicenter, Double-Blind, Randomized, Parallel-group, Phase 3 Study to Compare the Efficacy and Safety of the Proposed Biosimilar PERT-IJS and EU-Perjeta® Along with Trastuzumab and Chemotherapy (Carboplatin and Docetaxel) as Neoadjuvant Treatment in Patients with Hormone Receptor Negative (HR-ve) Human Epidermal Growth Factor Receptor 2 (HER2)-positive Early Stage or Locally Advanced Breast study	Dr. Praveen Kumar Shenoy

14	A Phase 2a study of HT-6184 in subjects with IPSS-R Very Low, Low or Intermediate Risk Myelodysplastic Syndrome (MDS) and Symptomatic Anemia	Dr. Chandran K Nair
15	single dose, cross-over bioequivalence study of Azacitidine tablets 300 mg and ONUREG® (Azacitidine) tablets 300 mg in adult patients with acute myeloid leukemia (AML) under fasting condition	Dr. Chandran K Nair
16	A Prospective Phase III open label Randomized Controlled Trial evaluating the role of Neo-adjuvant chemotherapy in mandible preservation in oral cavity cancers	Dr. Anoop Akkattil
17	Phase III Open Labelled Randomized Controlled Study to Evaluate the Optimal Dose of All-Trans Retinoic Acid in the Treatment of Acute Promyelocytic Leukemia	Dr. Chandran K Nair

ONGOING EXTRAMURAL RESEARCH FUND PROJECT

SL. NO	TITLE OF THE STUDY	FUNDING AGENCY	PI
1	Design and implementation health care model in patients with stage 2 breast cancer	Indian Council for Medical Research, Govt of India	Dr.Satheesan B
2	Assessment of key immune factors in the pathogenesis of HPV associate oral and orapharyngeal squamous cell carcinoma	Indian Council for Medical Research, Govt of India	Dr.Sangeetha K Nayanar
3	Deciphering key genetic alternations in oral precancers and cancer as possible therapeutics/Prognostic markers	Indian Council for Medical Research, Govt of India	Dr.Deepak Roshan V G
4	AI-driven Large-Scale screening for oral and oropharyngeal cancer	Department of Biotechnology, Govt of India	Dr.Satheesan B
5	Neoadjuvant chemotherapy followed by Surgery versus Surgery followed by adjuvant chemotherapy for resectable Gastric adenocarcinoma - Phase 3-Multicentre Randomized Controlled Trial(NAGA-Trial	Department of Health Research	Dr.Nizamudheen M P
6	Design and development of ultrasonicTransducer probes for medical imaging	R&D in Medical Electronics and Health Informatics Ministry of Electronics & Information Technology (MeitY), Govt of India	Dr.Nrithi S Prasad
7	Mission Covid Suraksha-Enhancing capacity for conduct of Human clinical trials for COVID-19 Vaccine candidates	Biotechnology Industrial Research council(BIRAC), Govt of India	Dr.Chandran K Nair

8	Clinicopathologic and genetic profile of bilateral breast cancer patients	Kerala State council for Science, Technology and environment, Govt of Kerala	Dr.Sithara Arvind
9	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	Biotechnology Industrial Research council(BIRAC), Govt of India	Dr.Satheesan B
10	LAMP based, point of care POC rapid and low cost diagnostic test for COVID-19	BIRAC, Govt of India	Dr.Saravanan M
11	Hospital Based Cancer Registries in India	National Centre for Disease Informatics and Research(NCDIR), ICMR	Dr.SainaSunilkumar
12	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	National Centre for Disease Informatics and Research(NCDIR), ICMR	Dr.SainaSunilkumar
13	Haematology Cancer Consortium	HCC	Dr.Chandran K Nair

PUBLICATION 2023-24

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BOOK CHAPTER

1. Prathyusha P and Sindhu E. R., Nanocurcumin - Therapeutic Aspects In Cancer., Advances in Pharmaceutical Sciences (Volume – 2) ISBN: 978-93-91342-23-4 First Edition Chapter – 8, Page: 93 – 111
2. Tomcy A. T and Sindhu E. R., Mesenchymal Stem Cells – Advances In Stem Cell Therapy., Advances in Pharmaceutical Sciences (Volume – 2) ISBN: 978-93-91342-23-4 First Edition Chapter – 4

OTHER COMMITTEES

SL NO	NAME OF COMMITTEES
1	Academic Council
2	Admin Committee
3	NABH Committee
4	Building Committee
5	Canteen Core Committee
6	Internal Complaint Committee
7	CSR Committee
8	Patient Welfare Committee
9	Technical Committee
10	Stock Verification Committee
11	Pre-bid Committee
12	Waste Management Committee
13	Library Committee
14	Hospital Management Committee
15	Nursing Administration Committee

NABH RELATED COMMITTEE

SL NO	NAME OF COMMITTEES
1	Quality Assurance Committee
2	Facility Management and Safety Committee
3	Hospital Infection Control Committee
4	Blood Transfusion Committee
5	Code Blue/ CPR Committee
6	Pharmaco-Therapeutic Committee
7	Internal Audit Committee
8	Clinical Audit committee
9	Credentialing and Previlaging Committee
10	Grievance Handling Committee
11	Medical Record Audit Committee
12	Internal Complaint Committee
13	Institutional Ethics Committee
14	Radiation Safety Committee

EDUCATIONAL WING

COURSES AT MCC

SL NO	BSc COURSE	DURATION/ SEATS
1	Medical Radiation Technology	4yrs/25
2	Nursing	4yrs/40

SL NO	DNB COURSE	DURATION/ SEATS
1	Surgical oncology	3/2
2	Clinical hematology	3/2
3	Pathology	3/1
4	Radiation Oncology	3/3

SL NO	FNB COURSE	DURATION/ SEATS
1	Pediatric Hemato Oncology	2/2
2	Head and Neck Oncology	2/2
3	DMRD	2/2

SL NO	FELLOWSHIP PROGRAMME	DURATION/ SEATS
1	Head and Neck Oncology	2/1
2	GynaecologicOncology	2/2
3	Hemato-Oncology &BMT	1/2
4	Gastrointestinal Oncology	1/1
5	Oral Oncology	1/1
6	Aphaeresis Medicine	1/1
7	Oncopathology	1/1
8	Head and Neck Pathology	1/1
9	Oncology Nutrition	1/1
10	Onco-Imaging &Interventional Radiology	1/1
11	Psycho Oncology	1/1
12	Medical Social Worker	1/1

SL NO	SHORT TERM COURSES	DURATION/SEATS
1	IAPC Part A	8 Wks/No Limit
2	IAPC Part B	10 Days/1
3	NFPM	10 Days /1
4	NFPN	10 Days /1

INSTITUTE OF NURSING SCIENCES AND RESEARCH (INSER)

Malabar Cancer Centre (Post Graduate Institute of Oncology Sciences and Research)
(Recognized by Indian Nursing Council, Kerala Nurses and Midwives Council,Affiliated to Kerala University of Health sciences)
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ANNUAL REPORT 2023-24

VISION & MISSION

VISION

To generate nurses to lead the health care sectors with compassion, capabilities and commitment

MISSION

To promote professionalism by value based education and integration of education, research and practice with a view to promote universal brotherhood.

PHILOSOPHY OF THE INSTITUTION

We, the faculty of the Institute of Nursing Sciences and Research at Malabar Cancer Centre, believe that nursing is a compassionate human service focused on caring for individuals, families, and communities to achieve optimal health and improve people's quality of life. We also believe that nurses should demonstrate qualities of commitment, compassion, competence, and a profound sense of empathetic consideration in their practice. We strongly hold that due to technological advancements and the explosion of knowledge, human needs and expectations are constantly evolving. Despite these advancements, health threats and challenges are increasing daily. We believe that nurses, as the key workforce in the healthcare delivery system, should receive education that equips them with knowledge, skills, affection, and a substantial amount of common sense.

We believe that nursing education should integrate nursing research, evidence-based practice, and problem-solving abilities into its daily teaching and learning activities. We, the faculty, believe that graduates of this institution should have a deep sense of dedication and an unconditional acceptance of individuals who are poor, underprivileged, abandoned, discriminated against, or disabled. We strongly believe that our graduates should understand the importance of love, respect, and dedicated service to our senior citizens. Our goal is to cultivate a new generation of nurses who can lead healthcare services with their knowledge, wisdom, commitment, compassion, and empathy, not only within the institution but also in the community, bringing positive changes to the world's health landscape.

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MANAGEMENT OF MCC (PGIOSR)

Malabar Cancer Centre is an autonomous Institution, under Department of Health & Family Welfare, by Government of Kerala. The control, administration and management of the Institute shall vest with the Governing body, constituted by the Government of Kerala.

GOVERNING BODY

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

EXECUTIVE COMMITTEE (MCC)

There is also an **Executive Committee** headed by the Secretary, Department of Health & Family Welfare, Govt. of Kerala to look into the day today affairs as well as to streamline the activities of Malabar Cancer Centre, Thalassery.

Executive Committee Members		
1.	Secretary, Health and Family Welfare Department, Government of Kerala	Chairman
2.	Secretary, Finance Department, Government of Kerala	Member
3.	Secretary, Planning &Economic Affairs Department ,Government of Kerala	Member
4.	Secretary, Power Department Government of Kerala	Member
5.	MLA of the constituency in which MCC is situated	Member
6.	Director of Medical Education	Member
7.	Chairman, Thalassery Municipality	Member
8.	Director–Regional Cancer Centre, Thiruvananthapuram	Member
9.	Director-Cochin Cancer Centre & Research Centre, Kochi	Member
10.	Director, Malabar Cancer Centre, Thalassery	Member/Convenor

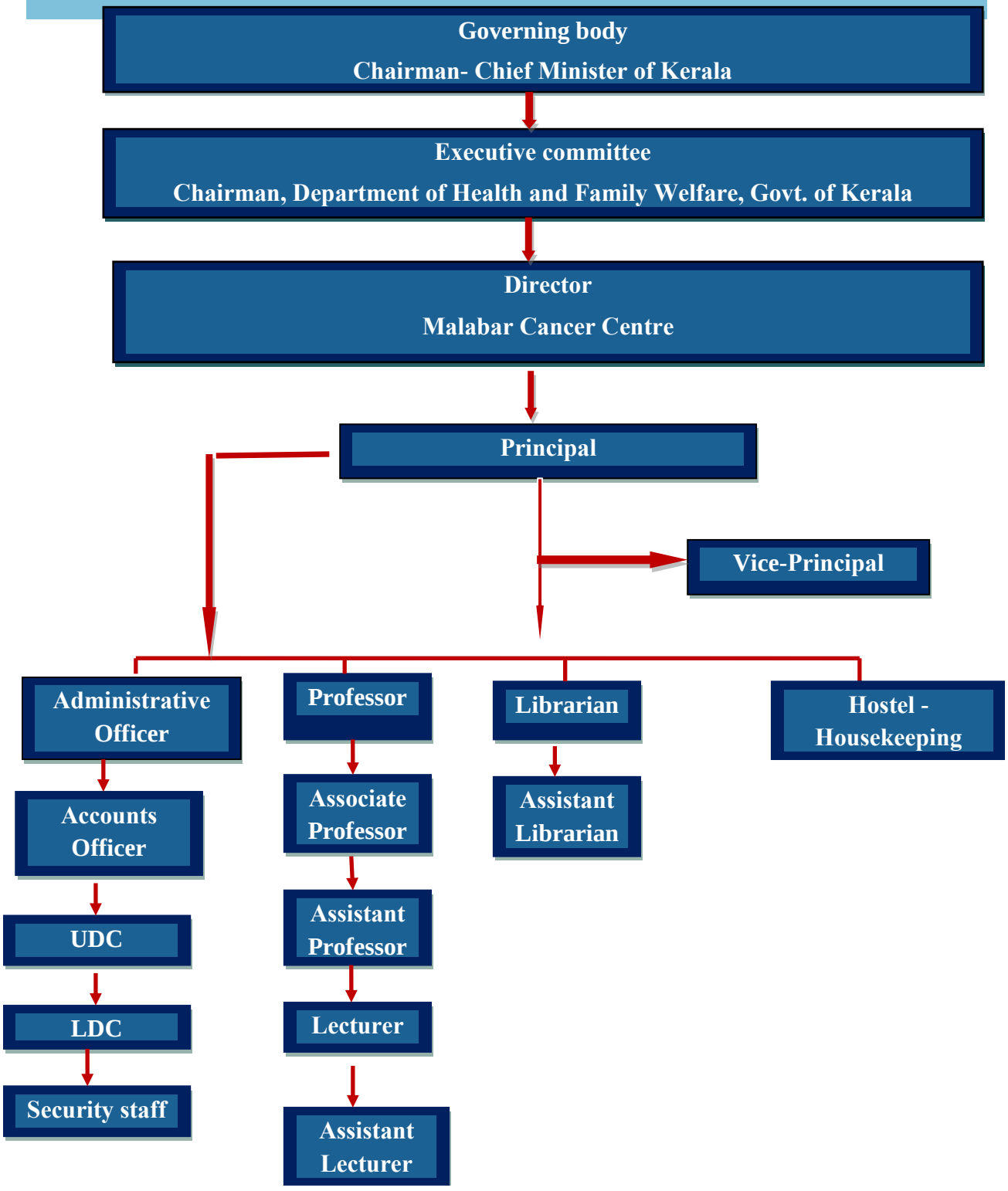
MANAGEMENT OF INSTITUTE OF NURSING SCIENCES AND RESEARCH (INSeR)

INSeR, MCC is an independent entity under Malabar Cancer Centre. Various Standing Committees, within the Institution, shall manage the administrative and academic aspect of the Institution .The overall activities, policy making, budget etc. will be governed by Administrative Council of INSeR.

The Administrative Council is constituted as follows:-

SI. No	MEMBER	DESIGNATION
1	Director–Malabar Cancer Centre	Chairman
2	Principal–INSeR , MCC	Vice Chairman
3	Vice Principal–INSeR , MCC	Convener and Member Secretary
4	Two H.O.Ds of Nursing College-Associate Professor or above	Member
5	One HOD from anyone Clinical Department of MCC	Member
6	Nursing Superintendent/Chief Nursing Officer–MCC	Member
7	Administrative Officer-INSeR, MCC	Member
8	Administrative Officer–MCC	Member
9	Finance Officer/Accounts Officer–MCC	Member

ORGANIZATION CHART
INSTITUTE OF NURSING SCIENCES AND RESEARCH
MALABAR CANCER CENTRE



FROM DIRECTOR'S DESK
PRONOUNCEMENT

It is pleasure and privilege to pen this note with regards to the release of the second annual report of the Institute of Nursing Sciences and Research. Knowing about the achievements of our students and faculty across a range of areas makes us glad. The exceptional all-around performance of the institute's faculty and students during the 2023–24 sessions will undoubtedly serve as a springboard for many additional future concepts. The first batch of BSc Nursing students has passed out and many of them have joined MCC(PGIOSR) as resident staff nurses. They provide the testing ground for the quality of education INSeR imparted and the impetus the INSeR created is evident through them.

The institute aims at improving the infrastructure with a vision to develop it as a state of art centre for nursing education and research. This year we have added additional construction to raise the standards of living on campus. Major hurdle, the institution faces, is faculty recruitment and it is a universal issue throughout the state.

The team INSeR under the dynamic leadership of the Principal Dr. Rohini, has created laudable impact in academics and extracurricular activities. Developing a system, based on the principles of discipline, overall growth and development of the institution inclusive of all stakeholders and allegiance to the institution, is of paramount importance in reaching the vision of the institution. The team has made significant progress in this direction and I hope it would develop an adorable and emulative model in near future

We hope to develop INSeR as an institution committed to nursing excellence through fruitful collaboration of all the stakeholders involved in the institute. I compliment the students, faculty and staff of the Institute for their contributions in making the organization a vibrant and organic entity.

Collaborations with institutions of excellence in nursing would provide further thrust and fuel to improve the quality of education. Dual responsibility for the faculties is a declared policy of the institution and the implementation process in a unique way is task cutout for the Team INSeR. I hope this would be implemented in the current year and its impact could be assessed in future years.

Research in Nursing sciences is another domain the faculties need to concentrate in coming years. With limited resources in the most populous country, health care is a challenge and the onus of finding remarkable and implementable solutions is on the faculty-researchers of major nursing institutions.

Quality standards and accreditations would bring visibility and transparency in the functioning of the institution and we expect INSeR would embrace the suggestions.

I wish the Institute of Nursing Sciences and Research a grand success in its pursuit of excellence.

Dr.Satheesan.B
Director
Malabar Cancer Centre (Postgraduate Institute of Oncology Sciences and Research)

FROM PRINCIPAL'S DESK

Learning is not attained by chance; it must be sought for with ardor and diligence.
– Abigail Adams

I am pleased to present the Annual Report of Institute of Nursing Sciences and Research, MCC documenting its development and the achievement for the academic year 2023-24. I give thanks to God for all of his blessings on our establishments. I am incredibly appreciative of and grateful to our Director, Dr. Satheesan B., for his continuous support of all of our efforts, accomplishments, and successes.

We all considered the academic year 2023-24 to be significant, as our first bunch of students, the 2018 batch, graduated with honors. The primary objective of every educator and academic institution is to achieve academic excellence. The institution's performance, chiefly evaluated by the Kerala University of Health Sciences' examination, is a crucial indicator of this endeavor. We are pleased to report that we performed well academically and in co-curricular and extracurricular activities during the course of the year. A variety of athletic and cultural events have been held at a greater level by the Student Nurses Association, NSS, and College Union. The students embraced the event of Lumiere - Arts celebration with tremendous excitement and enthusiasm.

My gratitude goes out to the parents, teaching and non-teaching staff, Executive Committee, Governing Body, and other standing committees for their support and direction in the development of this institution. It is especially worthy of note to acknowledge the faculty and students of this college for their unwavering commitment, sincerity, and perseverance in striving for excellence in every facet of education. In closing, I would like to quote Nelson Mandela: "Education is the most powerful weapon which you can use to change the world."

Dr. Rohini T
Principal
Institute of Nursing Sciences and Research, MCC-PGIOSR

ABOUT INSeR

INSeR was incepted in the year 2018 which resonates under Malabar cancer care society, Thalassery an apex institution in oncology with the influence of great visionary Dr. Satheesan.B, Director, Malabar Cancer Centre. Moreover the devoted and unexceptional guidance from Principal INSeR Dr. Rohini.T, imparts active and collaborative learning activity that makes the difference to nursing education and human development on the whole. INSeR is recognized by Indian Nursing Council, Kerala Nurses and Midwives Council and is affiliated to KUHS University. Our College of nursing functions with a vision to generate nurse leaders to shoulder the task of frontline fighters in the healthcare revolution with compassion, capability and commitment. There is provision for safe and secure in house hostel facilities with mess service; hostels are equipped with safe drinking water along with CCTV camera and security personnel for safety.

OUR DEPARTMENTS

- Medical Surgical Nursing
- Child Health Nursing
- Obstetric and Gynecological Nursing
- Mental Health Nursing
- Community Health Nursing

PROGRAMMES

BSc Nursing: The annual uptake includes 40 students and 8 supernumerary students (Under Prime Minister's Special Scholarship Scheme). The duration of course is 4 years. The course is recognized by Indian Nursing Council, Kerala Nurses and Midwives Council and is affiliated to Kerala University of Health Sciences. We are currently training 165 BSc Nursing students.

RESULTS /ACADEMIC ACHIEVEMENTS

In the current year all our students of various batches have obtained good results in the examination conducted by the KUHS.

BATCH	SEMESTER/YEAR	PASS PERCENTAGE
2018 batch	Fourth year	91.8%
2019 batch	Third year	87%
2020 batch	Second year Third year	65.7% 87.8%
2021 batch	Second semester Third semester	92% 94.7%
2022 batch	First semester Second semester	80.9% 100%

DEPARTMENT OF ADULT HEALTH NURSING (AHN)

"To do what nobody else will do, in a way that nobody else can do, in spite of all we go through; that is to be a nurse."

– Rawsi Williams

OVERVIEW

The primary goal of Adult Health Nursing is to enhance the quality of life related to health, focusing on disease prevention, management, and health promotion. This is achieved by applying critical thinking processes to adults who are integrated physically, psychosocially, culturally, and spiritually as they interact with their environment. Adult Health Nursing provides the necessary nursing knowledge and skills for caring for adults, emphasizing a value-oriented attitude centered on the person receiving care.

Adult Health Nursing with integrated pathophysiology, including Geriatric Nursing and Palliative Care Module, is a comprehensive program that combines theoretical learning with extensive clinical practice. The program is designed to provide a strong foundation in nursing theory while also offering practical experience through clinical hours.

The integration of pathophysiology, geriatric nursing, and palliative care modules enhances students' understanding of complex health issues and prepares them to provide specialized care to adult patients, including the elderly and those requiring palliative care. Through this program, students develop the skills and knowledge needed to deliver high-quality care that addresses the unique needs of adult patients across the lifespan

OBJECTIVE OF THE DEPARTMENT

- To provide comprehensive health assessments for adult patients, incorporating physical, psychological, social, and spiritual dimensions.
- To develop individualized care plans based on the assessment findings, patient preferences, and evidence-based practice guidelines
- To implement interventions to promote health maintenance, disease prevention, and optimal functioning in adult patients across diverse healthcare settings
- To monitor vital signs, laboratory values, and other indicators to assess the effectiveness of interventions and identify potential complications.
- To educate adult patients and their families about their health conditions, treatment options, and self-care strategies to empower them to actively participate in their care
- To collaborate with interdisciplinary healthcare team members to coordinate care and ensure continuity across various healthcare settings
- To advocate for the rights and preferences of adult patients, respecting their autonomy and cultural beliefs while promoting informed decision-making
- To utilize therapeutic communication techniques to establish rapport, provide emotional support, and address the psychosocial needs of adult patients
- To apply evidence-based practices to manage acute and chronic health conditions in adult patients, promoting optimal outcomes and quality of life
- To evaluate the effectiveness of nursing interventions, reassess patient needs, and modify care plans accordingly to promote ongoing health and wellness in adult patients.

CURRICULUM

The curriculum planning for adult health nursing in the third and fourth semesters of the Indian Nursing Council (INC) framework encompasses a comprehensive exploration of modern approaches to adult care, with a focus on the identification, prevention, and nursing management of common health issues affecting adults and the elderly. Through a blend of theoretical learning and practical application, students will delve into topics such as holistic assessment, evidence-based interventions, and interdisciplinary collaboration to foster a deep understanding of the intricacies involved in providing optimal care to adult and geriatric populations. Additionally, emphasis will be placed on cultivating critical thinking skills and ethical decision-making to equip future nurses with the competencies necessary to address the evolving healthcare needs of diverse adult populations.

COMPETENCIES

Upon completion of the course, students will be able to apply the nursing process and critical thinking skills to deliver holistic nursing care for selected Medical and Surgical conditions. Specifically, at the end of the Adult Health Nursing II course, students will:

- Explain the causes, pathophysiology, symptoms, diagnostic procedures, treatments, and potential complications of common medical and surgical disorders
- Conduct comprehensive health assessments to establish a database for high-quality patient care, integrating knowledge of diagnostic tests into the data collection process
- Identify diagnoses, prioritize them, and develop nursing care plans accordingly.
- Perform nursing procedures with skill and apply scientific principles while providing comprehensive care
- Apply knowledge of anatomy, physiology, pathology, nutrition, and pharmacology to the care of patients with various medical and surgical disorders
- Identify common diagnostic measures relevant to health issues, focusing on nursing assessment and responsibilities
- Demonstrate proficiency in assisting with or performing diagnostic and therapeutic procedures.
- Demonstrate competency in providing care to patients undergoing treatment for medical and surgical disorders
- Identify the medications used in treating patients with specific medical and surgical conditions
- Plan and deliver individual and group education on key medical and surgical topics.
- Maintain a safe environment for patients and healthcare personnel in the hospital setting

CLASS/ TRAINING PROGRAMME

Various teaching-learning methods are employed during the educational process, including lectures, role-plays, demonstrations, seminars, panel discussions, group discussions, symposiums, and field trips. Student understanding is regularly assessed through unit tests, sessional exams, and model exams for both theory and practical aspects of the curriculum.

CLINICAL EXPERIENCE

Upon completion of the clinical practicum, students will be able to apply the nursing process and critical thinking in delivering holistic nursing care to adult patients. Our students gain their clinical experience from General Hospital Thalassery, District Hospital Kannur, and Malabar Cancer Centre. They engage in various activities such as clinical presentations, case presentations, and drug presentations. Each student receives 480 clinical hours in the 3rd semester and 480 hours in the 4th semester to improve their skills. This exposure enables students to recognize the causes, pathophysiology, diagnostic measures, and management of patients with complex medical surgical conditions, enabling them to provide comprehensive care to patients.

SKILL LAB

The laboratory has been utilized by students for procedure demonstrations, providing them with hands-on experience that enhances their confidence in performing therapeutic procedures. The expertise of the medical-surgical nursing teachers, who contribute significantly by demonstrating each procedure to the students, plays a crucial role in preparing our students to perform well in their clinical rotations

LIST OF FACULTY

We have a team of medical-surgical experts teaching the subjects. Our staff from the parent hospital also contributes valuable suggestions in the clinical setting

S.NO	NAME	DESIGNATION
1	Prof. Dr. Rohini T.	Principal
2	Mrs I. Ishrath Fathima	Asst. Professor
3	Mrs.Neenu Pradeep T.K.	Lecturer
4	Mrs.Akhina N.P.	Asst. Lecturer
5	Mrs.Sushree U.K.	Asst. Lecturer

CONFERENCE ATTENDED/ PRESENTED

SL. NO	NAME	NAME OF THE PROGRAMME	ORGANIZED BY	DATE	ATTENDED / PRESENTED
1	Prof. Dr. Rohini T	National Surgical Nursing Conference	College of Nursing, CMC Vellore	25.07.2023	Presented (Resource person)
2	Prof. Dr. Rohini T	International conference on Reforming Nursing Science with Advanced practice and research	JSS College of Nursing, Mysore	19.08.2023	Presented (Resource person)
3	Prof. Dr. Rohini T	Nursing conference on Intergenerational learning.	College of Nursing Kannur Medical College	07.10.2023	Presented (Resource person)
4	Prof. Dr. Rohini T	Webinar on Overview of theories in Nursing	Chitkara school of Health Sciences, Chitkara University, Punjab	18.10.2023	Presented (Resource person)
5	Prof. Dr. Rohini T	National conference on Digitalizing Nursing education.	Baby Memorial College of Nursing Kozhikode	27.10.2023	Presented (Resource person)
6	Prof. Dr. Rohini T	State level Conference on Critical Care	MCC-PGIOSR	02.12.2023	Attended (Patron)
7	Mrs. Reshma C R	National Conference on Oncology Nursing Care-Practice and Trends.	Regional Cancer Centre, Tvpm.	21.01.2024	Scientific paper presentation
8	Prof. Dr. Rohini T	National conference on Qualitative research designs and analysis.	AIIMS, Raipur	01.02.2024	Presented (Resource person)

ACTIVITIES

- World heart day programme was conducted on 12.10.2023 at District Hospital Kannur during clinical posting. The programme was conducted by Medical Surgical department along with 4th semester B.Sc Nursing students. The organizers of the programme were Mrs. Reshma, and Mrs. Neenu Pradeep Lecturers, and student organizers Ms. Ann Treeza Thomas and Ms. MehrinNazar. The programme was inaugurated by Chief Nursing Officer of Government Hospital Kannur. Students did flash mob and health awareness program. The program was thus successfully completed.
- An e poster making competition titled "Do's in Diabetes" was conducted as a part of world diabetic day. The organizers of the programme were Mrs. Reshma Lecturer and Mrs. Sushree, Asst. Lecturer. Students from all four batches of INSeR actively participated in the programme. Based on the criteria for evaluation, Ms. Hridya Renjith, 1st semester student secured the first prize.
- World cancer day was observed by students of 4th semester by organizing a flash mob at various places of Thalassery in order to create awareness among public regarding cancer. Students from INSeR won prizes in the quiz competition organized by Malabar cancer centre, Thalassery. Mrs. Reshma, Lecturer and Mrs. Akhina N.P, Asst. Lecturer, were responsible for this programme.
- Third semester students along with Mrs. Ishrath Fathima, Assistant Professor and Mrs. Sushree, Assistant Lecturer of Institute of Nursing Sciences and Research, Malabar Cancer Centre organized a poster presentation with health talk on the world obesity day theme ' let's talk about obesity' on 07-03-2024 at General Hospital Thalassery. The programme started at 11.30 am in the OPD section of General Hospital Thalassery, with Dr. Rajeevan, Medical Superintend giving a brief introduction about obesity. Dr. Rajagopal, Pediatrician added on to it with his valuable points. Then two students from 3rd semester had given a health talk on various topics related to obesity. The programme came to an end at 12.15 pm with the participants' who enthusiastically cleared their doubts from the students after the class. The programme was a great success.

DEPARTMENTAL ACTIVITIES GALLERY

DEPARTMENT OF CHILD HEALTH NURSING

"I am a part of the team 'Child Health Nursing'.....getting a child to be at ease during their hospitalization is one of the most rewarding things I've ever experienced"

OVERVIEW

The Child Heath Nursing Department is a crucial part of healthcare, providing specialized care for infants, children, and adolescents across wide range of settings. This specialty address the unique physical, emotional, and developmental needs of young children through promotive, preventive, curative and rehabilitative approaches. Interdisciplinary collaboration is crucial in providing comprehensive, compassionate care which will enable to enhance the quality of care in specialized areas such as neonatal nursing, critical care nursing, pediatric medicine, pediatric hematology & oncology nursing, pediatric cardiology nursing, pediatric neurology, pediatric surgical nursing, and developmental pediatric nursing

The Institute of Nursing Sciences and Research (INSeR) of Malabar Cancer Centre under the eminent guidance of Prof. Dr Rohini. T (Principal) has a well-established Child Health Nursing Department which effectively manages the curriculum of the students. The department focus on patient and family centered care based on key competencies like communication, collaboration, teamwork, advocacy, teamwork and informatics, professional development and leadership, safety, quality improvement, research and evidence-based practice

OBJECTIVES

- To identify the anatomical and physiological difference between an adult and a child.
- To explain the modern concept of child care
- To describe the normal growth and development of children in various age groups.
- To identify the health needs and problems of neonates and children.
- To understand the pathophysiological changes in underlying conditions
- To identify the various preventive, promotive and rehabilitative aspects of child care and apply them in providing nursing care to children in the hospital and in the community with a special emphasis on health education.
- To analyze the scope of practice in clinical genetics on development of a child
- To impart quality education to the students in the field of child care
- To organize staff development programs.
- To uplift child health nursing through promoting evidence-based practice

CURRICULUM

The Child Health Nursing is distributed in the fifth and sixth semester of the Indian Nursing Council (INC) curriculum framework. This course is designed for developing an understanding of the modern approach to child-care, identification, prevention and nursing management of common health problems of neonates and children.

COMPETENCIES

On completion of the course, the students will be able to

- Develop understanding of the history and modern concepts of child health and child-care.
- Explore the national child welfare services, national programs and legislation in the light of National Health Policy 2017.

- Describe the role of preventive pediatrics and perform preventive measures towards accidents.
- Participate in national immunization programs/Universal Immunization Program (UIP).
- Identify the developmental needs of children and provide parental guidance.
- Describe the principles of child health nursing and perform child health nursing procedures.
- Demonstrate competencies in newborn assessment, planning and implementation of care to normal and high-risk newborn including neonatal resuscitation.
- Apply the principles and strategies of Integrated management of neonatal and childhood illness (IMNCI).
- Apply the knowledge of pathophysiology and provide nursing care to children with respiratory system disorders.
- Identify and meet childhood emergencies and perform child CPR.
- Apply the knowledge of pathophysiology and provide nursing care to children with Cardiovascular, GI, genitourinary, nervous system disorders, orthopedic disorders, eye, ear and skin disorders and communicable diseases
- Provide care to children with common behavioral, social and psychiatric problems
- Manage challenged children
- Identify the social and welfare services for challenged children

CLASS & TRAINING PROGRAMS

Around 100 hours is distributed to cover the theory and 240 hours to complete clinical requirements in Child Health Nursing through V and VI semester. The Semester V covers a theory of 60 Hours which is equivalent to three credits. The training program consists of both Skill Lab of 40 Hours equivalent to 1 credit and 160 hrs equivalent to 2 Credits. The Semester VI covers a theory of 40 Hours which is equivalent to two credits. The training program consists of 80hrs equivalent to 1 Credits. Various teaching-learning methods including lectures, role-plays, demonstrations, seminars and field trips are employed for the educational process. The evaluation of the total curriculum is based on both summative and formative assessment. Two sessional examinations are conducted in each semester and students will be given performance appraisal after each clinical posting.

CLINICAL FACILITIES

Students are given an opportunity to integrate theory with practice through various clinical postings specific to pediatric nursing. Postings are arranged in the following hospitals:

1. **General Hospital, Thalassery & District Hospital, Kannur**: Common medical conditions, Normal Newborn, Immunization clinic.
2. **Malabar Cancer Centre, Thalassery:** Pediatric hematology & Oncology, Chemotherapy unit, protocols followed during administration & side effects, Bone Marrow Transplantation
3. **Institute of Maternal & Child Health (IMCH), Govt. Medical College, Calicut:** It provides a perfect arena for students to observe the exact book picture in various advanced medical & surgical conditions, pediatric communicable diseases, high risk newborn, pediatric emergency, pediatric intensive care unit, neonatal intensive care unit, Operation Theatre, Hematologic disorder ward (Thalassemia, Heamophilia, ITP etc). Here students also get an opportunity to see metabolic screening tests, milk bank, and application of clinical genetics.
4. **Field visits:** Child guidance clinic, Anganwadi centers, Cold chain center, Special schools

SKILL LAB

A well set up pediatric lab with the essential mannequins like newborn mannequin, cardio pulmonary resuscitation dummy is available. A mannequin to demonstrate procedures like sites of injection administration, colostomy care is also there. Students are also given an opportunity to have a hands-on experience in this mannequin.

FACULTY

S.NO	NAME	DESIGNATION
1	Dr. Simi Mohan	Associate Professor
2	Mrs. Arya.V	Lecturer
3	External Faculty from MCC	

CONFERENCES ATTENDED

SL. NO	NAME	NAME OF THE PROGRAMME	ORGANIZED BY	DATE	ATTENDED / PRESENTED
1	Dr.Simi Mohan (Delegate)	National Workshop on Integration of genomics in Nursing profession	NIMS College of Nursing, Thiruva-nanthapuram	16.03.2024	Attended

ACTIVITIES

The department collaborates with the MCC pediatric division to coordinate events such as Children's Day. Additionally, school and maternal health initiatives are implemented, health lectures are delivered, and significant dates like World Thalassemia Day, World Hemophilia Day, and National Girl Child Day are commemorated. For the latter, we hosted a short film contest themed "Invest in Girl's Right: Our Leadership, Our Well-being," with Vth semester students clinching the top prize for the best short film.

DEPARTMENT OF MENTAL HEALTH NURSING

Life doesn't make any sense without interdependence. We need each other, and the sooner we learn that the better for us all."
— Erik Erikson

OVERVIEW

Department of Mental Health Nursing (Psychiatric Nursing) played an important role throughout this year focusing on academic and non academic development of the under graduate students. The department under the experienced faculty provides education to the students regarding various psychiatric disorders, its management and the roles played by psychiatric nurses in caring for the clients. It enables the students to develop confidence in dealing with the clients and to consider the client as an individual. The department also prepares the students to function effectively as psychiatric nurse, educator, researcher and a counselor for dealing the minor problems of the clients and family.

OBJECTIVE

Equip the students to

- Develop an understanding of scientific approach to maintain mental health, prevention and management of common mental health problems.
- Describe the psychopathology, clinical manifestations and treatment of the mental illness.
- Develop positive attitude towards mental health, mental illness and the mentally ill.
- Provide comprehensive nursing care to Psychiatric patients.
- Identify the role of the psychiatric nurse in different setting.

CURRICULUM

The department oversees 40 third-year B.Sc. Nursing students. The curriculum encompasses 110 hours of psychiatric nursing instruction and 360 hours of hands-on clinical experience. The core competencies on which the department concentrated while providing education for students were:

CORE COMPETENCIES

- Psychiatric interview & history collection
- Mental status examination
- Recording therapeutic communication
- Therapeutic relationship
- Psychotropic medication administration
- Nursing management of clients
- Psychiatric emergencies management
- Psycho-education
- Counseling

CLASSES AND TRAINING PROGRAM

Different methods like lecture method, discussion, role play, observation visit, debate, seminar and presentations were used for teaching the students.

CLINICAL EXPERIENCE

The students undergo a two-month clinical placement at Christuraj Institute of Mental Health and Neuro Science (CIMHANS) in Kuthuparamba, Kannur. During this period, they gain experience caring for patients with various conditions, including Schizophrenia, BPAD, RDD, Anxiety disorders, ADS, and Substance abuse disorders.

LIST OF FACULTY

The team consists of two Psychiatric nursing experts teaching the subjects.

SL NO.	NAME	DESIGNATION
1	Dr. Binuja.P	Associate Professor
2	Mrs. Sreetha. P	Lecturer

CONFERENCE ATTENDED/ PRESENTED

SL.NO	NAME	NAME OF THE PROGRAMME	ORGANIZED BY	DATE	ATTENDED/ PRESENTED
1	Dr. Binuja	International Conference on " Physical To Digital- Reinventing Health Care"	Kerala co operative hospital federation ltd.	19.10.2023 to 20.10.2023.	Attended

ACTIVITIES / AWARENESS PROGRAMME

- Conducted psycho-education and interactive sessions for inpatients and family members at CIMHANS during the clinical training period in June & July 2023.
- Organized structured exercise programs and rehabilitative activities for inpatients at CIMHANS during the clinical training period in June & July 2023.
- Organized awareness skit on 'SAY NO TO DRUGS' for the patients and family members as part of observing the International day against drug abuse and illicit trafficking on26th June 2023 at CIMHANS followed by poster exhibition and 'Choose Life Not Drug' pledge taking.
- As part of the World suicide prevention day, Video making competition for the students at INSeR was organized. The day was observed at INSeR, on 13th September 2023 and the event was inaugurated by Dr.Rohini.T, Principal INSeR by revealing the 'INSeR Tree of Hope', followed by awareness class on 'Role of peer group in Preventing suicide' by Ms. Jisha Abraham, Lecturer, Psycho-Oncology, MCC. Fourth year B.Sc. Nursing students also organized an awareness role play.
- World Mental Health day was observed on 6th October 2023 at INSeR, by revealing the theme 'Mental Health is a Universal Human Right'. A debate on 'Social media - a threat to Mental Health of the Youth?' was organized by the fourth year B.Sc. Nursing students.
- Educational visit to K.E Safiya Autism centre at Kidaramkunnu, Thalassery was organized for the Third year B.Sc. Nursing students on 24th November 2023.
- Educational visit to Samaritan old age home, Thalassery was organized for third year B.Sc. Nursing students on 25th November 2023. Interaction sessions and relaxation activities for the inmates was the highlight of the visit.

The Mental Health Nursing Department being the integral part of INSeR functions in association with other departments under the guidance of Dr. Rohini. T, Principal, INSeR, MCC, Thalassery. In this academic year through organizing educational services for the students and mental health awareness programs for public Mental Health Nursing Department was functioning effectively and fruitfully.

DEPARTMENTAL ACTIVITIES GALLERY

WORLD MENTAL HEALTH DAY

WORLD SUICIDE PREVENTION

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGICAL NURSING

"Mothers hold their children's hands for a while, but their hearts forever".

OVERVIEW

Obstetrics and Gynaecological Nursing is a speciality of caring for women during pregnancy, childbirth and postpartum period. To have healthy children, it is important to promote the health of the childbearing women and their families from the time before childbirth. Prenatal care and guidance is essential to the health of women, the fetus and to the emotional preparation of the family for childrearing. Prompt and efficient care helps to reduce maternal mortality and morbidity.

The Obstetrics and Gynecological Department is designed for graduate students to develop in-depth knowledge and skill of students in different settings of maternity nursing, including physical and psychological aspect of parenting. The curricula are constantly updated to meet the changing requirements of the health care demands. The department provides opportunities for academic and experiential learning for the students in professional and personal growth in times of globalization and rapid educational change .It also prepares our students to function as effective educators, managers and researchers in the field of maternity nursing.

OBJECTIVES

- To develop methods to monitor and evaluate midwifery skills of the faculty and students.
- To demonstrate competency in maternity skills which promote quality care to the women and child
- To demonstrate ethical in practice and research.
- To communicate effectively with diverse audiences, especially with low –income families with limited access to quality health services.

CURRICULUM

This course is designed for students to appreciate the concepts and principles of obstetric nursing and helps them to acquire knowledge and develop attitude and beginning skills in rendering nursing care to normal and high risk pregnant women during antenatal, intranatal and postnatal periods in hospital and community settings. It also helps to develop skills in managing normal and high risk neonate and participate in family welfare programmes.

COMPETENCIES

After the completion of the course, students will be able to apply the nursing process and critical thinking skills to deliver nursing care for selected Obstetrics and Gynecological conditions. Specifically, at the end of the Midwifery- II course, students will:

- Demonstrate professional accountability for the delivery of nursing care as per INC standards/ICM competencies that are consistent with moral, altruistic, legal, ethical, regulatory and humanistic principles in midwifery practice.
- Communicate effectively with individuals, families and professional colleagues fostering mutual respect and shared decision making to enhance health outcomes.
- Recognize the trends and issues in midwifery and obstetrical nursing.
- Review and describe the anatomy and physiology of human reproductive system and conception.
- Describe and apply physiology in the management of normal pregnancy, birth and puerperium.

- Demonstrate competency in providing respectful and evidence based maternity care for women during the antenatal, intra natal and postnatal period.
- Uphold the fundamental human rights of individuals when providing midwifery care.
- Promote physiologic labor and birth, and conduct normal childbirth.
- Provide evidence based essential newborn care.
- Apply nursing process approaching caring for women and their families.
- Describe the methods of contraception and role of nurse/midwife in family welfare services.
- Recognize the importance of and actively participate in family welfare programs.
- Provide youth friendly health services and care for women affected by gender-based violence.

CLASS/ TRAINING PROGRAMME

Different Teaching-Learning methods are employed during the educational process, including lectures, role-plays, demonstrations, seminars, panel discussions, group discussions, symposiums, and field trips. Student understanding is regularly assessed through unit tests, sessional exams, and model exams for both theory and practical aspects of the curriculum.

CLINICAL EXPERIENCE

Students acquire substantial clinical exposure in obstetrics and gynecology at Kannur District Hospital and Thalassery General Hospital. Our parent hospital, Malabar Medical Centre, provides gynecological rotations. Students receive extensive clinical training and opportunities to perform all procedures, enhancing their practical skills.

SKILL LAB

The OBG Labs are utilized for procedure demonstrations, offering students practical experience that boosts their confidence in executing procedures. The OBG Department faculty's expertise in demonstrating each procedure is crucial in preparing students for their clinical rotations.

FACULTY DETAILS

The team consisted of four OBG experts in the subject along with significant contributions from the parent hospital.

SL.NO	NAME OF THE FACULTY	DESIGNATION
1.	Mrs. Anju. P.P	Assistant Professor
2.	Mrs. Linju T.K	Lecturer
3.	Mrs. Athira Mohan	Lecturer
4.	Mrs. Arya .V	Lecturer

CONFERENCE ATTENDED/ PRESENTED

SL. NO	NAME	NAME OF THE PROGRAMME	ORGANIZED BY	DATE	ATTENDED/ PRESENTED
1	Mrs.ANJU P.P	A State Level Conference On Critical Care [Criticon 2k23]	Clinical nursing education& Institute of Nursing & research, MCC Thalassery	02.12.2023	Attended
2.	Mrs. LINJU T.K	A State Level Conference On Critical Care [Criticon 2k23]	Clinical nursing education& Institute of Nursing &research , MCC Thalassery	02.12.2023	Attended

ACTIVITIES

- Breastfeeding week "was celebrated on 04.07.2023 by B.sc (N) IV Year. Students conducted a role play at GH Thalassery on the importance of breast feeding. A role play and Quiz programme was conducted at GH thalassery and INSeR, MCC respectively. role play was conducted on 4/8/2023 at GH Thalassery. Musical role play with bouncing noise was done by the fourth year BSc Nursing students at Antenatal ward; theme was regarding **Health Awareness Regarding Breast Feeding** After the role play special felicitation address was given by Mrs. Suma M G (Senior Nursing Officer GH Thalaserry)
- Dec 1st World AIDS Day was celebrated in EranholiPHC . Fourth year students organized street play and health education at Koolibazar and GHSS Vadakkumbad School. Theme for this year was let community lead which our students conveyed beautifully
- As part of World Reproductive Day on 12 February 2024, Department of Obstetrics &Gynecology organized a health play based on the theme followed by a health exhibition involving 4th year B.Sc Nursing students. Mrs. Linju TK, Lecturer, welcomed the gathering.Prof. Dr. Rohini T (Principal INSeR) Chief guest of the program, inaugurated the program by releasing the reproductive symbol. Then Mrs. Anju PP, Assistant Professor, took a class on reproductive health awareness. Prizes were also distributed to the winners of the quiz competition held as part of the Breastfeeding Week celebration. The fourth year B.Sc Nursing students conducted health play and health exhibition based on the changes that occur in women at various stages. The program ended at 1 pm.

DEPARTMENTAL ACTIVITIES GALLERY

DEPARTMENT OF COMMUNITY HEALTH NURSING

OVERVIEW

The community health nursing department aims in training students to work in partnership with their local communities, work to prevent illness and promote health by identifying barriers to healthy lifestyles and general wellness. The students are shaped to be the interpretative bridge between the acute sector and community services. They embrace a social model of health to advocate and give a voice to the community accessing care. The Department of Community Health Nursing envisions offering diverse experience that facilitates evidence based practice and provides quality care to individual, family and community as a whole. It is our commitment to train the students to provide the highest standards of health care to all sections of the society, particularly to those who are socially and financially deprived

The department actively participates in training, service, and research in the field of community health nursing. The field training is imparted in both rural and urban areas. The rural community health training was given at Government Community Health Centre Pinarayi and Primary health center Eranholi. The community health service provides preventive, curative, rehabilitative and referral services to the residents of these villages. The urban health services are provided through the Urban Primary health centre, Kolassery. The department actively participates in all national health programmes implemented by Government of India and State government. The department has an excellent infrastructure to aid teaching and learning activities.

The course is designed for students to practice community health nursing for the individual, family and groups at both urban and rural settings by using concepts and principles of health and community health nursing. The allotted theory and practical hours for the subjects are 100 hrs and 320 hrs respectively

OBJECTIVES

- Identify the health needs and problems of the people.
- Appreciate the role of nurse in rural community setting.
- Develop skills in planning, implementing and evaluating health care services to individuals, families and community in the rural setting.
- Identify the health needs and problems of individuals, families and community.
- Provide comprehensive family health care by using the nursing process approach.
- Demonstrate the ability to educate and counsel the community and school children using different approaches.
- Assist in family welfare services.
- Attend various clinics.
- Recognize the health care delivery systems and their role in providing services to the community.

CLASS TRAINING PROGRAM

To ensure the academic excellence of the students , three internal exams and one model exam for each batch of students in an academic year including unit tests are conducted.

- For developing practical skill and community participation students participate in various health programmes in the community and health centers in the respective areas of field visit.

- Conducting health camps in accordance with community health nursing practical.
- To meet the required practical hours, students were sent to General Hospital, Thalassery, Community Health Centre, Panoor and Pannyanoor and also Urban Community health Centre, Kolassery.

COMMUNITY HEALTH NURSING POSTING

This year students were posted in following health centers and their affiliated field from October 2023-January 2024

- PHC Pinarayi
- PHC Erhanoli
- UPHC Kolaserry

In the health center students assisted in routine clinical work and also gave health education on various communicable and non communicable diseases. Other than that they performed under 5 assessments, antenatal and postnatal assessment. In the field they performed survey and visited families as part of their requirements

RUHSA (CMC VELLORE)

Students had one week of integrated health training from13/11/2023 to 18/11/2023 at RUHSA, CMC Vellore .under the guidance of experts they had very enriching exposure to rural community health. They even performed mime and puppet shows for the rural population which gave them first hand exposure to various methods of health education.

VISITS

- Visit to district TB Centre Kannur district on 23/11/2023
- NACO , DH Kannur on 23/03/2023
- Factory visit to RUBBCO on 11/12/2023

LIST OF FACULTY

S.NO	NAME	DESIGNATION
1	MrsJosnaJesmon	Asst .Professor
2	Mrs.AarathiIttiel	Asst .Lecturer

ACTIVITIES

- In collaboration with PHC Eranholi, students commemorated WORLD AIDS Day by raising awareness through street performances and health education at Koolibazarand GHSS Vadakkumbad school. This year's theme, "Let community lead," was effectively conveyed by the students.
- Working with UPHC Kollassery, students conducted street plays at the PHC to increase tobacco awareness. The PHC Kollassery staff and Medical Officer commended the students' efforts.
- Final year students organized an ASHA training program at UPHC Kolassery, educating ASHAs about palliative care, its importance, and their role in it. They also performed a role-play to emphasize the significance of palliative care.
- In partnership with UPHC Kolassery, final year students conducted a health camp for Mubarak school Thalassery's lower primary students. Approximately 80-90 children were evaluated for weight, height, vision, and dental caries. Students assisted UPHC staff with school immunizations and concluded the event with a skit promoting healthy habits for school-age children.

EXHIBITION

At a lower primary school in Eranjoli, students arranged an exhibition and provided health education on proper eating habits. They created models of food pyramids, health plates, and deficiency diseases with their symptoms.

DEPARTMENTAL ACTIVITIES GALLERY

LIBRARY AND LEARNING CENTRE

The INSeR Library is dedicated to providing high-quality service and an exceptional collection of materials to support the mission, goals, educational, and research needs of students, staff, faculty, administration, and community users, in alignment with the College's curriculum. The library is well-equipped and internet-enabled, with a vast collection of books, journals, and databases available for students. It subscribes to a variety of international journals and databases, offering a comprehensive learning experience

The library provides ample space for reading and note-taking. The reading room now accommodates 60 seats and 15 tables, allowing up to 60 students to use the facility simultaneously. Students can access the library's digital collection through its digital library section. Books are organized on shelves using a classification system to facilitate easy access for students. Additionally, there is a separate reading room for faculty members and staff, equipped with two computers for their exclusive use

All library users have access to the full text of subscribed databases such as Clinical Key, Ovid, Wiley Online, Springer Nature, and Taylor & Francis

Sl. No.	Details	Nos.
	Information Resources Status as on APRIL 2024Total Number of Books	3025
1	Reference Books	1182
2	General Reading	52
3	National Journal (Print)	10
4	International Journal (Print)	05
5	Online Journals	46

- Number of Books Purchased - 320
- Number of Books issued – 1755

INFRASTRUCTURE

The college features well-designed offices for the Principal, Vice Principal, faculty, and administrative staff, as well as a reception and waiting area. The Principal's office includes an attached toilet and provision room. Each office is equipped with independent telephone lines and interconnected with the hospital and hostel, providing internet access.

The college office operates from 9:00 am to 5:00 pm on all days except holidays. It handles all matters related to students and staff, including distribution of university mark lists, scholarships, assistance with e-grants, registration with professional organizations, issuing transcripts, course and conduct certificates, transfer certificates, and fee payments.

EXAMINATION HALL

INSeR is equipped with an examination center under the Kerala University of Health Sciences. The center can accommodate students for exams and is equipped with closed-circuit television, online access for uploading question papers, printing facilities, and scanning machines.

CLASSROOM

There are ample classrooms at INSeR, each capable of accommodating the students assigned to that class. The rooms are well-ventilated and well-lit, creating a conducive environment for learning. Each classroom is equipped with student chairs, tables, a chalkboard, a lecture stand, LCD projectors, and a computer. Additionally, there are tables and chairs for teachers to facilitate teaching.

FACULTY ROOMS

There are spacious teachers' rooms at INSeR, each accommodating 7-8 teachers. These rooms are equipped with separate toilet and handwashing facilities for the teaching faculty.

LABS

PRE CLINICAL LAB

A comprehensive understanding of human anatomy is essential for a career in the medical profession. At our institute, the labs are well-equipped with proper lighting and ventilation. The pre-clinical lab is equipped with a variety of equipment, including an adult human articulated skeleton, an adult skull, a pelvis, a heart with large blood vessels, an eye with different sections, an ear with different sections, a full set of disarticulated adult human skeleton, and specimens such as a gall bladder with gall stones, a cyst, an appendix, a normal uterus, a placenta, a uterus with sub mucous fibroid, as well as different charts of all the body systems. The lab is furnished in a way that allows students to acquire knowledge through various demonstrations, enhancing their understanding of human anatomy and physiology.

FOUNDATIONS OF NURSING LAB

Our Foundations of Nursing Lab is highly functional and fully furnished, equipped with various manikins including multi-functioning manikins and a CPR manikin with a monitor. All necessary instruments are available in the lab, providing students with hands-on experience in nursing skills. The lab has adequate space for performing demonstrations and practical sessions, ensuring that students receive comprehensive training in nursing fundamentals

ADVANCED SKILL LAB

The Advanced Skills Lab at our institute plays a crucial role in helping nursing students stay updated with the latest technological advancements in the profession. It is furnished with state-of-the-art equipment and instruments, including an Advanced Cardio Pulmonary Resuscitation Manikin, a Crash Cart, a Trolley,

and an advanced manikin capable of demonstrating more than 10 nursing procedures Students use this lab to practice procedures before performing them on human patients, which enhances their skills and confidence. This hands-on practice in the Advanced Skills Lab ensures that students are well-prepared to provide high-quality care in real-world clinical settings

OBSTETRICS AND GYNECOLOGICAL LAB

The Obstetrics and Gynecological Skills Lab at the nursing college serves as an invaluable resource for nursing students, enhancing their educational experience. The lab is equipped with various practice manikins, including a full-body Pregnancy Simulator, an obstetric manikin, pelvic models, an Ultrasonography simulator (Biometric and Gynecology), and a high-fidelity childbirth simulator. These resources provide students with a realistic and simulated clinical environment to practice and demonstrate competency in a range of obstetric and gynecological nursing skills. The lab plays a crucial role in preparing students for their future roles in providing care to women during pregnancy, childbirth, and other reproductive health scenarios

PEDIATRIC LAB

The Pediatric Nursing laboratory is designed to help students develop a modern approach to child care. It provides a strong foundation for handling newborns and children using manikins. The lab is equipped with Pediatric CPR manikins, Pediatric Procedure manikins with all orifices, Baby dolls, an infantometer, a weighing machine, an Oxygen hood, a Pediatric stethoscope, a BP Apparatus with Pediatric Cuff, a variety of play materials, various models, and adequate articles and equipment to demonstrate procedures to students. This lab helps students develop skills in carrying out and assisting with various pediatric procedures in clinical and community settings. It provides a hands-on learning experience that prepares students for their roles in pediatric nursing

COMMUNITY HEALTH NURSING LAB

The Community Lab is spacious, well-ventilated, and provides a healthy learning environment. It is equipped with all the necessary equipment for providing basic care in terms of primary health care, including 30 community bags, maternity kits, and other essential items. The lab is also arranged with models of boreholes, sanitary wells, deep and shallow wells, French latrines, septic tanks, etc., allowing students to practice procedures. Additionally, students use various charts and AV aids related to community health care, such as those displaying boreholes, in community health education programs aimed at improving the health status of individuals.

AV-AIDS LAB

Audio-visual aids (AV-AIDS) play a crucial role in enhancing student engagement and understanding. The AV-AIDS lab is equipped with the latest equipment, including overhead projectors (OHPs), charts, models, and various types of boards. These tools provide high-tech educational media to support the teaching-learning activities of students, helping them respond actively to the audio-visual stimuli and derive maximum benefits from their learning experiences.

NUTRITION LAB

The Nutrition Lab is designed to help student nurses acquire sufficient knowledge for maintaining optimum health at various life stages. Students learn to assess the nutritional needs and caloric requirements of different age groups and during various disease conditions. The college's well-equipped nutrition lab provides practical knowledge on planning diets tailored to meet patient needs and requirements. Students are taught to scientifically plan menus based on the calorific

COMPUTER LAB

Nursing is a field that has always embraced technological advancements, and computers have become integral to hospital and private practice cultures, as well as to the nursing profession as a whole. Given the importance of computer literacy in nursing, we provide personal computers with updated software and internet connections, along with e-learning facilities, to our students. We encourage them to utilize these resources to the fullest extent possible. At our institute, we have access to scanned scripts of manual exams or online exams, which can be marked and evaluated digitally. This not only enhances efficiency but also aligns with modern practices in healthcare education and assessment.

PHOTO GALLERY- DIFFERENT LABS AND IFRASTRUCTURE

VARIOUS COMMITTEES AND ACTIVITIES

The various committees as stipulated by State Nursing Council and KUHS are functioning as per the policies. The following are the list of the committees constituted in INSeR.

- College Development Committee
- College Council Committee
- Academic Monitoring Cell/Curriculum Committee
- Disciplinary Committee
- Continuing Nursing Education/ Staff Development Committee
- Journal club
- Grievance Redressal Committee
- Internal Complaints Committee
- College Union
- Student Nurses Association
- PTA (Parents Teacher Association)
- SSGP (Students Support And Guidance Program)
- Hostel Welfare Committee
- Anti-Ragging Committee
- Finishing School
- Red Ribbon Club
- NSS (National Service Scheme)
- Staff welfare committee
- Coordinators meeting
- Departmental committees
- Library committee

In addition we do have INSeR Administrative committee for the prolific discussions and precise decisions that are taken for the staff and students welfare.

CONTINUING NURSING EDUCATION (CNE)

To enhance and update knowledge, INSER, MCC held monthly continuing nursing education programs. Topics were chosen based on current trends in nursing education, research, and practice. With approval from higher authorities, CNE was conducted in every month.

SL NO.	DATE	NAME OF THE TEACHER	TOPIC
1	20.04.2023	Mrs. Athira Mohan	Vital signs
2	15.05.2023	Mrs. Reshma C R	Drain Care
3	10.06.2023	Mrs. Reshma C R	Cardiovascular Assessment
4	24.06.2023	Mrs. Sushree U K	Nasogastric Tube Insertion
5	18.07.2023	Mrs. Neenu Pradeep T K	Wound Dressing
6	06.08.2023	Mrs. Tittu Sebastian	Oral Care
7	23.09.2023	Mrs. Annu Pinto	Tracheostomy Care
8	11.11.2023	Mrs. Linju T K	Oral Medication Administration
9	09.12.2024	Mrs. Hanibernia S	Prevention of Sexual Harassment at work place
10	30.01.2024	Mrs. Arya V	IV Cannulation
11	19.02.2024	Mrs. AkhinaN.P	Eye drop Installation

CO-ORDINATORS MEETING

Weekly coordinators' meetings are conducted to address operational difficulties in academic planning. The objective of these meetings is to assess the effectiveness of curriculum delivery, the achievement of departmental goals, learning outcomes, and the meeting of targets and benchmarks. These meetings help ensure that academic plans are on track and that any challenges are addressed promptly

STAFF WELFARE COMMITTEE

The institution maintains an active staff welfare committee chaired by Prof. Dr. Rohini T, Principal of INSeR, with Mrs. Neenu Pradeep T.K, lecturer, as Staff Secretary. Monthly faculty meetings discuss institutional activities and staff welfare. All faculty members actively contribute suggestions. The committee recognizes faculty achievements, special days, and supports those in need, funded by monthly contributions from faculty members.

LIBRARY COMMITTEE

The Library Committee at INSeR serves as the advising and advocacy agency for the Library, focusing on general policy, planning, programs, goals, and objectives to support the institution's needs for teaching, learning, research, and community building. The committee is chaired by the Principal of INSeR, with the Vice Principal serving as Vice Chairperson, the Librarian as Convener, and all Heads of Departments (HODs) and Class Coordinators as Members.

The objectives of the Library Committee are as follows:

- To support the librarian in planning library activities and policies
- To gather feedback from faculty members and students, and plan for improvements and enrichment of the library
- To serve as a link between the library and its users
- The committee meets once a month to discuss and address these objectives.

COLLEGE DEVELOPMENT COMMITTEE

The College Development Committee (CDC) is the apex body of the institution responsible for planning and executing development activities. It determines the program of instructions, internal evaluation, and discusses the progress of studies in the college. The prime objective of the CDC is to prepare a comprehensive development plan for the institute on an annual basis, covering areas such as academic, placement, infrastructure, administrative, and admission growth. The committee meets once every four months to review and plan these activities.

FINISHING SCHOOL FOR FINAL YEAR STUDENTS

The Finishing School Programme is a competency-based pre-employment program designed to provide support and insights to students regarding innovations in the profession. As a part of finishing school, BLS training was given to nursing students on 16/12/2023, from 9 am to 12 pm at seminar hall, Malabar Cancer Centre. The programme was a huge success; both the students as well as the staff nurses who took classes were highly appreciated.

STUDENTS SUPPORT AND GUIDANCE PROGRAMME

Kerala University of Health Sciences launched a holistic approach for the welfare of students named Student Support Guidance programme. The emphasis given in this programme is the overall development of the students by addressing their academic, psychosocial physical and reproductive health issues. Holistic student support service programme has been developed by pooling the knowledge and vision of academicians, development of professionals and the student community. The programme activities were designed at par with the largest strategic concepts in health human resources development. Mentor -Mentee meeting is conducting every month and addressing all kinds of problems of students. As the numbers of crimes against girls are rising in the country, SSGP unit of Institute of nursing sciences and research in collaboration with Kerala police conducted a self defenseProgramme for girls to empower through comprehensive awareness and practical training program. SSGP team has a significant role in the overall development of the students during their student life.

PARENT TEACHERS ASSOCIATION

The Parent Teachers Association of INSeR actively involves in the development of the students and the organization. Regular executive and class PTA meetings are held based on the formulated PTA bye-laws and

SOP's. PTA helps for the smooth working and the progress of the college for maintaining good discipline and high academic standards

DISCIPLINARY COMMITTEE

The Discipline Committee is established to maintain a calm and peaceful academic atmosphere on campus. Its objectives include developing norms to regulate student behavior, reducing violence and confrontation among students, and promoting good and healthy practices. The committee ensures and enforces strict discipline within the college campus, monitors students' punctuality, receives complaints, conducts inquiries to ascertain the truth, and takes disciplinary action against those who violate the rules. Decisions are made based on the principles of natural justice, and if necessary, special inquiry committees are involved in the decision-making process

GRIEVANCE REDRESSAL COMMITTEE FOR STUDENTS

In accordance with the directives of the Kerala University of Health Sciences, the Institute of Nursing Sciences and Research at Malabar Cancer Centre has established a Grievance Redressal Committee for students. The committee meets once every four months to address grievances related to student problems and provide solutions to resolve them. All grievances raised by students are discussed in the committee, and measures are undertaken to resolve them through discussions with the Principal.

RED RIBBON CLUB

The Red Ribbon Club is a movement initiated by the Government of India in schools and colleges to raise awareness about HIV/AIDS. Following instructions from the Kerala Nurses and Midwives Council, INSeR has also initiated this club with the main objective of eliminating HIV/AIDS by 2025. The club aims to observe World AIDS Day and Blood Donation Day and to spread awareness about HIV/AIDS among the public

COLLEGE ALUMNI

INSeR initiated the Alumni association by including first batch students on June 2023. The main aim of the alumni association is to support and guide the alumni who have recently completed their course. It also focuses the overall professional development of the graduates.

JOURNAL CLUB PRESENTATION

A journal club for teaching faculty aims to improve knowledge and exchange ideas and skills. Faculty members critique topics in groups, identifying errors, analyzing and interpreting subjects, and drawing conclusions. In the academic setting, journal club presentations and critiques expand knowledge and provide valuable feedback.

SL NO	DATE	PAPER PRESENTED FOR JOURNAL CLUB	PRESENTED BY
1	18/7/23	Challenges and adaptation strategies of nurses in caring for patients with covid-19 in Iran	Dr. Simi Mohan
2	4/9/23	Examination of relationship between thanatophobia and resilience level of nurses working in intensive care unit and palliative care unit	Dr Binuja
3	13/10/23	Knowledge attitude and barriers of nursing research among bsc nursing students in selected nursing college of malapuram district	Prof.Dr Hanibernia
4	15/12/23	A retrospective comparison of water birth and conventional vaginal birth among women deemed to be low risk in secondary level hospital in Australia	Mrs Anju Pp
5	20/1/24	Clinical nurses research priorities in hospital settings: Delphi survey	Mrs Josna
6	10/02/24	Correlation between critical thinking dispositions and self esteem in nursing students	Ms. Reshma C R
7	23/3/24	Effectiveness of progressive muscle relaxation techniques among client with anxiety undergoing alcohol de-addiction in selected rehabilitation centres Madurai, Tamilnadu	Mrs Sreetha

COLLEGE UNION

INTRODUCTION

The college union is an elected body of students of the college for the promotion of the practice of democracy and leadership. The college union activities offer students opportunities to grow in cooperation with others in areas of services to fellow human beings. The college union consists of Chairman, Vice Chairman, Secretary, Joint Secretary; Arts club Secretary, Sports club Secretary, Magazine editor, One Union Councilor and Four Representatives for UG. The Union functions under the guidance of staff advisors appointed by the Principal.

The college has sectional associations in each department. The college union brings the best out of the students by organizing cultural and sports competitions. The term of the union assumes office until the date of elections which are conducted in the next subsequent year.

OBJECTIVES

- The aim of the union is to help students engage themselves in meaningful pursuits outside the co-curricular programs of the college and to provide opportunities for training as good citizens.
- The union will try to achieve this aim through meaningful programs.
- To promote opportunities for the development of character, leadership, efficiency , knowledge and spirit.
- To encourage arts and other cultural, educational and recreational activities among students.
- To work for the general welfare of the students community
- To identify talents in students and to develop them in the needed directions for the representation of college events.
- To develop the sense of democracy and leadership qualities in students.

Following are the **elected members** of the College **Union for the** Academic Year **2023-2024**

SL.NO	VARIOUS POST	NAME OF THE ELECTED MEMBERS
1.	Chairman	Ms. Stephy Mathew
2.	Vice Chairman General	Tintu P T , Elcita Anne Vincent
4.	Secretary	Ms.DilshaFathima .K
5.	Joint Secretary	Ms. Sariga P.V
6.	Arts club Secretary	Ms.Gopika Ramachandran
7.	Sports club secretary	Ms. Abiya Saj Mathew
8.	Magazine editor	Ms. KadeejathFazna Saleem
9.	Union Councilor	MsSneha Sunny
10.	One representatives from each UG course	Darsana S (Fourth year) Aparna P.P (Third year) Nihal C (Third semester) Samuel K. Peter (First semester)

COLLEGE UNION ACTIVITIES: EVENTS OF SPORTS - KUHS

- Badminton boys and girls were conducted on 02.11.2023 at Malabar Medical College - our 4 boys and 3 girls participated.
- Chess was conducted on on 20.11.2023 at Govt. Homeo Medical College - 2 boys and 2 girls were conducted.
- Throw ball (girls) was conducted on 29.11.2023 at KMCT, Calicut - our12 girls participated.

THE NATIONAL SERVICE SCHEME (NSS)

The National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. It provides opportunity to the student youth of 11th & 12th Class of schools at +2 Board level and student youth of Technical Institution, Graduate & Post Graduate at colleges and University level of India to take part in various government led community service activities &programmes. The sole aim of the NSS is to provide hands on experience to young students in delivering community service. All the youth volunteers who opt to serve the nation through the NSS led community service wear the NSS badge with pride and a sense of responsibility towards helping needy

OBJECTIVES

- Understand the community in which they work
- Understand themselves in relation to their community
- Identify the needs and problems of the community and involve them in problem-solving
- Develop among themselves a sense of social and civic responsibility
- Utilize their knowledge in finding practical solutions to individual and community problems
- Develop competence required for group-living and sharing of responsibilities
- Gain skills in mobilizing community participation
- Acquire leadership qualities and democratic attitudes
- Develop capacity to meet emergencies and natural disasters and
- Practice national integration and social harmony

NSS STUDENT LEADERS

WORLD ENVIRONMENT DAY

June 5 th 2023, World Environment Day urges all of us to protect our natural surroundings. World Environment Day is both a global celebration and a platform for public outreach. The students of INSeRMCC planted tree saplings in and around the campus. The programme was inaugurated by Prof DrRohiniT, Principal INSeRMCC at 10 am by planting a flowering tree sapling. All programme came to an end by 12pm.

INTERNATIONAL YOGA DAY

A yoga awareness class including practical session was conducted by Mr. Sanathana Babu, yoga master for first semester BSc Nursing students on 22/06/2023.It was really a wonderful experience for all students and teachers. Around 3pm the program was started. Then he demonstrated some yoga postures and made students to repeat it. Proper guidance and clearance was provided. Students were very excited to be the part of that class.

WORLD BLOOD DONOR DAY

As a part of blood donor day NSS volunteers of INSeR MCC donated blood to MCC in the blood donation camp which is conducted in INSeR campus itself on 23/06/2023 at 9:30 am. The donors of NSS volunteers were the role model for entire students in the college. Prof Dr. Rohini T, Principal INSeR MCC and Prof Mrs. Hina Hyder Vice Principal visited the camp and appreciated the volunteers for their initiation. The donors were refreshed with juice and snacks. All programme came to an end by 12pm.

ROAD SAFETY& TRAFFIC RULE AWARENESS PROGRAMME

Road traffic accidents are one of the leading cause of death in our country and globally .The NSS volunteers of INSeRMCC attended the online free quiz of Road Safety & Traffic rule Awareness Programmeand got awareness about the road safety& traffic rule 27/07/23.Many of them are awarded with certificate.

PREAWARENESS CANCER SURVEY

The parent hospital (Malabar Cancer Centre) of Institute of Nursing Sciences & Research, Malabar Cancer Centre adopted Panniyannur grama panchayath in order to achieve healthy young generation by improving knowledge related to prevention and early detection of cancer.As a part of this, NSS volunteers from 2nd semester BSc Nursing students of INSeR , organized pre-awareness survey regarding cancer among the people of Panniyannur grama panchayath on 20/08/23 from 8:30 am. Students were divided into groups and visited homes along with Asha workers of panchayath and asked questions on the basis of prepared questionnaire to people by drawing lot.

CELEBRATIONOF WORLD SUICIDE PREVENTION DAY

As a part of world suicide prevention day, NSS unit along with Mental Health Nursing Department of INSeR MCC organized an awareness program on 13/09/2023 at 3pm in INSeR campus. Dr. Rohini T Principal INSeRinagurated the function by revealing the hope of tree which is prepared by the NSS volunteers from 4th BSc Nursing.

NSS DAY CELEBRATION

Every year NSS day is celebrated on 24thseptember. As a part of NSS day, on 29th September 2023 poem writing , story writing and poster making competition were organized by NSS unit at 12pm and prized creation will be published in *Nethi* magazine of Malabar Cancer Center. The competitions were based on the topic 'Tobacco is a threat for society' and twenty volunteers participated in the competition.

SWACHHTA HI SEWA CAMPAIGHN

Swachhata Hi Seva (SHS) campaign was celebrated from 15th September to 2nd October to reinforce the concept of Sanitation as everyone's business. Theme of SHS-2023 is Garbage Free India' with focus on visual cleanliness and welfare of Safain Mitras. As a part of it, cleaning drive campaign at INSeR and Swachhata pledge taking event wereconducted on 30/10/2023 at 11 am .Twenty volunteers from 4th semester BSc Nursing students participated and pledge administration was done by Eldho James 4th semester BSc Nursing . Students were divided into groups for cleaning and each group was assigned to clean separate area with the guidance of Mrs. Tittu Sebastian NSS Programme officer. All events came to an end by 1pm.

CELEBRATION OF WORLD HOSPICE AND PALLIATIVE CARE DAY

NSS unit along with Department of Pain & Palliative medicine MCC organized an awareness class on 14/10/2023 at 9:30am in adopted village Panniyannur PHC, and Panchayath President Asokan inagurated the function .This year the theme was Compassionate Communities: Together for Palliative Care. Dr. BijiM.S HOD of Pain & Palliative medicine MCC spoke about the different aspects of palliative care .In addition to that Mrs. Sheeja Nellikka Nursing Officer taught care of colostomy to the volunteers.Ms Ann TreesaThomas (NSS volunteer from 4th Semester BSc Nursing) and Eldho James(NSS volunteer from 4th Semester BSc Nursing) assisted the nursing officer for colostomy care demonstration . All event came to an end at 1pm .

KERALEEYAM ONLINE QUIZ

In accordance with government guidelines NSS volunteers of 2nd Semester BSc Nursing Akhila K, Fairoos V, Gowri SinshaC participated in the online quiz of Keraleeyam on 19/10/2023.

BREAST CANCER AWARENESS DAY CELEBRATION

As a part of observing this day seventy NSS volunteers of INSeR MCC shared the image of Breast Self Examination through social media especially in Kudumbasreeunit. It helped to create awareness among society regarding the early detection of breast cancer.

KERALA PIRAVI CELEBRATION

As a part of Kerala piravi, Malayalabhasha Samiti of Malabar Cancer Centre organized poem writing (malayalam) competition through online based on an imge. NSS volunteers ofINSeR Ms. AnsumolBenny, Ms.Darshana , Mr. Athul Raj of IVth Year BSc Nursing, Ms Ann TreesaThomas of 4thSemester BSc Nursing, attended the programme.

ANTIMICROBIAL AWARENESS WEEK CELEBRATION

As a part of this NSS volunteers from 3rd semester BSc Nursing students attended the awareness class on prevention of antimicrobial resistance on 25/11/23 at 12;30 pm .Dr. Sarath Assistant Professor, Microbiology, Malabar Cancer Centre spoke about the various aspects of the same. The whole programme came to an end by 1pm.

CERVICAL CANCER AWARENESS MONTH CELEBRATION

Cervical Cancer Awareness Month is an important opportunity to share evidence-based information, promote vaccination against human papillomavirus (HPV) and screening, and emphasize the World Health Organization (WHO) Global Cervical Cancer Elimination Initiative. As a part of it NSS volunteers from 3rd semester BSc Nursing students attended the sensitization class on prevention of cervical cancer on 12/01/24 at 3 pm by Mrs. Arya V Lecturer INSeR .The class was informative and whole event came to an end by 3:30 pm

GLAUCOMA AWARENESS WEEK CELEBRATION

World Glaucoma Day is observed every year on March 12. The day serves as a reminder for individuals worldwide to prioritize their eye health and undergo comprehensive dilated eye exams to detect the presence of glaucoma at an early stage. NSS unit of Institute of Nursing Sciences and Research, Malabar Cancer Centre under the leadership of Mrs. Tittu Sebastian (NSS Programme officer) organized an awareness class on glaucoma awareness week on the basis of theme 'Uniting for Glaucoma free world' on 14-03-2024 for 5th semester B. Sc Nursing students.

MERA PEHLA VOTE DESH KE LIYE CAMPAIGN

Mera Pehla Vote Desh Ke Liye Campaign aims to ensures universal enlightened participation of youth in election. The main objective of the initiative is to engage and encourage young voters to come out and vote and to convey the importance of voting for the larger good of the nation. The initiative symbolizes the importance of Elections and the pride of voting in the largest democracy in the world. As a part of MeraPehla Vote DeshKeLiye Campaign NSS volunteers took voters pledge through online on 19/03/2024. It helps to strengthen the spirit of democracy among students.

CELEBRATIONS

GRADUATION CEREMONY

The graduation ceremony for the 1st batch B.Sc Nursing was conducted at Pearl view Regency on 12th October 2022. The chief guest for the ceremony was Dr. C P Vijayan, Pro Vice Chancellor, Kerala University of Health Sciences who inaugurated the function. Prof. Dr. Geethakumari V. P Guest of Honor gave the message to the graduates. The presidential address was delivered by Dr. Satheeshan Balasubramanian, Director, MCC. The sworn declaration was done by the Principal, Dr. Professor Rohini T. Dr. Binuja, Associate Professor, INSeR, MCC gave the vote of thanks.

LAMP LIGHTING CEREMONY

INSeR conducted the lamp lighting and Oath taking ceremony of the 2023 Batch BSc Nursing students on 18th January 2024 at INSeR campus from 10am-12pm.The chief guest of this occasion was Mrs. Lalithambika C, Deputy Nursing Superintendent GH Thalassery. The Program was inaugurated by lighting of lamp with the auspicious hands of dignitaries. The core of the function that is passing of lights to the budding nurses was carried out by Prof. Dr. Rohini T, Principal INSeR and the Nursing Superintendent, MCC. Later, the program was concluded at 12pm by vote of thanks by Dr. Simi Mohan, Associate Professor, INSeR.

STUDENT NURSES ASSOCIATION

INTRODUCTION:

The Student Nurses' Association of India (SNAI) is an affiliated association of the student nurses under the umbrella of TNAI. SNAI was established in 1929 during TNAI Annual Conference in Madras. Miss L.N.Jeans, Nursing Superintendent, Government General Hospital, Madras, was the first Honorary Organizing Secretary of SNAI. The pioneer unit of SNA was established in General Hospital, Madras. The first SNA annual Conference was held in Delhi during November 1932. The main purpose behind the establishment of SNAI was to uphold the dignity and to promote a team spirit among students with professional ethics. It encourage the students to gain a positive attitude towards nursing profession and develop leadership qualities. It also help students to participate and compete in various events at state, regional and national conferences.

EXECUTIVE MEMBERS OF S.N.A. DURING 2023

SL.NO	NAME	POST
1.	Prof.Dr.Rohini.T	S.N.A.President
2.	Dr.SimiMohan.J.S	S.N.A.Advisor
2.	Mrs. Linju.T.K	Assistant S.N.A Advisor
3.	Ms.SiyaSairus	Vice President
4.	Ms.Vinnie Maria	Secretary
5.	Ms. Elicita Annie Vincent	Joint Secretary
6.	Ms.NivedyaPavithran	Treasurer
7.	Ms. Harsha.M.V	Joint Treasurer
7	Mr. Athul Raj	Program Coordinator
8	Ms.Alna Abraham	Class representative – IV Year B.Sc.(N)
9	Ms.Krishnendhu.E	Class representative – III Year B.Sc.(N)
10	Ms.AnnTreesa Thomas	Class representative – III Semester B.Sc.(N)
11	Ms.Vandana	Class representative – II Semester B.Sc.(N)

SNA EXECUTIVES

ACTIVITIES

- **EXITO 2023:** On 6th May 2023, a farewell programme of the first Batch B.Sc. Nursing Students [2018 batch], EXITO – 23' was organized by 2019 batch in INSeR campus. Our Chief Guest, Dr. Satheeshan B, Director MCC, presented the presidential address followed by the key note address by Dr. Rohini T, Principal, INSeR MCC, followed by felicitation of dignitaries. Representatives from outgoing batch and Batch of 2019 batch have shared their college life experiences with the gathering and a short video of our seniors and their former teachers have been played. A token of love has been given to seniors.

- **NURSES DAY CELEBRATION :**International Nurses Day, annual observance was held on May 12, 2023 in INSeR Campus commemorating the birth of the foundational philosopher of modern nursing – Florence Nightingale on the theme '**OUR NURSES, OUR FUTURE**' To boost up the image of nursing. Collage Making Competition was conducted based on the theme "**A Nurse can make the difference"**. Ms. Ahina Benny &Ms.AnumariaManoj [III year B.Sc. (Nursing)] has won the first prize. Extempore speech in English and Malayalam was also done on the theme **"Workplace Safety".**Ms.Sneha Sunny and Ms. Tintu.P.L of IV year B.Sc. Nursing bagged the prizes in English and Malayalam respectively.

- On 12th May 2023, a formal session was organized by the Nursing Service Department in the Conference Hall, Malabar Cancer Centre, Thalassery. Students of INSeR and Staff Nurses of MCC, Thalassery has attended the session. Dr.Satheesan.B (Director, MCC) delivered the presidential address. Dr. Rohini.T (Principal, INSeR) unveiled the theme for the day. Winners of the competitions were declared. The nurses lightened the lamp and renewed their pledge to uphold the dignity of the profession.

- **THANKSGIVING -2023:**Thanks giving ceremony of 2018 batch was conducted on 08/05/2023. Prof.Hinahyder followed by faculties shared there experience with the students and wished a good future for them. Dr.Rohini T, Principal delivered an inspiring speech. The outgoing batch delivered the thanks giving speech and expressed their gratitude towards all who contributed in their course through a video display.

- **ESPOIR - 23:**The investiture ceremony of the Student Nurses Association and College Union 2023 was conducted on 02.07.2023. Dr. Satheeshan.B (Director, MCC) inaugurated the function and shared the presidential address, followed by Dr. Rohini.T (Principal, INSeR) delivered the Keynote Address. This was followed by the Oath takingceremony of the new executives.

- **PHOENIX -2023:**The unit level arts and sports fest - Pheonix 2024 wasinaugurated on 21.07.2023. The offstage and onstage events for Arts Fest - 23' was held on 19.07.23 and 20.07.2023 respectively. For Arts the individual champion for Boys is **Mr. Suhail (Batch of 2021)** and for Girls it is **Ms. Navya. V (Batch of 2019)**. The overall championship was secured by **Batch of 2019.**

- **Sports Meet - 23'as Inter house competition on 29.07.2023:** For Sports The Individual champion were secured by **Mr. Eldho for boys (Batch of 2022)** and **Ms. Nayana for girls(Batch of 2019)** respectively. The overall championship was won by **Rhinos house.**

- **INDEPENDENCE DAY - 2023:**

On 15.08.2023, in view of independence day, the flag hoisting was done by Dr. Rohini. T (Principal, INSeR) at 8am in INSeR, MCC. The presence of Dr.Satheeshan.B (Director, MCC) graced the occasion. It was followed by patriotic song and a choreography by student body. A debate competition was also organized by the unit and Ms. Athulya Joy (III yearB.Sc.N) has been awarded as the **'Best Debator'**

- **SHADA PADA - 24 :**

A combined onam Celebration - **'ShadaPade 24'** organized by the S.N.A Unit along with the B.Sc. MRT students was conducted on 19th August, 2023 in INSeR campus. To add the festivity of the program, 'Athapookalam', 'PurushaKesari", 'Malayali Manga', 'Uriyadi' and other competitions were there. The tasty 'Onamsadya" has added flavor for the day.

- **SPIKE - 2023:**The Annual Zonal Sports meet of the Student Nurses Association, Kerala State North Branch Zone **'SPIKE - 23'** was held on 21/08/2023 to 22/08/2023 subsequently. Football championship was held in SS Sports Arena Football Turf, Pilathara on 21.08.2023. The nursing students actively participated in March Past, track events, field events and in indoor games. **Mr. Abhiram. K.P** has secured **III prize in badminton for boys** and **Ms. Nayana. P.K** has secured **II prize in Javelin Throw for girls**.

- **MIKAV 2023:**

The S.N.A Zonal arts Fest, 'Mikav - 23' was conducted in various nursing colleges in the moth of September. Our students have actively participated in Literary, educational and Onstage events and has bagged several prizes.

- **DHANAK - 2023**

The state SNA educational competitions was held on Renewal Centre, Ernakulam on 19.10.2023. Students selected from zonal competition participated and Mr. Athul Raj, Ms. Vinnie Maira, Ms. MalavikaNellikka has secured the first prize in Quiz competition. It was a proud moment for the INSeR community.

- **International Girl Child Day - 2023**

As part of the International Girl Child day - 2023 observance a short film competition was held on the theme "**Invest in Girl's Right : Our Leadership, Our Well being**".

Instructions were given and a time period of two months was given for preparation

- **Christmas Celebrations - 2023**

The Christmas event has its grant finale in INSeR on 22.12.2023 where students from each batch presented their carols along with Santa Claus and choreo in full fledge. Prof. Dr. Rohini.T (Principal, INSeR) has graced the occasion with a Christmas message. This was followed by cake cutting and New year friend selection in each class.

- **Republic Day - 2024**

The 75th republic day has its inception at 8.30am in INSeR campus. Dr. Satheesan.B(Director, MCC) has graced the occasion with his presence. Prof. Dr.Rohini.T (Principal, INSeR) has done the flag hoisting. It was followed by a republic day message by Ms. Athira.T (IV yearB.Sc N)

- **National Girl Child Day - 2024**

In continuation with the International Girl Child Day -23', evaluation of the short film competition was done by experts. The short videos were displayed in the Assembly area to the student body. Fourth semester B.Sc (N) students have bagged the first prize.

- **'Lumiere-24'**

The College day 'Lumiere-24" was organized by Student Nurses Association (SNA) and B.Sc.MRT on 17.04.2024. The program was inaugurated collectively by Dr.Geetha (HOD, Radiation Oncology), Dr.Sangeetha (Principal, B.Sc.MRT), Dr.Rohini (Principal, INSeR). Various cultural programs were conducted by the students. The programs were mind blowing and energetic with full swing from 10am to 8pm. The most awaited 'DJ party' was mesmerizing and rocking. The delicious feast added spice to the blast.

- **International Women's Day -2024**

A debate competition was organized on 06.03.2024 @ 3pm in connection with the International Women's Day - 2024, on the topic "Is reservation necessary for Women Empowerment". There were 8 teams with three rounds and each team was given an option to speak in favor of the topic and against the topic. The best debate team was awarded to Ms. Athulya& Ms. Anagha [IV Year B.Sc(N)]. and the best debator was Ms. Jismiya Mathew (IV Year B.Sc(N)]

- **'Au Revoir' 2024:**

On 22nd March 2024, a farewell programme for the second Batch B.Sc. Nursing Students [2019 batch], 'Au-Revoir – 24' was organized by 2020 batch in INSeR campus. Dr. Rohini T, Principal, INSeR MCC, delivered the key note address and it was followed by felicitation. Representatives from Batch of 2020 have shared their ce life experiences with the gathering and a short video of our seniors and their former teachers have been played. A token of love has been given to seniors.

WINNERS OF COMPETITIONS [SNA 2023 – 2024]

STATE WINNERS LIST

SL.NO	NAME	EVENT	POSITION
1	MR.ATHUL RAJ MS.VINNIE MARIA MS.MALAVIKA NELLIKKA	QUIZ	FIRST

ZONAL ARTS AND SPORTS WINNERS LIST

SL.NO	NAME OF THE WINNERS	EVENT	POSITION
1	MS.ANGELINA MARIA	ESSAY WRITING (MAL)	FIRST
2	MR.ATHUL RAJ MS.VINNIE MARIA MS.MALAVIKA NELLIKKA	QUIZ	FIRST
3	MS. SARIGA.P.V	ON THE SPOT PAINTING	SECOND
4	MS. ANJANA SIVADAS	PENCIL SKETCH	THIRD
5	MS.SWETHA.V.K	STORY WRITING (MAL)	THIRD
6	MS. NAYANA.P.S	BHARATHANATYAM	THIRD
7	MS. ABIYA SAJ MATHEW MS. ANJANA SIVADAS MS. BESTEENA VARGHEESE MS. DARSANA.S MS. DILSHA FATHIMA.K MS. NAVYA VINODHAN MS. SURABHI.V.S	MIME SHOW	THIRD
8	REPROPDUCTIVE HEALTH MS. ANJANA SIVADAS, MS. NAVYA VINODHAN MS. SARIGA P.V	POSTER MAKING COMPETITION	THIRD
9	SCREENING CONTROL PREVENTION OF NON COMMUNICABLE DISEASES: MS. ABIYA SAJ MATHEW MS. ALNA ABRAHAM MS. DARSANA S		THIRD
10	BIOMEDICAL WASTE MANAGEMENT: MR. ASWIN THOMAS MS. AKHILA K MS. ALBIN.C. BIJU		THIRD
11	POST COVID ERA - STRESS AMONG NURSING STUDENTS: MS. MEGHA RAVEENDRAN MS. ANAMIKA MANOJ MS. SREEPRIYA VINOD		THIRD
12	MS. NAYANA.P.K	JAVELIN THROW	SECOND
13	MR.ABHIRAM.K.P	SHUTTLE BADMINTON	THIRD

UNIT LEVEL COMPETITIONS			
SL.NO	NAME OF THE WINNERS	EVENT	POSITION
INDEPENDENCE DAY CELEBRATION			
1	Ms. ATHULYA JOY	DEBATE	BEST DEBATOR
WORLD NO TOBACCO DAY			
1	Ms. SHYM KRISHNA	SLOGAN WRITING	FIRST
2	Ms. ANN TREEZA THOMAS		SECOND
NURSES WEEK CELE BRATION			
1	Ms. SNEHA SUNNY	EXTEMPORE SPEECH [ENG]	FIRST
2	Ms. JOSEMI JOSE		SECOND
3	Ms. ANUMARIYA MANOJ		THIRD
1	Ms. TINTU.P.T	EXTEMPORE SPEECH [MAL]	FIRST
2	Ms. POOJA		SECOND
3	Ms. ANAGHA V		THIRD
1 2	Ms. ANUMARIYA MANOJ Ms. AHINA BENNY	COLLAGE MAKING COMPETITION	FIRST
3 4 5 6	Ms. SARIGA.P.V Ms.VISMAYA.L Ms. RIFA Ms. ABINA		SECOND
7 8	Ms. ABIYA SAJ MATHEW Ms. ALNA ABRAHAM		THIRD

The Student Nurses Association continues to embark the journey by providing various opportunities for the budding nurses to grow personally and professionally.

NURSES AND STUDENT HOSTEL

In 2022, the Nurses and Student Hostel was founded on the campus of the Institute of Nursing Sciences and Research, Malabar Cancer Centre, Thalassery. This facility is reserved for female healthcare professionals, including doctors, nursing faculty, nursing officers, students, and other health workers. The girls' hostel provides a private and comfortable living environment. The building consists of four floors, with nursing faculty and B.Sc. nursing students (second semester, third semester, third year, and fourth year) occupying the ground and first floors, while other residents are housed on the second and third floors. A recreational area is available on the first floor for residents' enjoyment.

The hostel offers spacious and well-ventilated single and double-seated rooms, fostering an ideal academic atmosphere. A common room equipped with a television and newspapers is provided for residents. The facility is compact with a single entrance, which is secured by CCTV surveillance. Entry is restricted to authorized individuals only, with additional verification measures in place. A hygienic mess serves nutritious meals, and a canteen is available for students. Each room accommodates 3 to 4 students and is furnished with 3 beds, 1 fan, 1 table, and 1 chair.

Mess Timings:

a. Breakfast from 7:00 am to 8:00 am
b. Lunch from 1:00 pm to 2:00 pm
c. Tea Break from 4:00 pm to 5:00 pm
d. Dinner from 7:00 pm to 8:00 pm

ANNEXURES

BATCH 2019-2023

BATCH 2020-24

BATCH 2021-25

BATCH 2022-26

BATCH 2023-27

ALUMNI COMMITTEE EXECUTIVES

MAGAZINE COMMITTEE

DEPARTMENTAL HOD'S

MCC (PGIOSR) FUTURE VISION & CONCLUSION

We believe that we performed better in 2023–24 in terms of the extracurricular and academic activities offered. We will continue our unceasing efforts to offer the best provision of education for our community. As I recount our achievements and success with pride and happiness, I would like to dedicate whatever we could achieve, to our beloved students, committed team of teachers, other staff and valued parents of INSeR, MCC. I thank our management team for their unwavering support and encouragement. We especially endorse and appreciate our Director for taking the initiative to advocate for the addition of more infrastructure amenities to the premises. We seek the blessing from the God Almighty to assist and steer us in the proper direction going forward.

ACCOUNTS & AUDIT REPORTS FY 2023-24

MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR

CONSOLIDATED BALANCE SHEET AS AT 31ST MARCH 2024

PARTICULARS	Schedule No.	FY : 2023-2024	FY: 2022-2023
I. FUNDS & LIABILITIES			
1. Trust Funds			
a. Capital Fund	1	1,36,33,85,460.85	1,30,38,46,157.20
b. Grant in Aid- Capital Grant (Pending Utilisation)	2	5,54,69,223.87	12,52,71,264.35
c. Funds & Schemes	3	8,78,04,971.38	7,21,47,264.94
		1,50,66,59,656.10	1,50,12,64,686.49
2 . Current Liabilities			
a. Sundry Creditors		25,90,04,317.74	10,69,99,448.52
b. Income Received in Advance		47,53,374.90	1,68,12,133.92
c. Provision for Expenses	4	2,41,17,378.00	69,01,480.00
d. Other current liabilities	5	8,04,48,363.12	7,32,88,651.90
		36,83,23,433.76	20,40,01,714.34
TOTAL		1,87,49,83,089.86	1,70,52,66,400.83
II. PROPERTY & ASSETS			
1. Property , Plant & Equipment			
a. Tangible assets	6	1,17,99,28,705.35	1,16,63,82,391.35
b. Intangible assets		13,74,566.00	-
c. Capital Work In Progress		7,71,31,848.00	3,52,05,689.00
		1,25,84,35,419.35	1,20,15,88,080.35
2. Current assets			
a. Deposits ,Advances & other current assets	7	7,68,94,866.96	13,40,78,297.10
b. Cash and cash equivalents	8	14,90,17,329.95	18,25,11,178.18
c. Closing stock	9	10,39,24,736.01	18,43,07,258.82
d. Sundry Debtors		28,67,10,737.59	27,81,586.38
		61,65,47,670.51	50,36,78,320.48
TOTAL		1,87,49,83,089.86	1,70,52,66,400.83
Significant accounting policies and Notes on Accounts	30	-	-

As per our report of even date attached

For RSM & ASSOCIATES
CHARTERED ACCOUNTANTS
FRNo. 2813S

PAUL JOSEPH K FCA
PARTNER
M.No.26616
UDIN : 24026816BKBFXG4409

RSM & ASSOCIATES FR No. 002813 S COCHIN BRANCH CHARTERED ACCOUNTANTS

For MALABAR CANCER CENTRE SOCIETY

Dr. B. SATHEESAN
DIRECTOR

Dr. RAJAN KHOBRAGADE IAS
THE ADDITIONAL CHIEF SECRETARY (HEALTH)
Health & Family Welfare Department
Government of Kerala

S.V KALA
Special Secretary to Govt.
Finance Department , Government of Kerala

Place: COCHIN
Date : 31.07.2024

MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR

CONSOLIDATED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2024

Sl. No:	PARTICULARS	Schedule No.	FY : 2023 -2024	FY : 2022 -2023
I.	INCOME			
	Revenue from Hospital operations	10	62,65,23,664.00	55,66,03,073.00
	Grant in Aid - Revenue Grant	11	7,85,27,811.00	13,68,87,000.00
	Rental Income	12	46,85,213.80	48,34,480.00
	Income from Training and Teaching	13	2,96,98,369.00	2,69,58,795.00
	Income from Clinical Trials	14	10,94,254.00	3,49,536.00
	Programme & Awareness Income	15	4,27,201.00	70,000.00
	Other Income	16	1,21,18,847.02	46,02,628.83
	Pharmacy Collection		28,77,05,582.00	26,10,27,613.00
	Penal Liquidation Charges		17,83,762.00	20,21,318.00
	Interest Income		52,05,055.20	54,93,371.10
	Canteen Sales		4,32,30,179.00	3,24,21,684.00
	Donation Received		1,59,380.00	16,609.00
	Interest on Income tax refund		-	12,69,705.95
	Project fund utilised			
	HBCR - In India		8,67,787.31	5,32,671.00
	NCDIR - E-MOR Project Fund		-	4,62,172.00
	BIRAC - Lamp Based Study		-	80,924.00
	BIRAC CTN Project		24,19,996.00	31,24,692.00
	BIRAC - Mission Covid Suraksha Project		-	3,84,935.00
	AIDOSCAN		1,59,016.00	-
	Aware & Awake Project		18,560.00	-
	CGBB Project		4,58,840.00	-
	HPV Associated Oral and Oropharyngeal		8,78,540.00	-
	HPV Oral - Project		53,786.00	-
	IIPMER Naga Study		2,70,073.00	-
	NCDIR-POCCS		8,05,261.00	-
	Oral Precancers Project		11,99,112.00	-
	Ultrasonic Transducer Probes for Medical IMA		6,81,257.00	-
	CSR Funds utilised			
	Indian Oil Corporation Ltd		60,25,000.00	-
	BITES Ltd		14,88,683.00	-
	PLAN Fund Utilised		7,16,31,015.46	7,72,87,174.33
II	Total Income		1,17,81,16,024.79	1,11,24,28,382.21
III	EXPENDITURE			
	Pharmacy consumption	17	23,00,84,576.32	13,43,48,552.35
	Employee Benefit Expenses	18	47,73,86,897.00	41,79,49,082.00
	Consumables/Treatment Expenses	19	7,78,78,494.32	7,84,47,377.67
	Energy Charges	20	3,64,64,404.26	3,12,09,505.00
	Programme & Awareness Expenses	21	4,54,105.00	11,24,256.00
	Rates & Taxes	22	13,13,586.00	5,50,946.00
	Vehicle Expenses	23	20,86,120.60	20,50,051.34
	Course Conducting Expense	24	22,02,585.50	19,21,054.50
	Printing & Stationary	25	12,57,966.50	17,59,701.00
	Canteen Purchase & Expenses	26	2,64,22,470.59	2,15,83,875.55
	Expenses for Clinical Trials	27	56,859.00	-
	Other Expense	28	89,30,694.22	93,60,036.89
	Advertisement Expenses		10,18,905.00	4,00,252.00
	Repairs & Maintenance		23,05,749.00	26,07,814.29
	Travelling Expenses		12,93,986.69	5,43,103.00
	Rent Paid		2,12,500.00	9,13,060.00
	Bank Charges		2,10,815.09	5,302.29
	Legal & Professional Charges		1,93,500.00	3,10,130.00
	Cleaning & Laundry Expenses		1,56,00,289.00	2,18,72,651.00

AMC Charges		38,53,186.00	73,41,457.00
Security Service Charges		1,21,59,009.00	1,12,29,931.00
Subsidy given to patients & students		1,13,55,738.00	16,55,43,131.00
Audit Fee		2,53,000.00	2,06,500.00
Depreciation	6	27,63,77,565.00	26,92,05,072.00
Project Expenses			
HBCR - In India			
Salary & Allowances		6,49,865.00	5,18,271.00
Printing & Stationery		-	7,080.00
Postage & Communication		-	2,820.00
Software		-	4,500.00
Travelling Expenses		89,667.55	-
Recurring Expenses		1,28,171.76	-
NCDIR -E-MOR Project Fund		-	
Salary & Allowances		-	4,15,138.00
Printing & Stationery		-	18,534.00
Furniture		-	25,000.00
Professional Charges		-	3,500.00
BIRAC - Lamp Based Study			
Travelling Expenses		-	4,508.00
Salary & Allowances		-	-
Asset acquisition		-	12,500.00
Purchase of re-agents		-	63,916.00
BIRAC CTN Project			
Salary & Allowances		22,99,984.00	19,20,426.00
Professional Charges		-	7,630.00
Printing & Stationery		-	13,610.00
Asset acquisition		-	11,37,946.00
Computer Consumables		-	6,200.00
Registration fee		-	3,500.00
Consumables & Contingency		18,131.00	15,380.00
Travelling Expenses		1,01,881.00	-
BIRAC - Mission Covid Suraksha Project			
Salary & Allowances		-	87,783.00
Printing & Stationery		-	15,252.00
Asset acquisition		-	2,69,400.00
Professional Charges		-	12,500.00
AIIOSCAN Project			
Salary & Allowances		1,56,239.00	-
Travelling, Consumables & Overhead Expenses		2,777.00	-
Aware & Awake Project			
Programme Expenses		18,580.00	-
CGBB Project			
Overhead & Contingency		60,000.00	-
Recurring Expenses		3,97,158.00	-
Travelling Expenses		1,682.00	-
HPV Associated Oral and Oropharyngeal Project			
Salary & Allowances		3,80,782.00	-
Contingencies		99,025.00	-
Consumables & Recurring Expenses		3,98,733.00	-
HPV Oral Project			
Overhead Expenses		53,706.00	-
JIPMER Naga Study		-	-
Salary & Allowances		2,68,504.00	-
Contingency		1,569.00	-
NCDIR-POCCS			
Salary & Allowances		8,05,261.00	-
Oral Precancers Project			
Salary & Allowances		6,18,923.00	-
Contingecies & Overhead Expenses		80,189.00	-
Recurring Expenses		5,00,000.00	-

	Ultrasonic Transducer Probes for Medical Use			
	Salary & Allowances		8,83,010.00	-
	Travelling Expenses		8,221.00	-
	Contingency & Overhead Expenses		1,32,926.00	-
	CSR Fund Expenses			
	Indian Oil Corporation Limited			
	Accessories & Consumables		58,35,323.00	-
	Programme Expenses		1,99,677.00	-
	BITES Ltd			
	Accessories & Consumables		14,46,683.00	
	Expenditure Under Plan Fund	29	7,16,31,815.46	7,23,87,174.33
IV	Total Expenditure		1,27,63,79,788.86	1,25,15,87,190.41
V	Excess of Income over Expenditure (II-IV)		(9,62,13,764.87)	(14,09,28,805.76)
	Significant accounting policies and Notes on Accounts	30		

As per our report of even date attached

For BSM & ASSOCIATES
CHARTERED ACCOUNTANTS
FRNo. 28139

PAUL JOSEPH K PCA
PARTNER
M.No.26816
UDIN : 24026816BKBPNG4409

Place: COCHIN
Date : 31.07.2024

For MALABAR CANCER CENTRE SOCIETY

DR. P. NAFEESAN
DIRECTOR

Dr. RAJAN KHOBRAGADE IAS
THE ADDITIONAL CHIEF SECRETARY (HEALTH)
Health & Family Welfare Department
Government of Kerala

S.V KALA
Special Secretary to Govt
Finance Department , Government of Kerala

MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR

CONSOLIDATED RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2024

Sl.No:	PARTICULARS		FY : 2023 -2024
I.	**RECEIPTS**		
	Opening Balance		
	Cash in Hand	8,42,333.00	
	Cash at Bank	18,16,68,845.18	18,25,11,178.18
	Corpus Funds		
	Grant Received & Interest accrued from Govt - PLAN FUND (Net of resumed & directly expended)		15,02,79,395.00
	Grant Received from Govt - RKI Fund (Net of resumed)		58,93,220.00
	Receipts from Funds & Schemes		
	BIRAC - Mission Covid Suraksha Project	4,52,371.00	
	BCCS Projects	38,21,724.00	
	DBT AIDO Scan Project	3,26,854.00	
	ICMR Project -HPV Associated Oral	-	
	ICMR Project - Oral Precancer	8,54,420.00	
	SPT Trial	1,94,400.00	
	SRS Project - Clinicopathologic	-	
	State Health Agency (SHA) Credits	-	
	Patients Welfare Fund	9,66,770.00	
	Patients' Account (PMNRF)	2,40,16,207.00	
	HBCR - NCDIR - ICMR Project	8,19,012.00	
	Ultrasonic Transducer Probes for Medical Ima-Grant	19,015.00	
	HPV Associated Oral and Oropharyngeal Carcinoma	8,10,552.00	
	JIPMER NAGA STUDY	3,208.00	
	Medical Librarian	16,085.00	
	NCDIR-POCSSProject	7,12,701.00	
	CGBB Project	13,364.00	
	BIRAC LAMP Based Study Grant	1,931.00	
	BIRAC CTN- GRANT	24,20,264.00	
	Training Fund - KSACS	-	
	Aware and Awake Project	3,078.00	
	Interest received from Project funds	6,889.00	
	Project fund for purchase of Reagents	1,08,000.00	
	CSR Fund		
	Dharma Charitable Trust	50,000.00	
	Electric Boggy	5,54,400.00	
	Indian Oil Corporation, Mumbai	80,00,000.00	
	Luker India	2,00,000.00	
	National Cancer Grid	1,00,00,000.00	
	RITES	3,64,003.00	
	Academic & Research Fund	-	5,47,35,248.00

	Income Received		
	Income from Training & Teaching	2,82,01,682.00	
	Revenue from Hospital Operations	25,63,86,728.00	
	Programme & Awareness Income	91,413.00	
	Income received for Clinical Trials	1,42,485.00	
	Interest income	48,43,033.00	
	Rental Income	26,25,187.60	
	Canteen Sales	4,13,05,739.00	
	Discount Received	-	33,35,99,267.60
	Other Income		
	Application Fee	6,33,667.46	
	Fine & ID fee	11,084.00	
	Income from Ambulance Service	510.00	
	Income from sale of Bus Coupon	2,08,570.00	
	Income from sale of Tender forms	21,98,376.00	
	Income from xerox	1,97,980.00	
	Penal Liquidation Charges	65,000.00	
	EMD Forfieted	10,08,000.00	
	Miscellaneous Income	44,928.05	
	RTI Fee collected	-	
	Sale of Sand , Scrap & Trees	7,68,632.00	
	Van Hire Charges Collected	11,010.00	51,47,757.51
	Grant Received from Govt		7,85,27,811.00
	Insurance Claim Received		-
	collection for uniform and Text books		2,11,700.00
	Income received in Advance		27,65,90,822.86
	PTA & SNA fee collected		1,08,000.00
	Collection from Students		37,55,839.50
	Caution Deposit received		28,69,719.00
	Advance received		6,16,672.02
	EMD Received		77,36,536.00
	Security Deposit received		23,90,416.20
	Retention Money		-
	Donation received		1,59,300.00
	Term Deposit Matured		15,29,95,124.70
	Receipt from Debtors (Net)		5,33,88,134.02
	Branch Transfers		
	Malabar Cancer Centre	93,47,419.61	
	MCC - Canteen	16,52,288.51	
	MCC - Projects	84,89,005.40	
	MCC - Nursing College	1,20,99,404.70	3,15,88,118.22
	TOTAL		**1,34,31,04,259.81**
II	**PAYMENTS**		
	Funds Utilised		
	BIRAC - Mission Covid Suraksha Project	-	
	Patients' Account (PMNRF)	39,06,436.00	

Patients Welfare Fund	25,341.00	
BIRAC LAMP Based Study Grant	61,635.00	
BIRAC - CTN Project	-	
HBCR Project in India	14,904.00	
HPV Associated Oral and Oropharyngeal Carcinoma	23,000.00	
JIPMER NAGA STUDY	5,795.00	
Oral Precancer&Cancer Therapeutic&Prognostic Marker	79,876.00	
Ultrasonic Transducer Probes for Medical Ima-Grant	5,321.00	
Medical Librarian	17,710.00	
Training Fund - KSACS	15,000.00	
Aware and Awake Project	18,580.00	
CSR Fund		
Indian Oil Corporation, Mumbai	15,00,000.00	
Academic & Research Fund	-	56,73,398.00
Payment to Creditors (Net)		44,74,20,715.84
Bank Loan recovered remitted		7,96,008.00
EMD Refunded		26,69,315.00
Security Deposit refunded		13,76,531.40
Caution Deposit refunded		21,59,778.00
Deposits		20,08,530.00
Term Deposits		8,55,25,709.00
Advance given		19,65,451.00
GST & GST TDS Paid		40,20,727.00
Tax Deducted at Source		34,11,959.00
Capital Expenditure		
Plant & Machinery	14,00,24,736.00	
Furniture & Electrical fittings	3,760.00	
Computer & Computer software	-	
Books & Journals	-	
Capital Work in Progress	-	14,00,28,496.00
Indirect Expenses		
Distress Relief Fund	-	
Exam Fees - BSC MRT	-	
Fine	23,785.00	
Employee Benefit Expenes	38,67,11,677.00	
Vehicle Running & Maintenance	23,01,576.00	
Energy Charges	3,42,49,036.00	
Telephone & internet Charges	24,259.00	
Rent	38,500.00	
Visiting Consultant Charges	5,29,570.00	
Statutory Payments	3,26,92,758.00	
Printing & Stationery	50,969.00	
Repairs & Maintenance	11,66,940.00	
Travelling & Conveyance	5,00,945.69	

	Bank Charges	2,10,761.99	
	Consumables & Other Treatment Expenses	9,95,427.00	
	Subsidy to Patients	-	
	Course Conducting Expenses	20,94,191.40	
	Legal & Professional Charges	2,000.00	
	Programme & Quality assuarence Expenses	14,894.00	
	Rates , Fees & Tax	13,22,336.00	
	Canteen Purchase	5,19,239.00	
	Canteen Expenses	-	
	Other Expenses		
	Cable Subscription Charges	-	
	Refreshment Expenses	6,158.00	
	Insurance Charges Paid	3,75,760.00	
	Meeting Expenses	-	
	General Expenses	24,64,648.42	
	Postage & Communication	-	
	Water Charges	1,289.00	46,62,96,720.50
	Branch Transfers		
	Malabar Cancer Centre	1,52,53,544.91	
	MCC - Canteen	20,43,714.00	
	MCC - Nursing College	1,38,005.10	
	MCC - Projects	1,32,98,127.11	3,07,33,391.12
	Closing Balance		
	Cash in Hand	4,00,429.00	
	Cash at Bank	14,86,16,900.95	14,90,17,329.95
	TOTAL		1,34,31,04,259.81
	Significant accounting policies and Notes on Accounts		-

As per our report of even date attached

For RSM & ASSOCIATES
CHARTERED ACCOUNTANTS
FRNo. 2813S

PAUL JOSEPH K FCA
PARTNER
M.No.26816
UDIN : 24026816BKBFXG4409

RSM & ASSOCIATES ★ FR No. 002813 S COCHIN BRANCH ★ CHARTERED ACCOUNTANTS

Place: COCHIN
Date : 31.07.2024

For MALABAR CANCER CENTRE SOCIETY

Dr. B. SATHEESAN
DIRECTOR

Dr. RAJAN KHOBRAGADE IAS
THE ADDITIONAL CHIEF SECRETARY (HEALTH)
Health & Family Welfare Department
Government of Kerala

S.V KALA
Special Secretary to Govt.
Finance Department . Government of Kerala

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 funds 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

FREE TREATMENT AND SUBSIDY GIVEN

Percentage of patients given free treatment using various financial assistance schemes& Subsidy given based on Economic status.

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Total % of patients given freeTreatment using various financial assistance schemes.	96.00 %	95.94 %	95.10%	87.56%	82.76%	92.59%	89.29%	88.52%
Treatment charge discount	3.85 Cr.	5.54 Cr.	5.77 Cr	4.20 Cr.	1.01 Cr.	0.52 Cr.	0.69 Cr.	0.613 Cr.
Pharmacy discount (from MRP)	27.43 Cr.	26.13 Cr.	26.18 Cr	15.62 Cr.	11.44 Cr.	20.50 Cr.	21.79 Cr.	20.782 Cr.
Total treatment subsidy given by MCC(PGIOSR)	31.28 Cr.	31.67 Cr.	31.95 Cr.	19.82 Cr	12.45 Cr	21.02 Cr	22.48 Cr.	21.395 Cr.

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.

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 (Post Graduate Institute of Oncology Sciences and Research). 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 (PGIOSR)'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 donated a mini bus for transportation of patients to and fro from MCC(PGIOSR), 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-PGIOSRhas 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 "EverGreen"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.

MUKULAM FUND

- It is important to consider that while government schemes can provide treatment for children in need, their families may require additional support in areas such as accommodation, emotional well-being, travel, and nutrition. This fund will not only reduce out-of-pocket expenses for families, but also improve patient care by enhancing infrastructure, manpower efficiency, and research.

HOW TO SUPPORT MCC

An Appeal: It is well-known that cancer treatment is costly, and many individuals cannot afford the expenses without financial support. MCC is dedicated to providing free care for economically and socially disadvantaged patients, as well as at reduced rates for others. Numerous patients have already sought financial aid from various organizations. Many generous institutions and agencies have previously assisted our underprivileged patients, and several have expressed their intention to continue supporting such individuals in the future.

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 ICICI bank, Thalassery Branch:

Account Name:	**MCC SOCIETY PATIENT WELFARE SCHEME**
Account Number:	04620 100 2346
IFS Code:	ICIC0000462
MICR Code:	670229102
Swift Code:	ICICINBBXXX
VPA ID:	mccspws@icici
Bank & Branch:	ICICI, Thalassery Branch.

PATIENTS FREE FOOD SCHEME

MCC recently launched a “Patients Free Food Scheme” for all patients, regardless of their financial status. This initiative, currently supported by Malabar CH Centre, provides meals to all inpatients through the MCC canteen. This generous program has enabled many underprivileged patients to complete their treatment and significantly reduce financial burden. MCC is seeking additional financial support through donations from individuals, corporate institutions, and state-owned corporations to extend the food provision to caregivers as well.

Generous to realize the donations are welcome dream:Donations to MCC may beforwadedtoDirector,Malabar Cancer Centre or to the following Account in ICICI

Account Name: **MCC SOCIETY PATIENT WELFARE SCHEME**

Account Number: 04620 100 2346

IFS Code: ICIC0000462

MICR Code: 670229102

Swift Code: ICICINBBXXX

VPA ID: mccspws@icici

Bank & Branch: ICICI, Thalassery Branch.

RIGHT TO INFORMATION ACT & RIGHT TO SERVICE 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.

In accordance with the provisions contained in the 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.

Right to Information Act - Data from 01.04.2023 to 31.03.2024

Number of applications received by Public Information Officer-MCC, during the period	26
Number of applications received by Appellate Authority- MCC, during the period	0
Number of hearings conducted by Chief State Information Commission, during the period	0

Right to Service Act - Data from 01.04.2023 to 31.03.2024

MONTH	NO OF CERTIFICATES ISSUED	TOTAL NO OF APPLICATIONS PROCESSED EXCEEDING THE TIME LIMIT	TOTAL NO OF FIRST APPEALS	TOTAL NO OF SECOND APPEALS
April 2023	1007	0	0	0
May 2023	914	0	0	0
June 2023	873	0	0	0
July 2023	947	0	0	0
August 2023	1036	0	0	0
September 2023	944	0	0	0
October 2023	1110	0	0	0
November 2023	1134	0	0	0
December 2023	1068	0	0	0
January 2024	1313	0	0	0
February 2024	1190	0	0	0
MARCH 2024	1107	0	0	0
Total	**12643**	**0**	**0**	**0**

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

Bank Account details for remitting Application Fee

Account Name: MALABAR CANCER CENTRE SOCIETY
Account Number: MCCTLYRTI
IFSC Code: ICIC0000106
Bank Name: ICICI Bank Ltd.
Branch: Thalassery
Account Type: Current

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