





Regional Cancer Centre, Thiruvananthapuram, India





Annual Report 2010-2011



ANNUAL REPORT 2010-2011



THIRUVANANTHAPURAM – 695011, KERALA, INDIA.

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GOVERNING BODY

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	Secretary to Government	
	Health & Social Welfare Department, Govt. of Kerala	Alt.Vice-Chairman
4.	Shri. B.S. Mavoji, IAS (From 12.10.2010 to 07.01.2011)	
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5.	Dr. Davendra Kumar Dhodawat, IAS (From 08.01.2011)	
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	Ministry of Health and Family Welfare, Govt. of India	Member
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14.	Dr. V. Geetha	
	Director of Medical Education, Thiruvananthapuram	Member
15.	Dr. Ramdas Pisharody	
	Principal, Medical College, Thiruvananthapuram	Member
16.	Dr. Paul Sebastian	
	Director, Regional Cancer Centre, Thiruvananthapuram	Convener

EXECUTIVE COMMITTEE

١.	Dr. Usha Titus, IAS (Till 11.10.2010)	
	Secretary to Government	
	Health & Social Welfare Department, Govt. of Kerala	Chairman
2.	Shri. B.S. Mavoji, IAS (From 12.10.2010 to 07.01.2011)	
	Secretary to Government	
	Health & Social Welfare Department, Govt. of Kerala	Chairman
3.	Dr. Davendra Kumar Dhodawat, IAS (From 08.01.2011)	
	Secretary to Government	
	Health & Social Welfare Department, Govt. of Kerala	Chairman
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	Principal Secretary to Government	
	Finance Department, Govt. of Kerala	Member
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	Principal Secretary to Government	
	Finance Department, Govt. of Kerala	Member
6.	Dr. Teeka Ram Meena, IAS	
	Secretary to Government,	
	Planning Department, Govt. of Kerala	Member
7.	Dr. V. Geetha	
	Director of Medical Education, Thiruvananthapuram	Member
8.	Dr. Ramdas Pisharody	
	Principal, Medical College, Thiruvananthapuram	Member
9.	Dr. Paul Sebastian	
	Director, Regional Cancer Centre, Thiruvananthapuram	Convener



Dr. Paul Sebastian
Director

DIRECTOR'S REVIEW

The Regional Cancer Centre, Thiruvananthapuram (RCC) is an autonomous scientific institution sponsored jointly by the Government of Kerala and the Government of India receiving

financial assistance from both. The Centre was established as per Government of India letter No. T. 200125/79 of October 1980 as one among six such centres in India. The State Government transferred a few departments of Medical College, Thiruvananthapuram, which were primarily concerned with cancer care to RCC. The Centre was registered under Travancore Cochin Literary Scientific and Charitable Societies Registration Act 1955 vide No. 567/81 dated 19.08.1981. It has been designated as a Science and Technology Centre in health sector by State Government as per G. O. (Rt) No. 1521/85/11 H & FWD dated 18.11.1985.

RCC, now in its 30th year of service, caters to the population of the state of Kerala and adjoining parts of Tamil Nadu. As a leading specialist cancer centre, we are internationally renowned for our groundbreaking work in cancer control activities. We also provide state-of-the-art services from cancer prevention to diagnosis, treatment, rehabilitation and palliation. Every year, the Centre attends to more than one third of the registered cancer cases in the State. In the report period, we registered 13,230 new cases and provided follow-up services to 1,79,145 patients.

Most modern and high precision diagnostic and therapeutic equipments were added as part of strengthening our infrastructure facilities, during this period. Diagnostic facilities were strengthened by the addition of a full field digital mammogram with prone table biopsy system and a CR system for digital X-rays. Steps are being taken for the installation of a Picture Archiving and Communication System (PACS), which could enable electronic storage and retrieval of images on multiple terminals even at remote locations. In the treatment front, two linear accelerators, Clinac iX and Clinac 600C costing 17 crores were added for radiation treatment. Clinac iX has facilities for delivering Intensity Modulated Radiotherapy, Image Guided Radiotherapy, Stereotactic Radiosurgery and Volumetric Modulated Arc Therapy (Rapid Arc). With the addition of this high energy linear accelerator, RCC joined the elite club of a few hospitals in the country to provide such state-of-the-art treatment facilities. An Eclipse radiotherapy treatment planning system was also installed during this period.

In the academic front, the Centre made a giant leap, when sanction was accorded by Medical Council of India for starting super speciality (MCh) programme in Surgical Oncology with an annual intake of four candidates. The Centre started Quality Excellence Programmes in Pathology and Laboratory Medicine, Advanced Training in Diagnostic Imaging and Certificate Course in Essentials of Palliative Care during the report period. DNB training programmes in six disciplines under National

Board of Examinations, fellowship programmes, post-doctoral programmes and trainer trainee programmes in cancer control activities continued.

Professionals and researchers grabbed awards at many national and international platforms during this period. Dr. K. Ramadas, Additional Professor & Medical Superintendent and Dr. Aleyamma Mathew, Additional Professor were awarded the fellowship of National Academy of Medical Sciences. Dr. K. Ramadas also received the prestigious Nazli Gad-el-Mawla prize for his outstanding contributions in cancer control activities. The award is instituted by International Network for Cancer Treatment & Research (INCTR) for oncologists from countries with limited resources.

Towards a meaningful industry-research centre tie-up, RCC took a few initiatives during the period. A MoU was signed with Ubio Biotechnology Systems, Kalamasserry, Kerala to materialize a faster and more cost-effective method for detecting chromosomal abnormalities that lead to various types of leukaemias. Another notable achievement was the development of a fully effective spacer balloon device made up of double centrifuged rubber latex in collaboration with HLL Life Care Limited, to alleviate pain and discomfort among cervical cancer patients receiving radiation treatment. The device is awaiting patent.

Our basic, epidemiological and clinical research output found place in international and national journals, events and other media. During the period, scholarly output in the form of 55 journal articles and 14 conference presentations were brought out. 47 articles appeared in peer-reviewed indexed journals.

In the community based cancer control activities, the Centre has organized 173 cancer detection camps and 128 cancer awareness programmes throughout the state. As per the cancer prevalence statistics of Thiruvananthapuram district revealed by our epidemiological studies, the District Panchayat formulated novel strategies of cancer control like the 'Cancer Free Women Society' scheme. RCC played a lead role in this venture by providing treatment to women detected with cancer, while the cost of treatment was met by district administration. In addition, a team of professionals took part in a number of screening programmes towards attaining the objectives of this programme. It is through such efforts, the Centre became designated as a nodal centre in many state and central sponsored cancer control programmes.

Out of a handful of events organized by the Centre during the period, the silver jubilee celebrations of the Community Oncology Division deserve special mention. The division, first of its kind in the country, has been functioning as the backbone of RCC in community based cancer control activities throughout the State. Life time achievement and excellence awards were presented to the doyens in the field. An international workshop was also organized in collaboration with IARC, France in connection with this programme. A team of international faculty including Dr. R. Sankaranarayanan, a renowned expert in cancer control and Dr. Quek Swee Chong, K. K. Womens and Childrens Hospital, Singapore led the workshop.

State level inauguration of 'World No Tobacco Day' celebrations was organized in collaboration with Sree Chitra Tirunal Institute of Medical Sciences and Technology. With the theme of 'Sharing the Care', World Palliative Care Day was observed on 9th October in which a group of students from Saitama University, Japan who extended financial support to a selected group of bereaved children of cancer patients participated.

Pollution control activities got recognized through Kerala State Pollution Control award for 2010 under Government hospitals

with more than 200 beds category. After getting third place for the same title in the year 2005, the Centre has been trying to improve the hospital waste management system along with support of patient community and staff. An effluent treatment plant costing 22.5 lakhs was installed during the period with the financial support of state government.

Our efforts to mobilize philanthropic support continued with help from NGOs like Asraya, Care Plus, Prathyasa and others. Also a spectrum of noted figures from social networking groups, singers, magicians, film stars, athletes, and elite people in literary and cultural circles extended their best possible support in various ways and means to the patient community at the Centre.

Hurdles towards finding space were resolved, when 64 cents of land adjoining RCC campus has been leased to RCC by the state government for future expansion programmes. Construction of the proposed 10 storeyed building, which was started in the previous report period, is progressing.

In order to retain experienced professional expertise, Government of Kerala has raised the retirement age of professors and other medical doctors to 65 and 62 respectively. Government have also agreed to introduce a pension scheme for the staff, as a reward for the selfless service rendered to the patient community. We acknowledge these steps with great gratitude.

It has been an excellent year of progress for the Centre and we are in a good position to take advantage of new opportunities. Our staff are the key to our success and I would like to thank them all for their extraordinary commitment to our patients and the future of the institution.

I am very pleased to present the annual report, which contains the activities of various Divisions, Clinics and Peripheral Centres of RCC for the period 2010-2011.

Dr. Paul Sebastian

Director

DIVISIONS

RADIATION ONCOLOGY

Jayaprakash P.G.

Professor & Head

Professor: Parameswaran S.

Additional Professors: Jayaprakash Madhavan (on leave), Ramadas K.,

Ratheesan K., Francis V. James, Beela Sarah Mathew

Associate Professors: Thomas Koilparambil, Aswin Kumar,

Sivanandan C.D, Rejnish Kumar R., Susan Mathews, Asha Arjunan,

Sajeed A., Kainickal C.T.

Lecturers: Arun Sankar, Lakshmi Balakrishnan, Roshni S., Naveen B.





The Division is responsible for primary care of majority of solid tumours. This includes head and neck, breast, central nervous system, lung, gastrointestinal, gynaecologic and urologic tumours. The division offers top quality external radiotherapy including image guided Intensity Modulated Radiotherapy which was initiated this year. Brachytherapy service is offered using high dose rate remote afterloading machine. Services offered included external radiotherapy for 7202 patients and brachytherapy for 1329 patients.

Academic Activities

This division is actively involved in clinical research, both pharma sponsored and investigator initiated. Four DNB students are enrolled per year for training. Trainees are also posted from various disciplines of Medical College Hospital, Thiruvananthapuram like Radiotherapy, Gynaecology and Dental.

Research Scholar	Title of Study/University	Guide
Dr. Aswin Kumar	Quality of life of cervical cancer patients undergoing	Prof. Ansi Auvinen
	radical radiotherapy/University of Tampere, Finland.	

SURGICAL ONCOLOGY

Paul Sebastian

Professor and Head & Director

Additional Professors: Iqbal Ahamed M., Jem Prabhakar,

Shaji Thomas, Bipin T. Varghese, Paul Augustine

Associate Professors: Chandramohan K.,

Elizabeth Mathew lype, Balagopal P. G., Rema P., Kurian Cherian, Madhu Muralee, Arun Peter Mathew, Suchetha S.

Resident Medical Officer: Divya Raj

The Division is responsible for all aspects of surgical care of patients attending RCC. The total number of patients who underwent major surgeries in the period under report was 3334.





Surgical And Endoscopic Procedures

5022 surgical procedures and 648 endoscopic procedures were performed during the period under report.

Table 1: Major Procedures - Site wise			
Sites	No. of patients		
Oral	581		
Larygopharyngeal	104		
Sinonasal	12		
Thyroid	241		
Breast	1178		
Sarcoma	100		
Urology	54		
Gynaecolgic	319		
Upper GI	125		
Colorectal	170		
Paediatrics	81		
Miscellaneous	369		
Total	3334		

Table 2: Minor Procedures			
Procedure	Number		
Minor cases	1138		
Nasal endoscopy	304		
DL scopy	177		
LEEP	29		
Colposcopy	33		
Cystoscopy	7		
Total	1688		

Table 3: Endoscopic Procedures				
Procedure Number				
Nasopharygoscopy 32				
Bronchoscopy 32				
Upper GI endoscopy 169				
Colonoscopy 415				
Total 648				

Academic Activities

A new milestone was achieved during the report period, when Medical Council of India gave permission to start the 3 year MCh programme in Surgical Oncology, from the academic year 2011, with an annual intake of 4 candidates.

- The 3 year DNB programme in Surgical Oncology and the 2 year Fellowship training in Head & Neck Oncosurgery were continued.
- Three of our DNB Surgical Oncology trainees have cleared examination.
- Increase in the number of postgraduate trainees under different streams like MS General Surgery, MS Otolaryngology, MD Obstetrics & Gynaecology and MDS Maxillofacial Surgery from Medical College Hospital, Thiruvananthapuram and Kottayam and various other colleges from South India.

- Collaborated with expertise as part of the International Workshop on Colposcopy and Cervical pre-cancers jointly organized RCC and IARC, France from 6th-7th November 2010.
- 'One day CME on breast cancer for nurses' in collaboration with the Nursing Division of RCC in October 2010 for updating practicing nurses and nursing students from nearby hospitals on various aspects of care of breast cancer patients.
- A breast cancer awareness programme conducted at UST Global, Technopark on 31st October 2010 in collaboration with the faculty from the division of Community Oncology.

Table 4: Doctoral Programmes pursued by staff				
Research Scholar	esearch Scholar Title of Study/University			
Dr. Bipin T. Varghese	Development of a strategy for comprehensive post laryngectomy Dr.			
	rehabilitation - a Kerala perspective / University of Kerala			
Dr. Elizabeth Mathew lype	Selected molecular markers as indicators of clinical profile, tumor			
characteristics, and treatment outcome in squamous cell carcinoma				
	of the larynx/ University of Kerala	Dr. B. Rajan		

MEDICAL ONCOLOGY

Geetha N.

Additional Professor & Head

Additional Professor: Sreejith G. Nair

Associate Professor: Prakash N.P.

Assistant Professor: Santhosh Thyagu (on leave)

Lecturers: Shruti Prem, Anoop V.M. Resident Medical Officer: Lali V.S.

Medical Oncology division is responsible for the diagnosis and management of haematological and lymphoreticular malignancies, sarcomas and other solid tumours where intensive chemotherapy is indicated.





1844 new cases were treated during the reporting period. Outpatient attendance was 27,988, of which 75% underwent chemotherapy. Dose intense protocols were used for the treatment of all leukaemias and lymphomas. 2,332 patients were administered high profile chemotherapy. 200 new patients with chronic myeloid leukaemia were enrolled in the Novartis Patient Assistance (NOVA) programme and were given imatinib free of cost.

Autologous bone marrow transplantation following high dose chemotherapy was performed in 14 patients and allogenic bone marrow transplantation was done for 4 patients.

Table 5: Patient Statistics	
Cases	No.
New	1,844
Review	27,988
Total	29,832

Academic Activities

Post graduate students in general medicine, transfusion medicine and radiation oncology were given training in medical oncology. Staff nurses were given training in patient care. Regular case discussions on transplantation, haemato-oncology and sarcomas were also carried out.

PAEDIATRIC ONCOLOGY

Kusumakumary P.

Professor & Head

Additional Professor: Priya Kumari T. Assistant Professor: Anu Ninan

The Division handles childhood malignancies up to the age of 14 years. 631 new cases and 25,338 review cases were seen during the report period.





Among the new cases reported, acute lymphoblastic leukaemia and brain tumour were the most common malignancies. A total of 1,437 patients got admitted to the paediatric ward during the period.

The regular running of the clinic is supported by the Indian Paediatric Oncology Initiative (IPOI) of Jiv Daya Foundation. The IPOI team comprises of two doctors, three staff nurses, one data entry operator and one social worker.

Academic Activities

The Division provided regular training to the postgraduate radiotherapy students of the Centre and other Medical Colleges in Kerala as well as to the Paediatrics Post Graduates from SAT Hospital, Kerala Institute of Medical Sciences and CSI Medical College, Karakonam.

Cultural Activities and Visits

Various cultural activities were organized for children and their parents during festivals like Onam, Christmas, New Year, Vishu, Deepavali and Children's Day. Eminent figures like Padmasree Jayaram, Mrs. Sunanda Pushkar Tharoor, Smt. Sugathakumari, Magician Gopinath Muthukad, Mrs. Sona Nair, Mr. Jagadeesh and Mr. G. Venugopal visited the Division during the period. Regular classes on clay modelling, drawing, tailoring and flower making and cultural programmes were organized for the children by the Mr. G. Venugopal orkut community 'Sasneham'.

Table 6: Patient Statistics			
Cases	No	%	
Acute lymphoblastic leukaemia	187	29.9	
Acute myeloid leukaemia	42	6.7	
Chronic myeloid leukaemia	2	0.3	
Brain tumour	90	14.4	
Ewing's sarcoma/Primitive			
neuro ectodermal tumour	23	3.7	
Osteosarcoma	14	2.2	
Hepatoblastoma	9	1.5	
Rhabdomyosarcoma	19	3.0	
Germ cell tumour	10	1.6	
Hodgkin's lymphoma	28	4.5	
Non-Hodgkin lymphoma	23	3.7	
Neuroblastoma	32	5.1	
Wilms' tumour	16	2.5	
Retinoblastoma	10	1.6	
Langerhans cell histiocytosis	17	2.7	
Thyroid	10	1.6	
Miscellaneous	53	8.0	
Not yet diagnosed	19	3.0	
Non malignant	27	4.3	
Total number of new cases	631	100	
Total number of review cases 25338			

PATHOLOGY

Jayasree K.

Additional Professor & Head

Additional Professors: Rekha A. Nair, Anitha Mathews,

Thara Somanathan, Nileena Nayak

Associate Professors: Preethi T.R., Raveendran Pillai K.

Assistant Professor: Sujathan K. Lecturers: Anila K.R., Renu S.

Resident Medical Officer: Sindhu Nair P.

In addition to the routine diagnostic services, the division provided ancillary / additional diagnostic services of immunohistochemistry, frozen section reporting, flow cytometry, FISH and molecular tests. Division also provided expert opinions on referred tissue samples from various hospitals all over the state.





In addition to the ongoing teaching and training programmes, a new one year certificate course, 'Quality Excellence Programme in Pathology for Lab technicians' was started during the report period. The course is intended to provide hands on experience to lab technicians in all areas of pathology and cytology.

The Division is also actively involved in the community oriented cancer control programmes, especially in the early detection of cervical, oral and breast cancers. Division started automated 'monolayer preparation' for cervical cytology smears, mainly used for screening purposes.

Diagnostic Services

Total Work Load at a Glance

During the report period, a total of 42,166 pathology reports were generated, which comprised surgical pathology, cytopathology and haematopathology cases (Tables7). These included 13,660 special tests also. (Table 8)

Table 7: Work load at a glance (Number of reports)				
Surgical Pathology	Cytopathology	Haematopathology	Total	
13,828	21,980	6,358	42,166	

Table 8: Special/Advanced tests						
Immunohistochemical staining	Frozen section	FISH - Her2	Flow cytometry			
(Surgical pathology +						
Cytopathology + Haematopathology)						
12,488	653	14	505			

A. Surgical Pathology

Surgical pathology specimens of 13,828 cases were processed during the period, of which, 8,695 cases were surgical specimens of the Centre and 5,133 were cases referred from other hospitals for review. Among this, malignancy was reported in 8,343 cases. (Table 9)

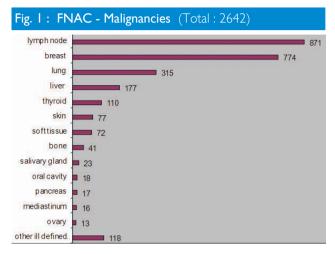
Site	No. of cases
Breast	1813
Oral cavity	1460
Gastro-intestinal tract and	
hepatobiliary system	1061
Bone marrow	556
Lymph node	482
Thyroid	488
Male genito-urinary system	331
Cervix	310
Female genital system	
(Other than Cervix & Ovary)	245
Soft tissue	222
Ovary	219
Central nervous system	242
Skin	151
Larynx	135
Lung	175
Bone	120
Respiratory system (other sites)	71
Salivary gland	64
Mediastinum	50
Eye	45
Retroperitoneum	27
Endocrine organs (other than thyro	id) 3
Adrenals	- 11
Other ill defined sites	62
Total	8343

B. Cytopathology

The main samples examined for cytological abnormalities include, fine needle aspirations, cervical smears, body fluids and sputum.

a. Fine Needle Aspiration Cytology (FNAC)

6,054 fine needle aspirations were performed and the major sites of aspiration included lymph node (1,398), breast (1,501) and thyroid (1,225). Out of this, 2,642 were malignant lesions. (Fig. 1)



b. Cervical Smear

Out of the 12,527 cervical smears examined, 10,503 cases were from different projects. Out of this, 646 cases were tested positive for intraepithelial lesions / malignancy.

c. Fluid Cytology

Out of the 2,096 effusions and other body fluid samples processed, malignancy was reported in 263 samples. Samples included 567 pleural fluids, 1,004 samples of cerebrospinal fluid, 469 ascitic fluids, 41 urine and 15 pericardial fluids.

d. Sputum Cytology

Sputum samples from 1,303 patients (3 to 5 samples per patient) were studied and malignancies were reported in 71 cases. This include 34 cases of adenocarcinoma. 10 cases each of squamous cell carcinoma and small cell carcinomas, 17 cases of non-small cell carcinomas (unclassified). 152 cases were reported to have atypical cells suspicious of malignancy.

C. Haematopathology

6.358 samples of peripheral blood and bone marrow specimens were studied. This included 3,180 bone marrow samples, 2.990 blood smears and 188 slide reviews. Malignancies were reported in 901 cases, which include 272 cases of acute myeloid leukemia (AML), 267 cases of acute lymphoblastic leukemia (206 cases of precursor B-lymphoblastic leukaemia and 61 cases of precursor T-lymphoblastic leukaemia), 168 cases of chronic myeloid leukaemia (CML), 46 cases of chronic lymphoproliferative disorders and 114 plasma cell myeloma (MM) cases. A total of 505 cases were subjected to flow cytometry using FACSCalibur flow cytometer (4 Colour). Immunophenotyping was done for 488 leukaemia cases and stem cell assay was done for 17 cases.

Academic Activities

Five lectures were given by national and international faculties. Regular CPCs were also conducted.

Regular Courses Conducted

DNB (Pathology)	3 years
Postdoctoral Certificate in Oncopathology	l year
Cytotechnologists training	l year
Cytotechnicians training	6 months
Advanced training in Histotechnology for	
Laboratory Technicians	9 months
Quality Excellence Programme for	
Laboratory Technicians	l year
PhD in Cancer Biology	

Regular postings were given to DNB students of Radiotherapy and Surgical Oncology from RCC and MD Radiotherapy and MD Pathology students from Medical Colleges.

Hands on training on histotechnology and immunohistochemistry were given to laboratory technicians and pathologists from various institutions. In addition, one month practical orientation was also given to B.Sc. (MLT) students from Mahatma Gandhi University.

Tab	Table 10: Ongoing Doctoral Programmes			
SI.	Research Scholar	Title of Study/University	Guide	
No.				
1.	Ms. Keerthi	MicroRNA profiling in cancers /Amritha Viswavidya Peetham	Dr.Rekha A. Nair	
2.	Ms. Sharone C. Pereira	Identification of biomarkers for the differential diagnosis of		
		thyroid malignancies in FNACs /M.S.University	Dr. Sujathan K	
3.	Ms. Veena V.S.	Identification of biomarkers for lung cancer / Bharathiar University	Dr. Sujathan K	
4.	Mr. Thomas A	Expression of WNT, JAGGED, NOTCH and SONIC		
		HEDGEHOG in different grades of glioma: correlation with		
		standard risk factors and survival /Bharathiar University	Dr. Sujathan K	

IMAGEOLOGY

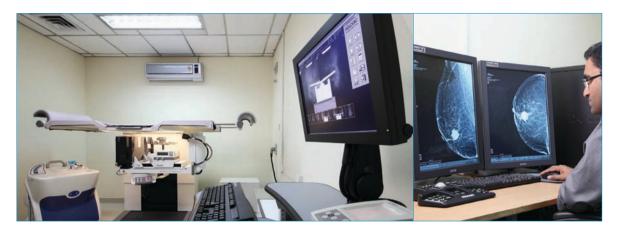
Ramachandran K.

Professor & Head

Associate Professor: Venugopal M. Assistant Professors: Jiji V., Sumod Mathew Koshy

The division provided all necessary diagnostic backing for the various divisions of the Centre especially for Nuclear Medicine and Pathology divisions.





MRI has gained momentum and non-vascular interventions were being increasingly done. There was a significant increase in the number of patients imaged – X-ray, ultrasound, CT, MRI, mammography and special investigations.

Major Achievements

The division achieved a few very important goals during this period. A full field digital mammography unit (Hologic) with prone table biopsy system worth Rs. 2.27 crores is ready for use. An Agfa CR system worth Rs. 23 lakhs was introduced to convert the X-rays to digital format. The steps for acquiring a PACS system were finalized. The division started a new course 'Advanced Training in Diagnostic Imaging' during the report period.

Academic Activities

Offered fulltime training for students of DNB Radiodiagnosis and other disciplines of the centre and also for MD post graduates from various Medical Colleges. The faculty participated in monthly Trivandrum Radiology Club, Neuro Oncology Club, Pulmonary Radiology in SUT, RCC Breast Clinic, Seminars in MRI in SCTIMST, etc. Preliminary studies were being conducted in collaboration with C-DAC, Thiruvananthapuram for developing a Computer Aided Diagnostic System (CAD) for the early diagnosis of breast cancer.

Table 11: Diagnostic & Interventional Studies		
Investigations	No.	
Plain X-Rays	24430	
MRI scans	1631	
CT scans	14561	
CT guided aspiration	151	
Ultrasound scan	9748	
USS for guided intervention	365	
Doppler studies	137	
Mammography-Single	3006	
Mammography-Double	2647	
Barium studies	207	

NUCLEAR MEDICINE

Pradeep V.M.

Professor & Head

Additional Professor: Sreekumar A.

Nuclear Medicine refers to the use of open radioactive sources in the diagnosis and treatment of diseases.





The Division caters to the needs of patients of RCC as well as the rest of the state of Kerala and adjoining parts of Tamil Nadu. Bulk of the patient load continued to be in the thyroid section followed by patients referred for isotope bone scans. The Division has facilities for imaging (dual head SPECT Gamma camera) as well as for therapy (thyrotoxicosis, high dose therapy for thyroid cancer and bone pain palliation). 970 new cases and 10,837 review cases were seen during the report period.

Table 12: Diagnostic & Clinical services		
Service	No.	
SPECT Gamma camera imaging	6,947	
Radio immunoassays	26,647	
Ultrasound scan (Thyroid)	291	
Thyroid cancer therapy	491	
Thyrotoxicosis therapy	391	

ANAESTHESIOLOGY

Rachel Cherian Koshy

Additional Professor & Head

Additional Professor: Mary Thomas

Associate Professors: Venugopal A., Mallika Balakrishnan

Assistant Professors: Sudha P., Viji Pillai

Lecturers: Bhagyalekshmi R., Rajasree O., Deepthi J. Prabhu

Pre-anaesthetic evaluation was done six days a week. Round the clock emergency coverage, post operative intensive care and ventilatory management, short and long term central venous access for adults and children were provided.





In addition anaesthetic service was provided for children requiring radiation therapy, CT guided procedures. The division has initiated in-house training in basic life support for all staff and advanced cardiac life support for nurses and doctors on every second and fourth Saturdays.

I I new monitors (8 with BIS module) and a cardiac output monitor (non invasive) has been purchased.

Major Achievement

The division has been granted Rs 50,00,000/- by the Dept of Science and Technology as Fund for Improvement of Science and Technology Infrastructure in Universities and higher educational institutions (FIST Grant). A budget proposal to set up a simulation lab and advanced airway management facilities has been submitted to utilize the fund.

Academic Activities

In addition to the ongoing DNB programme, regular teaching programmes, guest lectures, seminars, case discussion, and iournal clubs were also held in the division.

Table 13: Clinical Services	
Pre-anaesthetic assessment clinic	No.
New cases	3936
Review case	5422
Total	9358
Anaesthesia administered	
Major & Minor cases	3771



RADIATION PHYSICS

Raghu Ram K. Nair

Additional Professor & Head

Associate Professors: Thayal Singh Elias, Raghu Kumar P., Saju B.

Assistant Professors: Zhenia Gopalakrishnan, Divya K.T. Lecturer in Electronics Engineering: Giri Purushothaman Lecturers: Debjani Phani, Shaiju V.S.

New machines acquired

Two linear accelerators, Clinac iX and Clinac 600C costing 17 crores were added for radiation treatment. Clinac iX has facilities for delivering Intensity Modulated Radiotherapy, Image Guided Radiotherapy, Stereotactic Radiosurgery and Volumetric Modulated Arc Therapy (Rapid Arc). An Eclipse radiotherapy treatment planning system was also installed during this period.





Routine Activities

- · Calibration and quality assurance of radiotherapy equipments.
- Treatment planning and dose computation.
- Radiation safety in Radiotherapy, Imageology and Nuclear Medicine divisions.
- · Participation in intercomparison and external verification of dose output of treatment machines using TLD in BARC/ IAEA programmes.
- Daily maintenance, checking and repair of all teletherapy and brachytherapy equipments.
- Intraoperative, intraluminal and mould brachytherapy using Microselectron HDR.

Academic Activities

Classes were conducted in Medical Physics and practical training was imparted to the following categories of students:

- I. DRT, DMLT & B.Sc. (MLT)
- 2. B.Sc. & M.Sc. Nursing, MHA (Kerala University)
- 3. MBBS, DMRT, DMRD, MDS (Oral Radiology)
- 4. MD & DNB (Radiodiagnosis)

Training Programme

The three months refresher program in Imageology/Nuclear Medicine and Radiotherapy for radiographers started in 1994 has covered 37 trainees in Radiotherapy till March 2011.

Table 14: Patient Services		
Treatment given	Total No. of	
	Patients	
External Beam Radiotherapy	7202	
Brachytherapy (Microselectron HDR)		
Gynaec	1301	
Oesophagus	28	
Simulator	5004	
Mould Room		
Orfit Shell	1590	
Bite Block	635	
Wax Bolus	438	
Electron Cut-outs, Head rest,		
Leg rest, face rest, mould, etc.	902	

CLINICAL LABORATORY SERVICES

Thomas Abraham

Scientific Officer Gr. I & Head

The activities of the division include specimen collection, processing, analysis and reporting of various tests for both out-patients and inpatients. About I million tests are being carried out annually as part of haematology, clinical chemistry and urinalysis investigations. The division provided services to 19,556 patients during the report period. On an average a patient made use of the services of the laboratory about 10 times.







Bar coding and Bi-directional Interfacing

In order to fully automate the investigations, the laboratory introduced bar coding and bi-directional interfacing for the first time in a government hospital in Kerala. By implementing bar coding, all samples were collected in pre-labelled tubes/ vials. This procedure greatly enhanced the efficiency of the pre-analytical procedures as well as reduced manual errors in reporting. This leads to optimum use of fully automated high-end analysers which have bar code reader for samples. When the sample tubes are placed in these instruments, information is accessed from the Hospital information System (HIS) regarding the tests to be carried out. The tests will then be automatically carried out and the results are sent to the interfacing computer for uploading on to HIS after confirming the quality of the report by an expert. On the average 3000 test results are daily uploaded automatically on to HIS avoiding typographical errors. Introduction of bar-coding improved the average turnaround time to less than I hour for haematology and 1.2 hours for clinical chemistry and coagulation profile. The Division comprises Clinical Chemistry and Haematology laboratories and provides Phlebotomy services.

Phlebotomy

The phlebotomy services mainly meant for outpatients of the Centre. The services include blood collection and provision of containers for urine. The lab carried out 1.5 lakh collection related procedures during the period. It also provided instruction for specimen collection like 24-hour urine collection for creatinine clearance.

Clinical Chemistry

Clinical chemistry lab processed, analysed and reported 5,14,938 tests in the reporting period. Introduction of therapeutic drug monitoring of cyclosporin drug, additional investigations like Free Kappa and Free Lambda, HbA1c and direct LDL and bidirectional interfacing for automated high through-put clinical chemistry analyser were the notable achievements. Urine analysis section analysed and reported 12,612 samples.

Haematology

One Beckman Coulter LH 750 fully automated 5-part Haematology Analyser was installed during the report period. Haematology section carried out 4,74,800 tests. This included automated haematology. Bidirectional interfacing was carried out for LH 750 Haematology Analyser and Advia 120 Haematology Analyser.

Quality Assurance

The department has been a participant in the External Quality Assurance Services Bio-Rad Laboratories, USA for Haematology and Clinical Chemistry proficiency testing programme. Daily quality control analysis was also performed.

Biochemistry	No.
Sugar	67362
Jrea	43465
Creatinine	50798
Uric Acid	29432
Bilirubin	34177
Other Bilirubin fractions	2031
(Direct bilirubin, Conjugated & Unconjugated	
pilirubin, Delta bilirubin & Neonatal bilirubin)	
SGOT (AST)	33677
SGPT (ALT)	34320
Alkaline Phosphatase	28696
Gamma Glutamyl transferse	269
Total Protein	21061
Albumin	20584
Globulin	17610
C- Reactive protein	259
Cholesterol	733
Lipid profile	688
(Cholesterol, HDL, LDL & Triglycerides)	
Sodium	50330
Potassium	50330
Chloride	528
Total CO ₂	316
Calcium	33052
Phosphorous	2970
Magnesium	6066
ron	84
Total Iron binding capacity	65
Creatinine Clearance Test	1249
LDH	5783
Amylase	664
Lipase	114

CSF (sugar & protein)	201	
HbAI	12	
Cyclosporin	26	
Serum Immunoglobulin assay	1064	
(IgG, IgA & IgM)		
Free Kappa	403	
Free Lambda	401	
Serum Electrophoresis	789	
Haematology	No.	
Haematology CBC	145307	
(Haemoglobin, WBC Count & Platelets)		
PCV	7567	
RBC	680	
Differential Count	16068	
Reticulocyte count	82	
ESR	3944	
Coagulation parameters	No.	
Bleeding Time/Clotting Time	3816	
Prothrombin Time	2446	
APTT	860	
Urinalysis	No.	
Urine Routine	12567	
(Sugar, Protein, pH, Specific gravity, Ketone,		
Urobilinogen, Deposits etc.)		
Bence-Jones Protein	45	

Academic Activities & Training Programmes

Organised a quality control training programme titled 'Top 10 in 2010' on 25th June 2010 and a CME on 'Quality Improvement Programme in Laboratory Medicine' on 12th August 2010 at the Centre. The division provided training to graduate and post-graduate students from various Colleges and Universities in laboratory medicine. 6 B.Tech. and 12 Biochemistry postgraduate students underwent intensive training. Short term training was also given to M.Sc. Biotechology, B.Sc. MLT and B.Sc. Biotechnology/Microbiology students.

MICROBIOLOGY

Swapna R. Nath

Assistant Professor & Head

The division maintained high accuracy in diagnostic services in microbiology viz. bacteriology, mycology and parasitology.







New Machines Acquired

Division acquired an automated blood culture system (BacT/ Alert) and an automated identification and sensitivity system (VITEK), which will help in providing speedy microbial diagnosis to enable early institution of appropriate antibiotics.

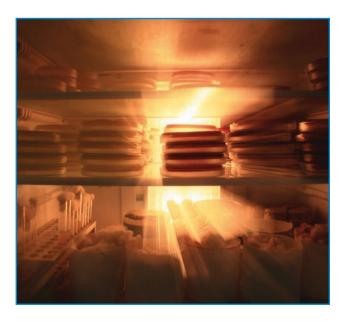


Table 16: Investigations done	
Culture, Sensitivity & Other tests	Number
Blood	3270
Urine	734
Sputum	423
Exudates	683
Aspirate	159
Throat swab	227
Cerebrospinal fluid	31
Faeces	80
Fungus	14
Acid-fast bacteria	21
Surveillance culture	27
Microscopy (Gram stain & AFB stain)	450
Widal test	7
Total	6126

Academic Activities

Training was provided to B.Sc. and M.Sc. Medical Microbiology students.

TRANSFUSION MEDICINE

Vijayalakshmi K.

Assistant Professor & Head

Resident Medical Officers: Jayalakshmi P.,

Rajesh R. Chandran

The Division has been recognized as a Regional Blood Transfusion Centre with cent percent component separation and blood irradiation facility. The division works in co-operation with other divisions of the centre to extend optimum services to the patients by making use of the most modern technology for collection, separation processing and issue of blood and blood products. National AIDS Control Organization extends tremendous support by way of providing machinery and staff.





Routine Activities

- Collection of blood from voluntary and replacement donors and processing & separation.
- Issue of blood and blood components to patients not only in RCC but to patients in hospitals in and around Thiruvananthapuram city also.
- Plateletpheresis (42 numbers during the period)
- Blood irradiation (1391 numbers during the period)
- Regular blood collection camps (14 numbers during the period).

A total number of 21,356 persons had donated blood under the voluntary blood donation programmes.



New Machines Acquired

Cryofuge/Heraeus (12 bag capacity)-I

Plasma Thaw Bath -I (Supplied by KSACS)

Blood Bank Refrigerator -2 (Supplied by KSACS)

Academic Activities

Regular trainings were provided to postgraduate students in pathology, B.Sc. (MLT), M.Sc. (MLT) and DMLT students. Observership training on good blood banking practices was given for staff members from Terumo Penpol and HLL Lifecare Ltd.

Table 17: Blood components separated								
Components PRC PRP FFP PC								
No. Separated	21172	18685	2399	2399				

Table 18: Trai	nsfusion trans	missible o	diseases de	etected
HbsAg	HCV	HIV	VDRL	Malaria
108	30	9	1	2

PALLIATIVE MEDICINE

Cherian M. Koshy

Additional Professor & Head

Resident Medical Officers: Prasanth C.V., Manju Achamma Varghese

The Division got renamed as 'Palliative Medicine'. Trainings were imparted to staff engaged in the 'Vayomithram' project launched by NRHM, in association with Kerala Social Security Mission. The project intends to reach medical care to those above 65 years of age through a 24 hour help line. The 'Jiv Daya' foundation, based in Dallas Texas, under their Indian Palliative Care Initiative came forward to sponsor one doctor, one social worker cum data entry operator, and one nurse.





The division maintained close liaison with NGOs like 'Care Plus' and 'Asraya'. The weekly 'Tele Clinic' with the Karuna Hospice at Adimali christened 'HELP for the Hills' (HELP = Hear Ease Link Palliate) continues to be a blessing to several patients from the district of Idukki. The activities in the division were taken note of internationally and a team of CBS TV Journalists from Vancouver and Johannesburg came to see RCC and its palliative care activities. The World Hospice and Palliative Care Day celebrations were inaugurated by Dr. Usha Titus, Secretary for Health and Family Welfare, Government of Kerala on 7th September 2010.

Table 19: Clinical services	
Cases	No.
New	3500
Review	8310
Tele-clinic consultations	210
Total	12020

Academic Activities

25 candidates attended the two sessions of the certificate course on 'Essentials of Palliative Care' conducted in June and November 2010.

NURSING SERVICES

Sreelekha R.

Chief Nursing Officer

Nursing Superintendent: Flower Augustine

Nursing division is responsible for rendering quality nursing care to all cancer patients. Highly competent and qualified nurses deliver comprehensive nursing care efficiently in wards, day care units, high dependency units and in the specialty clinics. On an average, around 150-200 patients are attending chemotherapy units on each day.







Special Clinics

Central Venous Access Device (CVAD), lymphoedema clinic and stoma care clinic functioned effectively.

CVAD Clinic

316 central line insertions were done among 118 OP cases and 198 IP cases.

Lymphoedema Clinic

Services include teaching arm and leg exercises for the prevention of lymphoedema and management of lymphoedema which include skin care, massage, arm exercises and application of compression bandages. Preventive lymphoedema services were given to 945 patients and lymphoedema was reported in 93 cases.

Stoma Clinic

Services include pre-op counseling, stoma marking, cleaning and changing colostomy bags and discharge counseling. Out of the 387 patients who received colostomy services, 270 were OP cases and 117 were IP cases.

Cancer Carer's Training

Carer's trainer meet each and every new patients admitted in wards and give education on diet, management of side effects of cancer treatments and other aspects of cancer care. Practical training was also given to immediate relatives of patient regarding home care of bed ridden patients, care of tracheostomy and so on.

Academic Activities

The 8th batch nursing assistants are on their first year of training. Division offered clinical experiences and orientation / observation updates to 1038 nursing students from government as well as private institutions.

M.Sc. Nursing students 137 769 B.Sc. Nursing students Post B.Sc. Nursing students 40 92 Observation update

Other Activities

Nurse's day was celebrated by conducting a quiz competition on nursing related topics. Also arranged 9 training programmes, which were attended by 262 nurses.

CLINICAL SERVICES & MEDICAL RECORDS

Raveendran Nair R.

Administrative Officer (Clinical Services)

Medical Records Officer: Chandrika D., Public Relations Officer: Surendran Nair V

Asst. Professor: Latha P.T.

This division has been entrusted with the management of front office, registration of new cases by categorizing patients by economic status, multidisciplinary clinics, medical records, patient accounts and billing, Cancer Care for Life scheme, vehicles, and various patient welfare services.





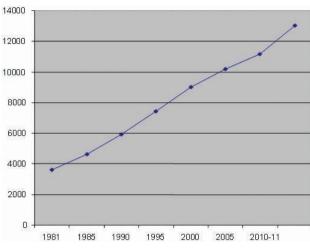
Total Patient Flow

Table 20: Hospital statistics (2010-2011)					
Item	No.				
New cases	13230				
Review cases*	179145				
Total patients (New + Review)	192375				
Daily average	641				
Average attendance per patient	15				
In-Patient admissions	10979				
Total bed occupancy	95095				
In-Patient bed**	278				
Average bed occupancy	261				
Percentage of bed occupancy	94				
Average length of stay (days)	8				
Hospital death	787				
Telemedicine consultation	1983				

- Follow up at peripheral centres, tele-clinics, palliative care, clinic to clinic consultation, review during treatment, etc. are not included.
- ** Day care chemo wards, chemo cubicles and other admissions not meant for overnight stay are not included.

	Table 21: New cases: Registration since the establishment of RCC (1981-2011)								
2010-11	13230	2000-01	9802	1990-91	5918				
2009-10	13040	1999-00	9269	1989-90	5110				
2008-09	12123	1998-99	9002	1988-89	5265				
2007-08	11327	1997-98	8963	1987-88	5108				
2006-07	11173	1996-97	8551	1986-87	4633				
2005-06	10310	1995-96	7981	1985-86	4182				
2004-05	10255	1994-95	7429	1984-85	4060				
2003-04	10190	1993-94	7263	1983-84	3788				
2002-03	10174	1992-93	733 I	1982-83	3626				
2001-02	9996	1991-92	6960	1981-82	3347				

Fig. 2: New registration (1981 to 2010-11)



Patient Statistics

Table 22: Patient categories based on socio-economic							
status							
Category*	No.	%					
F	5987	45					
M	3015	23					
0	4228	32					
Total	13230	100					

^{*} O – Affordable to pay fully

After initial assessment, 1033 requests were received from patients for reconsidering their category. Out of this, categories of 448 patients were changed from M to F, 22 from O to F and 196 from O to M. This was done by a committee comprising Medial Superintendent, Patient Welfare Officer and Administrative Officer (Clinical Services), which met on a monthly basis.

Table 23: New cases (Speciality clinic wise)						
Clinic	No	%				
Α	1844	14				
В	2322	18				
С	2290	17				
D	2145	16				
E	3027	23				
F	631	5				
G	971	7				
Total	13230	100				

A–Haemato-Lympho reticular system, bone and soft tissue sarcoma

B - Head & Neck

C – Breast & Central Nervous System

D - Gynaec and Genito urinary & others

E - Chest & Gastro- intestinal

F – Paediatric (Patients upto the age of 14 years)

G - Thyroid

Table 24: Clinic wise registration based on patient category						
Clinic	F	М	0	%		
Α	45	23	32	14		
В	52	22	26	18		
C	36	24	40	17		
D	36	26	38	16		
E	40	26	34	23		
F	76	6	18	5		
G	24	39	37	7		
Total %	45	23	32	100		

Table 25: New & Review cases (Speciality clinic wise)						
Clinic	New	Review*	Total	Daily Average		
Α	1844	27988	29832	99		
В	2322	22847	25169	84		
С	2290	33470	35760	119		
D	2145	24805	26950	90		
Е	3027	25926	28953	97		
F	631	23090	23721	79		
G	971	10837	11808	39		
SO	_	10182	10182	34		
Total	13230	179145	192375	685		

^{*} M – Affordable to pay partially

^{*} F – Not affordable to pay but little (Radiation totally free)

Table 26: New cases (Age & Sex wise)							
Age Group	Male	%	Female	%	Total	%	
0 - 14	382	6	279	4	661	5	
15-24	217	3	291	4	508	4	
25-34	318	5	628	9	946	7	
35-44	630	10	1134	17	1764	13	
45-54	1254	19	1627	24	2881	22	
55-64	1825	28	1511	23	3336	25	
65-74	1339	21	881	13	2220	17	
75+	548	8	366	6	914	7	
Total	6513	100	6717	100	13230	100	
	49%		51%		100%		

Table 27: New cases (Religion wise)								
Religion	Male	%	Female	%	Total	%		
Hindu	3766	58	4212	63	7978	60		
Muslim	1547	24	1231	18	2778	21		
Christian	1200	18	1274	19	2474	19		
Total	6513	100	6717	100	13230	100		

Table	Table 28: In-Patient admission (Speciality clinic wise)				
Clinic	New	Repeat	Total *	%	
	Admission	Admission			
Α	1130	1201	2331	21	
В	1153	301	1454	13	
С	1493	282	1775	16	
D	907	280	1187	- 11	
Е	1136	793	1929	18	
F	579	1080	1659	15	
G	614	30	644	6	
Total	7012	3467	10979	100	

^{*}Admission to palliative care, surgical oncology etc. are included in the clinic concerned.

Table 29: In-Patient admission (Patient category wise)					
Clinic	0	M	F	Total	
Α	703	426	1202	2331	
В	426	278	750	1454	
С	784	347	644	1775	
D	517	245	425	1187	
Е	852	349	728	1929	
F	245	168	1246	1659	
G	269	251	124	644	
Total	3796	2064	5119	10979	
%	35	19	46	100	

Table	Table 30: In-Patient admission (Clinic/Sex wise)								
Clinic	Α	В	С	D	Е	F	G	Total	%
Male	1395	1060	60	299	1317	1002	174	5307	48
Female	936	394	1715	888	612	657	470	5672	52
Total	2331	1454	1775	1187	1929	1659	644	10979	100

Referral System

RCC is a tertiary level referral hospital and patients were referred from teaching hospitals, private hospitals and eminent private doctors in and outside the State. The following tables show the hospital wise and district wise references.

Table 31: Referred cases		
Referred from	No.	%
Teaching Hospitals (MCH)	3138	24
District/General Hospitals	579	4
Other Govt. Hospitals	758	6
VSSC/ECHS/ESI/CGHS/Railway hospitals	2097	16
ECDC and peripheral centers	152	- 1
Other Cancer Centers	38	<
Private doctors	936	7
Private hospitals	5464	41
Overseas	38	<
Self/RCC	30	<
Total	13230	100

Table 32: Referred cases	s (Geographi	cal area wise)
District	No.	%
Thiruvananthapuram	2967	22
Kollam	2341	18
Pathanamthitta	715	5
Alappuzha	700	5
Kottayam	365	3
Idukki	199	2
Ernakulam	597	4
Thrissur	655	5
Palakkad	721	6
Kozhikode	478	4
Malappuram	882	7
Wayanad	81	1
Kannur	466	3
Kasargod	186	1
Others *	1877	14
Total	13230	100

* The others include Tamil Nadu (1626), Abroad (172) and other States and Union Territories (79).
 12% were reported from Tamil Nadu.

Patients Accounts and Billing

All patients' accounts and billing are handled by the clinical services. Facilities were introduced for the patients to pay lump sum advance by cash/credit/debit card/electronic transfer. During the reporting period total transaction by cash and credit was Rs.71,51,88,965.00†. Out of this Rs. 30,04,78,849.00† were through pharmacy counter. 38% of total payments were through credit facility under various patient welfare schemes.

† - Unaudited figure.

Cancer Care For Life Scheme

Cancer Care for Life is an independent welfare scheme for the public who are not cancer patients. During the reporting period 29649 new memberships (29289 in Plan A and 360 in plan B) were issued. An amount of Rs. 1,38,30,678.00 has been collected as membership fee. 895 patients (new and old) availed treatment worth Rs. 97,51,327.00† at an average of Rs. 10,895/- per patient. 173 new CCL patients reported for treatment during the period.

† - Unaudited figure.

Training Programmes

In-service training for Medical Records and Patients Service was given to students from M.G.University, Kottayam. Training on counseling and information regarding how to manage psychological problems, economic problems, possible psychological interventions and details about patient welfare schemes were also given to the MSW students from various colleges of Kerala, Mahatma Gandhi, Calicut and Tamilnadu universities.

Patient Welfare Services

Patient welfare department mainly concentrate on extending emotional support to patients and family members, imparting information regarding treatment policies, procedures of investigations and in helping the patient to avail practical resources and rehabilitation. All these were made possible with help from various Government and Non Government welfare schemes and voluntary agencies like Asraya, Care Plus and Prathyasa. Prathyasa is a voluntary group which gives financial and psychosocial support to children and their families in the paediatric oncology ward.

es for Poor l	Patients
lo. Benefited	Amt. Spent
530	3,28,50,840/-
14	1,88,849/-
63	17,83,055/-
е	
16	3,18,547/-
141	66,81,582/-
133	21,56,289/-
y	
803	3,64,68,316/-
172	84,96,935/-
SI) 899	4,53,07,325/-
	63 e 16 141

Free Food Scheme

Free food has been given to inpatients belonging to low socio economic status in arrangements with contributions from well wishers and also from the interest accrued on the endowment fund for food. More than 30 lakhs† has been collected for free food scheme.

Free Drug Bank

The working of the free drug bank is monitored by a committee constituted by the director with specific guide lines. The medicines are procured in the form of donation by cash/ medicine and also from various organizations, pharmaceutical firms, etc. Rs. 13,75,305.00† has been donated by well wishers and the drug bank provided full/partial help to 5010 patients during the reporting period.

† - Unaudited figure

The various welfare services rendered by Asraya & Care Plus, the two voluntary organizations in RCC are laudable. Asraya with a membership of 300 volunteers contribute considerably to the institution's needs with respect to patient care. Care Plus is in the sixth year of humanitarian service for the very poor palliative care patients registered in RCC. The team extends help to patients at their homes and also four peripheral clinics.

Public Relations Wing

The public relations wing of the centre deals with the media relations, management of security wing, helpdesk, telephone exchange, feedback process, awareness programmes on poor patients welfare fund and Cancer Care for Life schemes, organization of public functions and other day to day public interaction activities.

Programmes on Centre's welfare schemes in Jaihind, Amritha and Kairali TV channels were very much appreciated and people came forward to help patients. Twelve awareness campaigns on poor patients' welfare fund and CCL schemes were conducted during the period in collaboration with various non-governmental agencies. In addition a number of articles and press releases were also arranged in electronic media. PRO participated in the advisory committee meeting of Health and Family Welfare wing of All India Radio, Thiruvananthapuram.

^{† -} Unaudited figure

COMMUNITY ONCOLOGY

Ramani S. Wesley

Professor & Head

Associate Professor: Gigi Thomas Assistant Professor: Jayakrishnan R.

The major activities of this division are primarily aimed at human resource development and primary and secondary prevention of common cancers. These were achieved through conducting trainer trainee programmes, cancer awareness/ education programmes, cancer detection camps and also through the functioning of the early cancer detection clinic at the division.



Cancer Control Activities

Human Resource Development

- a) Trainer Trainee Programmes: Through 84 programmes, 8818 trainers were educated (Table 34).
- b) International School of Colposcopy: 252 gynaecologists were given one week hands on training at RCC. 123 B.Sc. (MLT) students were given one day orientation programme on VIA, VILI and Colposcopy.

Table 34: Details of Trainer Trainee programmes			
Categories of Trainees	No. of	No.	
	programmes	trained	
Nurses	3	542	
Doctors (Allopathy)	16	709	
Community Volunteers	5	1415	
Paramedicals (B.Sc. MLT)	10	123	
Health supervisors and workers	7	464	
Student representatives & teacher	s 13	1965	
Bank/Factory/ Technopark/VSSC	12	1037	
Lay public and NGO's	18	2563	
Total	84	8818	

Early Cancer Detection

a. Screening for Oral, Breast and Cervical Cancers

The peripheral centres and nodal centres are referring patients with precancers and cancers to the Early Cancer Detection Clinic functioning at the division for confirmation of diagnosis, colposcopy, LEEP, cryotherapy etc. Patients having leukoplakia were treated by chemoprevention or by excision. Propagation of breast self examination and clinical evaluation of breast disease and referral for mammography were done for 2324 patients. Cancers and pre-cancers detected among 9897 persons screened with warning signals of cancer are detailed below.

Table 35: Cancers and Pre-cancers detected			
Sites	Cancers detected	Precancers & benign	
		lesions detected	
Oral	118	561	
Breast	126	634	
Cervix	58	224	
Others	127		
Total	429	1419	

Table 36: Colposcopy clinic	
Procedures done	No.
Colposcopies	1533
Colpodirected biopsies	288
LEEP therapy	59
Cryotherapy	6
Cold coagulation	34
Pap smears	1999
High grade lesions	
Low grade lesions	248

Table 37: Oral dysplasia clinic		
(No. screened=736)		
Cases detected	No.	
Leukoplakia	283	
Oral submucous fibrosis	227	
Other benign lesions	81	
Total	591	

- b. Tobacco Cessation Clinic: Out of the 245 tobacco habitués who attended the clinic, 80% were smokers, 10% were tobacco chewers and 10% had both the habits. They were given behavioral counseling and Nicotine Replacement Therapy was given for those with severe nicotine dependence.
- c. Cancer Detection Camps & Cancer Awareness Programmes: 42 cancer detection camps and 55 cancer awareness programmes were conducted in various parts of the state. Cancer awareness programmes were attended by 7326 people. Weekly cervical cancer detection clinics were conducted at Mangalapuram for the women residing in the control area of breast cancer screening project. Out of 193

women screened, 15 cervical pre-cancers were detected. Faculty also presented many cancer awareness programmes in AIR, TV channels and news papers. A breast cancer awareness programme was also conducted at UST Global, Technopark on 31st October 2010 in collaboration with the faculty from the division of Surgical Oncology.

Table 38: Cancers & Pre-cancers detected in cancer detection camps		
No. of camps	42	
No. screened 3700		
Oral cancer 12		
Breast cancer		
Cervix cancer		
Others		
Oral pre-cancers 7		
Breast benign 12		
Cervical pre-cancers 104		

Academic Activities

World No Tobacco Day (31 May 2010): In collaboration with SCTIMST, Thiruvananthapuram and Regional Cancer Association, a training programme based on the theme 'gender and tobacco with an emphasis on marketing to women' was organised for community health Volunteers. Around 500 health volunteers were benefited by the programme.

Silver Jubilee celebrations of the Division (26 June 2010): Programmes were organized to commemorate the 25th year of existence of the division. It was inaugurated by Smt. P.K. Sreemathy Teacher, Hon. Minister for Health and Social Welfare, Govt. of Kerala, in which eminent personalities who have contributed significantly to the cancer control activities in the state were honoured. A one day CME entitled 'Updates on early detection and management of oral pre-cancers and cancers' was conducted for medical and dental practitioners and post graduate students.

National Cancer Awareness Day (7 November 2010): A workshop on 'Colposcopy and management of cervical pre-cancers' was conducted, which was attended by 282 gynaecologists from different parts of the state.

World Cancer Day (4 February 2011): A seminar on cancer prevention and control was organised for media personnels and journalism students.

Tabl	e 39: Ongoing Doctoi	ral Programmes pursued by staff	
SI.	Research Scholar	Title of the Study/University	Guide
No.			
1.	Dr. Gigi Thomas	Search for predictive genetic markers of	
		high risk malignant transformation potential	
		in oral leukoplakia patients/	
		University of Kerala	Dr. Ravindran Ankathil
2.	Dr. Jayakrishnan R.	Effectiveness of community based	Dr. Antti Uutela (Finland),
		tobacco cessation intervention in rural	Dr. Aleyamma Mathew (RCC)
		Kerala/ University of Tampere, Finland	

CANCER RESEARCH

Kannan S.

Additional Professor & Head

Additional Professor: Remani P. Assistant Professor: Hariharan S. Scientific Officer Gr.I: Sreelekha T.T.

Cancer research in this division is focusing on the delineation of the molecular mechanism of tumorigenesis in cancers prevalent in our region. This has been undertaken by the five different research groups viz. cell cycle regulation, phytopharmacology, cytogenetics, biopharmaceuticals and molecular diagnostics.





Laboratory of cell cycle regulation mainly focuses on the molecular events underlying the development of oral cancer - transcriptome analysis using TagMan low density array, SNP genotyping, microRNA profiling and in vitro knockdown studies. In the field of phytopharmacology, isolation of active components and evaluation of its antitumor activities are being done. An active compound isocurcuminol from the rhizomes of Curcuma zedoaria has been isolated and characterized and was found to be a good candidate for the anticancer drug development. Cytogenetics group mainly concentrating on leukaemias - chromosomal abnormalities in various leukaemias and searching for predictive genetic markers to detect the risk group based prognostic stratification of haematological malignancies. Discovery of new anticancer drug from phytopolysaccharides and nanoparticle based novel drug delivery systems are the focus of research under the pharmaceuticals

lab. On the academic front, 253 postgraduate students from various institutions were provided training for their dissertations/projects in their fields.

Patient Services

Quantitative RT-PCR for bcr-abl	:	495
Qualitative RT-PCR for bcr-abl & pml-rara	:	334
Karyotype analysis	:	688
Fluorescent In Situ Hybridization	:	57

New Equipments Acquired

Biosafety cabinet	:	
CO ₂ incubator	:	2
-80°C freezer	:	2
Shaking microincubator	:	

Table 4	10: Ongoing Doctoral Resea	arch Programmes	
SI. No.	Research Scholar	Title of the Study/University	Guide
1.	Ms. Abitha Murali	Characterization of molecular alterations in the	
		Retinoblastoma (Rb) gene in oral carcinoma/	
		University of Kerala.	Dr. S. Kannan
2.	Mr. Deepak Roshan V. G.	Study on the identification of factor/s involved in over	
		expression of Cyclin- D1 in oral carcinoma/	
		University of Kerala.	Dr. S. Kannan
3.	Mr. Dileep Kumar U.	Studies on the biology of carcinoma of buccal mucosa	
		and tongue/University of Kerala.	Dr. S. Kannan
4.	Mr. Christo Rajan	Study of the significance of miRNA expression pattern	
		in oral carcinoma /University of Kerala.	Dr. S. Kannan

5.	Mr. Sivadas V.P	Molecular dissection of TGFB/ Smad pathway in oral carcinoma /University of Kerala.	Dr. S. Kannan
6.	Ms. Lakshmi S	Antitumour activity of some selected medicinal plants	
7	Ma Dhanna C S	of Zingiberaceae/University of Kerala.	Dr. P. Remani
7.	Ms. Dhanya G. S	Cytotoxic and immunological studies of two Solanaceae plants/University of Kerala.	Dr. P. Remani
8.	Ms. V. Viji	Characterization and evaluation of anticancerous properties of compounds from selected	
9.	Ms. Biba V. S	medicinal plants/University of Kerala. Antimicrobial, antitumour and immunomodulatory properties of two species of Annona (Annonaceae)/	Dr. P. Remani
		University of Kerala.	Dr. P. Remani
10.	Ms. Farha A. K.	Molecular mechanisms involved in the cell death induced by Deoxyelephantopin, a sesquiterpene lactone,	
11.	Mr. Praveen Kumar B R	from Elephantopus scaber/University of Kerala. Germline mutation analysis of mismatch repair genes	Dr. P. Remani
11.	rii. Fraveen Kuniai B K	in familial colorectal cancer patients /University of Kerala.	Dr. R. Ankathil
12.	Ms. Sangeetha Vijay	Molecular genetic basis of resistance to imatinib	
		mesylate treatment in chronic myeloid leukaemia patients/University of Kerala.	Dr. S. Hariharan
13.	Ms. Santhi S	Prognostic significance of chromosomal aberrations	Di. 3. Harmaran
		and FLT3 gene mutation status in patients with acute	
14.	Mr. Suresh Kumar V	myeloid leukaemia/University of Kerala. Detection of Nucleophosmin I gene mutations in AML	Dr. S. Hariharan
17.	i ii. Sui esii Kumai Y	patients and its impact on treatment/ University of Kerala.	Dr. S. Hariharan
15.	Mr. Aravind SR	Immunomodulatory and anticancerous properties of	
16.	Mr. Manu M. Joseph	Tamarind seed polysaccharides/University of Kerala. Studies on Tamarindus indica polysaccharide	Dr. T.T. Sreelekha
10.	т п. т апа т п. јозерп	nanoparticle as immunomodulatory / anticancer agent	
		and as a potent drug carrier/University of Kerala.	Dr. T.T. Sreelekha
17.	Ms. Sheeja Varghese	Studies on the molecular mechanisms of antitumour / immunomodulatory polysaccharide from Mangifera indica/	
		University of Kerala.	Dr. T.T. Sreelekha
Table	41: Ongoing Post-doctoral	Programmes	
	. Research Scholar	Title of the Study/University	Guide
1.	Ms. Vani S	Blastic transformation of chronic myeloid leukemia:	
		Cytogenetic and molecular mechanisms orchestrating the	D 11 11 6
2.	Ms. Sreeja L.	disease progression. Molecular and gene expression signatures in prognostically	Dr. Hariharan S
		prioritized stratification in AML patients with NC.	Dr. Hariharan S

MOLECULAR MEDICINE, DRUG **DEVELOPMENT & CHEMOINFORMATICS**

Lakshmi S.

Assistant Professor & Head

The division seeks greater and more comprehensive understanding of human biology and disease which forms the primary goal of biomedical research.







Research projects are ongoing on the role of estrogen receptor co-regulators in the development of breast cancer, the elucidation of cell signaling pathways in the development of breast cancer, gene environment interaction and susceptibility to breast cancer, molecular genetics of paediatric acute lymphoblastic leukaemia in Kerala, molecular markers as indicators of clinical profile, tumor characteristics and treatment outcome in squamous cell carcinoma of the larynx and on the molecular mechanisms of multidrug resistance in

ovarian cancer. The projects are supported by grants from DBT, DST, and KSCSTE. The data produced till date has been presented in national conferences by the research fellows. As part of its commitment to human resource development, 25 students from various institutions at the postgraduate level carried out dissertation and project work in biotechnology and molecular biology. In addition, 8 students at the graduate level were offered short-term/summer training in basic cancer research and molecular biology.

Table 4	2: Ongoing Doctoral F	Programmes	
SI. No.	Research Scholar	Title of Study/University	Guide
1.	Mr. Binu K.A	Role of estrogen receptor co-regulators in	
		breast cancer/ University of Kerala	Dr. Lakshmi S
2.	Ms. Prabha Pillai	Role of signal transducers and activators of	
		transcription in breast carcinogenesis/ University of Kerala	Dr. Lakshmi S
3.	Ms. Sreeja R	Molecular analysis of multidrug resistance gene and	
		its expression in ovarian cancer/ University of Kerala	Dr. Lakshmi S

CANCER EPIDEMIOLOGY & CLINICAL RESEARCH

Aleyamma Mathew

Additional Professor in Statistics and Epidemiology & Head

Assistant Professors in Biostatistics: Padmakumary Amma G., Preethi Sara George

Assistant Professor in Epidemiology: Kalavathy M.C.

Cancer Registries

The Division has been functioning as the Hospital Based Cancer Registry (HBCR) of RCC (Table 45), and Population Based Cancer Registry (PBCR), Thiruvananthapuram (Table 46). A total of 13,230 new patients were registered at RCC during the period under report, which is an increase of 1.4% compared to the previous period.





Surveillance Programmes

Systematic data abstraction on patterns of care and survival in cancers of the uterine cervix, breast and head and neck patients reporting to the RCC is ongoing in collaboration with NCRP. A total of 3862 female breast, 1222 cervix uteri and 6350 head & neck cancer cases were abstracted using a specifically designed 'Patient Information Form'.

Epidemiologic Studies

Epidemiologic studies are on in urinary bladder, kidney and female breast cancers and HPV infection among women with atypical squamous cells. A monograph on brain and nervous system cancers based on all India PBCR and HBCR data was submitted to the National Cancer Registry Programme (NCRP) of ICMR for publication.

Cancer Screening Programmes

Cancer detection programmes were organized in connection with a comprehensive cancer control programme launched in the Jilla Panchayat area with financial support from Thiruvananthapuram Jilla Panchayat in the year 2010.

Table 43: Cancers & Pre-cancers detected in camps			
Camps	66		
No. Screened	402		
Cervical cancers	3		
Breast cancers	17		
Oral cancers	8		
Cervical pre- cancers	25		
Oral pre-cancers	143		

A regular Pap smear screening clinic is conducted in Women & Children Hospital, Thycaud and Government Hospital, Peroorkada. 31 cervical pre-cancers and 9 cervical cancers were detected among 2976 women, who underwent screening.

Cancer Awareness Programmes For Medical Officers/Health Workers/Lay Public

One day training/orientation was provided to the Medical Officers, members of Thiruvananthapuram lilla Panchayat, Junior Public Health Nurses and ASHA workers of Thiruvanathapuram district as part of the 'Cancer Vimuktha Sthree Samooham' (Cancer Free Women's Society) project.

Academic Activities

The division provided guidance to 7 doctoral students in Epidemiology and Biostatistics, and 12 students received short term training on statistical epidemiology/cancer registry. Consultancy services on statistical design and analysis as well as cancer statistics were provided to more than 100 research studies.

Table 44	l: Ongoing Doctoral Progr	rammes	
SI. No.	Research Scholar	Title of Study/University	Guide
1.	Dr. Aleyamma Mathew	Female breast and reproductive tract cancers in Kerala: statistical modeling and projections (in Statistics) /	
		Mahatma Gandhi University, Kottayam	Dr. K. K. Jose
2.	Ms. Manju L.	Risk estimates of bladder cancer: multiple logistic	
		regression model / University of Kerala	Dr. Aleyamma Mathew
3.	Ms. Grata Ildaphonsa	Risk factors of kidney cancer: a matched case-control	
		study/University of Kerala	Dr. Aleyamma Mathew
4.	Ms. Sona P. S.	Performance status and quality of life of ovarian	
		cancer patients / University of Kerala	Dr. Aleyamma Mathew
5.	Ms. Subha R. Nair	Statistical models for estimating probability of	
		developing breast cancer/ University of Kerala	Dr. Aleyamma Mathew
6.	Dr. Jayakrishnan R.	Evaluating the effectiveness of community based tobacco	
		cessation strategies in Thiruvananthapuram district /	
		University of Tampere	Dr. Aleyamma Mathew
7.	Ms. Melbin John	Burden and projection of cancer in India /	
		University of Tampere	Dr. Aleyamma Mathew

Table 45:	Site-wise distribution of	f patient registration by	y gender	(2010 - 2011)				
ICD-10	Site	М	ale	Fer	nale	To	tal	
		No.	%	No.	%	No.	%	
C00	Lip	11	0.2	18	0.3	29	0.2	
C01	Base of tongue	53	0.9	6	0.1	59	0.5	
C02	Tongue	301	5.2	150	2.6	451	3.9	
C03	Gum	110	1.9	74	1.3	184	1.6	
C04	Floor of mouth	74	1.3	5	0.1	79	0.7	
C05	Palate	36	0.6	9	0.2	45	0.4	
C06	Other mouth	256	4.4	111	1.9	367	3.2	
C07	Parotid gland	28	0.5	16	0.3	44	0.4	

C00	Call and a day	15	0.2	12	0.2	20	0.2	
C08	Salivary gland	15	0.3	13	0.2	28	0.2	
C09	Tonsil	37	0.6	9	0.2	46	0.4	
CI0	Oropharynx	110	1.9	8	0.1	118	1.0	
CII	Nasopharynx	38	0.7	22	0.4	60	0.5	
CI2	Pyriform sinus	51	0.9	10	0.2	61	0.5	
CI3	Hypopharynx	81	1.4	26	0.4	107	0.9	
CI4	Pharynx unspecified	5	0.1	2	0.0	7	0.1	
CI5	Oesophagus	209	3.6	84	1.4	293	2.5	
C16	Stomach	306	5.3	107	1.8	413	3.5	
CI7	Small intestine	13	0.2	4	0.1	17	0.1	
CI8	Colon	121	2.1	86	1.5	207	1.8	
CI9	Rectosigmoid colon	28	0.5	13	0.2	41	0.4	
C20	Rectum	185	3.2	133	2.3	318	2.7	
C21	Anus & anal canal	8	0.1	7	0.1	15	0.1	
C22	Liver	133	2.3	40	0.7	173	1.5	
C23	Gall bladder	П	0.2	25	0.4	36	0.3	
C24	Other biliary tract	16	0.3	П	0.2	27	0.2	
C25	Pancreas	62	1.1	30	0.5	92	8.0	
C26	Other ill-defined digestive organs	5	0.1	2	0.0	7	0.1	
C30	Nasal cavity	14	0.2	7	0.1	21	0.2	
C31	Accessory sinus	24	0.4	12	0.2	36	0.3	
C32	Larynx	221	3.8	14	0.2	235	2.0	
C34	Lung	836	14.4	149	2.6	985	8.5	
C37	Thymus	1	0.0	2	0.0	3	0.0	
C38	Heart & mediastinum	29	0.5	15	0.3	44	0.4	
C40	Bone of limbs	37	0.6	24	0.4	61	0.5	
C4I	Other bone	40	0.7	25	0.4	65	0.6	
C43	Skin melanoma	30	0.5	13	0.2	43	0.4	
C44	Skin other	78	1.3	48	8.0	126	1.1	
C47	Peripheral nerves system	1	0.0	2	0.0	3	0.0	
C48	Retroperitoneum	- 11	0.2	10	0.2	21	0.2	
C49	Connective tissue	83	1.4	77	1.3	160	1.4	
C50	Breast	14	0.2	1732	29.7	1746	15.0	
C51	Vulva	_	_	9	0.2	9	0.1	
C52	Vagina	_	_	26	0.4	26	0.2	
C53	Cervix uteri	_	_	472	8.1	472	4.1	
C54	Corpus Uteri	_	_	169	2.9	169	1.5	
C55	Uterus, nos	_	_	29	0.5	29	0.2	
C56	Ovary	_	_	300	5.2	300	2.6	
C57	Other female genital organs	_	_	8	0.1	8	0.1	
C58	Placenta	_	_	2	0.0	2	0.0	

040		22	0.4			22	0.0	
C60	Penis	22	0.4	_	_	22	0.2	
C61	Prostate	214	3.7	_	_	214	1.8	
C62	Testis	33	0.6	_	_	33	0.3	
C63	Other genital organs	4	0.1	_	_	4	0.0	
C64	Kidney	74	1.3	24	0.4	98	0.8	
C65	Renal pelvis	2	0.0	1	0.0	3	0.0	
C66	Ureter	4	0.1	1	0.0	5	0.0	
C67	Urinary bladder	124	2.1	14	0.2	138	1.2	
C68	Other urinary organs	I	0.0	I I	0.0	2	0.0	
C69	Eye	13	0.2	5	0.1	18	0.2	
C71	Brain	185	3.2	123	2.1	308	2.6	
C72	Spinal cord	10	0.2	7	0.1	17	0.1	
C73	Thyroid gland	199	3.4	745	12.8	944	8.1	
C74	Adrenal gland	23	0.4	9	0.2	32	0.3	
C75	Other endocrine gland	4	0.1	_	_	4	0.0	
C76	III defined sites	7	0.1	5	0.1	12	0.1	
C77	Secondary lymphnode	83	1.4	28	0.5	111	1.0	
C78	Secondary respiratory & digestive	51	0.9	39	0.7	90	8.0	
C79	Secondary other sites	41	0.7	22	0.4	63	0.5	
C80	Primary unknown	48	0.8	29	0.5	77	0.7	
C81	Hodgkin's disease	94	1.6	40	0.7	134	1.2	
C82	Follicular NHL	51	0.9	39	0.7	90	0.8	
C83	Diffuse NHL	119	2.0	71	1.2	190	1.6	
C84	T-cell lymphoma	25	0.4	12	0.2	37	0.3	
C85	Other NHL	30	0.5	25	0.4	55	0.5	
C90	Multiple myeloma	118	2.0	64	1.1	182	1.6	
C91	Leukemia, lymphoid	186	3.2	117	2.0	303	2.6	
C92	Leukemia, myeloid	222	3.8	156	2.7	378	3.2	
C93	Leukemia, monocytic	40	0.7	31	0.5	71	0.6	
C94	Other specified leukaemia	5	0.1	3	0.1	8	0.1	
C95	Leukemia, unspecified	48	0.8	33	0.6	81	0.7	
C96	Other lymphoid neoplasms	10	0.2	12	0.2	22	0.2	
C00-C96	Total	5812	100	5822	100	11634	100	
	In-situ	8	0.1	57	0.8	65	0.5	
	Borderline malignancy	87	1.3	128	1.9	215	1.6	
	Benign tumours	59	0.9	203	3.0	262	2.0	
	Non-neoplastic (include pre-malign	ant						
	conditions & others)	172	2.6	236	3.5	408	3.1	
	Diagnosis not confirmed	358	5.5	288	4.3	646	4.9	
	Total	684		912		1596		
	Total No. of Patients	6496		6734		13230		

Table 46: Population-based cancer registry, Thiruvananthapuram Taluk (2009): Age-Adjusted Incidence Rate (AAR) per 100,000 persons of leading cancer sites ICD 10 code Male Female Site **AAR** Rank **AAR** Rank 2 4 C00-06 13.3 6.8 Oral cavity C09-10, C12-14 Pharynx 6.9 5 0.4 >10 7 4.7 0.4 CI5 Esophagus >10 9 C16 4.1 2.5 Stomach 10 C32 7.4 4 Larynx 0.6 >10 C33- C34 15.3 Lung Т 4.4 7 C50 Breast 32.6 Т C53 7.9 3 Cervix uteri C54 Corpus uteri 6.2 6 C56 Ovary 6.5 5 C61 Prostate 7.5 3 C73 **Thyroid** 2.7 10 10.5 2 C81-C85 & C96 Lymphoma 6 9 5.5 3.7 Leukemia 4.4 8 C91- C95 8 4.4 C00-C96 All sites 133.0 119.0

LIBRARY AND INFORMATION SERVICES

Vishnu V.

Librarian cum Information Officer & Head

Managing medical libraries in the changed scene of information explosion is a challenging task. Rather than a traditional information repository, the division has diversified its activities and transformed into a most sought-after division both in terms of resources and manpower for all the clinical, academic, research and administrative requirements of the Centre. The division tries to deliver services to meet the centre's objectives.





Collection Building

Suggestions and recommendations were elicited periodically from the user spectrum in the collection building process. Besides providing access to E-journals, a reasonable number of E-books were also added.

Table 47: Addition of information resources						
Document type	Additions	Collection				
		as on March 2011				
Books, monographs						
and back volumes	293	11814				
Current Journals	10	118				
Reprints and reports	334	6359				
CD ROMs/DVDs	18	411				

Library Use

Total membership of the library rose to 400, with an addition of 43 members, majority enrollment in the student category. 133 consultation memberships were issued for external users. Use of resources was enhanced through notices and circulars in print and electronic media. Library intranet was updated on a regular basis by incorporating contents pages of current journals, newly arrived sources, forthcoming conferences,

and relevant news items from the media. Guide boards were placed at appropriate locations in the library for easy access to resources, facilities and services.

Access to E-lournals

E-Journal access from publishing platforms like ScienceDirect, Ovid, Wiley-Blackwell, Informaworld, SpringerLink, etc. was continued. 78 foreign journals and 28 indian journals were made available on the intranet. Full text access to the 6 subscribed titles of 'Clinics' was provided through ScienceDirect. Remote access was extended to 12 journals from Wiley-Blackwell, which enabled access from any computer, anywhere in the world. 35 titles were designated as E-only subscriptions, as a step towards space conservation.

RCC Publications Database

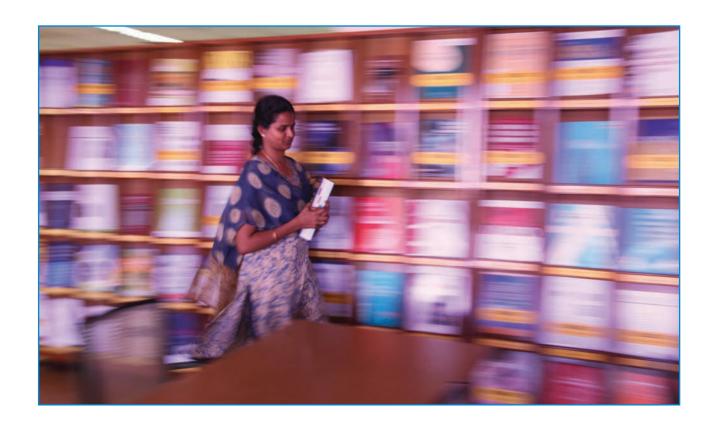
Preparation of a comprehensive database of RCC publications including journal articles, conference papers, presentations, books, chapters in books, etc from 1981 onwards was completed. It incorporated scholarly content generated from RCC and plans are laid to update the database on a regular basis.

IT Infrastructure

Computer workstations were upgraded by replacing 4 existing nodes with systems with latest configuration, which provided a boost to internet browsing.

Extended Support

The division has successfully completed the publication process of annual report of the centre in time. The format, contents, style of presentation and overall layout has undergone a major revamp during the period. Library played a significant role in MCI affiliation process. Library met successfully all the audio-visual and reprographic requirements of the Centre.



INFORMATION SYSTEMS

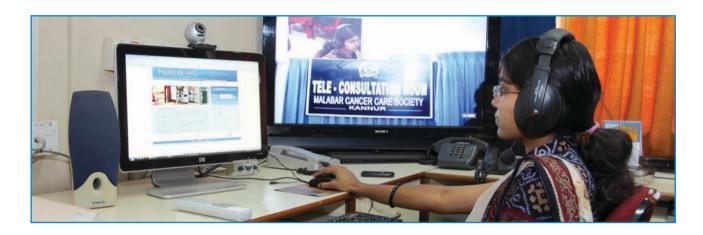
Neelima N.

Systems Manager & Head

The Division is responsible for developing, implementing and maintaining the Hospital Information System and associated computer technology. It supported and maintained operational systems and provided training to hospital staff in areas of information technology.







Other routine activities include:

Maintenance of application, web, mail and proxy servers, administration of Oracle database, management of LAN and WAN, management of data relating to Cancer Care for Life scheme, maintenance of PCs and troubleshooting, administration and maintenance of telemedicine software and equipments, scanning of case sheets and making them view for doctors using consult application.

Hospital Information System (HIS)

HIS is a network of computers, which is used to collect, process and retrieve both patient care information and administrative information from various departments to satisfy the functional requirements.

RCC-Intranet

RCC-INTRANET hosts online library services, institutional news service, staff search, personal information of staff like, leave, salary, tax planner, etc. in a downloadable format.

Cancer Registry Network

Online data entry and searching facility were provided on the intranet, for the hospital cancer registry and population based cancer registries.

Other Activities

The division provided training to the B.Tech., MCA and B.Sc. (Computer Science) students of various colleges for their final year project work.

EARLY CANCER DETECTION CENTRE (ECDC), ERNAKULAM

Latha A.

Cytopathologist

Primarily aims at screening and early detection of cancers through the examination of cervical smears, oral scrape smears, fine needle aspirations, colposcopy and body secretions. In addition to the daily OPD services attended by 50-60 patients per day, the centre conducted cancer detection camps, cancer awareness classes, seminars and health talks in the rural and urban areas of Ernakulam and neighbouring districts. The monthly follow up clinic on every 3rd Saturday was attended by 839 patients. Through telemedicine facility, video conferencing, consultations, slide discussions, patient referral and cancer awareness classes were conducted. The centre enrolled about 2500 families under CCL scheme.

Table 48: Patient services	
Tasks	Total No.
Patients screened	11,629
Cancer detection camps	37
Awareness classes	35
Patients referred to RCC	65
Follow ups	839

Table 49: Clinical activities			
Tasks	ECDC	Camp	Total
Cervical Smear	3884	1829	5713
Oral Smear	341	46	387
Fine Needle			
Aspiration Cytology	2751	538	3289
Sputum Cytology	67	••••	67
Colposcopy	5		5
Body Fluids	201	83	284
Peripheral Blood Smears	27	3	30

Table 50: Cancers & Precancers detected			
Cases	ECDC	Camp	Total
Oral cancer	39	1	40
Breast cancer	154	3	157
Cervix cancer	23	2	25
Thyroid	15		15
Others	125	1	126
Precancers	50	2	52

EARLY CANCER DETECTION CENTRE (ECDC), PALAKKAD

Sanil P.N.

Cytotechnologist

Creating cancer awareness among the public and screening them for warning signals of cancer are the main functions of this ECDC. The Centre has extended its services to the tribal areas of Palakkad district such as Anakkal, Vlakal and Agali. Organized cancer detection camps and awareness programmes in the rural and urban areas of Palakkad, Malappuram and Thrissur districts with assistance from governmental and non-governmental organisations. Also conducted programmes for the early detection of cervical cancer through mass screening on Wednesdays and Thursdays at District Hospital Palakkad. Propagation of breast self examination and cytological evaluation of breast lesions were done for 756 patients. The Centre has started oncoconsultation on every Saturdays as a joint venture with Fluid Control Research Institute (FCRI). Conducted five exhibitions, which were viewed by about 65,000 people.

Table 51: Patient services			
Tasks	Total No.		
Patients screened	10,230		
Cancer detection camps	30		
Awareness classes	38		
Patients referred to RCC	68		
Follow ups	237		

Table 52: Clinical activities			
Tasks	ECDC	Camp	Total
Cervical Smear	1347	1610	2957
Oral Smear	30	9	39
Fine Needle Aspiration Cytology	19	- 1	20
Sputum Cytology	10		10
Nipple discharge	6		6

Table 53: Cancers detected			
Cases	ECDC	Camp	Total
Oral cancer	2		2
Breast cancer		- 1	- 1
Cervix cancer	13	- 1	14
Others	2		2

NATURAL BACKGROUND RADIATION CANCER REGISTRY (NBRR), KARUNAGAPPALLY

Jayalekshmi P.

Assistant Professor & Officer-in-charge

Natural Background Radiation Cancer Registry, an outreach centre of RCC, was started to evaluate the health effects of natural radiation present in the sea coast of Karunagappally Taluk, Kollam district. The study is now concentrating on radiation risk analysis and also evaluating the biological effects. Dosimetric measurements, cytogenetic studies, thyroid nodularity studies, epidemiologic surveys and surveillance activities are continuing. A Cancer Care Centre attached to this unit rendered cancer detection services for the residents of Kollam District.

Table 54: Clinical activities and patient services			
Particulars	No.	Persons	
		benefited	
Cancer awareness classes &			
palliative care training programmes	23	4000	
Review clinics	6	2040	
Pain clinics and supportive clinics	Daily	7626	
Field detection camps	154	30800	
Pap smear screening		5204	
FNAC and Scrape			
(Cytology investigations)		249	
Cancer cases detected	••••	12	

Academic Activities

Organized a satellite symposium, prior to the 7th International conference on high levels of natural radiation and radon areas (held on 24 - 26 November 2010, Mumbai), in Neendakara on 20 - 21 November 2010. NBRR study results presented by RCC scientists were thoroughly reviewed by global experts consisting of Dr. Abel Gonzalez (Nuclear Regularity Authority), Dr. David Pawel (US Environmental Protection Agency) and Dr. Suminori Akiba (Kagoshima University, Japan) and the review committee recommended the continuation of the study considering the importance of natural radiation in the global scenario.

MULTIDISCIPLINARY CLINICS

'A' CLINIC (HAEMATOLOGICAL, LYMPHORETICULAR, BONE & SOFT TISSUE SARCOMA)



'A' clinic deals with the diagnosis and management of haematological and lymphoreticular malignancies, sarcomas and other solid tumors where intensive chemotherapy is indicated. The clinic conducted outpatient clinics 6 days a week. 75% of the out-patients underwent chemotherapy. Dose intense protocols were used for the treatment of all leukaemias and lymphomas.

2332 patients were admitted for the administration of high profile chemotherapy and management of emergencies and complications. 200 new patients with chronic myeloid leukaemia were enrolled in the Novartis Patient Assistance (NOVA) programme and were given imatinib free of cost.

Autologous bone marrow transplantation following high dose chemotherapy was performed in 14 patients and allogenic bone marrow transplantation was done for 4 patients with leukaemia.

Clinical Procedures/Services Offered

Patients consulted	
Cases	Number
New	1,844
Review	27,988
Total	29,832

Medical Oncology Services

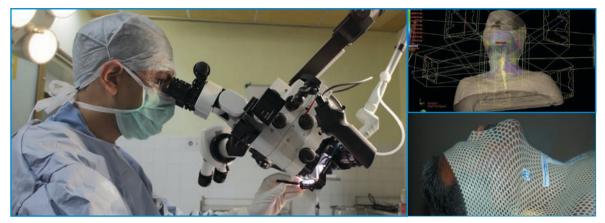
High Dose chemo	Autologous BMT	Allogenic BMT
1000	14	4

Surgical Procedures

Total: 133

Observers/Trainees: 17

'B' CLINIC (HEAD & NECK)



B' clinic is a multidisciplinary clinic comprising of radiation oncologists, surgical oncologists, ENT surgeons and plastic surgeons. This clinic took care of approximately 20% of the patients registered in RCC every year. The services provided included state-of-the-art radiotherapy facilities including 3D CRT and IMRT. All the standard chemotherapy protocols are practiced in the clinic. Surgical oncology services provided were at par with international standards including complex cranio-facial resections and microvascular reconstructions. The clinic provided rehabilitation services too. Weekly tumour boards were conducted with participation of consultants from various divisions.

Clinical Procedures/Services Offered

Patients consulted	
Cases	Number
New	2,332
Review	25,169
Total	27,501

Radiotherapy Services

	Radical		Palliative
IMRT	3D CRT	2D Planning	
3	60	1217	76

Surgical Procedures

Oral cancers Laryngo-		Salivary	Others	Reconstructive
	pharyngeal	glands		Procedures
654	36	38	118	202

Chemotherapy Services

Concurrent	Neo-adjuvant	Palliative
chemo-radiotherapy	chemotherapy	chemotherapy
778	226	518

Academic Activities

Clinic was actively involved in cancer research in areas of screening, translational research and phase II and III clinical trials. Clinical training was given to post graduate students of Radiation Oncology, Surgical Oncology, ENT, Oral and Maxillofacial Surgery, General Surgery and Oral Medicine from various institutions. The two year fellowship programme in head and neck surgical oncology continued. The following symposia were also organized under the auspices of the clinic.

- I. 'Meet the Expert' programme, 6 August 2010, Thiruvananthapuram. Prof. Vermorken (Belgium), main speaker.
- 2. Symposium on 'Effective Management of Head and Neck Cancer: a Global Perspective', 7 May 2010, Thiruvananthapuram
- 3. 'E- talk Symposium', 1 May 2010, Thiruvananthapuram, by Dr. G.S. Battacharya

Observers/Trainees

Radiation Oncology - 10; Surgical Oncology - 124; From abroad - 4

Visitor

Prof. Vermorken, Head of the Dept. of Medical Oncology, University Hospital, Antwerp, Belgium

'C' CLINIC

(BREAST & CENTRAL NERVOUS SYSTEM)



The clinic continued with its work in the treatment and research of malignancies arising in the breast and central nervous system. There was a substantial increase in the number of new patients treated in the clinic. The activities of the lymphoedema clinic were streamlined so as to cater to more number of patients. A breast support group was formed so as to cater to the psychosocial problems of breast cancer survivors.

The breast cancer awareness month initiated by the clinic saw a flurry of activities with a free, one month long breast screening clinic. Various outreach programmes were conducted during the month of October so as to generate awareness regarding breast cancer among the common people. A CME was organized for nurses as part of the breast cancer month.

On the academic front the clinic continued to have Tumor boards in collaboration with neurosurgery colleagues of SCTIMST.

Clinical Procedures/Services Offered

Patients consulted	
Patients	Number
New cases	2290
Review cases	33470
Total	35760

Radiotherapy Services

Conformal	Radical	Palliative
350	1176	486

Surgical Procedures

MRM	BCS	BCS+LD	Others
933	126	53	113

Academic Activities

A one day breast awareness programme for nurses and paramedical staff was organized in connection with breast cancer awareness month.

Observers/Trainees

 Post graduates undergoing training for DNB Surgical Oncology and Radiotherapy at RCC

Visitors

- General Surgery post graduates from Medical Colleges, in Thiruvananthapuram and Kottayam
- DNB general surgery postgraduates form Kerala Institute of Medical Sciences, Thiruvananthapuram and Pushpagiri Institute of Medical Sciences, Thiruvalla.
- Post graduates undergoing training for MD in Radiotherapy at Medical College, Thiruvananthapuram.

'D' CLINIC (GYNAEC, GENITO-URINARY & OTHERS)



Patients with gynaecological and urological cancers and cancer of the unknown primary were evaluated, staged and treated in the 'D' clinic. Common female cancers included cancers of uterine cervix, ovary and endometrium and common male cancers included cancers of prostate, bladder and kidney. Improvement in the quality of radiation treatment was achieved with the introduction of Intensity Modulated Radiation Therapy under image guidance. Addition of two radiotherapy machines has reduced the waiting time for patients. Number of patients undergoing high precision radiotherapy was on the increase.

Clinical Procedures/Services Offered

Patients consulted	
Patients	No.
New cases	2145
Review cases	24805
Total	26950

Radiotherapy Services

Conformal	Radical	Palliative	Brachytherapy
80	607	300	1301

Surgical Procedures (Gynaec, Uro & Skin)

Gynaec	Staging LAP	118
	Interval Cytoreduction	83
	Primary Cytoreduction	26
	Secondary Cytoreduction	39
	Radical Hysterectomy	48
	Exenteration	3
	Others	8
Urological	Nephrectomy	11
	Penectomy	9
	Cystectomy	5
Skin	Melanoma	40

Chemotherapy Services

Concurrent chemotherapy was given for carcinoma cervix patients along with radiotherapy. Neo-adjuvant and adjuvant chemotherapy was given for carcinoma ovary. Curative chemotherapy was given for germ cell and choriocarcinoma. Many patients with carcinoma prostate, bladder, ovary and cervix received palliative chemotherapy.

Visitor

 Dr. Gery Lamblin, laparoscopic surgeon from 'Hospital Femme Mere Enfant', Lyon, France.

'E' CLINIC (CHEST & GASTRO-INTESTINAL)



'E' clinic is a multidisciplinary clinic consisting of experts from Surgical Oncology, Radiation Oncology & Palliative care who manage malignancies of lung, mediastinum, gastro-intestinal tract and hepatobiliary tract. More number of diagnostic and therapeutic minimally invasive procedures and complex multivisceral resections were carried out during the report period.

Clinical Procedures/Services Offered

Patients consulted	
Cases	Number
New	3,027
Review	25,926
Total	28,953

Radiotherapy services

Conformal	Radical	Palliative	Brachytherapy
76	506	1354	32

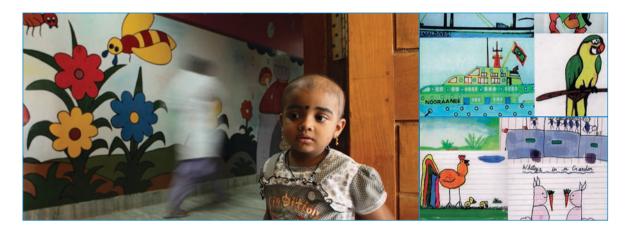
Surgical procedures

Esophagus	Stomach	Pancreas	Colon	Rectum
80	76	12	27	133

Academic Activities

As part of academic and research activities, training was imparted to post graduate students (MS General Surgery and MD Radiotherapy from Medical College Hospitals in Thiruvananthapuram and Kottayam) and carried out multiple clinical trials.

'F' CLINIC (PAEDIATRIC ONCOLOGY)



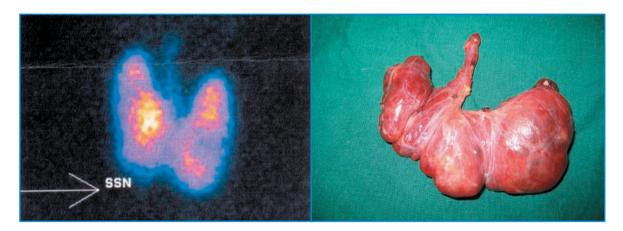
'F' clinic caters to childhood malignancies from the newborn period to 14 years of age. A number of 631 new cases and 25,338 review cases were seen during the report period. Among the new cases reported, acute lymphoblastic leukaemia and brain tumour were the most common malignancies. A total of 1437 patients got admitted to the paediatric ward during the period. The regular running of the clinic was supported by the Indian Pediatric Oncology Initiative (IPOI) of Jiv Daya Foundation. The IPOI team is comprised of two doctors, three staff nurses, one data entry operator and one social worker.

Patients consulted	
Cases	No.
New	631
Review	25,338
Total	25,969

Surgical Procedures

Ω

'G' CLINIC (THYROID)



'G' clinic is a multidisciplinary clinic comprising experts from Nuclear Medicine, Surgical Oncology and Radiation Oncology divisions. Being the only Nuclear Medicine department in the state, it caters to the needs of the whole of Kerala and adjoining states. Though thyroid cancers make up the bulk of the patients treated, the clinic also offered treatment for non-oncological thyroid disorders, besides gamma camera imaging and bone pain palliation.

Clinical Procedures/Services Offered

Patients consulted	
Cases	Number
New	970
Review	10,837
Total	11,807

Nuclear Medicine services

Immunoassays	SPECT	Thyroid	Radio-iodine
	Gamma camera	Ultrasound	therapy
26647	6947	291	882

Surgical Procedures

Completion	Total	Hemi-	Neck
Thyroidectomy	Thyroidectomy	Thyroidectomy	dissection
79	122	69	69

Radiotherapy Services

Radical	Palliative
28	17

Functions, Workshops & Conferences Organised

SI. No.	Name of Programme	Date
1.	World Cancer Day	4 February 2011
2.	International Workshop on Colposcopy and Treatment of Cervical Pre-cancers	6-7 November 2010
3.	World Palliative Care day-Theme: 'Sharing the care'	II October 2010
4.	Breast Cancer Awareness Month (Free breast screening clinic)	October 2010
5.	Silver Jubilee Seminar of Community Oncology Division	26 June 2010
6.	World No Tobacco Day - Theme: 'Gender and tobacco with an emphasis on marketing to women'	31 May 2010

Honours, Awards and Recognitions Received by Staff & Students

Aleyamma Mathew, received Fellowship of National Academy of Medical Sciences, India

Aleyamma Mathew, Regional Editor, 'Asian Pacific Journal of Cancer Prevention'.

Bipin T. Varghese, awarded UICC- ICRETT Fellowship in endoscopic approach to skull base tumors, at University of Pittsburg Medical Centre, USA (8 June - 7 July 2010).

Cherian M. Koshy, one of the ten members of the task force constituted by Government of India and WHO to improve palliative care across the country under the up-gradation to Tertiary Cancer Centre scheme.

Cherian M. Koshy, appointed as Sir Bruce Davis Gold Medal Examiner in Palliative Medicine.

Cherian M. Koshy, editorial advisor, 'Indian Journal of Palliative Care'.

Jayasree K, Member, External Quality Assessment Committee, Indian Academy of Cytologists.

Jem Prabhakar, elected steering committee member, Indo-Italian Collaborative Group of Cancer Research Foundation India and European Institute of Oncology, Milan.

Prabha Pillai (Research Scholar), received Prof. Chinoy best paper cash award for paper presented at International Symposium on Current Trends in Endocrine and Reproductive Health and 29th Annual Meeting of Society for Reproductive Biology and Comparative Endocrinology (SRBCE 2011), Department of Studies in Zoology, University of Mysore, Mysore, 10-12 February 2011.

Priyakumari T., received best poster award for 'Molecular genetics of paediatric ALL in Kerala' at 14th National Conference of Paediatric Haematology & Oncology, Nagpur.

Ramadas K., received Fellowship of National Academy of Medical Sciences, India.

Ramadas K., received Nazli Gad-el-Mawla Award-2011 instituted by International Network for Cancer Treatment and Research (INCTR) for outstanding contributions to cancer treatment and research in developing countries.

Ramani S. Wesley, Volunteer project grant reviewer of Yamagiwa-Yoshida grants of Union for International Cancer Control (UICC).

Rari P. Mony, received best case presentation in slide seminar on 'ovarian pathology: granulocytic sarcoma ovary' in the 65th IAPM chapter, Kolencherry, 14th August 2010.

Rekha A. Nair, ICMR Task force member on Immunophenotyping of Hematolymphoid neoplasms.

Sangeetha Vijay, awarded Dept. of Science & Technology INSPIRE Fellowship.

Sindhu Nair P., received second prize for the poster presentation 'Flow cytometric immunophenotyping of chronic lymphoproliferative disorders: a case study' in the 7th National CME in Pathology at Thrissur Medical college, 12-14 February 2011.

Sreelekha R., received 1st rank in Masters degree in Hospital Administration conducted by University of Kerala.

Sudha P., awarded UICC-ICRETT Fellowship to visit the Department of Anaesthesiology and Critical Care Medicine, Memorial Sloan-Kettering Cancer Center, New York, USA for doing a project titled 'Recent trends and advances in interventional pain management in cancer patients' in April 2010.

Conferences, Training Programmes and Meetings Attended & Papers Presented by Staff & Students

INTERNATIONAL

SI. No.	Participant/Speaker	Conference/Meeting	Date & Venue	Title of the Paper/ Participant's Status
Ι.	Beela Sarah Mathew	52 nd Annual Meeting of ASTRO	Nov 2010, San Diego	Participant
2.	Bipin T. Varghese	American Society of Clinical Oncology Annual Meeting (ASCO 2010)	4-8 June 2010, Chicago, USA	Poster: 'Comparison of quality of life between voice rehabilitated and non-rehabilitated laryngectomies in a developing world community'.
3.	Chandramohan, Francis V. James, Paul Sebastian	India-Oxford Cancer Trial Meet	16-17 May 2010, UK	Participants
4.	Cherian M. Koshy	2 nd International Conference on Public Health and Palliative Care	21-23 Jan 2011, Dhakka, Bangladesh	Talk: 'Tele clinic in palliative care: unique window of opportunity in integrating public health and palliative care'.
5.	Elizabeth Mathew lype	Annual Conference of the European Society of Surgical Oncology	16-18 Sept 2010, France	Posters I. 'Changing the phase of cancer therapy: surgical cure for post radiation sequelae in head and neck cancer'. 2. 'Maxillectomy for carcinoma in young adults: a matched pair analysis'.
6.	Geetha N., Lali V.S.	American Society of Clinical Oncology Annual Meeting (ASCO 2010)	4-8 June 2010, Chicago, USA	Participants
7.	Jem Prabhakar	Laparoscopic Colorectal Surgery	Sept 2010, General Hospital, Singapore	Participant
8.	Jem Prabhakar	12th Milan Breast Cancer Conference	June 2010, Milan, Italy	Participant
9.	Raghukumar P.	Training in Varian Eclipse Treatment Planning System	8-18 June 2010, Switzerland	Participant
10.	Raghu Ram K. Nair	University of Barcelona Lecture Series	II-14 Sept 2010, Barcelona	Paper: 'Medical Physics curriculum in the developing world'.

11.	Ramachandran K., Prasad P.P.	Training programme on MRI	13-26 Mar 2011, National Cancer Centre, Singapore	Participants
12.	Sangeetha Vijay	The 4 th Pan Arab meeting & Human Genome Meeting on 'genomics of human diversity and heritable disorders'.	14-17 Mar 2011, Dubai	Paper: 'Exploring the value of conventional cytogenetics, FISH and RT- PCR in diagnosis, prognosis and clinical management of chronic myeloid leukaemia patients'.
13.	Shruti Prem	33 rd World Congress of International Society of Hematology	10-14 Oct 2010, Jerusalem, Israel	Paper: 'Risk factors for aplastic anaemia in India'.
14.	Sumod Mathew Koshy	European Society of MR in Medicine & Biology: Advanced MR Imaging of the Breast & Pelvis (ESMRMB teaching course)	4-6 Nov 2010, Rashid Hospital, Dubai	Participant

NATIONAL

SI. No.	Participant/Speaker	Conference/Meeting	Date & Venue	Title of the Paper/Talk /
				Participant's Status
١.	Aleyamma Mathew	26 th National Annual	7-8 Dec 2010,	Talks: I. 'Trivandrum
		Cancer Registry Meeting	Bangalore	cancer registry: summary of
				results'.
				2. 'Pattern of care and
				survival of female breast,
				cervix and head & neck
				cancers'.
				3. 'Monograph on brain
				and nervous system
				cancers'.
2.	Aleyamma Mathew	National Conference on Statistics for	17-19 Mar 2011,	Chairperson
		Twenty-First Century [NCSTC] &	Thiruvananthapuram	Talk: 'Statistical modelling and
		Annual Conference of Kerala Statistical		projection of cancer in
		Association		Kerala'.
3.	Anila K.R.	ISO 15189•2007: Internal Quality Audit	7-10 Jul 2010,	Participant
		Training programme for NABL Accreditation	n Sri Ramachandra	
			University, Chennai	
4.	Anila K.R.	CME on Principles and Techniques in	4 Sept 2010,	Participant
		Grossing of Oncology Surgical Specimens	Tata Memorial Hospital,	
			Mumbai	

5.	Anila K.R., Renu S., Latha A	IAPM Kerala Chapter meeting	14 Aug 2010, Medical College, Kolench	Participants ery
6.	Anila K.R.,Sindhu Nair P.	7 th National CME in Pathology and IAPM Kerala Chapter Meeting	12-14 Feb 2011, Thrissur	Participants
7.	Anitha C., Rajesh P.R., Vidduil Latha P.A., Mini V.L.	Training in Varian Linac (IMRT and IGRT)	22 Mar - 2 April 2010, Vydehi Institute of Medical Sciences, Bangalo	Participants ore
8.	Aravind S.R.	23 rd Kerala Science Congress	29 -31 Jan 2011, Thiruvananthapuram	Paper: 'Apoptotic potential of antitumour polysaccharide PST001 in KB and MCF-7 cells by gene expression profiles'.
9.	Aravind S.R.	30 th Annual Convention of the Indian Association for Cancer Research	6-8 Feb 2011, Kolkata	Paper: 'Examination of apoptosis signaling in A549 cells treated with antitumour polysaccharide isolated from Tamarindus indica'.
10.	Arun Peter Mathew	CME on Breast Cancers for Nurses	Oct 2010, Trivandrum	Talk: I.'Surgical treatment of breast cancer'. 2. 'Adjuvant treatment of breast cancer'.
11.	Arun Peter Mathew, Madhu Muralee	9th Annual Conference on Evidence Based Management of Cancers in India	25-27 Feb 2011, Mumbai	Participants
12.	Balagopal P.G.	South Zone Conference of Neuro Surgeons of India, Kerala Chapter	6 June 2010, Alappuzha	Participant
13.	Balagopal P.G.	BASICON: National Conference on Skull Base Surgery	22-23 Oct 2010, Thiruvananthapuram	Talk: 'Reconstruction of anterior skull base using Galea Aponurotica and abdominal pad of fat'.
14.	Balagopal P.G.	National Conference of Association of Rural Surgeons of India.	19-21 Nov 2010, Kollam	Talk: 'Early cancer detection in rural set up'.
15.	Balagopal P.G.	Annual Conference of NSI Kerala Chapter	5-6 Feb 2011, Kottayam	Participant
16.	Beela Sarah Mathew	CME on Breast Cancer organized by AROI, Kerala Chapter	Feb 2011, Kumarakom, Kottayam	Invited talk: 'Targeted therapy in breast cancer'
17.	Bhagyalakshmi R.	Swasthi 2011: CME	10 Mar 2011, Thiruvananthapuram	Participant
18.	Bhagyalakshmi R., Rajasree O., Sudha P., Deepthi J. Prabhu, Rachel Cherian Koshy, Mallika Balakrishnan, Viji Pillai	Niswas 2010: CME	3 - 4 Jul 2010, Thiruvananthapuram	Participants

19.	Bindhu P.P.	Endoscopy Training	3-4 May 2010, PVS Hospital, Ernakulam	Participant
20.	Binumon M., Harikrishnan K., Kalavathy M.C., Lalitha Bhai, Preethi Sara George, Soumya P.	26 th National Annual Cancer Registry Meeting	7-10 Dec 2010, Bangalore	Participants
21.	Bipin T. Varghese	Joint FHNO and IFHNOS meeting	9-11 Oct 2010, Bangalore	Paper: 'Microvascular reconstruction in a low resource high volume cancer centre'.
22.	Bipin T. Varghese	CME cum Alumni meet organized by the Department of ENT and Head & Neck Surgery, Kasturba Medical College	4-5 Dec 2010, Mangalore	Talk: 'Management of head and neck cancers'.
23.	Bipin T. Varghese	'Jyothirgamaya' : Workshop on Head and Neck Ultrasound	3 Oct 2010, Thiruvananthapuram	Talk: 'Ultrasonography of the head and neck region: clinical scenario'.
24.	Bipin T. Varghese	KENTCON 2010: Annual conference of the AOI Kerala	18-19 Sept 2010, Kollam	Talk: 'Post laryngectomy voice rehabilitation during the operative surgery: controversies in management of laryngeal cancers'.
25.	Bipin T. Varghese	Symposium on Management of Laryngeal and Hypopharyngeal Cancers.	6 Aug 2010, Thiruvananthapuram	Panelist
26.	Chandramohan K.	ASICON 2010: Annual Conference of Association of Surgeons of India	15-19 Dec 2010, New Delhi	Talk: 'Wide excision followed by partial breast reconstruction using silicon implant and Lattissimus Dorsi myocutaneous flap (Video presentation)'.
27.	Chandramohan K.	NATCON IASO 2010: Indian Association of Surgical Oncologists	17-19 Sept 2010, Mumbai	Talk: 'Translation and validation of quality of life tools in local language: experience in a tertiary care cancer institute'.
28.	Chandramohan K.	ACSRICON 2010: Association of Colorectal Surgeons of India	22-25 Sept 2010, Jaipur	Talk: 'Study of factors affecting pathologic complete remission (PCR) after chemo radiation for rectal cancer'.

29.	Cherian M. Koshy	18 th International Conference of Indian Association of Palliative Care.	II-13 Feb 2011, Lucknow	Talks: I. 'Networking in palliative care'. 2. 'Euthanasia and assisted dying: the debate'.
30.	Cherian M. Koshy	Continuing Medical Education Programme of Department of Haematology and BMT	10 Mar 2011, Christian Medical College, Ludhiana	Talk: 'Role of palliative care in haematology and medical oncology'.
31.	Cherian M. Koshy	Indian Palliative Care Initiative	13 Mar 2011, AIIMS, New Delhi	Talk: 'The changing scenario in palliative care services at RCC, Trivandrum'
32.	Christo Rajan	International Cancer Research Symposium-2010: Defining and translating science behind the disease.	20-22 Dec 2010, Thiruvananthapuram	Paper: 'MicroRNA expression pattern in normal, pre-malignant and malignant oral mucosa'.
33.	Kannan S	Indian Association of Cancer Research Satellite Meeting: 'Inhibition of tumour	11-12 Feb 2011, Thrissur	Talk: 'MicroRNA: A new horizon in cancer research'. progression'.
34.	Deepak Roshan	International Cancer Research Symposium-2010: Defining and translating science behind the disease.	20-22 Dec 2010, Thiruvananthapuram	Paper: 'Involvement of HIF- Ialpha and FBX4 in cyclin DI over expression in oral carcinoma'.
35.	Kannan S	International Cancer Research Symposium-2010: Defining and translating science behind the disease.	20-22 Dec 2010, Thiruvananthapuram	Talk: 'Delineation of cyclin d1 dysregulation in oral carcinoma'.
36.	Deepak Roshan V.G.	30 th Annual Convention of Indian Associatio for Cancer Research and International Symposium on 'Signaling network and cance	Kolkata	Paper: 'Deciphering the mechanisms involved in cyclin DI over-expression in oral carcinoma'.
37.	Deepthi J. Prabhu, Mallika Balakrishnan	International Conference & Workshop on Difficult Airway	3 – 5 Dec 2010, Tata Memorial Hospital, Mumbai	Participants
38.	Elizabeth Mathew lype	Annual meeting of the International Federation of Head and Neck Oncology (IFHNOS)	9-11 Oct 2010, Bangalore	Chaired a session on sinuses and skull base.
39.	Elizabeth Mathew lype	Hands on training in micro vascular surgery	6-10 June 2010, Chennai	Participant
40.	Elizabeth Mathew lype	Advanced Head and Neck Oncology Meeting (AHEAD)	4-6 Feb 2011, Kochi	Faculty Talk:'Laryngeal surgery'. (Video)
41.	Elizabeth Mathew lype	Association of Otolaryngolgy meeting	5 Dec 2010, Thiruvananthapuram	Talk: 'Recent trends in the management of laryngeal cancer'.

42.	Farha A. K., Remani P., Sangeetha Vijay	23 rd Kerala Science Congress	29-31 Jan 2011, Thiruvananthapuram	Participants
43.	Geetha N., Prakash N.P.	Haematology CME	13-14 Nov 2010, Mumba	i Participants
44.	Geetha N.	APML meeting	CMC Vellore	Participant
45.	Geetha S., Vasantha Kumari, Renjini R.S., Aswathy M. R., Preetha S., Linsa George, Thara S.S., Kumari Sobha, Deepa Davis	HIV/AIDS and ART Training for Nurses under Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM): Round 7	Govt. College of Nursing Thiruvananthapuram	
46.	Giri Purushothaman	National Technological Congress	28-29 Jan 2011, Thiruvananthapuram	Participant
47.	Grata Ildaphonse	National Conference on Statistics for Twenty-First Century [NCSTC] & Annual Conference of Kerala Statistical Association	17-19 Mar 2011, Thiruvananthapuram	Paper: 'Comparison of risk estimates for an individual matched case control study on kidney cancer'.
48.	Harikrishnan K., Jayaprakash V., Sreekandan I., Sunoj C. Varughese, Sudhamony S., Kanchana R., Geetha M.L., Jyothisree	Satellite meeting of 7 th International Conference on High Levels of Natural Radiation & Radon Areas (HLNRRA)	20-21 Nov 2010, Neendakara, Kollam	Participants
49.	Hariharan S.	7 th International Conference on High levels of Natural Radiation & Radon Areas	24-26 Nov 2011, Mumbai	Paper. 'Dose effect relationship of dicentric and ring chromosomes in lymphocytes of individuals living in the high background radiation areas in Karunagappally, Kerala, India'.
50.	Hariharan S.	Translational Cancer Prevention & Biomarkers Workshop 2011	13-17 Feb 2011, Bangalore	Participant
51.	Jayalekshmi P.	Satellite Meeting of 7 th International Conference on High Levels of Natural Radiation & Radon Areas (HLNRRA)	20-21 Nov 2010, Neendakara, Kollam	Talk: 'Non-cancer disease mortality and socio- demographic studies in HBRA, Karunagappally, Kerala'.
52.	Jayalekshmi P.	7 th International Conference on High Levels of Natural Radiation & Radon Areas (HLNRRA)	24-26 Nov 2010, Mumbai.	Talk: 'Non- cancer disease mortality in high background radiation area of Karunagappally, Kollam, Kerala.'

53.	Jayalekshmi P.	26 th National Annual Cancer	7-10 Dec 2010,	Talk: 'Cancer incidence &
		Registry Meeting (2007 & 2008)'.	Bangalore	mortality in Kollam District
54.	Jayaprakash V.,	7 th International Conference on High Levels	24-26 Nov 2010,	Participants
	Kanchana R.,	of Natural Radiation &	Mumbai	
	Sunoj C. Varughese	Radon Areas (HLNRRA)		
55.	Jayasree K.	CYTOCON 2010: 40th Annual Conference	25-28 Nov 2010,	Faculty
		of Indian Association of Cytologists	Kolkata	Paper: 'Adenocarcinoma in situ and diagnostic dilemmas'.
56.	Jayasree K.	7 th National CME in Pathology and IAPM	12-14 Feb 2011,	Faculty
	, ,	Kerala Chapter meeting	Thrissur	'Challenges in the diagnosis of bone tumours'.
57.	Jayasree K.	Insight 2011: Annual CME on Bone Tumours	: 13 Mar 2011,	Faculty
	,	G	Thiruvananthapuram	'Challenges in giant cell tumour pathology'.
58.	Jem Prabhakar,	NATCON IASO 2010: Indian Association	17 – 19 Sept 2010,	Participants
	Madhu Muralee	of Surgical Oncologists	Mumbai	
59.	Jiji V.	Annual Conference of the Association of	29 - 31 Oct 2010,	Participant
		Nuclear Medicine Physicians of India	Thiruvananthapuram	
60.	Jiji V.,	'Jyothirgamaya' : Workshop on Head and	3 Oct 2010,	Participants
	Sumod Mathew Koshi	Neck Ultrasound	SCTIMST,	
			Thiruvananthapuram	
61.	Jiji V.,	Indo-Canadian Conference on Advanced	5-6 Feb 2011, SCTIMST,	Participants
	Sumod Mathew Koshi	Paediatric Neuroimaging and Research Methodology	Thiruvananthapuram	
62.	Kalavathy M.C.,	International Cancer Research Symposium:	20-22 Dec 2010,	Paper: 'Cytological predictors
		Defining and translating science	RGCB,	of oncogenic HPV positivity
		behind the disease	Thiruvananthapuram	among women with ASCUS'.
63.	Kumari Thankam S.	Supervisory & Management Training to	8 Jul 2010,	Talk: 'Palliative care'
		Nursing school Principals and Nursing	Govt. School of Nursing,	
		superintendent of health service department organized by DGHS	Thiruvananthapuram	
64.	Kusumakumary P.	Oncology 2010	11 Dec 2010, Kottayam	Talk: 'Management of
			Ewing sarcoma'.	
65.	Kusumakumary P.	10th Annual Conference of RGCON 2011	5-6 Feb 2011	Talk: 'Chemotherapy of non-
			New Delhi	rhabdomyosarcoma soft tissue sarcoma'.
66.	Lakshmi S.,	International Cancer Research Symposium:	20-22 Dec 2010,	Participants
	Sreeja R.,	Defining and translating science behind	RGCB,	
	Jasmine A.S.	the disease.	Thiruvananthapuram	
			·	

67.	Lakshmi S.	International Cancer Research Symposium: Defining and translating science behind the disease	20-22 Dec 2010, RGCB, Thiruvananthapuram	Paper: 'Apoptotic and chemopreventive efficacy of a sesquiterpenoid from Curcuma zedoaria'.
68.	Lakshmi S.	30 th Annual Convention of Indian Association for Cancer Research.	6-9 Feb 2011, Kolkata	Paper: 'Chemo-preventive and apoptosis inducing efficacy of a flavonoid from Alpinia galanga'.
69.	Lizyamma Jacob	Observer Trainee: Infection Control Practice	24 – 29 May 2010, CMC Vellore	Participant
70.	Lizyamma Jacob, Sithara Balakrishnan	Bio-medical Waste Management	10 Feb 2011, Thiruvananthapuram	Participants
71.	Madhu Muralee	33 rd Annual conference of Association of Surgeons of India, Kerala chapter	May 2010, Cochin	Talk: 'Blood and blood products in surgical practice'.
72.	Madhu Muralee	Public health update	June 2010, Thiruvananthapuram	Talk: 'Malignancies and surgeon'.
73.	Madhu Muralee	A 2 Z series on Thyroid Diseases	August 2010, Thiruvananthapuram	Participant
74.	Madhu Muralee	ASI Peripheral Meet	Feb 2011, Perinthalmanna	Participant
75.	Mallika Balakrishnan	Intensive Care Update: 2010: Indian Society of Critical care Medicine, Trivandrum chapter	3 Oct 2010, Thiruvananthapuram	Participant
76.	Manju L.	National Conference on Statistics for Twenty First Century [NCSTC] & Annual Conference of Kerala Statistical Association	17-19 Mar 2011, Thiruvananthapuram	Paper: 'Conditional and unconditional logistic regression estimates for a matched case-control study on bladder cancer'.
77.	Manu M. Joseph	Nano - 2010	13-16 Dec 2010, Thiruchemcode	Participant
78.	Manu M. Joseph	23 rd Kerala Science Congress	29 -31 Jan 2011, Thiruvananthapuram	Paper: 'Antioxidant, antitumor and immunomodulatory properties of polysaccharide isolated from fruit rind of Punica'.
79.	Manu M. Joseph	30 th Annual Convention of the Indian Association for Cancer Research	6-8 Feb 2011, Kolkata	Paper: 'Synthesis of anticancer polysaccharide PST001-capped gold nanoparticles and evaluation of its activity'.
80.	Mary Thomas	RACE 2011: Ramachandra Anesthesia Continuing Education	4-6 Feb 2011, Chennai	Participant

81.	Neelima N.	One day workshop on GARUDA Grid computing by CDAC Bangalore and NIC, DELHI	30 April 2010, Chennai	Participant
82.	Neelima N.	E-Governance Life Cycle Training Program	17 - 21 Jan 2011, Thiruvananthapuram	Participant
83.	Nileena Nayak, Anila K.R., Renu S., K. Raveendran Pillai, Latha A., Gracy George	nternational Workshop on Colposcopy & Treatment of cervical precancers	6-7 Nov 2010, RCC, Thiruvananthapuram	Participants
84.	Paul Sebastian	7 th International Conference on High levels of Natural Radiation & Radon Areas	24-26 Nov 2010, Mumbai	Participant
85.	Paul Sebastian	KASICON 2010 : Annual conference of Association of Surgeons Of India (Kerala chapter)	May 2010, Kochi	Talk: 'Senior's vision: management of oral cancer'.
86.	Paul Sebastian	26 th National Annual Cancer Registry Meeting	7-8 Dec 2010, Bangalore	Participant
87.	Paul Sebastian	INDOX Meeting	Dec 2010, Mumbai	Participant
88.	Prabha Pillai	Society for Biotechnologists India: National conference on Innovation in Biotechnology, 2010	7-8 Oct 2010, Sri Ramachandra University, Chennai	Paper: 'Association of STATs with anti-apoptotic genes-Bcl-2, Bcl-X, Mcl-I and surviving in breast cancer'.
89.	Prabha Pillai	International Cancer Research Symposium: Defining and translating science behind the disease.	20-22 Dec 2010, RGCB, Thiruvananthapuram.	Poster: 'Expression of activated STAT3: Significant association with MMP-2, MMP-9 and VEGF expression'.
90.	Prabha Pillai	International Symposium on current trends in Endocrine and Reproductive Health and 29th Annual meeting of Society for Reproductive Biology and Comparative Endocrinology (SRBCE 2011)	10-12 Feb 2011, University of Mysore, Mysore	Paper: 'Signal transducers and activators of transcription3 (STAT3) association with negative estrogen receptor status in breast cancer'.
91.	Preethi Sara George	National Conference on Statistics for Twenty-First Century [NCSTC] & Annual Conference of Kerala Statistical Association	17-19 Mar 2011, Thiruvananthapuram	Paper: 'Risk estimation per unit change from summarized data and empirical comparisons'.
92.	Preethi T.R.	Workshop on Biopsy Sample preparation and Her-2 Testing	6 July 2010, Gurgaon	Participant
93.	Preethi T.R.	Cytocon 2010: Pre Conference CME of the Annual Conference of IAC	25-28 Nov 2010, Kolkata	Participant
94.	Preethi T.R.	CME on Update on Laboratory Medicine	15 Jan 2011, Medical College, Kottayam	Paper: 'Update on fluid cytology'.

95.	Priyakumari T.	14 th National Conference of Pediatric Hematology & Oncology	26-28 Nov 2010, Nagpur	Poster: 'Molecular genetics of paediatric ALL in Kerala' (Received best poster award)
96.	Priyakumari T.	International Cancer Research Symposium 2010 : Defining and Translating	20-22 Dec 2010, RGCB,	Paper: 'Molecular analysis of fusion gene transcripts in
		science behind the disease	Thiruvananthapuram	childhood ALL'.
97.	Priyakumari T.	International Cancer Research Symposium:	20-22 Dec 2010,	Paper: 'Molecular genetics of
		Defining and translating science behind the	RGCB,	paediatric acute lymphoblastic
		disease.	Thiruvananthapuram	leukemia in Kerala'.
98.	Rachel Cherian Koshy	Regional Anaesthesia in Modern Era	16 May 2010, Bangalore	Participant
99.	Rachel Cherian Koshy	Thoracic Anaesthesia: Recent Advances	26-27 June 2010,	Panelist
		and current trends in onco- anaesthesia	Mumbai	
100.	Rachel Cherian Koshy	Workshop on Haemodynamic Monitoring	24 July 2010, Kochi	Participant
101.	Rachel Cherian Koshy	26 th South Zone CME and conference	24-26 Sept 2010,	Chaired session
		and 34th Kerala State Conference of	Thrissur	
		Indian Society of Anaesthesiologists		
102.	Rachel Cherian Koshy	Update 2010: Volatile induction and	6 Nov 2010,	Participant
		maintenance of anaesthesia	Kochi	
103.	Raghukumar P.	Annual Conference of Association of	18-21 Nov 2010,	
		Medical Physicists of India.	Lucknow.	Participant
104.	Raghu Ram K. Nair	Annual Conference of Association of	18-21 Nov 2010,	Talk: 'The role of medical
		Medical Physicists of India.	Lucknow	physicist in imaging sciences'.
105.	Raghu Ram K. Nair	7 th International Conference on High Levels	24-26 Nov 2010,	Talk: 'Cancer risk among
		of Natural Radiation & Radon Areas	Mumbai	HBRA residents of
				Karunagappally, Kerala, India'.
106.	Raghu Ram K. Nair	National Conference on Impact of	17-18 Jan 2011, BARC,	Talk: 'Cancer risk among
		Radiation Technology on Human	Mumbai	HBRA residents in
		Health & Environment		Karunagappally, India &
				Yangjiang, China'.
107.	Raghu Ram K. Nair	National Seminar on Recent Trends in	3 March 2011,	Talk: 'The impact of
		Medical Imaging & Instrumentation	Nagercoil	technology in medicine'.
108.	Ramachandran K.	Annual Conference of the Association of	29 – 31Oct 2010,	Chaired Session
		Nuclear Medicine Physicians of India	Thiruvananthapuram	
109.	Ramadas K.	Effective Management of Head and	7 May 2010,	Chairperson
		Neck Cancer: a Global Perspective	Thiruvananthapuram	·
110.	Ramadas K.	CME programme on Public Health Updates:	17 June 2010,	Faculty
		CME series for Health Professionals	Thiruvananthapuram	,
111.	Ramadas K.	Best of ASCO 2010	10-11 Jul 2010, Hyderaba	nd Faculty
112.	Ramadas K.	Quality Healthcare: Dream to Reality	24 July 2010, Kerala Instit	
		Thiruvananthapuram	Participant	
113.	Ramadas K.	First Indo-US Translational Cancer	13-17 Feb 2011,	
		Prevention and Biomarkers Workshop.	Bangalore	Faculty
		I		·

114.	Ramadas K.	3 rd Head & Neck Cancer Expert	19 Mar 2011,	-
	2	Forum Webcast.	Mumbai	Faculty
115.	Ramani Wesley	National Conference on Tobacco or Health	'	Paper: 'Effectiveness of
			Mumbai	antitobacco awareness
				programmes conducted
				among adolescent students of
117	Davis and described IV	Turining in Labourton Coulity Management	0 12 4 2010	rural Kerala State'.
116.	Raveendran Pillai K.	Training in Laboratory Quality Management	9 - 12 Aug 2010,	Participant
		and Internal Audit for NABL Accreditation	Centre for Electronic	
	D I D'II ' IV	for Clinical Laboratories	Test Engineering, Bangalo	
11/.	Raveendran Pillai K.,	International Cancer Research	20-23 Dec 2010,	Participants
	K. Sujathan, T.T. Sreelekha	Symposium-2010: Defining and	RGCB,	
	D 1 D'II ' IV	translating science behind the disease.	Thiruvananthapuram	
118.	Raveendran Pillai K.	Indian Association of Cancer Research	II-I2 Feb 20II,	
		Satellite Meeting on "Inhibition of	Amala Cancer Research	6
	D.11 A.11.	Tumour Progression"	Centre, Thrissur	Participant
119.	Rekha A. Nair	Advanced TCS Flow cytometry workshop	29 Mar-1 April 2010,	6
	2.11		Delhi	Participant
	Rekha A. Nair	Seminar on Molecular Diagnostics	7 Aug 2010, Chennai	Participant
121.	Rekha A. Nair	Annual meeting of the Cytometry	19-20 Oct 2010,	
		Society of India	NCBS, Bangalore	Participant
122.	Rekha A. Nair	Diagnostic Advances in	27 -28 Nov 2010,	
		Laboratory Medicine	Army Hospital, Delhi	Participant
123.	Rekha A. Nair	Lymphoma update 2011	8 -9 Jan 2011,	
			Chennai	Participant
124.	Rekha A. Nair	Pathology of NHL: An update	10-11 Jan 2011,	
			CMC, Vellore	Participant
125.	Rema P.	Colposcopy and Treatment of	7 Nov 2010, RCC	Talk: 'Role of cold coagulation
		Cervical Pre-cancers	Thiruvananthapuram	in the management of
				cervical intra epithelial
				neoplasms'.
126.	Rema P.	CME on Cervical Cancers	Dec 2010, Alappuzha	Talk: 'Radical hysterectomy:
				an overview'.
127.	Rema P.	OBGYN Club Monthly Meet	Jan 2011,	Talk: 'Reproduction
			Thiruvananthapuram	beyond cancer'.
128.	Remani P., Sreelekha T.T.	Seminar on Career Advancement	22 Sept 2010,	
		Programme for Women Scientists	Thiruvananthapuram	Participants
129.	Renu S.	International Academy of Pathology-	9-12 Dec 2010,	Participant
		Indian Division &	Hyderabad	
		IAPM Annual conference		

130. Sangeetha Vijay	The 4th International Conference on Genetic and Molecular Diagnosis in Modern Medicine.	28-30 Jan 2011, Bangalore	Paper: 'Clinical utility of fluorescent in situ hybridization in unmasking the cryptic sub-microscopic rearrangements of derivative 9 chromosome in chronic myeloid leukemia'.
131. Sangeetha Vijay	Workshop on Multicolor Spectral Karyotyping and its Applications in Clinical Cytogenetics.	12-15 Apr 2010, Centre for Human Genetics, Bangalore	Participant
132. Santhi S.	The 4th International Conference on Genetic and Molecular Diagnosis in Modern Medicine.	28-30 Jan 2011, Bangalore	Paper: 'Comparative advantage of FISH over RT-PCR and conventional cytogenetics in acute myeloid leukemia patients'.
133. Santhi S.	23rd Kerala Science Congress.	29-31 Jan 2011, Thiruvananthapuram	Paper: 'Diagnostic value of RT-PCR for the detection of genomic aberrations in patient with AML'.
134. Santhoshkumar A.R.	Energy Management Programme under Energy Management Centre	17 Dec 2010, Kochi	Participant
135. Shaji Thomas	KASICON 2010 : Annual conference of Association of Surgeons Of India (Kerala cha	May 2010, Kochi apter)	Participant
136. Shaji Thomas	BASICON: National Conference of Skull Base Surgery	22-23 Oct 2010, Thiruvananthapuram	Participant
137. Shaji Thomas	ARSICON 2010: 18th Annual Conference of Association of Rural Surgeons of India	November 2010, Kollam	Talk: 'Reconstructive options in head and neck cancer surgeries'.
138. Sheeja Varghese	Indian Association of Cancer Research Satellite Meeting on "Inhibition of Tumour Progression"	II-I2 Feb 20II, Thrissur	Paper: 'A novel polysaccharide PSM001 as a potential antioxidant and immunomodulatory compound'.
139. Shruti Prem	ISHTM	18-21 Nov 2010,	Talk: 'Taking care of patients Kolkata on chemotherapy'.
140. Shruti Prem	NIH FHI Workshop on Randomized Controlled Trials	21-24 Dec 2010, Thiruvananthapuram	Participant
141. Sivadas V.P.	International Cancer Research Symposium-2010: Defining and translating science behind the disease	20-22 Dec 2010, RGCB, Thiruvananthapuram	Paper: 'Characterization of molecular alterations In TGFâ- SMAD signaling pathway in oral carcinoma

142.	Sreekala R., Sunilkumar S.	Training in Varian Linac (IMRT and IGRT)	27 Sept- 9 Oct 2010, Indo-American Cancer Hospital, Hyderabad	Participants
143.	Sreelekha R.	Nurses Training Course	9 Feb & 28 Feb 2011 Thiruvananthapuram	Talk: 1. 'Leadership styles and characteristics of a leader'. 2.'Nursing audit'.
144.	Sreelekha R.,	Observer trainee (Infection	Tata Memorial Hospital,	Participants
	Lizyamma Jacob	control practice)	Mumbai	
145.	Sreelekha T.T.	Seminar on role of immunomodulators in cancer therapy	11-12 Oct 2010, Coimbatore	Talk: 'Immunomodulators: therapeutic implication in cancer with special emphasis on plant polysaccharides'.
146.	Sreelekha T.T.	Nanotech 2010	19-21 Nov 2010, Kochi	Participant
147.	Sreelekha T.T.	Indian Association of Cancer Research Satellite Meeting on Inhibition of	11-12 Feb 2011, Thrissur	Talk: 'Elucidation of the antitumour potential of a
		Tumour Progression		polysaccharide from Tamarindus indica'.
148.	Sreelekha T.T.	National Seminar on Life style Diseases	29 Mar 2011, Thiruvananthapuram	Talk: 'Plant polysaccharides in cancer therapy'.
149.	Suchetha S.	OBGYN club Monthly meet	Jan 2011, Thiruvananthapuram	Talk: 'Treatment of early cervical cancer'.
150.	Sudha P.	FOCUS 2010: National Conference on	7-8 Aug 2010,	
		Hospital Administration	Thiruvananthapuram	Participant
151.	Sujathan K.	CYTOCON 2010: 40th Annual Conference	25-28 Nov 2010,	
		of Indian Academy of Cytologists	Kolkata	Participant
152.	Sumod Mathew Koshy	Annual Conference of the Association	29 - 31 Oct 2010,	Talk: 'Whole body MR
		of Nuclear Medicine Physicians of India	Thiruvananthapuram	Imaging'.
153.	Surendran Nair V.	Seminar on Geriatric Welfare	6 Dec 2010,	Participant
			Thiruvananthapuram	
154.	Thomas Abraham	CME Programme on Quality	12 Aug 2010, RCC,	Talk: 'Road map to quality
		Improvement in Laboratory Medicine.	Thiruvananthapuram	excellence in laboratory medicine'.
155.	Thomas Abraham	2010 BC Key Leaders' Open forum	16-18 July 2010, Panaji, Goa	Participant
156.	Thomas Abraham	3 rd Vellore Coulter Series: Cytometry:	27-29 Aug 2010,	
		taking it to a perfect ten.	Chennai	Participant
157.	Venugopal A.	ISACON Kerala 2010: The South Zone &	24-26 Sept 2010,	Talk: 'Pre-op evaluation of a
	0 1	Annual State Conference of Indian Society	Thrissur	cancer patient coming for
		of Anaesthesiologists		surgery'.
158.	Venugopal A.	Annual National Conference of Indian	26-29 Dec 2010,	Talk: 'Malposition of central
	5 1	Society of Anaesthesiologists	Lucknow	venous catheter tip: is chest
				X- ray always mandatory?'

159. Venugopal A.	ISA MIDKON: Midterm CME and PG quest organized by Indian Society of	11-12 Mar 2011, Kochi	Talk: 'Difficult airway management: case discussion'.
	Anaesthesiologists Kerala State Chapter		
160. Vijayakumar L.	Lifelong learning programme in Energy	15 Apr 2010, Bangalore	Participant
	Efficiency Process and Energy Conservation		
	in Hospital Buildings		
161. Vijayalakshmi K.	Indian Society of Blood Transfusion &	30 Jan 2011,	
	Immunohaematology: ISBTI CME	Alappuzha	Participant
162. Viji Pillai	ISACON Kerala 2010: The South Zone &	24-26 Sept 2010,	Paper: 'Screening practices of
	Annual State Conference of Indian	Thrissur	HIV, HBsAg among
	Society of Anaesthesiologists		anaesthesiologists of South
			India'.

ONGOING RESEARCH PROJECTS

SI. No.	Principal Investigator	Project Title	Funded by	Status
		BREAST		
I	Beela Sarah Mathew	ATLAS: Tamoxifen Longer vs Shorter.	Oxford University	Ongoing
2	Beela Sarah Mathew	Risk factors for breast cancer in India: an INDOX case-control study.	Oxford University	Ongoing
3	Ramadas K.	Randomised controlled evaluation of clinical early detection in the control of breast cancer in lowand medium- resource settings.	IARC, Lyon, France	Ongoing
		GASTRO-INTESTINAL		
4	Chandramohan K.	Tumour primordial cells in colorectal cancer: implications for surgical margins and minimal residual disease.	Dept. of Biotechnology, Govt. of India	Ongoing
5	Sajeed A.	Aspirin for Dukes C and high risk Dukes B colorectal cancers: An international, multi-centre, double blind, randomised placebo controlled phase 3 trial.	SCRI, Singapore	Ongoing
		GYNAEC & GENITO-URINARY		
6	Paul Sebastian	A study on role of cold coagulation in the management of cervical intraepithelial neoplasia.	IARC , WHO Lyon, France	Ongoing
	HAE	MATOLOGICAL, LYMPHORETICULAR, BONE &	SOFT TISSUE	
7	Geetha N.	Molecular remission with arsenic trioxide in acute promyelocytic leukaemia: (Indian APML Study Group)	Dept. of Biotechnology, Govt. of India	Follow up phase
8	Geetha N.	Cytogenetic and molecular response to imatinib in patients with chronic myeloid leukaemia.	Kerala State Council for Science, Technology & Environment	Ongoing
		HEAD & NECK		
9	Balagopal P.G.	A genome wide approach to understand the pathogenesis of tongue cancer and its metastasis to cervical lymph nodes.	Centre for DNA Fingerprinting and Diagnostics, Govt. of India	Ongoing
10	Balagopal P.G.	Molecular and genetic approach to understand the pathogenesis of thyroid cancer.	Institute of Genomics and Integrative Biology, Govt. of India	Ongoing
	Bipin T. Vargheese	Development of a strategy for comprehensive post laryngectomy rehabilitation: a Kerala perspective.	Kerala State Council for Science, Technology & Environment	Ongoing

12	Paul Sebastian	Molecular ecology, molecular genetics and natural history of anterior tongue cancer in young adults without (or insignificant) tobacco exposure: can a distinct clinical entity be defined?	Dept. of Biotechnology, Govt. of India	Ongoing
13	Paul Sebastian	Phase 2, double – blind, placebo controlled randomized study of sulindac, a pan – COX inhibitor in oral premalignant lesions.	Memorial Sloan Kettering Cancer Centre, New York	Ongoing
14	Paul Sebastian	Phase 3, double blind, placebo controlled study of post-operative adjuvant concurrent chemoradiotherapy with or without nimotuzumab for stage 3/4 head and neck squamous cell carcinoma.	National Cancer Centre, Singapore	Ongoing
15	Ramadas K.	Cluster randomized controlled trial of oral cancer screening.	IARC, Lyon, France	Ongoing
16	Ramadas K.	Estimation of tobacco attributable mortality in Kerala.	IARC, Lyon, France	Ongoing
17	Ramadas K.	Clinical and patho-biological effects of curcumin on oral leukoplakia: a double blind placebo controlled randomized trial.	Dept. of Biotechnology, Govt. of India	Ongoing
		PAEDIATRIC ONCOLOGY		
18	Kusumakumary P.	Indian Paediatric Oncology Initiative	Jiv Daya Foundation	Ongoing
19	Priyakumari T.	Molecular genetics of paediatric acute lymphoblastic leukemia in Kerala	Kerala State Council for Science, Technology & Environment	Ongoing
		PALLIATIVE MEDICINE		
20	Cherian M. Koshy	Indian Palliative Care Initiative	Jiv Daya Foundation	Ongoing
		PATHOLOGY		
21	Anitha Mathews	Classification of breast carcinoma based on immunohistochemical profile and its correlation with histomorphological features and clinical outcome.	Kerala State Council For Science, Technology & Environment.	Ongoing
22	Rekha A. Nair	Micro RNA (miRNA) profiling in leukemias and lymphomas.	Dept. of Biotechnology, Govt. of India	Ongoing
23	Sujathan K.	Identification of biomarkers for thyroid cancer.	Dept. of Biotechnology, Govt. of India	Ongoing
24	Sujathan K.	Medical image processing for automated Pap smear screening.	Dept. of Information Technology, Govt. of India	Ongoing
25	Sujathan K.	3-D analysis of chromatin texture in cell nuclei to improve cervical cancer screening.	Vinnova	Ongoing

		CANCER EPIDEMIOLOGY		
26	Aleyamma Mathew	Feasibility study for a prospective life-style and dietary cohort in Thiruvananthapuram.	National Cancer Institute, USA	Ongoing
27	Aleyamma Mathew	Population Based Cancer Registry, Thiruvananthapuram.	ICMR, Govt. of India	Ongoing
28	Aleyamma Mathew	Rural Cancer Registry, Thiruvananthapuram	Finnish Cancer Society, Finland	Ongoing
29	Aleyamma Mathew	Risk prediction models for the development of breast cancer in Kerala.	University of Kerala	Ongoing
30	Aleyamma Mathew	Risk factors of bladder and kidney cancers: a case-control study.	Kerala State Council for Science, Technology & Environment	
31	Kalavathy M.C.	Thiruvananthapuram Corporation Cancer Control programme.	Thiruvananthapuram Corporation	Ongoing
32	Kalavathy M.C.	Role of cervical HPV infection in progression or regression of a Pap smear diagnosis of atypical squamous cells among women attending the Gynaec OPD of Women & Children Hospital, Thycaud, Thiruvanathapuram.	Kerala State Council for Science, Technology & Environment	
33	Paul Sebastian	Pattern of care and survival studies on cancers of cervix, female breast and head and neck cancers.	ICMR, Govt. of India	Ongoing
34	Paul Sebastian	Hospital Based Cancer Registry.	ICMR, Govt. of India	Ongoing
		CANCER RESEARCH		
35	Kannan S.	Study on the significance of Micro-RNA expression pattern in oral carcinoma.	Dept. of Biotechnology, Govt. of India	Ongoing
36	Kannan S.	Molecular dissection of TGF-Smad signaling pathway in oral carcinoma.	Dept. of Biotechnology, Govt. of India	Ongoing
37	Kannan S.	Knockdown studies to elucidate the mechanism of cyclin D1 over-expression and exploration of its therapeutic implication in oral carcinoma.	Kerala State Council for Science, Technology & Environment	Ongoing
38	Remani P.	Antitumour properties of Alpinia galanga, a medicinal plant of Zingiberaceae.	ICMR, Govt. of India	Completed
39	Remani P.	Evaluation of the anti-tumor and immunomodulatory properties of deoxy elephantopus and isodeoxy elephantopus isolated from Elephantopus scaber.	Kerala State Council for Science, Technology & Environment	
40	Sreelekha T.T.	Elucidation of the molecular mechanism of mitotic inhibition by polysaccharide PST001 in human cancer cell lines.	Life Sciences Research Board, DRDO, Govt. of India	Ongoing

41	Sreelekha T.T.	Genomic instability in lung cancer as an early prediction tool.	Dept. of Science & Technology, Govt. of India	Ongoing
42	Sreelekha T.T.	Development of a microarray biochip to detect chromosomal translocations in leukaemia.	Kerala State Council for Science, Technology & Environment	Ongoing
		COMMUNITY ONCOLOGY		
43	Gigi Thomas	Randomised controlled trial of oral cancer screening by mouth examination in Kerala, India.	IARC, Lyon, France	Ongoing
44	Jayakrishnan R.	Project on Resource Centre for Tobacco Control	World Health Organisation	Ongoing
45	Jayakrishnan R.	Randomised controlled trial for evaluating the effectiveness of community based tobacco cessation strategies in Kerala State.	Part funding from Tobacco Cessation Project	Ongoing
46	Jayakrishnan R.	Commemoration of World No Tobacco activities 2009-2010.	World Health Organisation	Ongoing
47	Ramani S. Wesley	Evaluation of early detection of cervical cancer precursors by visual inspection with Lugol's iodine (VILI), visual inspection with acetic acid (VIA) and magnified VIA (VIAM) in Kerala, India.	IARC, Lyon, France & Bill Gates Foundation	Ongoing
48	Ramani S. Wesley	Cervical cancer screening using VIA, VILI for women in the control area of Trivandrum breast cancer screening project.	IARC, Lyon, France	Ongoing
		INFORMATION SYSTEMS		
49	Paul Sebastian	Development of data management system for oncology.	Dept. of Information Technology, Govt. of India	Ongoing
	MOLECUL	AR MEDICINE, DRUG DEVELOPMENT AND CH	EMO-INFORMATICS	
50	Lakshmi S.	Gene-environment interaction and breast cancer risk.	Dept. of Science & Technology, Govt. of India	Ongoing
51	Lakshmi S.	Role of EGFR signaling in breast cancer.	Kerala State Council for Science, Technology & Environment	Ongoing
52	Lakshmi S.	Role of stat3 as downstream mediator of steroid and epidermal growth factor pathways in breast cancer.	ICMR, Govt. of India	Ongoing
		ATURAL BACKGROUND RADIATION CANCE		
53	Hariharan S.	Cytogenetic studies on the effects of chronic low level radiation in the residents of high background radiation areas (HBRA) in Kerala, India.	Health Research Foundation, Japan	Ongoing

54	Jayalekshmi P.	Prevention and cancer control among female workers in traditional industries (Cashew workers).	Jilla Panchayat, Kollam	Ongoing
55	Jayalekshmi P.	Prevention and cancer control among female workers in traditional industries (Fishing and Coir workers).	Jilla Panchayat, Kollam	Ongoing
56	Jayalekshmi P.	Cancer control and cancer patient service project.	LAD, Govt. of Kerala	Ongoing
57	Jayalekshmi P.	'Sanjeevani': Cancer detection and cancer patient service in mining area of Kollam District.	Mining area Welfare Board, Govt. of Kerala	Ongoing
58	Jayalekshmi P.	Epidemiologic studies, Karunagappally, Kerala, India.	Health Research Foundation, Japan	Ongoing
59	Jayalekshmi P.	Socio demographic survey & cancer incidence studies.	BARC, Mumbai	Ongoing
60	Paul Sebastian	District Cancer Registry, Kollam	ICMR, Govt. of India	Ongoing
61	Raghu Ram K. Nair	Natural Background Radiation Registry (NBRR): Radiation measurement of Sakthikulangara, Poothakulam, Mayyanad and Paravur.	BARC, Mumbai	Ongoing
62	Raghu Ram K. Nair	Health effects of High Natural Radiation Karunagappally, Kerala, India.	Health Research Foundation, Japan	Ongoing
63	Raghu Ram K. Nair	Dosimetric studies, Karunagappally, Kerala, India.	Health Research Foundation, Japan	Ongoing
64	Raghu Ram K. Nair	Strengthening the research programs in HBRA Kerala, India: extension of studies to Kollam.	BARC, Mumbai	Ongoing
65	Sreekumar A.	Thyroid nodularity studies.	Health Research Foundation, Japan	Ongoing

PHARMA/INDUSTRY SPONSORED

SI. No.	Principal Investigator	Project title	Funded by	Status
		BREAST & CENTRAL NERVOUS SYSTEM	M	
	Asha Arjunan	CA-163-100: A randomized phase 2 biomarker neoadjuvant study of sequential AC followed by ixabepilone compared to sequential AC followed by paclitaxel in women with early stage breast cancer.	Bristol-Myers Sqibb	Ongoing
2	Asha Arjunan	Phase 3 study of vinflunine plus gemcitabine versus gemcitabine plus paclitaxel in patients with unresectable, locally recurrent or metastatic breast cancer after prior anthracycline-based adjuvant chemotherapy.	UNC Lineberger	Ongoing

3	Beela Sarah Mathew	A phase 3 study of vinflunine plus capecitabine versus capecitabine alone in patients with advanced breast cancer previously treated with or resistant to an anthracycline and who are taxane resistant.	Pierre-Fabre Medicament	Ongoing
4	Beela Sarah Mathew	A randomized, multi-centre, open-label, phase 3 study of adjuvant lapatinib, trastuzumab, their sequence and their combination in patients with HER2/ErbB2 positive primary breast cancer.	Glaxo SmithKline	Ongoing
5	Beela Sarah Mathew	Epoetin alpha versus standard supportive care in anaemic patients with metastatic breast cancer receiving first line standard chemotherapy:Phase 3 randomised, open label, multicentric study.	Johnson & Johnson	Ongoing
6	Beela Sarah Mathew	An open label, prospective, multicentric study to evaluate the safety and efficacy of BIOMAb-EGFRTM (Nimotuzumab) as induction and maintenance therapy in combination with radiotherapy plus temozolomide (concomitant & adjuvant) in Indian patients with glioblastoma multiforme.	Biocon Ltd	Completed
7	Ratheesan K.	A randomized, double-blind, multicentre study of denosumab compared with zoledronic acid (Zometa) in the treatment of bone metastases in subjects with advanced breast cancer.	Amgen	Ongoing
8	Ratheesan K.	A double blind randomized phase 2 B study evaluating the efficacy and safety of sorafenib compared to placebo when administered in combination with paclitaxel in patients with locally recurrent and metastatic breast cancer.	Bayer Pharma	Ongoing
9	Ratheesan K.	A phase 2 safety and efficacy study of bavatuximab plus weekly paclitaxel and carboplatin in patients with locally advanced or metastatic cancer.	Peregrine	Ongoing
10	Ratheesan K.	A randomized, double-blind, parallel-group, multicentre, phase 3 study comparing the efficacy and tolerability of fulvestrant (FASLODEX) 500mg with fulvestrant (FASLODEX) 250mg in post menopausal women with oestrogen receptor positive advanced breast cancer progressing or relapsing after previous endocrine therapy.	Astra Zeneca	Ongoing
	Ratheesan K.	An open label, Randomized, Parallel-group, Multicentre study to compare ZOLADEX 10.8mg given every 12 weeks with ZOLADEX 3.6mg given every 4 weeks in pre menopausal women with oestrogen receptor positive advanced breast cancer.	Astra Zeneca	Ongoing

		CHEST & GASTRO-INTESTINAL		
2	Sajeed A.	A dose tolerability and Efficacy study of RX-0201 plus gemcitabine in metastatic pancreatic Cancer	Rexahn	Ongoing
3	Sajeed A.	A randomized, double-blind, multi-center phase 3 study of brivanib versus sorafenib as first-line treatment in patients with advanced hepatocellular carcinoma.	BMS	Ongoing
4	Sajeed A.	Randomized, phase 3b, multi-centre, open label, parallel study of enoxaparin (low molecular weight heparin) given concomitantly with chemotherapy versus chemotherapy alone in patients with inoperable gastric and gastroesophageal cancer.	Thrombosis Research Institute	Ongoing
5	Sajeed A.	A phase 3, study of premetrexed, cisplatin and radiotherapy followed by consolidation premetrexed versus etoposide, cisplatin, and radiotherapy followed by consolidation cytotoxic chemotherapy of choice in patients with unresectable, locally advanced, stage 3 non- small lung cancer other than predominantly squamous cell histology.	Eli lilly	Ongoing
6	Sivanandan C. D.	Phase I / 2 study of premetrexed (Alimta) plus carboplatin or premetrexed cisplatin with concurrent radiation therapy followed by every 21-day premetrexed consolidation in patients with favorable prognosis in operable stage 3A/B non-small cell lung cancer.	Eli Lilly India	Ongoing
7	Sivanandan C. D.	EGF110656: A phase 3 study of ERBB2 positive advanced or metastatic gastric or esophageal or gastroesophageal junction adenocarcinoma treated with capecitabine plus oxaloplatin with or without lapatinib.	Glaxo Smithkline	Ongoing
8	Sivanandan C. D.	Multicentre, randomized, double-blind, phase 3 trial to investigate the efficacy and safety of oral BIBF 1120 plus standard docetaxel therapy compared to placebo plus standard docetaxel therapy in patients with stage 3B/4 or recurrent non-small cell lung cancer after failure of first line chemotherapy.	Boehringer Ingelheim	Ongoing
		GYNAEC & GENITO-URINARY		
9	Aswin Kumar	International validation study of EORTC bone metastasis module quality of life measure with EORTC-QLQ-C3o for assessing quality of life in patients with bone metastasis.	EORTC	Ongoing

20	Francis V. James	Project ID: Protocol 3066kI-33II-ww: PT: phase 3 randomized open-label study of bevacizumab (avastin)+temsirolimus (Torisel) venus bevcizumab (avastin) + interferon-alpha (Roferon) as first line treatment in subjects with advanced renal cell carcinoma.	Wyeth Pharmaceuticals	Ongoing
21	Francis V James	Multicentre, single-arm, open label clinical trial intended to provide early access to cabazitaxel in patients with metastatic hormone refractory prostate cancer previously treated with a docetaxel-containing regimen and to document safety of cabazitaxel in these patients.	Sanofi Aventis	Ongoing
22	Jayaprakash P.G.	Project ID: D4320C00014: A Phase 3, randomized, double-blind study to assess the efficacy and safety of 10mg ZD4054 versus placebo in patients with hormone-resistant prostate cancer and bone metastasis who are pain free or mildly symptomatic.	Astra Zeneca	Ongoing
23	Jayaprakash P.G.	Project ID: AMGEN 20050103: A randomized, double-blind, multicentre study of denosumab compared with zoledronic acid (Zometa) in the treatment of bone metastases in men with hormone-refractory prostate cancer.	Amgen	Ongoing
24	Jayaprakash P.G.	Project ID: AMGEN 20050147: A randomized, double-blind, placebo-controlled, multicentre phase 3 study of denosumab on prolonging bone metastasis-free survival in men with hormone-refractory prostate cancer.	Amgen	Ongoing
25	Jayaprakash P.G.	Project ID: Protocol MORAb 003-004: A randomized, double-blind, placebo-controlled phase 3 study to assess the efficacy and safety of weekly farletazumab (MORAb-003) in combination with carboplatin and taxane in subjects with platinum-sensitive ovarian cancer in first relapse.	Morphotek	Ongoing
	HA	EMATOLOGICAL, LYMPHORETICULAR, BONE &	SOFT TISSUE	
26	Geetha N.	Protocol PIX301: A novel aza-anthracenedione versus other chemotherapeutic agents for third line single agent treatment of patients with relapsed aggressive non-Hodgkin's lymphoma: A randomized, controlled phase 3 comparative trial.	Cell Therapeutics	Ongoing
76	Geetha N.	An open-label, randomized, multicentre phase 3 trial of dasatinib versus standard dose imatinib (400 mg) in the treatment of subjects with newly diagnosed chronic phase philadelphia chromosome positive chronic myeloid leukemia.	Bristol-Myers Squibb	Ongoing

28	Geetha N.	PRELUDE: A phase 3 clinical study to investigate the prevention of relapse in lymphoma using daily enzastaurin.	Eli Lilly	Ongoing
29	Prakash N.P.	WORLD observational registry collecting longitudinal data on the management of chronic myelogenous leukemia patients.	Novartis	Ongoing
30	Sreejith G. Nair	26866138-LYM-3001: A randomized, open-label, multicentre study of VELCADE with rituximab or rituximab alone in subjects with relapsed or refractory, rituximab naive or sensitive follicular B-cell non-Hodgkin's lymphoma.	Johnson & Johnson	Ongoing
31	Sreejith G. Nair	A randomised, open_label multicentre phase 3 study of the combination of rituximab, cyclophosphamide, doxorubicin, VELCADE and prednisone (VcR-CAP) or rituximab, cyclophosphamide, doxorubicin, vincristine and Prednosone (R-CHOP) in patients with newly diagnosed mantle cell lymphoma who are not eligible for a bone marrow transplant.	Johnson & Johnson	Ongoing
32	Sreejith G. Nair	Protocol:AP23573-07-302: A pivotal trial to determine the efficacy and safety of AP23573 when administered as maintenance therapy to patients with metastatic soft-tissue or bone sarcomas.	Kendle	Ongoing
		HEAD & NECK		
33	Rejnish Kumar R.	A randomised, double-blind, placebo-controlled, multicentre, phase 2 study of oral lapatinib in combination with concurrent radiotherapy and cisplatin versus radiotherapy and cisplatin alone, in subjects with stage 3 and 4A, B squamous cell carcinoma of the head and neck.	Glaxo Smithkline	Ongoing
34	Rejnish Kumar R.	A randomised, double-blind placebo-controlled, multicentre, phase 3 study of post-operative adjuvant lapatinib or placebo and concurrent chemo-radiotherapy followed by maintenance lapatinib or placebo monotherapy in high risk subjects with resected squamous cell carcinoma of head and neck.	Glaxo Smithkline	Ongoing
35	Rejnish Kumar R.	An open label, multicentre phase 2 study to evaluate efficacy and safety of P276-00 in Indian subjects with recurrent, metastatic or unresectable locally advanced squamous cell carcinoma of head and neck.	Piramal Life Sciences	Ongoing

IN-HOUSE PROJECTS

SI. No.	Principal Investigator	Project title	Status
		ANAESTHESIOLOGY	
	Bhagyalakshmi R.	A prospective randomized control single blind trial to compare the efficacy of butorphanol nasal spray and intravenous fentanyl for supraglottic airway insertion	Ongoing
2	Rachel Cherian Koshy	A prospective randomised double blind study of the effects of oral premedication with clonidine on haemodynamic responses to laryngoscopy and endotracheal intubation.	Completed
3	Rachel Cherian Koshy	Comparison of Intravenous induction with propofol versus inhalation induction with sevoflurane a randomized control trial	Completed
4	Rachel Cherian Koshy	A prospective double blind randomized control trial to study the efficacy of a single dose pre emptive gabapentin to reduce post operative pain and opioid demand following head and neck surgery.	Ongoing
5	Rachel Cherian Koshy	Comparative evaluation of ease of intubation following in line stabilization using intubating LMA versus conventional endotracheal intubation following in line manual stabilization.	Ongoing
6	Rachel Cherian Koshy	Efficacy of dexmedetomidine for post operative endotracheal tube tolerance, analgesia, sedation: a prospective, randomized, double blind controlled trial.	Ongoing
7	Venugopal A.	A comparison of the haemodynamic effects and quality of analgesia of a combination of 0.2% ropivacaine with fentanyl to bupivacaine 0.125% with fentanyl as continuous epidural infusion for post op analgesia following laparotomy. (DNB Thesis)	Ongoing
8	Venugopal A.	Effects of intravenous dexmedetomidine on perioperative of emergence in patients undergoing head and neck surgery following general anaesthesia: A comparative rand	Ongoing
9	Beela Sarah Mathew	Results of breast conservative therapy at Regional Cancer Centre, Thiruvananthapuram. (DNB Thesis)	Ongoing
		GASTRO-INTESTINAL	
10	Chandramohan K.	Study of clinical and pathologic aspects of truncal and extremity soft tissue sarcomas.	Ongoing
	Chandramohan K.	Study of QOL in patients undergoing colorectal resection in RCC Thiruvananthapuram using FACT –C and EORTC Malayalam translations.	Ongoing
12	Iqbal Ahamed M.	Comparison of surgical parameters between primary surgery and surgery after neoadjuvant chemotherapy in carcinoma rectum.	Ongoing
		GYNAEC & GENITO-URINARY	
13	Francis V. James	Comparison of different schedules of radiation therapy in carcinoma cervix.	Ongoing
14	Francis V. James	3-D planning of brachytherapy of carcinoma cervix.	Ongoing
	<i>y</i>	1 0 / 1/ "	0

15	Geetha N.	Clinical and prognostic significance of molecular factors in adult acute	Ongoing
		myeloid leukemia.	
16	Geetha N.	Molecular prognostic factors in diffuse large B cell lymphomas.	Ongoing
17	Geetha N.	Role of NFKB activation and target-gene expression in malignant lymphomas.	Ongoing
18	Geetha N.	Serum galactomannan assay in the early diagnosis of Aspergillosis in patients with acute leukaemia.	Ongoing
19	Lali V.S.	Clinical presentation and outcome of patients with Philadelphia chromosome positive acute lymphoblastic leukemia.	Ongoing
20	Prakash N.P.	Pattern of surface antigen expression in adult acute leukaemia, and their clinical significance.	Ongoing
		HEAD & NECK	
21	Bipin T. Varghese	Prospective randomized studies comparing the efficacy of watch and wait policy with neck dissection in clinical superficial tongue squamous cell cancers with N0 status.	Ongoing
22	Bipin T. Varghese	Salivary neoplasms: therapeutic and functional outcome: a retrospective study.	Ongoing
23	Bipin T. Varghese	Prospective study of treatment outcome in patients undergoing surgery for carcinoma larynx and hypopharynx.	Ongoing
24	Elizabeth Mathew lype	Selected molecular markers as indicators of clinical profile, tumor characteristics, and treatment outcome in squamous cell carcinoma of the larynx.	Ongoing
25	Elizabeth Mathew Iype	Study on clinico-pathological predictors of recurrence in squamous cell carcinoma of the buccal mucosa.	Ongoing
26	Ramadas K.	Comparison of concurrent chemo-radiotherapy with six days a week radiation in locally advanced squamous cell carcinoma of head and neck.	Ongoing
27	Ramadas K.	Pilot study comparing two external beam radiotherapy schedules in oral cavity cancer.	Ongoing
28	Rejnish Kumar R.	Comparison of weekly vs three weekly cisplatin concurrently with radiation in treatment of locally advanced head and neck squamous cell carcinoma	Ongoing
		PATHOLOGY	
29	Anitha Mathews	Correlation of clinicopathological features with MIB-1 labelling index, progesterone receptor status and outcome in meningiomas. (DNB Thesis)	Ongoing
30	Jayasree K.	Histological and immunohistochemical prognostic factors in paediatric osteosarcomas: a retrospective study. (DNB Thesis)	Ongoing
31	Preethi T.R.	Diagnostic value of HBME-1 and CK19 in the differential diagnosis of follicular lesions of thyroid in fine needle aspiration cytology. (DNB Thesis)	Ongoing

32	Raveendran Pillai K.	Significance of psammoma bodies in fine needle aspiration cytology of breast: A clinicopathological study: Five year retrospective analysis. (DNB Thesis)	Ongoing
33	Rekha A. Nair	Flow cytometric immunotyping in paediatric myeloperoxidase negative acute leukaemias: A clinicopathological analysis. (DNB Thesis)	Ongoing
34	Thara Somanathan	Evaluation of the prognostic value of histopathological parameters in oral and oropharyngeal squamous cell carcinoma in predicting treatment outcome and survival. (DNB Thesis)	Ongoing
		CANCER EPIDEMIOLOGY	
35	Aleyamma Mathew	Time-trends in cancer incidence rates (1991-2010), cancer burden and projection of cancers in Kerala.	Ongoing
36	Aleyamma Mathew	Nutritional risk factors of breast cancer: a case-control study.	Ongoing
37	Aleyamma Mathew	Meta analysis of anthropometric factors and cancer risk.	Completed
38	Kalavathy M.C.	Papsmear screening programme, Women & Children Hospital, Thycaudu.	Ongoing
39	Kalavathy M.C.	Papsmear screening programme, Govt. Hospital, Peroorkkada.	Ongoing
40	Preethi Sara George	Estimation of burden of cancer and projection of cancer load in Kerala.	Ongoing
41	Preethi Sara George	Meta analysis of occupation and the risk of various cancers.	Ongoing
		COMMUNITY ONCOLOGY	
42	Gigi Thomas	Search for predictive genetic markers of high-risk malignant transformation potential in oral leukoplakia patients.	Ongoing
43	Gigi Thomas	A multi-centre phase 2 randomised double-blind placebo efficacy and safety of curcumin in oral premalignant lesions.	Ongoing
44	Jayakrishnan R.	Prevention and control of cancer among Cashew workers of Kollam Jilla Panchayat.	Ongoing
45	Sreekumar C.	Prevention and control of cancer among the tribal population of Kerala state.	Ongoing
46	Sreekumar C.	Cancer control programmes in Palakkad district.	Ongoing
		NURSING	
47	Sunitha Kumari	Early signs and symptoms of PICC associated infection among patients in Regional Cancer Centre.	Ongoing
48	Siva Kumari	Factors contributing to secondary lymphoedema among breast cancer patients: an observational study.	Ongoing

PUBLICATIONS

Articles

1.	Bejoy Cherian Thomas, Nanda Mohan V, Krishnan Nair M, Manoj Pandey. 'Gender, age and surgery as a treatment modality leads to higher distress in patients with cancer'. Supportive Care in Cancer. 2011/19(1): 239-50			
2.	Bhagyalakshmi R, Rachel Cherian Koshy. 'Femoral sciatic block: a safe alternative in von Recklinghausen's disease'. Indian Journal of Anaesthesia. 2011/55(2): 210-12			
3.	Biju C. Mathew, Reji Susan Daniel, Abdul Nabi, Thomas David, <i>Paul Augustin</i> e, Bright JJ, Campbell IW. 'Telomere and telomerase in cancer and ageing'. Jamahiria Medical Journal. 2010/10(2): 86-95			
4.	Bipin T. Varghese, Aleyamma Mathew, Paul Sebastian, Elizabeth Mathew lype, Archana Vijay. 'Comparison of quality of life between voice rehabilitated and nonrehabilitated laryngectomies in a developing world community'. Acta Otolaryngologica. 2011/131(3): 310-15			
5.	Bipin T. Varghese, Shaji Thomas, Balakrishnan Nair, Mathew PC, Paul Sebastian. 'Accidental radioisotope burns: management of late sequelae'. Indian Journal of Plastic Surgery. 2010/43 (Suppl.): S88-91			
6.	Chandramohan K, Arun Peter Mathew, Madhu Muralee, Anila KR, Ramachandran K, Iqbal Ahamed. 'Squamous cell carcinoma arising from long-standing perianal fistula'. International Wound Journal. 2010/7(6): 515-18			
7.	Daniel CR, Dorairaj Prabhakaran, Kavita Kapur, Barry IG, Niveditha Devasenapathy, Lakshmy Ramakrishnan, Preethi Sara George, Hemali Shetty, Ferrucci LM, Yugalevitch S, Nilanjan Chatterjee, Reddy KS, Tanuja Rastogi, Prakash C. Gupta, Aleyamma Mathew, Rashmi Sinha. 'A cross-sectional investigation of regional patterns of diet and cardio-metabolic risk in India'. Nutrition Journal. 2011/10: 12			
8.	Ferrucci LM, Daniel CR, Kavita Kapur, Puneet Chadha, Hemali Shetty, Barry IG, <i>Preethi Sara George</i> , Osborne W, Yurgalevitch S, Niveditha Devasenapathy, Nilanjan Chatterjee, Dorairaj Prabhakaran, Prakash C.Gupta, <i>Aleyamma Mathew</i> , Rashmi Sinha. 'Measurement of spices and seasonings in India: opportunities for cancer epidemiology and prevention'. Asian Pacific Journal of Cancer Prevention. 2010/11(6): 1621-29			
9.	Hariharan S, Vani S, Santhi S, Sangeetha Vijay, Sreeja L, Geetha N. 'Detection of BCR-ABL fusion gene in chronic myeloid leukemia patients by conventional cytogenetics and RT-PCR'. Journal of Cytology and Genetics. 2010/11(1): 83-90			
10.	Jayalekshmi P, Gangadharan P, Akiba S, Koriyama C, Raghu Ram K. Nair. 'Oral cavity cancer risk in relation to tobacco chewing and bidi smoking among men in Karunagappally, Kerala, India: Karunagappally cohort study'. Cancer Science. 2011/102(2): 460-67			
11.	Jayasree K, Baisakh MR, Aleyamma Mathew, Thara Somanathan, Nileena Nayak, Elizabeth K.Abraham. 'Sialoblastoma: a rare salivary gland neoplasm'. Indian Journal of Cancer. 2010/47(2): 219-20			
12.	Kupferman ME., de la Garza GO, Santillan AA, Williams MD, <i>Bipin T. Varghese</i> , Huh W, Roberts D, Weber RS. 'Outcomes of pediatric patients with malignancies of the major salivary glands'. Annals of Surgical Oncology. 2010/17(12): 3301-07			
13.	Laija S. Nair, Mahesh SP, Smitha LS, Remani P. 'Lymphocyte proliferation studies of Canavalia gladiata lectin'. Journal of Cell and Molecular Biology. 2010/8(2): 51-55			
14.	Lakshmi S, Padmaja G, Remani P. 'Antitumour effects of isocurcumenol isolated from Curcuma zedoaria rhizomes on human and murine cancer cells'. International Journal of Medicinal Chemistry. 2011(2011): 1-13. Article ID: 253962			
15.	Madhu Muralee, Iqbal Ahamed, Thara Somanathan, Anila KS. 'Hepatoid adenocarcinoma of the stomach: a rare pathological entity'. Gulf Journal of Oncology. 2011/1(9): 78-81			

16. Mary Thomas, Nebu A. George, Balagopal PG, Preethi Sara George, Paul Sebastian. 'Comparative evaluation of ASA classification and ACE-27 index as morbidity scoring systems in oncosurgeries'. Indian Journal of Anaesthesia. 2010/54(3): 219-25 17. Mary Thomas, Nebu A. George, Balagopal PG, Preethi Sara George, Paul Sebastian. 'A novel morbidity prediction model for head and neck oncosurgery'. Indian Journal of Surgery. 2010/72(6): 463-69 18. Moore MA, Ariyaratne Y, Badar F, Bhurgri Y, Karabi Datta, Aleyamma Mathew, Gangadharan P, Nandakumar A, Kishore K. Pradhananga, Md Habibullah Talukder, Balkrishna B. Yeole, Sobue T. 'Cancer epidemiology in South Asia: past, present and future'. Asian Pacific Journal of Cancer Prevention. 2010/11 (Suppl 2): 49-66 Murthy NS, Dinesh Rajaram, Gautham MS, Shivraj NS, Pruthvish S, Preethi Sara George, Aleyamma Mathew. 19. 'Trends in incidence of gallbladder cancer: Indian scenario'. Gastrointestinal Cancer: Targets and Therapy. 2011/1: 1-9 20. Murthy NS, Nandakumar BS, Shivarai NS, Pruthvish S, Shalini CN, Chaudhry K, Aleyamma Mathew. 'Cancer registration: its relevance for health care planning in India'. Indian Journal of Preventive and Social Medicine. 2010/41(1&2): 75-87 21. Murthy NS, Nandakumar BS, Pruthvish S, Preethi Sara George, Aleyamma Mathew. 'Disability adjusted life years for cancer patients in India'. Asian Pacific Journal of Cancer Prevention. 2010/11(3): 633-40 22. Murthy NS, Shalini S, Nandakumar BS, Gadicherla Suman, Pruthvish S, Aleyamma Mathew. 'Increase in incidence of cancer of corpus uteri: estimation of time trends: an Indian scenario'. European Journal of Cancer Prevention. 2011/20(1): 25-32 23. Padmakumar G, Mary Thomas. 'A prospective double blind randomized control trial to study the effectiveness of labetalol induced hypotensive anaesthesia on intraoperative blood loss and the visibility of the operative field'. Journal of Anaesthesiology Clinical Pharmacology. 2010/26(3): 329-34 24. Paul M, Preethi Sara George, Aleyamma Mathew. 'Patient and disease related factors associated with lost-to follow-up/drop-outs of cervical cancer patients: a study at a major cancer hospital in South India'. Asian Pacific Journal of Cancer Prevention. 2010/11(6): 1529-34 25. Rachel Cherian Koshy, Padmakumar G, Rajasree O. 'Low cost continuous femoral nerve block for relief of acute severe cancer related pain due to pathological fracture femur' Indian Journal of Palliative Care. 2010/16(3): 180-82 26. Rachel Cherian Koshy, Rajasree O, Mary Thomas. 'Anaesthetic management of a patient with sarcoidosis presenting for mastectomy'. | Journal of Anaesthesiology Clinical Pharmacology. 2010/26(4): 555-56 27. Radhakrishna Pillai M, Janaki M. Babu, Vinoda T. Jissa, Lakshmi S, Shubhada V. Chiplunkar, Patkar M, Tongaonkar H, Krishnamurthy B. Reddy, Kumar N. Chakka, Siddiqui M, Soma Roychoudury, Priya Abraham, Abraham Peedicayil, Gnanamony M, Subashini. 'Region-wise distribution of high-risk human papillomavirus types in squamous cell carcinomas of the cervix in India'. International Journal of Gynecologic Cancer. 2010/20(6): 1046-51 28. Ramadas K, Sauvaget C, Gigi Thomas, Fayette JM, Thara Somanathan, Sankaranarayanan R. 'Effect of tobacco chewing, tobacco smoking and alcohol on all-cause and cancer mortality: a cohort study from Trivandrum, India'. Cancer Epidemiology. 2010/34(4): 405-12 29. Raveendran Pillai K, Jayasree K, Ramdas Pisharody, Elizabeth K.Abraham. 'Decoy cells in the urine cytology of a renal transplant recipient: an immunohistochemical study'. Indian Journal of Pathology and Microbiology. 2010/53(2): 347-50 30. Rupananda J. Mallia, Subhash N, Paul Sebastian, Rejnish Kumar R, Shiny Sara Thomas, Anitha Mathews, Jayaprakash Madhavan. 'In vivo temporal evolution of ALA-induced normalized fluorescence at different anatomical locations of oral cavity: application to improve cancer diagnostic contrast and potential'. Photodiagnosis and Photodynamic Therapy. 2010/7(3): 162-75

31.	Rupananda J. Mallia, Subhash N, Anitha Mathews, Rejnish Kumar R, Shiny Sara Thomas, Paul Sebastian, Jayaprakash Madhavan. 'Clinical grading of oral mucosa by curve-fitting of corrected autofluorescence using diffuse reflectance spectra'. Head and Neck. 2010/32(6): 763-79			
32.	Rupananda J. Mallia, Subhash N, <i>Jayaprakash Madhavan</i> , <i>Paul Sebastian</i> , <i>Rejnish Kumar R</i> , <i>Anitha Mathews</i> , <i>Gigi Thomas</i> , <i>Jayakrishnan R</i> . 'Diffuse reflection spectroscopy: an alternative to autofluorescence spectroscopy in tongue cancer detection'. Applied Spectroscopy. 2010/64(4): 409-18			
33.	Sailasree R, Nalinakumari KR, Paul Sebastian, Kannan S. 'Influence of methylenetetrahydrofolate reductase polymorphisms in oral cancer patients'. Journal of Oral Pathology & Medicine. 2011/40(1): 61-66			
34.	Sangeetha Vijay, Santhi S, Vani S, Sreeja L, Suresh Kumar R, Geetha N, Hariharan S. 'Exploring the value of conventional cytogenetics, FISH and RT-PCR in diagnosis, prognosis and clinical management of chronic myeloid leukemia patients'. HUGO Journal. 2011/5(Suppl.1): 172-73			
35.	Sauvaget C, Fayette JM, Muwonge R, <i>Ramani Wesley</i> , Sankaranarayanan R. 'Accuracy of visual inspection with acetic acid for cervical cancer screening'. International Journal of Gynecology and Obstetrics. 2011/113(1): 14-24			
36.	Sauvaget C, <i>Ramadas K, Gigi Thomas, Thara Somanathan</i> , Sankaranarayanan R. 'Prognosis criteria of casual systolic and diastolic blood pressure values in a prospective study in India'. Journal of Epidemiology and Community Health. 2010/64: 366-72			
37.	Sreelekha TT, Rajesh M, Anil Kumar V, Jayaprakash Madhavan, Prabha Balaram. 'CYPIAIm2 polymorphisms regulate estrogen and interleukin-6 in lung cancer'. Molecular Medicine Reports. 2010/3(6): 971-76			
38.	Suchetha S, Rema P, Arun Peter Mathew, Paul Sebastian. 'Endometriosis with massive hemorrhagic ascites'. Indian Journal of Cancer. 2010/47(2): 224-25			
39.	Sudha P, Rachel Cherian Koshy. 'Nonconvulsive status epilepticus: an unusual cause of postoperative unresponsiveness following general anaesthesia'. Indian Journal of Anaesthesia. 2011/55(2): 174-6			
40.	Sujathan K, Thara Somanathan, Laija S. Nair, Smitha LS, Remani P. 'Endogenous expression of galectins and tissue binding profile of a galactose specific plant lectin in cervical intra epithelial neoplasia: its significance to assess the malignant potential'. Journal of Experimental Sciences. 2010/1(8): 39-44			
41.	Sujathan K,Thara Somanathan, Remani P. 'Expression of galectin-1, galectin-3 and T-antigen in breast carcinoma tissues and its significance in axillary lymph node infiltration'. Recent Research in Science and Technology. 2011/3(6): 85-90			
42.	Venugopal A. 'Addon drugs of subarachnoid block'. Indian Society of Anaesthesiologists Journal. 2010/1(4): 16-20			
43.	Vijayakumar N, Bibek Bista, <i>Cherian Ko</i> shy. "BREAKS" protocol for breaking bad news". Indian Journal of Palliative Care. 2010/16(2): 61-65			
44.	Volga SS, Vani S, Sheeja VR, Ratheesan K, Rajan B, Ravindran Ankathil. 'Possible risk modification by polymorphisms of estrogen metabolizing genes in familial breast cancer susceptibility in an Indian population'. Cancer Investigation. 2010/28(3): 304-11			
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	Abstracts in Journals
46.	Elizabeth Mathew lype, Rejnish Kumar R, Paul Sebastian. 'Changing the phase of cancer therapy: surgical cure for post radiation sequelae in head and neck cancer' (15th ESSO Congress abstract). European Journal of Surgical Oncology. 2010/36(9): 892
47.	Geetha N, Krishna R, Kiron V. Nair, Sreejith G. Nair. 'Clinical pattern of primary central nervous system lymphoma in a developing country'. European Journal of Cancer. 2010/8(4) Suppl: 24
48.	Nebu A. George, Balagopal PG, Paul Sebastian. 'Anatomic variations of the marginal mandibular nerve and its identification in neck dissection' (15th ESSO Congress abstract). European Journal of Surgical Oncology. 2010/36(9): 892
49.	Nebu A. George, Balagopal PG. 'Anterior skull base reconstruction in a low resource institute' (15th ESSO Congress abstract). European Journal of Surgical Oncology. 2010/36(9): 893
50.	Nebu A. George, Elizabeth Mathew lype, Kapil Desai, Paul Sebastian. 'Maxillectomy for carcinoma in young adults: a matched pair analysis'. (15th ESSO Congress abstract) European Journal of Surgical Oncology. 2010/36(9): 894
51.	Nebu A. George, Mary Thomas, Preethi Sara George, Paul Sebastian. 'Predictions of postoperative morbidity in laryngectomy patients' (15th ESSO Congress abstract). European Journal of Surgical Oncology. 2010/36(9): 893
52.	Nebu A. George, Rema P, Suchetha S, Paul Sebastian. 'Surgical salvage for post radiotherapy recurrent carcinoma cervix' (15th ESSO Congress abstract). European Journal of Surgical Oncology. 2010/36(9): 886
53.	Renu S, Thara Somanathan, Anitha Mathews, Jayasree K. 'Sinonasal teratocarcinosarcoma'. Indian Journal of Pathology and Microbiology. 2010/53(Suppl.1): 57
54.	Sindhu Nair, Rekha Nair, Priya Mary Jacob, Nileena Nayak, Jayasree K. 'Therapy related acute myeloid leukaemia (t-AML): a study of 5 cases (APCON 2010 Abstract)'. Indian Journal of Pathology and Microbiology. 2010/53 (Suppl.1): 38
55.	Smitha P. Nair, Jayasree K, Geetha N, Anitha Mathews, Thara Somanathan, Sreejith G. Nair, Sumod Mathew Koshy. 'Two cases of multifocal osteosarcoma' (APCON 2010 Abstract). Indian Journal of Pathology and Microbiology. 2010/53 (Suppl.1): 109
	Conference Papers
56.	Divya Ravindran, Indhu Hariharan, Rejnish Kumar R, Muwonge R, Radhakrishna Pillai M, Ramadas K. 'Immunomodulation by Varanadi Ghritha and its role in preventing locoregional recurrence/second malignancy in head & neck cancer patients: a three year follow up data'. In: International Cancer Research Symposium - 2010: Defining and translating science behind the diseaseThiruvananthapuram, 2010
57.	Issac Niwas S, Palanisamay P, Sujathan K. 'Complex wavelet based texture features of cancer cytology images'. In: 5th International conference on Industrial and Information Systems, ICIIS, 2010: 348-53
58.	Issac Niwas S, Palanisamay P, <i>Sujathan K.</i> 'Wavelet based feature extraction method for breast cancer cytology images'. In: 2010 IEEE symposium on Industrial Electronics and Applications (ISIEA 2010) Penang, 2010: 669-73
59.	Kalavathy MC, Saritha VN, Lallu S, Rajesh SV, Preethi Sara George, Jayasree K, Sujathan K. 'Cytological predictors of oncogenic HPV positivity in women with ASCUS in papsmear'. In: International Cancer Research Symposium - 2010: Defining and translating science behind the diseaseThiruvananthapuram, 2010
60.	Merin Joselin George, Viji S. Pillai, Rachel Cherian Koshy, Mallika Balakrishnan, Deepthi J. Prabhu. 'Anaesthetic management of a patient with apla syndrome: a case report'. In: Szisacon 2010: Souvenir/ South Zone - Indian Society of Anaesthesiologists conferenceThrissur: ISA, 2010 230.

61.	Nimi GK, Thara Somanathan, Remani P, Sujathan K. 'Study of E-cadherin status in triple negative breast cancer: correlation with established prognostic factors'. In: International Cancer Research Symposium - 2010: Defining and translating science behind the diseaseThiruvananthapuram, 2010
62.	Rachel Cherian Koshy. 'Survey of anaesthetic practices in South India'. In: Szisacon 2010: Souvenir/ South Zone - Indian Society of Anaesthesiologists conferenceThrissur: ISA, 2010: 258
63.	Rachel Cherian Koshy, Venu N. 'Pre-anaesthetic work up-trends in South India'. In: Szisacon 2010: Souvenir/South Zone - Indian Society of Anaesthesiologists conferenceThrissur: ISA, 2010: 252
64.	Rachel Cherian Koshy, Venu N. 'Pre-operative screening of patients for HIV and HBsAG'. In: Szisacon 2010: Souvenir/ South Zone - Indian Society of Anaesthesiologists conferenceThrissur: ISA, 2010: 253
65.	Rajesh SV, Shanone C. Pereira, Remani P, Preethi TR, Jayasree K, Sujathan K. 'Study of cytoskeletal proteins in thyroid tumors: its significance in the differential diagnosis of papillary carcinoma'. In: International Cancer Research Symposium - 2010: Defining and translating science behind the diseaseThiruvananthapuram, 2010
66.	Satheesh Kumar PS, Anitha Balan, Sheeba Padiyath, <i>Prabha Balaram</i> . 'Circulating ANTI-P53 antibodies in oral precancers and cancers using ANTI-P53 ELISA'. In: Abstract book/4th World congress of International Federation of Head and Neck Oncologic Societies Seoul, 2010: 76
67.	Shanone C. Pereira, Rajesh SV, Remani P, Preethi TR, Jayasree K, Rari P. Mony, Sujathan K. 'Cellular expression of galectins in thyroid tumours: Its significance in the differential diagnosis of follicular carcinoma'. In: International Cancer Research Symposium - 2010: Defining and translating science behind the diseaseThiruvananthapuram, 2010
68.	Veena VS, Preethi Sara George, Jayasree K, Sujathan K. 'Role of sputum cytology in the diagnosis of lung cancer'. In: International Cancer Research Symposium - 2010: Defining and translating science behind the diseaseThiruvananthapuram, 2010
69.	Venugopal A. re-op evaluation of a cancer patient coming for surgery'. In: Szisacon 2010: Souvenir/ South Zone - Indian Society of Anaesthesiologists conferenceThrissur: ISA, 2010: 155-61

MISCELLANEOUS

L. Human Resources

a. Staff strength

<u> </u>							
Type of Staff	Permanent	New Recruits	Temporary	Daily wages	Depu	utation	Consultants engaged
					In	Out	
Academic	92	2	11				6
Non-Academic	407	151	55	92	3		3
Total	499	153	66	92	3		9

b. Academic Saff strength

Professors-7, Additional Professors-27, Associate Professors-18, Assistant Professors-27, Lecturers-15.

c. Administration

Director: Dr. Paul Sebastian

Additional Director (Academic): Dr. P. Kusumakumary

Medical Superintendent: Dr. K. Ramadas

Deputy Medical Superintendent: Dr. Aswin Kumar

d. Non-Academic Staff strength

Administrative Office

Suliman S (Sri.)

Administrative Officer
Asst. Administrative Officer Gr.
Office Assistant Sel.Gr.
Office Assistant Sr. Gr.
Office Assistant Sr. Gr.
Office Assistant Sr. Gr.
Junior Personal Assistant
Clinical Records Assistant
Senior Helper
Despatcher

Hospital Attender

Cancer Epidemiology & Clinical Research

Social Investigator Sr.Gr. Anita Nayar (Smt.)

Asha N M (Smt.) Clerk Gr.I Jaya Kumar P (Sri.) Clerk Gr.I

Prasanth Kumar R K (Sri.) Data Entry Operator Gr. I

Cancer Research

Scientific Officer Gr.I
Research Assistant Gr. I
Senior Animal House Keeper
Senior Animal House Keeper

Clinical Laboratory

Thomas Abraham (Dr)	Scientific Officer Gr. I
Gangadevi C (Smt.)	Technical Officer
Usha J (Smt.)	Technical Officer
Helen B (Smt.)	Lab. Technician Sel.Gr.
Renuka P (Smt.)	Lab. Technician Sel.Gr.
Ajaya Kumar R (Sri.)	Lab. Technician Sr.Gr.



Jaya Kumar B (Sri.)	Lab.Technician Sr.Gr.
Rajesh K R (Sri.)	Lab.Technician Sr.Gr.
Riyad R A (Sri.)	Lab.Technician Sr.Gr.
Saneela S (Smt.)	Lab.Technician Sr.Gr.
Sindhumony S (Smt.)	Lab.Technician Sr.Gr.
Sini L S (Smt.)	Lab.Technician Sr.Gr.
Sreelekha V K (Smt.)	Lab.Technician Sr.Gr.
Trophy S (Sri.)	Lab.Technician Sr.Gr.
Veena Devi	
Thankachy V S (Smt.)	Lab.Technician Sr.Gr.
Girija R (Smt.)	Clinical Records Assistant
Anil Kumar R (Sri.)	Senior Helper

Clinical Services & Medical Records

Clinical Services & Medica	ii Records
Raveendran Nair R (Sri.)	Administrative Officer
	(Clinical Services)
Chandrika D (Smt.)	Medical Records Officer
Surendran Nair V (Sri.)	Public Relations Officer
Ambily O (Smt.)	Clerk Gr. I
Anil Kumar K (Sri.)	Clerk Gr. I
Annamma J (Smt.)	Clerk Gr. I
Geetha O (Smt.)	Clerk Gr. I
John S (Sri.)	Clerk Gr. I
Kumari Bindu P K (Smt.)	Clerk Gr. I
Mariamma M A (Smt.)	Clerk Gr. I
Prabhavathi Devi AK (Smt) Clerk Gr. I
Pradeep Kumar B (Sri.)	Clerk Gr. I
Siju R. Nair (Smt.)	Clerk Gr. I
Sreekumar B (Sri.)	Clerk Gr. I
Sreelatha S (Smt.)	Clerk Gr. I
Thankamony	
Amma P (Smt.)	Clerk Gr. I
Saraladevi P G (Smt.)	Cashier Sel.Gr.
Sheela Kumari R (Smt.)	Cashier Sel.Gr.
Shajkumar K R (Sri.)	Office Assistant Sr Gr.
Bindu Sadasivan (Smt.)	Clinical Records Assistant
Gireesh S (Sri.)	Clinical Records Assistant
Jayalekshmi P (Smt.)	Coding Clerk
Rajesh V M (Sri.)	Data Entry Operator
	(Relieved on 06.06.2009)
Satheeshkumar K S (Sri.)	Tel. Operator Cum
	Receptionist Gr. I

Sreekumar C (Sri.)	Tel. Operator Cum			
	Receptionist			
Krishnan Nair P (Sri.)	Driver Sel.Gr.			
Sasidharan Nair N (Sri.)	Driver Sel.Gr.			
Sreekumaran Nair P (Sri.)	Driver Sr.Gr.			
Nazaruddin S (Sri.)	Driver Gr. I			
Premachandran Nair S (Sri.)Driver Gr. I				
Ajitha Kumari R B (Smt.)	Senior Helper			
Mariyamma Varghese (Smt.) Senior Helper				
Subair M (Sri.)	Senior Helper			
Thomas Rajasekharan (Sri.) Senior Helper				
Amrithamma M (Smt.)	Hospital Attender			
Sivankutty K (Sri.)	Hospital Attender			
Gangadharan V (Sri.)	Gardener			

Community Oncology

Sreekumar C (Sri.)	Social Investigator Sr.Gr.
Jeena Joseph N (Smt.)	Protocol Nurse
Vindhya Sugathan (Smt.)	Data Entry Operator Gr.I

Director's Office

Savithri Amma B (Smt.)	Junior Personal Assistant
Antony P (Sri.)	Despatcher
Senan S (Sri.)	Senior Helper

ECDC, Ernakulam

Latha A (Dr)	Cytopathologist
James Thomas M (Sri.)	Cytotechnician Sel.Gr.
Mercy Joseph K (Smt.)	Cytotechnologist Sr.Gr.
Radha C (Smt.)	Cytotechnologist Sr.Gr.
Lijo T V (Sri)	Lab.Technician Sr.Gr.
Renjini Thomas (Smt.)	Lab.Technician Sr.Gr.
Ambika T B (Smt.)	Staff Nurse Sr. Gr.





Gracy George (Smt.) Letha B (Smt.) Gopakumar P (Sri.) John Evidus P P (Sri.) Staff Nurse Typist Gr. I Helper Hospital Attender

ECDC, Palakkad

Sanil P N (Sri.) Cytotechnologist Nirmala K C (Smt.) Staff Nurse Gr. I Abdul Rahiman P M (Sri.) Senior Helper

Engineering Wing

Vijaya Kumar L (Sri.) Chief Construction Engineer Rajendran K R (Sri.) Supervisor (Electrical) Sr.Gr. Santhosh Kumar A R (Sri.) Supervisor (Electrical) Sr.Gr. Sasidharan N (Sri.) Supervisor (Electrical) Sr.Gr. Venugopalan Nair V R (Sri.)Supervisor (Electrical) Electrician Sr.Gr.

Giji P S (Sri.) Jayakumar P (Sri.) Rajmohan M B (Sri.) Suresh Kumar G (Sri.)

Electrician Gr.I Electrician Gr.I. Electrician

Electronic Technician Sr.Gr. Sivarajan L (Sri.)

Harikumar S (Sri.) Jayabalan Nair B (Sri.) Rajan P C (Sri.)

Semi Skilled Worker Semi Skilled Worker Senior Helper

Finance & Accounts

Umamaheswari K. (Smt.) Controller of Finance Mathai KO (Sri.) Accounts Officer Sasikumar S V (Sri.) Purchase Officer Beena N (Smt.) Asst. Accounts Officer Girija Kumari L S (Smt.) Office Assistant Sr.Gr. Office Assistant John Joseph (Sri.)

Cashier Cum Receptionist Gr.I Johnson X (Sri.) Jumailathu Beevi K M (Smt.)Office Assistant Sel.Gr. Asst.Internal Audit Officer Sasikumar K (Sri.)

Usha V (Smt.) Data Entry Operator Sr.Gr. Office Assistant Sr.Gr. Usha Varma (Smt.) Office Assistant Sel.Gr. Remila C K (Smt.) Veena C L (Smt.) Office Assistant Sr. Gr.

Vijayaprasad B (Sri.) Clerk Gr. I

Imageology

Asha S (Smt.) Radiographer Binoy B G (Sri.) Radiographer Hari C (Sri.) Dark Room Asst. Gr. I Jayakumar P(Sri.) Radiographer Joe D'cruz A (Sri.) Technical Officer Krishnankutty R (Sri.) Senior Helper

Junior Personal Assistant Mallika Devi S (Smt.) Pradeep S (Sri.) Radiographer Sel.Gr. Prasad P P (Sri.) Radiographer Sel.Gr. Santhosh Kumar C S (Sri.) Hospital Attender



Sathyalekha S I (Smt.)	Radiographer Sel.Gr.	Flower Augustine (Smt.)	Nursing Supt. Gr. I
Shailesh Kumar K N (Sri.)	Radiographer Sel.Gr.	Geetha S (Smt.)	Nursing Supt.
Udayakumar K R (Sri.)	Radiographer Sr.Gr.	Lizyamma Jacob (Smt.)	Nursing Supervisor
Sini F K (Smt.)	Radiographer	Mariamma James (Smt.)	Nursing Supervisor
Sreelekha L D (Smt.)	Radiographer	Sally Abraham (Smt.)	Nursing Supervisor
Veena R R (Smt.)	Radiographer	Christeen V (Smt.)	Head Nurse Gr. I
Information Systems		Geetha Kumari B S (Smt.)	Head Nurse Gr. I
Neelima N (Smt.)	Systems Manager	Jaya T S (Smt.)	Head Nurse Gr. I
Rajesh P (Sri.)	System Analyst	Jikki M (Smt.)	Head Nurse Gr. I
Shaji J (Sri.)	System Analyst	Prasanna Kumari S (Smt.)	Head Nurse Gr. I
Pradeep Chandran (Sri.)	Asst. Programmer Gr. I	Rajila Beegum (Smt.)	Head Nurse Gr. I
	(Till 27.9.2010)	Sheeba S V (Smt.)	Head Nurse Gr. I
Pradeep Chandran (Sri.)	Junior System Analyst	Shobha S (Smt.)	Head Nurse Gr. I
	(From 28.9.2010)	Sunitha Kumari R (Smt.)	Head Nurse Gr. I
Basil Varghese (Sri)	Junior System Analyst	Vijaya A K (Smt.)	Head Nurse Gr. I
Jayanthy J K (Smt.)	Data Entry Operator Sr.Gr.	Vijayalekshmy Ammal (Sm	•
Suseela Devi B (Smt.)	Data Entry Operator Sr.Gr.	Aniamma Joseph (Smt.)	Head Nurse
Library & Information Ser	rvices	Sheela Rodriguez (Smt.)	Head Nurse
Vishnu V (Sri.)	Library Assistant Gr. I	Shema C (Smt.)	Head Nurse
	(Till 10.10.2010)	Sindhu S (Smt.)	Head Nurse
Vishnu V (Sri.)	Librarian Cum Information	Aleyamma Mathew (Smt.)	
	Officer (From 11.10.2010)	Bensamma Varghese (Smt	•
Saji S Nair (Sri.)	Library Assistant Gr. I	Sindhu G S (Smt.)	Staff Nurse Sr. Gr.
Ganga A P (Smt.)	Clinical Records Assistant	Siva Kumari P R (Smt.)	Staff Nurse Sr. Gr.
Balachandran K G (Sri.)	Senior Helper	Abraham Shini (Smt.)	Staff Nurse Gr. I
Vijayakumaran Nair R (Sri.) Audio Visual Operator Gr. I	Ajitha S (Smt.)	Staff Nurse Gr. I
Nuclear Medicine		Ajitha T L (Smt.)	Staff Nurse Gr. I Staff Nurse Gr. I
Sheela V (Smt.)	Technical Officer	Aleyamma Chacko (Smt.) Anila Kumari S (Smt.)	Staff Nurse Gr. I
Sheeja S R (Smt.)	Radiographer Sel.Gr.	Bindhu M (Smt.)	Staff Nurse Gr. I
Suja B R (Smt.)	Radiographer Sel.Gr.	Bini A (Smt.)	Staff Nurse Gr. I
Saritha V S (Smt.)	Radiographer Sr.Gr.	Binu O (Smt.)	Staff Nurse Gr. I
Sibi K S (Smt.)	Radiographer	Chandrika P (Smt.)	Staff Nurse Gr. I
Sunitha S (Smt.)	Radiographer	Elsamma Joseph (Smt.)	Staff Nurse Gr. I
Bindu B (Smt.)	R I A Technician Sr. Gr.	Geetha Kumari D (Smt.)	Staff Nurse Gr. I
Minyamma K (Smt.)	R I A Technician Sr. Gr.	llin William (Smt.)	Staff Nurse Gr. I
Sindhu P (Smt.)	R I A Technician Sr. Gr.	Indira Devi G (Smt.)	Staff Nurse Gr. I
Ananda Kumar K (Sri.)	R I A Technician Gr. I	Indu V S (Smt.)	Staff Nurse Gr. I
Usha R (Smt.)	Data Entry Operator	Jessy Thomas (Smt.)	Staff Nurse Gr. I
Nursing Services		Joby Paul (Smt.)	Staff Nurse Gr. I
Sreelekha R (Smt.)	Chief Nursing Officer	Kumari Sindhu S (Smt.)	Staff Nurse Gr. I
, ,	-	()	

Laly Joseph (Smt.)	Staff Nurse Gr. I	Bincy Lukose (Smt.)	Staff Nurse
Leemol Mathew (Smt.)	Staff Nurse Gr. I	Bindhu K G (Smt.)	Staff Nurse
Mangalam S (Smt.)	Staff Nurse Gr. I	Bindhu P D (Smt.)	Staff Nurse
Marykutty Mathew (Smt.)	Staff Nurse Gr. I	Bindhu Rani P V (Smt.)	Staff Nurse
Maya K B (Smt.)	Staff Nurse Gr. I	Bindu Kumari T C (Smt.)	Staff Nurse
Moly M T (Smt.)	Staff Nurse Gr. I	Bini R (Smt.)	Staff Nurse
Nisha Vidyadhar R (Smt.)	Staff Nurse Gr. I	Cherupushpam M (Smt.)	Staff Nurse
Ranichandra V (Smt.)	Staff Nurse Gr. I	Chithra V G (Smt.)	Staff Nurse
Rethidevi G S (Smt.)	Staff Nurse Gr. I	Deepa Davis (Smt.)	Staff Nurse
Sajitha S (Smt.)	Staff Nurse Gr. I	Deepa A S (Smt.)	Staff Nurse
Santhi Rani N (Smt.)	Staff Nurse Gr. I	Deepa T P (Smt.)	Staff Nurse
Saraswathy Amma P (Smt.) Staff Nurse Gr. I	Divya Das S (Smt.)	Staff Nurse
Sheeba P (Smt.)	Staff Nurse Gr. I	Girija L (Smt.)	Staff Nurse
Sherly M (Smt.)	Staff Nurse Gr. I	Gracy Sebastian (Smt.)	Staff Nurse
Shijikumary N G (Smt.)	Staff Nurse Gr. I	Indulekha K S (Smt.)	Staff Nurse
Sindhumol M G (Smt.)	Staff Nurse Gr. I	Jayasree C G (Smt.)	Staff Nurse
Sophiya Lilly (Smt.)	Staff Nurse Gr. I	Jeeja Rajan (Smt.)	Staff Nurse
Suma P V (Smt.)	Staff Nurse Gr. I	Jyothilekshmi D (Smt.)	Staff Nurse
Swapna C R (Smt.)	Staff Nurse Gr. I	Kavitha S G (Smt.)	Staff Nurse
Jainamma Standal (Smt.)	Staff Nurse Gr. I	Kumari Sobha D (Smt.)	Staff Nurse
Kumari Thankam S (Smt.)	Staff Nurse Gr. I	Ligi Das R S (Smt.)	Staff Nurse
Sheeja Samuel (Smt.)	Staff Nurse Gr. I	Lija K (Smt.)	Staff Nurse
Sindhumole L K (Smt.)	Staff Nurse Gr. I	Linsa George (Smt.)	Staff Nurse
Ajila M S (Smt.)	Staff Nurse	Lizy Varkey (Smt.)	Staff Nurse
Ajitha S (Smt.)	Staff Nurse	Manju M S (Smt.)	Staff Nurse
Amrutha L Raj (Smt.)	Staff Nurse	Manju VP (Smt.)	Staff Nurse
Aneeta J George (Smt.)	Staff Nurse	Manjusha G S (Smt.)	Staff Nurse
Anitha Kumary P V (Smt.)	Staff Nurse	Mareena Silas (Smt.)	Staff Nurse
Annamma E J (Smt.)	Staff Nurse	Maya N Nair (Smt.)	Staff Nurse
Anupama B (Smt.)	Staff Nurse	Maya P V (Smt.)	Staff Nurse (Resigned 23.6.10)
Anupama Susmitha (Smt.)	Staff Nurse	Maya S S (Smt.)	Staff Nurse
Aparna B (Smt.)	Staff Nurse	Mayadevi L (Smt.)	Staff Nurse
Aradhana S (Smt.)	Staff Nurse	Nisha K N (Smt.)	Staff Nurse
Archana M.Nair (Smt.)	Staff Nurse	Nisha K Thomas (Smt.)	Staff Nurse
Ariya Sreedharan B (Smt.)	Staff Nurse	Preeja S (Smt.)	Staff Nurse
Aswathy M R (Smt.)	Staff Nurse	Preetha A (Smt.)	Staff Nurse
Beena K G (Smt.)	Staff Nurse	Preetha S (Smt.)	Staff Nurse
Beena Koshy (Smt.)	Staff Nurse	Preethi P R (Smt.)	Staff Nurse
Beena Kumari N (Smt.)	Staff Nurse	Priya K L (Smt.)	Staff Nurse
Bency Varghese (Smt.)	Staff Nurse	Rajani R V (Smt.)	Staff Nurse
Biji P R (Smt.)	Staff Nurse	Rajaram S K	Staff Nurse

D " I (D (C)	G. (G.)	6	C. C.
Raji K R (Smt.)	Staff Nurse	Sreekumaran Pillai V (Sri.)	Staff Nurse
Reena A (Smt.)	Staff Nurse	Sreelatha C S (Smt.)	Staff Nurse
Rejani Mole A (Smt.)	Staff Nurse	Sreelekha S (Smt.)	Staff Nurse
Rema Devi R (Smt.)	Staff Nurse (Resigned 28.6.10)	Sukanya Kumari S R (Smt.)	
Renjini R S (Smt.)	Staff Nurse	Suma V (Smt.)	Staff Nurse
Renjusha V (Smt.)	Staff Nurse (Resigned 28.6.10)	Suma John (Smt.)	Staff Nurse
Resmi V (Smt.)	Staff Nurse	Suma K (Smt.)	Staff Nurse
Roja S Anand (Smt.)	Staff Nurse	Suma P S (Smt.)	Staff Nurse
Rosamma Joseph (Smt.)	Staff Nurse	Sumathy P (Smt.)	Staff Nurse
Rugmini M D (Smt.)	Staff Nurse	Suni Mathew (Smt.)	Staff Nurse
Saji G S (Smt.)	Staff Nurse	Sunitha L (Smt.)	Staff Nurse
Salini G S (Smt.)	Staff Nurse (Resigned 23.6.10)	Swapna K (Smt.)	Staff Nurse
Saloma PS (Smt.)	Staff Nurse	Thara S S (Smt.)	Staff Nurse
Sandhya V Nair (Smt.)	Staff Nurse	Vasanthakumari R (Smt.)	Staff Nurse
Sandhyamol K S (Smt.)	Staff Nurse	Georjee George(Smt.)	Staff Nurse
Sangeetha K S (Smt.)	Staff Nurse	Gigi Mol Chacko	Staff Nurse
Saritha SS (Smt.)	Staff Nurse	Sreeja MS	Staff Nurse
Shajila R (Smt.)	Staff Nurse (Resigned 8.9.10)	Sumam L	Staff Nurse
Sheeba P Varghese (Smt.)	Staff Nurse	Jaichitra MV	Staff Nurse
Sheeba V L (Smt.)	Staff Nurse	Palliative Medicine	
Sheeja B T (Smt.)	Staff Nurse	Dennison G (Sri)	Manufacturing Chemist
Sheeja D B (Smt.)	Staff Nurse	Sanal AD	Skilled Worker
Sherin John Karottu (Smt.)	Staff Nurse	Pathology	
Sherry M (Smt.)	Staff Nurse	Najeeya S (Smt.)	Technical Officer
Shiny George (Smt.)	Staff Nurse	Jayalal K S (Sri.)	Cytotechnologist Sr.Gr.
Shiny P Thankappan (Smt.)	Staff Nurse	Mani K S (Sri.)	Cytotechnologist Sr.Gr.
Simmy Panicker S (Smt.)	Staff Nurse	Veena V S (Smt.)	Cytotechnologist Sr.Gr.
Sindhu G (Smt.)	Staff Nurse	Anitha S (Smt.)	Cytotechnologist 31.31.
Sindhu K (Smt.)	Staff Nurse	Nataraj A (Sri.)	Cytotechnician Sel.Gr.
Sindhu Kumari L (Smt.)	Staff Nurse (Resigned 14.5.10)	Brinda T P (Smt.)	Lab.Technician Sel.Gr.
Sindhu L (Smt.)	Staff Nurse	Saina A (Smt.)	Lab. Technician Sel.Gr.
Sindhu P Nair (Smt.)	Staff Nurse	Sulochana S (Smt.)	Lab. Technician Sel.Gr.
Sindhu R (Smt.)	Staff Nurse		Lab. Technician Sr.Gr.
Sindhu V (Smt.)	Staff Nurse	Jayasree P S (Smt.)	Lab. Technician Sr. Gr.
Sithara Balakrishnan (Smt.)	Staff Nurse	Jiju J S (Sri.)	
Smitha S Mani (Smt.)	Staff Nurse	Lathamalathy L (Smt.)	Lab.Technician Sr.Gr.
Soni John (Smt.)	Staff Nurse	Sherly K Ninan (Smt.)	Data Entry Operator Gr. I
Sreeja A P (Smt.)	Staff Nurse	Vijayakumar C (Sri.)	Hospital Attender
Sreeja S (Smt.)	Staff Nurse	Pharmacy & Store	
Sreekala P (Smt.)	Staff Nurse	Suresh G (Sri.)	Pharmacist Gr. I
` ,		D: 1 D C (C :)	
Sreekala T (Smt.)	Staff Nurse	Dinesh P S (Sri.) Shaji SS (Sri)	Pharmacist Gr. I Pharmacist

Vimal Kumar Y S (Sri.)	Helper	Latha P.T. (Dr)	Assistant Professor in Sociology
Project Cell		Mini N.(Smt.)	Dietician Gr. I
Vijayakumar G (Sri.)	Project Assistant	Surgical Oncology	
Thrivikraman Nair M G (Sr	i.) Clerk Gr. I	Mohanan Pillai B (Sri.)	Theatre Technician
Radiation Physics			(Aneasthesia) Sr.Gr.
Ramabhadran P (Sri.)	Technical Officer	Abin Issac (Sri.)	Operation Theatre Technician
Ambily Govind K (Smt.)	Radiographer Sel.Gr.	Damodara Sarma E (Sri.)	Operation Theatre Technician
Anitha C (Smt.)	Radiographer Sel.Gr.		(Relieved 25.6.10)
Geetha P (Smt.)	Radiographer Sel.Gr.	Rajendran Nair P (Sri.)	Operation Theatre Technician
Geethamma K (Smt.)	Radiographer Sel.Gr.	Manju RS (Smt.)	Operation Theatre Technician
Jayasree C G (Smt.)	Radiographer Sel.Gr.	Devaraja Panicker K (Sri.)	Senior Helper
Premeela Devi T (Smt.)	Radiographer Sel.Gr.	Jayasree S (Smt.)	Typist Gr. I
Radhakrishnan Nair T (Sri.)	9 1	Viswakumar N (Sri.)	Typist Gr. I
Santhan H (Sri.)	Radiographer Sel.Gr.	Suresh P S (Sri.)	Senior Helper
Sheeba D R (Smt.)	Radiographer Sel.Gr.	Thankappan Chettiyar K (S	Sri.) Senior Helper
Sherif J S (Sri.)	Radiographer Sel.Gr.	Louis T C (Sri.)	Hospital Attender
Sreekala R (Smt.)	Radiographer Sel.Gr.	Transfusion Medicine	
Sunil Kumar S (Sri.)	Radiographer Sel.Gr.	Renukadevi V (Smt.)	Lab Tech Sel. Gr.
Viddiul Latha P A (Smt.)	Radiographer Sel.Gr.	Asha S R (Smt.)	Lab.Technician Sr.Gr.
Maheswari J (Smt.)	Radiographer Sr.Gr.	Bindu A P (Smt.)	Lab.Technician Sr.Gr.
Mariamma Jacob (Smt.)	Radiographer Sr.Gr.	Mini S P (Smt.)	Lab.Technician Sr.Gr.
Mini V L (Smt.)	Radiographer Sr.Gr.	e. Dismissals/Retrenchme	nts: Nil
Rajesh P R (Sri.)	Radiographer Sr.Gr.	f. Retirements	
Sindhu S S (Smt.)	Radiographer Sr.Gr.	Mohanachandran	
Abhilash Sudh S S (Sri.)	Radiographer	Nair C (Sri.)	Clerk Gr. I (on 31.12.2010)
Asa Rani K S (Smt.)	Radiographer	Sivasankara Pillai K (Sri.)	Pharmacist Gr. I (on 31.05.2010)
Lal K Nair (Sri.)	Radiographer	Krishnadasan T P (Sri.)	Driver Sel.Gr. (on 27.11.2010)
Manju P M (Smt.)	Radiographer	Dass G (Sri.)	Hospital Attender
Maya M (Smt.)	Radiographer	Dass G (511.)	(on 27.11.2010)
Salini G S (Smt.)	Radiographer	Suseela P (Smt.)	Junior Personal Assistant
Seena C S (Smt.)	Radiographer	Susceia i (Sitil.)	(on 31.12.2010)
Sheena J (Smt.)	Radiographer	Aleykutty P M (Smt.)	Nursing Superintendent
Shinu R S (Sri.)	Radiographer	Aleykutty i i i (Siiit.)	(on 31.10.2010)
Sunitha Kumari U P (Smt.)	Radiographer	Suseelamma S (Smt.)	Technical Officer (on 30.11.2010)
Vinod S L (Sri.)	Radiographer	, ,	recrimear Officer (01130.11.2010)
Sreekala D (Smt.)	Mould Room Technician Sel.Gr.	g. Obituary	A D . C
Santhosh Kumar M S (Sri.)	Electronic Technician	Dr. Mirsa Hussain B.	Associate Professor
Security		C - II T D (C t)	(expired on 30.08.2010)
Jyothikumar S (Sri.)	Sergeant	Sudharma T P (Smt.)	Senior Helper
Supporting Services	-		(expired on 08.06.2010)
Surendran Nair V (Sri)	Public Relations Officer		
()			

2. Right To Information Act

a. Public Information Officers

Sri. K.O. Mathai. Accounts Officer

Sri. K. Anandamohan. Administrative Officer

Sri. R. Raveendran Nair, Administrative Officer

(Clinical Services)

Smt. N. Neelima, Systems Manager

b. Assistant Public Information Officers

Smt. B. Lalitha, Assistant Administrative Officer Gr. I

Sri. S.V. Sasikumar, Purchase Officer

Smt. N. Beena, Assistant Accounts Officer

Sri. V. Surendran Nair, Public Relations Officer

c. Appellate Authority

Dr. Paul Sebastian, Director

d. Number of Applications

Received: 58

Disposed: 58 (including 2 pending applications of the previous year)

Pending: 2

- e. Penalties levied for non-supply of information: Nil
- f. Cases pending with State Information Commission: Nil

3. Internal Control Mechanism

- a. Staff used exclusively for internal audit: |
- b. Audit committee meetings: Nil
- c. Monitoring committees set up: Administrative committee consisting of all HODs, Medical Superintendent and Additional Directors with the Director as the Head, meets periodically to evaluate the functioning of the Centre.

4. Other matters

- a. Grievance redressal mechanism: Committee for redressal of complaints of sexual harassment against female employees.
- b. Official language act: Not implemented
- c. Computerisation: Progressing

5. Standing Committees

a. Institutional Review Board

- L. Dr. Paul Sebastian: Chairman Director, Regional Cancer Centre, Thiruvananthapuram
- 2. Dr. P.G. Jayaprakash: Member Prof. & Head, Division of Radiation Oncology, Regional Cancer Centre, Thiruvananthapuram
- 3. Dr. K. Ramachandran: Member Professor & Head, Division of Imageology, Regional Cancer Centre, Thiruvananthapuram
- 4. Dr. P. Kusumakumary: Member Additional Director, Regional Cancer Centre, Thiruvananthapuram
- 5. Dr. K. Ramadas: Member Medical Superintendent, Regional Cancer Centre, Thiruvananthapuram
- 6. Dr. V.M. Pradeep: Member Professor & Head, Division of Nuclear Medicine, Regional Cancer Centre, Thiruvananthapuram
- 7. Dr. K. Jayasree: Member Additional Professor & Head, Division of Pathology, Regional Cancer Centre, Thiruvananthapuram
- 8. Dr. N. Geetha: Member Additional Professor & Head, Division of Medical Oncology, Regional Cancer Centre, Thiruvananthapuram
- 9. Dr. Aleyamma Mathew: Member Additional Professor & Head Division of Cancer Epidemiology & Clinical Research Regional Cancer Centre, Thiruvananthapuram
- 10. Dr. S. Kannan: Member Additional Professor & Head. Division of Cancer Research, Regional Cancer Centre, Thiruvananthapuram
- 11. Dr. Francis V. James: Convener Additional Professor, Division of Radiation Oncology, Regional Cancer Centre, Thiruvananthapuram

b. Ethics Committee

- I. Dr. M. Narendranathan: Chairman 'Sreenilayam', Veerabhadra Gardens, Pottakuzhi, Pattom P.O., Thiruvananthapuram-695 004
- 2. Dr. M. Radhakrishna Pillai: Member Director, Rajiv Gandhi Centre for Biotechnology Thiruvananthapuram.
- 3. Dr. M. Sambasiyan: Member Prof. of Neurosurgery (Rtd.), Consultant Neurosurgeon Cosmopolitan Hospital, Thiruvananthapuram.
- 4 Dr. C.C. Kartha: Member Professor of Eminence, Department of Molecular Medicine, Rajiv Gandhi Centre for Biotechnology Thiruvananthapuram
- 5. Dr.V. Retnavally: Member Prof. of Pharmacology (Rtd.) 'Lekshmi', House No. 59, Vrindavan Housing Colony Pattom, Thiruvananthapuram-4
- 6. Sri. M. Yunnus Kunju: Member Advocate No. 7, 'Kaleekal', East Pattom, Thiruvananthapuram
- 7. Smt. Darly Francis: Member 'Bethelehem', D7D Moolayil Lane, Sasthamangalam Thiruvananthapuram-695 010
- 8. Dr. Girish Menon R: Member Additional Professor of Neurosurgery Sree Chitra Tirunal Institute for Science & Technology Thiruvananthapuram
- 9. Dr. N. Geetha: Member Additional Professor & Head Division of Medical Oncology Regional Cancer Centre, Thiruvananthapuram
- 10. Dr. Rejnish Kumar R: Convener Associate Professor of Radiation Oncology Regional Cancer Centre, Thiruvananthapuram

c. Scientific Committee

I. Dr. K. Radhakrishan: Chairman Director, SCTIMST, Thiruvananthapuram

- 2. Dr. Paul Sebastian: Alternate Chairman Director, RCC, Thiruvananthapuram
- 3. Dr. G.K. Rath: Member Chief, BRA-IRCH, AIIMS, New delhi
- 4. Dr. Rajendra A. Badwe: Member Director, Tata Memorial Centre, Mumbai
- 5. Dr. M. Vijayakumar: Member Director, Kidwai Memorial Institute of Oncology Bangaluru
- 6. Dr. M. Radhakrishna Pillai: Member Director, Rajiv Gandhi Centre for Biotechnology Thiruvananthapuram
- 7. Dr. T. Rajkumar: Member Prof. and Head, Dept. of Molecular Oncology Cancer Institute (WIA), Chennai
- 8. Dr. Nirmala A. Jambhedkar: Member Prof. and Head, Dept. of Pathology Tata Memorial Centre, Mumbai
- 9. Dr. Meenu Hariharan: Member Director of Medical Education (Retired) Thiruvananthapuram
- 10. Dr. K. Ramadas: Convener Additional Professor of Radiation Oncology RCC, Thiruvananthapuram

d. Medical Audit Committee

- 1. Dr. K. Ramadas, Medical Superintendent: Chairman
- 2. Dr. P.G. Jayaprakash, HOD, Radiation Oncology: Member
- 3. Dr. Paul Sebastian, HOD, Surgical Oncology: Member
- 4. Dr. N. Geetha, HOD, Medical Oncology: Member
- 5. Dr. P. Kusumamumary, HOD, Paediatric Oncology: Member
- 6. Dr. K. Ramachandran, HOD, Imageology: Member
- 7. Dr. V.M. Pradeep, HOD, Nuclear Medicine: Member
- 8. Dr. Cherian M. Koshy, HOD, Palliative Care: Member
- 9. Dr. Beela Sarah Mathew, Addl. Professor, Radiation Oncology: Member
- 10. Dr. R. Rejnish Kumar, Assoc. Professor, Radiation Oncology: Member

- 11. Ms. R. Sreelekha, Chief Nursing Officer: Member
- 12. Sri. R. Raveendran Nair, Administrative Officer (Clinical Services): Member

e. Hospital Infection Control Committee

- 1. Dr. K. Ramadas, Medical Superintendent: Chairman
- 2. Dr. Paul Sebastian, HOD, Surgical Oncology: Member
- 3. Dr. N. Geetha, HOD, Medical Oncology: Member
- 4. Dr. Rachel Cherian Koshy, HOD, Anaesthesiology: Member
- 5. Dr. Swapna R. Nath, HOD, Microbiology: Member
- 6. Dr. K. Vijayalekshmi, HOD, Transfusion Medicine: Member
- 7. Ms. R. Sreelekha, Chief Nursing Officer: Member
- 8. Ms. Sally Abraham, Nursing Supervisor, In charge of Laundry & Linen Services: Member
- 9. Ms. Mariamma James, Nursing Supervisor, In charge of Housekeeping Services: Member
- 10. Ms. R. Sunithakumary, Head Nurse, In charge of CVAD: Member
- 11. Ms. Sithara Balakrishnan. Infection Control Nurse: Member
- 12. Smt. Uma Maheswari, Controller of Finance: Member
- 13. Sri. S.V. Sasikumar, Purchase Officer, Member
- 14. Ms. Lizyamma Jacob, Nursing Supervisor: Convener

Building Committee

- I. Sri. P.K. Satheesan, Chief Engineer, PWD: Chairman
- 2. Smt. Sheela R., Chief Archetect, PWD: Member
- 3. Dr. V. Geetha, Director of Medical Education: Member
- 4. Dr. Ramadas Pisharody, Principal, Medical College, Thiruvananthapuram: Member
- 5. Dr. Paul Sebastian, Director, RCC: Member
- 6. Smt. Uma Maheswari. Controller of Finance, RCC: Member
- 7. Sri. L. Vijayakumar, Chief Construction Engineer, RCC: Convener

g. Library Committee

- I. Dr. Paul Sebastian, Director, RCC: Chairman
- 2. Dr. P. Kusumakumary, Additional Director (Academic): Member
- 3. Dr. K. Ramadas. Medical Superintendent: Member
- 4. Smt. Uma Maheswari, Controller of Finance: Member
- 5. Dr. K. Ramachandran. HOD, Imageology Division: Member
- 6. Dr. K Jayasree, HOD, Pathology Division: Member
- 7. Dr. Kannan S. HOD, Cancer Research Division: Member
- 8. Sri. Vishnu V. Librarian cum Information Officer: Convener

EVENTS



Dr. Christopher P. Wild, Director, International Agency for Research on Cancer, on his visit to RCC (21 April 2010).



'World No Tobacco Day' celebrations (31 May 2010)



Silver Jubilee Celebrations of Community Oncology Division (25 June 2010)



'World Hospice & Palliative Care Day' celebrations (9 Oct 2010).



Inauguration of Linear Accelerators by Smt. P.K. Sreemathi Teacher, Hon'ble Minister for Health and Social Welfare, Govt. of Kerala (8 Feb 2011)



Dr. Paul Sebastian, Director, RCC receiving 'Chirayinkil Ansar Memorial Award' in recognition of RCC's services and track record in a critical area of medicare, instituted by Friends Abu Dhabi Malayali Samajam

ACCOUNTS 2010-2011

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (Reg. No. 567/81) BALANCE SHEET AS ON 31st MARCH 2011

Previous Year Schedule Liabilities	Schedule	e Liabilities	Current Year	Previous Year Schedule Assets	echedule	Assets		Current Year
Rs. Ps.			Rs. Ps.	Rs. Ps.			Rs. Ps.	Rs. Ps.
1,020,096,409.17	_	CAPITAL FUND	1,138,242,090.17	138,242,090.17 1,013,397,766.76	>	FIXED ASSETS	1,114,743,447.76	
140,788,136.91	=	SPECIFIC FUNDS	180,761,043.61	524,234,515.15		Less:PROVISION FOR DEPRECIATION	585,220,993.37	
32,650,000.00		GRANT IN AID FROM GOVT OF KERALA	159,447,514.00	489,163,251.61		HXED ASSETS (net of provision for dep.)		529,522,454.39
				202,851,014.00	5	INVESTMENTS		299,236,682.00
		CURRENT LIABILITIES AND PROVISIONS				CURRENT ASSETS, LOANS & ADVANCES		
49,265,498.00	=	CREDITORS FOR GOODS SUPPLIED	46,450,223.00					
62,229,096.78	\geq	OTHER CURRENT LIABILITIES	90,322,270.22	44,683,101.00	₹	CLOSING STOCK		61,924,512.00
18,078,473.00		PROVISION FOR GRATUITY	7,409,746.00	90,675,565.91	₩	INVESTIGATION FEES RECEIVABLE		126,119,862.46
				35,081,944.41	\times	BALANCE WITH BANKS		65,789,491.21
				286,432.58	×	CASH IN HAND		352,092.73
				15,336,331.20	$\overline{\times}$	ADVANCES - OTHERS		10,813,063.68
				445,029,973.15	₹	INCOME & EXPENDITURE A/C		528,874,728.53
1,323,107,613.86		TOTAL	1,622,632,887.00 1,323,107,613.86	1,323,107,613.86		TOTAL		,622,632,887.00
	$ \overline{\overline{z}} $	XIII SIGNIFICANT ACCOUNTING POLICIES	CIES					

Thiruvananthapuram, 24/10/2011

NOTES ON ACCOUNTS

Schdules I to XV form an integral part of this Balance Sheet.

DR. PAUL SEBASTIAN (Director)

LEKSHMI RANI (Controller of Finance)

As per my report of even date attached

SAJI V S Bcom, BGL, DISA(ICAI), FCA

Chartered Accountant

Membership No.212594

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (Reg.No. 567/81) INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2011.

Previous Year	Schedule	Expenditure	Current Year	Previous Year	Schedule	Income	Current Year
Rs. Ps.			Rs. Ps.	Rs. Ps.			Rs. Ps.
35,251,331.18		Opening Stock	44,683,101.00	201,819,114.06		Investigation Fees	277,410,843.50
313,331,548.74	⋖	Purchases Medicines,Chemicals etc.	332,319,695.00	304,662,289.17		Medicine Receipts	312,704,599.15
267,359,171.05	В	Salaries and Allowances	358,298,459.30	9,423,321.95		Interest Income	4,619,236.86
304,866.00		Uniform and Liveries	290,893.00	1,527,122.00	\checkmark	Training Fees	612,850.00
1,049,841.00	U	Rent,Rates &Taxes	871,262.00	7,027,106.36		Miscellaneous Income	7,060,702.05
318,939.00		Postage, Telephone & Telegrame	351,072.00	44,683,101.00	\parallel	Closing Stock	61,924,512.00
208,676.00	ш	Travelling Expences	122,855.00				
1,548,615.26		Printing &Stationary	2,355,276.50	112,720,255.35		Grant-in-Aid from Govt of Kerala	120,000,000.00
826,612.00		Advertisement Charges	686,354.00				
16,109,471.00	ш	Electricity and Water Charges	16,875,423.00			Excess of Expenditure over Income	79,773,383.88
9,956,925.04	ŋ	Repairs & Maintenance	10,065,598.17	48,538,160.32			
6,335,327.00	I	Service Contract Charges	8,912,488.00				
85,000.00		Internal Audit Fees	120,000.00				
110,300.00		Statutory Audit Fees	120,000.00				
878,760.00	_	Computer Expenses	633,377.00				
10,894.00		Books&Periodicals	8,834.00				
2,493,257.00		Expenses to NTR	3,308,001.00				
1,971,531.10		Medicine issues (free)	1,860,631.00				
194,136.00	_	Miscellaneous Expenses	982,388.25				
97,448.00		DCCP Expenses					
		Matress,Linen,Laundry and other					
2,432,442.85		Housekeeping Expenses	4,105,101.00				
69,525,377.99	>	Depreciation	77,135,318.22				
730,400,470.21		TOTAL	864,106,127.44	730,400,470.21		TOTAL	864,106,127.44

SIGNIFICANT ACCOUNTING POLICIES \geq

NOTES ON ACCOUNTS

Schedules A to L,VI,XIV and XV form an integral part of this Statement.

As per my report of even date attached

DR. PAUL SEBASTIAN TThiruvananthapuram, 24/10/2011

(Director)

(Controller of Finance) LEKSHMI RANI

Bcom, BGL, DISA(ICAI), FCA Chartered Accountant SAJI V S

Membership No.212594

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (Reg. No. 567/81) SCHEDULE -V

		Gross	Gross Block				Depreciation			Š	Net Block
ltem	As on 1.4.10	Additions during the year	Deduction during the year	As on 31.3.2011	Rate %	Up To	Provided during the year	Adjustments/	Total Upto	As On 31.3.2011	As On 31.3.10
Land	00:000'1	- 0	/ 0	00:000'1	1		-		1	00:000'1	00'000'1
Buildings	159,424,149.92	46,844,476.65		206,268,626.57	5.00	78,334,487.86	6,396,706.94		84,731,194.80	121,537,431.77	81,089,662.06
Givil Works	127,118.63	182,022.00		309,140.63	5.00	85,991.79	11,157.44		97,149.23	211,991.40	41,126.84
Cobalt Unit	18,123,455.30	1		18,123,455.30	15.00	13,953,338.60	625,517.51		14,578,856.10	3,544,599.20	4,170,116.70
Water Supply And Drainage	4,062,999.43	694,424.00		4,757,423.43	15.00	2,343,061.00	362,154.36		2,705,215.36	2,052,208.07	1,719,938.43
Furniture And Fittings	15,298,794.48	4,292,826.00		19,591,620.48	10.00	8,932,433.30	1,065,918.72		9,998,352.02	9,593,268.46	6,366,361.18
Office Equipments	2,585,693.43	132,325.00		2,718,018.43	15.00	2,242,768.47	71,287.49		2,314,055.96	403,962.47	342,924.96
Hospital & Lab. Equipments	548,964,523.97	73,704,402.00	12,000,000.00	610,668,925.97	15.00	267,398,239.21	53,290,603.01	11,534,886.00	309,153,956.22	301,514,969.75	281,566,284.76
Electrical Installation	41,866,443.90	525,065.00		42,391,508.90	15.00	35,540,832.83	1,027,601.41		36,568,434.24	5,823,074.66	6,325,611.07
Fire Detection	4,006,287.00	508,416.00		4,514,703.00	15.00	3,516,872.03	149,674.65		3,666,546.67	848,156.33	489,414.97
Air Conditioning	23,062,391.35	11,491,496.00	4,800,000.00	29,753,887.35	15.00	17,750,352.09	2,520,530.29	4,613,954.00	15,656,928.38	14,096,958.97	5,312,039.26
Computer Hardware & Software	7,382,963.00	2,035,594.00		9,418,557.00	00:09	6,420,470.97	1,798,851.62		8,219,322.59	1,199,234.41	962,492.03
Gas And Cylinder	7,540,120.05	6,355.00		7,546,475.05	15.00	6,405,423.08	171,157.80		6,576,580.88	969,894.17	1,134,696.97
Vehicles	1,325,445.60	ı		1,325,445.60	20.00	764,000,99	112,288.92		16'682'91	449,155.69	561,444.61
Library Books And Journals	34,858,206.65	5,354,216.00		40,212,422.65	15.00	19,803,107.09	3,061,397.33		22,864,504.43	17,347,918.22	15,055,099.56
Lift And Elevator	5,913,240.00	1		5,913,240.00	15.00	5,447,021.01	69,932.85		5,516,953.86	396,286.14	466,218.99
Assets (Donations)	337,612.00	1		337,612.00	15.00	317,379.94	3,034.81		320,414.75	17,197.25	20,232.06
Telephone Equipments	4,343,346.00	14,175.00		4,357,521.00	15.00	3,206,428.07	172,663.94		3,379,092.01	978,428.99	1,136,917.93
High Energy Linear Accelerator	52,987,763.00	-		52,987,763.00	15.00	33,003,453.65	2,997,646.40		36,001,100,05	16,986,662.95	19,984,309.35
Assets-telemedicines Project	7,718,623.00			7,718,623.00	15.00	5,165,117.12	383,025.88		5,548,143.00	2,170,480.00	2,553,505.88
Hospital Equipments &											
Other Assets (Project)	26,510,164.00	2,443,195.00		28,953,359.00	15.00	12,210,152.59	2,511,480.96		14,721,633.55	14,231,725.45	14,300,011.41
Low Energy Linear Accelerator	3,611,489.40	1		3,611,489.40	15.00	1,393,583.47	332,685.89		1,726,269.36	1,885,220.04	2,217,905.93
Builidings Work In Progress	43,345,936.65	11,922,931.00	42,006,237.65	13,262,630.00						13,262,630.00	43,345,936.65
Total	1,013,397,766.76	160,151,918.65	58,806,237,65	58,806,237.65 1,114,743,447.76		524,234,515.15	77,135,318.22	16,148,840.00	585,220,993.37	529,522,454.39	489,163,251.61

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (Reg. no. 567/81) CANCER CARE FOR LIFE SCHEME INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2011

Previous Year	EXPENDITURE	Current Year	Previous Year	INCOME	Current Year
Rs. Ps.		Rs. Ps.	Rs. Ps.		Rs. Ps.
250,000.00	Salaries & Allowances		7,785,755.00	Interest on FD & Investments	5,670,836.00
8,794,951.75	Reimbursement to Patients	9,742,207.50	1,259,196.75	Excess of Expenditure over Income	4,071,371.50
9,044,951.75	TOTAL	9,742,207.50	9,044,951.75	TOTAL	9,742,207.50

Thiruvananthapuram, 24/10/2011

> DR. PAUL SEBASTIAN (Director)

As per my report of even date attached

LEKSHMI RANI (Controller of Finance)

SAJI V S Bcom, BGL, DISA(ICAI), FCA Chartered Accountant Membership No.212594

AUDITOR'S REPORT

- 1. I have audited the attached Balance Sheet of Regional Cancer Centre Society as at 31st March 2011, and also the annexed Income and Expenditure Account for the year ended on that date. These financial statements are the responsibility of the Society's management. My responsibility is to express an opinion on these financial statements based on my audit.
- 2. I conducted my audit in accordance with Auditing Standards generally accepted in India. Those Standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statement presentation. I believe that my audit provides a reasonable basis for my opinion.

3. I further report that:

- 1. I have obtained all the information and explanations which to the best of my knowledge and belief were necessary for the purpose of my audit.
- 2. In my opinion proper books of accounts have been kept by the Society, so far as appears from my examination of those books.
- 3. The Balance Sheet and Income and Expenditure account dealt with by this report are in agreement with the books of accounts.
- 4. Investigation Fee Receivable, Creditors for Goods Supplied, Advances and Current Liabilities are subject to confirmation of balances from the respective parties.
- 5. Refer Significant Accounting Policies No.6 and Notes on Accounts No.1 and 3 regarding method of accounting for government grants and effect thereof on the deficit for the year.

Subject to my comments in para (4) and (5) mentioned above, in my opinion and to the best of my information and according to the explanations given to me, the said accounts read together with the accounting policies and notes thereon give a true and fair

- (a) In the case of Balance Sheet of the state of affairs of the Society as at 31st March 2011.
- (b) In the case of the Income and Expenditure Account of the deficit (excess of expenditure over income) of the Society for the year ended on that date.

Thiruvananthapuram 24-10-2011

> SAII V.S BCom, BGL, DISA(ICAI), FCA Chartered Accountant Membership No.212594

SCHEDULE - XIV SIGNIFICANT ACCOUNTING POLICIES

I. ACCOUNTING ASSUMPTIONS

The accounts have been prepared under the historic cost convention on the basis of a going concern, with revenues recognized and expenses accounted on their accrual (except income from investment and leave surrender salary which are accounted when income/ expense is actually received or paid) including provision/adjustments for committed obligations and amounts determined as payable or receivable during the year.

The Financial Statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) in India and the Accounting Standards issued by the Institute of Chartered Accountants of India and deviations if any from such standards have been explained in the notes on accounts.

2. METHOD OF ACCOUNTING

The method of accounting followed by the society is "mercantile system" subject to the clause no. I above.

3. INVENTORIES

Inventories are valued at cost or net realizable value whichever is less. Cost includes freight and other related incidental expenses and is computed on weighted average method.

4. FIXED ASSETS

The 'Gross Block' of fixed assets represents cost of acquisition and all other attributable cost of bringing the asset to the working condition for its intended use. Accumulated depreciation is shown separately as Provision for Depreciation.

5. DEPRECIATION

Depreciation is provided on Fixed Assets under written Down Value Method at the rates specified in the Fixed Assets Schedule which is forming part of the balance sheet. In the case of new assets purchased during year full depreciation is provided at the rates mentioned above.

6. GRANT IN AID

Grant in Aid received during the year from the State Government under the plan fund to the extent utilized for the acquisition of fixed assets is transferred and included under Capital Fund Account and the amount to the extent not utilized in the current year for the acquisition of fixed assets is retained under Grant in Aid from the State Government Account. Grant in Aid received under non plan fund from the State Government is transferred to Income and Expenditure Account. Capital Grant received from NRHM is included under capital fund account as it represents the fixed assets acquired.

7. CAPITAL FUND

Capital Fund Account balance includes the fund balance at the beginning of the year, Capital Grants to the extent used for acquisition/construction of fixed assets and the value of assets received from the projects at free of cost.

8. INCOME TAX

No provision for current or deferred Tax is provided as the society is a registered charitable society under section 12A(a) of Income Tax Act 1961 and there are no surplus or profit during the year which is chargeable to tax.

9. ASSETS RECEIVED FROM PROJECT CELL

The assets transferred to the society from the projects cell after having fulfilled its intended use in the projects are credited capital fund account as the society receive these assets at free of cost.

SCHEDULE - XV NOTES ON ACCOUNTS

- 1. Had the organization followed the Accounting Standard (AS 12) regarding Govt. Grant issued by the ICAI and reduced grant utilized for acquisition of fixed assets from the gross value of such assets, the depreciation debited to Income and Expenditure Account would have been reduced by the quantum of depreciation relating to the value of specific assets acquired out of grant in aid and therefore would have consequent reduction in the deficit for the year. As the organization has been following the accounting practice, as mentioned under the clause no.6 of the significant accounting policies, for previous years also, the impact of the above deviation from the standard in the current year's deficit could not be quantified precisely.
- 2. Investigation Fee includes income from registration fee, ward charges, nuclear medicine, radiotherapy, surgery and lab.
- 3. Contingent liability towards property tax and interest thereon is amounting to Rs.1,04,67,369/-. Non refundable of Grant in aid is contingent up on the fulfillment of all the conditions attached to such assistance.
- 4. Figures for the previous year have been regrouped and recast wherever necessary to suit the current year's lay out.

Thiruvananthapuram

24-10-2011

DR. PAUL SEBASTIAN (Director)

LEKSHMI RANI (Controller of Finance)

As per my report of even date attached

SAJI V S B.Com. BGL, DISA(ICAI), FCA Chartered Accountant Membership No.212594

UTILISATION CERTIFICATE

1. During the year 2010-11, the Regional Cancer Centre Society, Trivandrum has received Rs.2000Lakhs under the head of account 2210-05-800-89(P), Rs.400Lakhs under the head of account 2210-800-89-31(Plan) and Rs.1200Lakhs under the head of account 2210-05-800-89(NP) from the Govt. of Kerala. The details of such receipts are as follows:

Installment	G.O.Numbers	Amount (Rs. In Lakhs)
	Head of Account 2210-05-800-89(P)	
I	G.O.(Rt)No.4281/2010/H&FWD dtd 30/10/2010	625,00,000.00
2	G.O.(Rt)No.4935/2010/H&FWD dtd. 17/12/2010	475,00,000.00
3	G.O.(Rt)No.291/2011/H&FWD dtd.24/01/2011	600,00,000.00
4	G.O.(Rt)No.1126/2011/H&FWD dtd. 23/03/2011	300,00,000.00
	Head of Account 2210-800-89-31(P)	
I	G.O.(Rt)No.4148/2010/H&FWD dtd. 20/10/2010	400,00,000.00
	Head of Account 2210-05-800-89(NP)	
I	G.O.(Rt)No.1855/2010/H&FWD dtd. 05/05/2010	200,00,000.00
2	G.O.(Rt)No.2749/2010/H&FWD dtd. 16/07/2010	200,00,000.00
3	G.O.(Rt)No.3850/2010/H&FWD dtd. 28/09/2010	300,00,000.00
4	G.O.(Rt)No.106/2011/H&FWD dtd. 07/01/2011	300,00,000.00
5	G.O.(Rt)No.393/2011/H&FWD dtd. 01/02/2011	100,00,000.00
6	G.O.(Rt)No.972/2011/H&FWD dtd. 10/03/2011	100,00,000.00
	Total	3,600,00,000.00

2. The amount was utilised as follows.

SI. No.	Purpose	Amount (Rs.)
1	Acquisition of Assets	8,05,52,486.00
2	Opening LC for acquiring fixed Asset(Margin Deposit	
	for Letter of Credit opened for acquiring fixed assets)	10,39,12,542.00
3	Operational Expenditure	12,00,00,000.00
	Total	30,44,65,028.00

3. That the utilization mentioned under (2) above is true and correct as disclosed by the Books of account of the Society.

Thiruvananthapuram 24-10-2011

> SAJI V S BCom, BGL, DISA(ICAI), FCA Chartered Accountant Membership No.212594

T. AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT

Chaitaniya, T.C. 54/2214-2 Sreedharan Pillai Road Pappanamcode P.O. Thiruvananthapuram 695 018 Telephone: 0471-2495939 Mobile: 9349990489

E-mail: ajithkumarca@yahoo.com

AUDITOR'S REPORT

I have audited the accounts of the Foreign Contribution for Research Projects of the Regional Cancer Centre Society, registered as per T.C Literary Scientific and Charitable Societies Regulation Act XII of 1955 (Reg.No.567/81) with registered office at Medical College P.O., Thiruvananthapuram-695011, Kerala State for the year ended 31st March, 2011 and relevant books and vouchers and certify that according to the audited accounts.

- The brought forward foreign contribution at the beginning of the financial year 2010-2011 was Rs.2,67,09,574.17
- Foreign Contribution worth Rs.93,76,296.00 was received by the Association during the year ended 31st March,2011.
- 3. The balance in foreign contribution account together with interest earned thereon at the end of the financial year 2010-2011 was Rs.2,63,67,229.92
- 4. Certified that the Association has maintained the accounts of foreign contribution and records relating thereto in the manner specified in section 13 of the foreign contribution (Regulation) Act, 1976 read with rule 8 (I) of the foreign contribution (Regulation) Rules, 1976.
- 5. The information furnished above and in the Balance Sheet and statement of receipts and payments are correct as checked by me.

Trivandrum, 10th October, 2011 T.AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT MEM. NO. 209348

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (Reg.No.567/81) PROJECT CELL

Foreign contribution for Research Projects Balance Sheet as at 31st March 2011

LIABILITIES	Amt (Rs. Ps.)	Amt (Rs. Ps.)	ASSETS	Amt (Rs. Ps.)
CAPITAL FUND			FIXED ASSETS	
As on 1-4-2010	11103017.84		Computer	2183574.00
			Printer & UPS	271010.00
		11103017.84	Fax Machine	51359.00
			Refrigerator	11953.00
			Deep Freezer	123674.00
			Vehicle	2380744.00
			FAN	3687.00
			Furniture	668672.29
			Equipments	4076541.00
			Air Conditioner	223239.00
Project Balances as Per Schedule		12310876.15	Photocopier	322735.00
Research Funds as per Schedule		14056353.77	Building Addl. Facilitites	785829.55
CURRENT LIABILITIES			INVESTMENTS	
Salary Recovery		36,220.00	Term Deposit with Syndicate Bank	3293542.10
Sales Tax Payable		6,250.00	Term Deposit with S.B.T	17208104.00
Payable to res: Project a\c		151782.00	Term Deposit with Fed.Bank	1500000.00
RCC Payable		277968.00	Term Deposit with PNB	1154523.00
			CURRENT ASSETS &	
			LOANS AND ADVANCES	
			Cash in Hand	54009.00
			Cash at Bank	1495577.82
			Interest Accrued but not due	2097694.00
			Imprest	6000.00
			Rent Deposits	30000.00
TOTAL		37942467.76	TOTAL	37942467.76

Vide my report of even date attached.

Thiruvananthapuram 10 October 2011

Finance Manager (Projects)

DIRECTOR

T. AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (Reg.No.567/81) PROJECT CELL

Foreign contribution for Research Projects Receipts and Payments Account for the year ended 31st March 2011

RECEIPTS	Amt (Rs)	PAYMENTS	Amt (Rs)
To Opening Balance:-		By Project Expenses:-	
Cash in Hand	24786.00	" Revenue Expenses paid 9	
Cash at Bank	3681099.32	(As per Schedule attached)	
		" Capital Expenses paid	1796546.00
Foreign Receipts for			
various Projects	9376296.00	(As per Schedule attached)	
(As per Schedule attached)			
Recovery from Salary	303555.00	Salary Recovery Account	305710.00
Other Advance Recovered	174500.00	Other Advances paid	174500.00
Other Receipts	772264.00	Paid to Research Projects	498216.00
Interest Received	188757.00	Term Deposit-SBT	2500000.00
Donation for Kinginicheppu	277968.00	Donation for Kinginicheppu	914598.50
Term Deposit-SBT	2500000.00		
		To Closing Balance:-	
		Cash in Hand	54009.00
		Cash at Bank	1495577.82
TOTAL	17299225.32	TOTAL	17299225.32

Vide my report of even date attached.

Thiruvananthapuram 10 October 2011

Finance Manager (Projects)

DIRECTOR

T. AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT

T. AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT

Chaitaniya, T.C.54/2214-2 Sreedharan Pillai Road Pappanamcode P.O. Thiruvananthapuram - 695 018 Telephone: 0471-2495939

Mobile: 9349990489

E-mail: ajithkumarca@yahoo.com

AUDITOR'S REPORT

- 1. I have audited the Balance Sheet of the Project Cell of Regional Cancer Centre, Thriruvananthapuram as at 31st March, 2011 and the Income and Expenditure Account together with the Schedules thereon for the year ended on that date.
- 2. Subject to:

Confirmation of the different Project Account Balances

- a. I have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
- b. In our opinion proper books of accounts have been maintained by the Project Cell.
- c. The Balance Sheet and the Income and Expenditure account dealt with by this report are in agreement with the books of accounts maintained and as checked by me.

Vide my report of even date attached.

Thiruvananthapuram 10 October 2011

Finance Manager (Projects)

DIRECTOR

T. AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (REG. No. 567/81) PROJECT CELL

Financial Assistance received from National Agencies for Research Projects Balance Sheet as on 31st March 2011

Liabilities	Amt (Rs. Ps.)	Amt (Rs. Ps.)	Assets	Amt (Rs. Ps.)	Amt (Rs. Ps.)
Capital Fund		9963577.62		, ,	
			Fixed Assets:- Sch-2		207475.16
R&D Fund	13441412.05				
Less:- Utilised during the year	146442.00	13294970.05			
			Foreign Contribution		
Income & Expenditure Account		6178268.63	Receivable Account		151782.00
Training Fund(Schedule-5)		6064678.90	TERM DEPOSITS :		
			Syndicate Bank	1000000	
Projects(Deductions)		1031514.83	Union Bank of India	1000000	
			SBT	37369317	
Current Liabilities			Punjab Nat. Bank	3404182	42773499.00
Security Deposits	64037.00				
Project Balances as per Sch-I	32145173.97	32209210.97	Cash in Hand - Sch-3		5638.00
Salary Recovery		22899.00	Cash at Bank - Sch-4		19973934.01
			Rent Deposit		45000.00
			Other Advance		55500.00
			Interest Accrued but not	Due	1041079.00
			TDS		4511212.83
TOTAL		68765120.00	TOTAL		68765120.00

Vide my report of even date attached

Thiruvananthapuram 10 October 2011

Finance Manager (Projects)

DIRECTOR

T. AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT

REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (REG. No. 567/81) PROJECT CELL

Income and Expenditure Account for the year ended 31st March 2011

Expenditure	Amt (Rs. Ps.)	Income	Amt (Rs. Ps.)
Salary Paid	326766.80	Income from Projects	2562095.00
Travelling Expenses	6368.00	Interest received	4030866.00
Audit Fee	29000.00		
Printing & Stationery	10273.00		
Computer Stationery	8569.00		
Postage & Telephone Expenses	710.00		
Other Miscellaneous Expenses	3426.00		
Depreciation	29579.57		
Excess of Income Over Expenditure	6178268.63		
TOTAL	6592961.00	TOTAL	6592961.00

Vide my report of even date attached

Thiruvananthapuram 10 October 2011

Finance Manager (Projects)

DIRECTOR

T. AJITH KUMAR B.Com, FCA CHARTERED ACCOUNTANT

ACKNOWLEDGEMENTS

Ministry of Health & Family Welfare, Government of India

Ministry of Information Technology, Government of India

Department of Science and Technology, Government of India

Council of Scientific and Industrial Research, Government of India

Department of Biotechnology, Government of India

Director General of Health Services, Government of India, New Delhi

Department of Health & Family Welfare, Government of Kerala

State Planning Board, Government of Kerala

Director of Health Services, Government of Kerala, Thiruvananthapuram

World Health Organisation, Genera, Switzerland

International Agency for Research on Cancer (IARC), Lyon, France

Union for International Cancer Control (UICC) Geneva, Switzerland

World Health Organisation, Regional Office, New Delhi

Stony Brook University, New York, USA

National Cancer Institute, Bethesda, Maryland, USA

Memorial Sloan-Kettering Cancer Centre, New York, USA

National Cancer Centre, Singapore

Health Research Foundation, Japan

Kagoshima University, Japan

Finnish Cancer Society, Finland

Indian Council of Medical Research, New Delhi

Atomic Energy Commission, Government of India

Bhabha Atomic Research Centre, Bombay

Indian Space Research Organisation

Sree Chitra Tirunal Institute of Medical Sciences & Technology, Thiruvananthapuram

Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Centre for Cellular and Molecular Biology, Hyderabad

University of Kerala, Thiruvananthapuram

Kerala University of Health and Allied Sciences, Thrissur

Mahatma Gandhi University, Kottayam

University Grants Commission

Kerala State Committee on Science, Technology and Environment, Thiruvananthapuram

C-DAC, Thiruvananthapuram

Centre for Earth Science Studies, Thiruvananthapuram

Govt. Medical College, Thiruvananthapuram

Sree Avittam Thirunal Hospital for Women and Children, Thiruvananthapuram

Govt. Dental College, Thiruvananthapuram

Department of Economics and Statistics, Kerala

Drugs Controller, Thiruvananthapuram

Govt. College of Pharmaceutical Sciences, Thiruvananthapuram

Corporation of Thiruvananthapuram

Regional Cancer Association, Thiruvananthapuram

Asianet TV

Kairali TV

Care Plus, Thiruvananthapuram

Asraya, Thiruvananthapuram

Prathyasa, Thiruvananthapuram

SDM Cancer Relief Fund, California

All our Well-wishers and Friends



