

*Over three decades of changing lives*



REGIONAL  
CANCER  
CENTRE

Thiruvananthapuram, India

**Annual Report  
2012-13**



# REGIONAL CANCER CENTRE

Thiruvananthapuram, India

- Established as per Govt. of India letter No. T. 200125/79 of October 1980 as one among 6 such Centres in India.
- Registered under Travancore Cochin Literary Scientific and Charitable Societies Registration Act 1955 vide No. 567/81 dated 19.08.1981.
- Designated as a Science & Technology Centre in health sector by State Government as per G. O. (Rt) No. 1521/85/11 H & FWD dated 18.11.1985.

## VISION

To emerge as a global leader in cancer control.

## MISSION

- Deliver highest quality cancer care at affordable cost.
- Create cancer awareness among public and health professionals.
- Generate trained manpower in cancer control.
- Organize outreach programmes in cancer control.
- Conduct focused cancer research relevant to our society.
- Lead cancer control activities in the state.

# ANNUAL REPORT 2012-2013



REGIONAL CANCER CENTRE  
THIRUVANANTHAPURAM - 695 011, KERALA, INDIA.

## **REGIONAL CANCER CENTRE**

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Published by  
Director, Regional Cancer Centre, Thiruvananthapuram

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# GOVERNING BODY

1. Shri. Oommen Chandy  
Hon'ble Chief Minister of Kerala Chairman
2. Shri. Adoor Prakash (Till 12.04.2012)  
Hon'ble Minister for Health & Coir  
Government of Kerala Vice-Chairman
3. Shri.V.S. Sivakumar (From 12 April 2012)  
Hon'ble Minister for Health, Family Welfare and Devaswoms,  
Government of Kerala Vice-Chairman
4. Shri. Rajeev Sadanandan, IAS  
Principal Secretary to Government  
Health & Family Welfare Dept., Government of Kerala Alt.Vice-Chairman
5. Shri.V.P. Joy, IAS  
Principal Secretary to Government  
Finance Department, Government of Kerala Member
6. Shri.Subrata Biswas, IAS  
Secretary to Government  
Planning & Economic Affairs Department, Government of Kerala Member
7. Dr. K. Radhakrishnan  
Director, Sree Chitra Tirunal Institute for Medical Sciences & Technology,  
Thiruvananthapuram Member
8. Dr. Jagdish Prasad  
Director General of Health Services  
Ministry of Health and Family Welfare, Government of India Member
9. Shri. K. N. Desiraju, IAS  
Secretary to Government  
Ministry of Health and Family Welfare, Government of India Member
10. Dr. S.C. Gupta  
'Vidya', Pulayanarkotta Road, Thiruvananthapuram Member
11. Dr.V. Geetha  
Director of Medical Education, Thiruvananthapuram Member
12. Dr. Ramdas Pisharody  
Principal, Medical College, Thiruvananthapuram Member
13. Dr. Paul Sebastian  
Director, Regional Cancer Centre Convener

# EXECUTIVE COMMITTEE

1. Shri. Rajeev Sadanandan, IAS  
Principal Secretary to Government  
Health & Family Welfare Department  
Government of Kerala  
Chairman
2. Shri.V.P. Joy, IAS  
Principal Secretary to Government  
Finance Department, Government of Kerala  
Member
3. Shri. Subrata Biswas, IAS  
Secretary to Government  
Planning & Economic Affairs Department, Government of Kerala  
Member
4. Dr.V. Geetha  
Director of Medical Education, Thiruvananthapuram  
Member
5. Dr. Ramdas Pisharody  
Principal, Medical College, Thiruvananthapuram  
Member
6. Dr. Paul Sebastian  
Director, Regional Cancer Centre  
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. RCC provided specialized cancer care to 2,08,926 patients including 14,985 new patients in its crusade against cancer during the period under report. A 30 year consolidated report of Hospital Based Cancer Registry (1982-2011), released during the report period revealed that 2,49,362 patients were registered from 1982 to 2011 and the percentage of increase over the years was 280%. This depicts the magnitude of cancer cases handled by the Centre not only from the State but from adjoining parts of Tamil Nadu, Karnataka and Maldives.

As part of our continued fight against cancer on multiple fronts - prevention, diagnosis, treatment, and support- a number of diagnostic and treatment facilities were added or upgraded for improvement in overall efficiency at low operational costs. Installation of a Picture Archiving and Communication System (PACS) to digitally capture, store and transmit medical images was a milestone in adding up such state-of-the-art facilities. The system allows multiple accesses to diagnostic images, when a patient needs to be seen by specialists at different clinics at the same time. Anaesthetic facilities were introduced in brachytherapy theatre and also for children undergoing MRI scan. A Beckman Coulter LH 780 fully automated 5-part haematology analyser was acquired to reduce turn-around time in Clinical Laboratory services. Pharmacy services were further streamlined by introducing inpatient pharmacy services and round the clock pharmacy services. Facilities were also put in place for providing round the clock chemotherapy services. A biogas plant was installed at RCC premises is an effort towards zero level waste management practices.

Cancer Research facilities were upgraded by acquiring a High Performance Liquid Chromatography system, DNA sequencer, PCR machine and Multidetector microplate reader. Library & Information Services division was made fully automated by introducing Radio Frequency Identification technology (RFID) for issue/return, document tracking, security and physical verification of documents. A much needed disaster recovery system was put in place as part of Information Systems division by setting up a secondary server site. The entire RCC campus was Wi-Fi enabled during the period under report.

With an eye of further improving patient amenities, the Local Area Development funds of Members of Parliament were effectively channelized. A four bedded state-of-the-art ICU with two ventilators was set up in the Paediatric Oncology Division using the MP fund of Dr. Shashi Tharoor, Hon'ble Union Minister for State for Human Resources Development. A

high tech ambulance was also acquired by utilizing MP fund of Dr.T.N. Seema, Hon'ble member of Rajyasabha. The financial support provided by various State and Central Government schemes was effectively made available to the most needy. 14,634 patients including 5,033 new patients availed quality treatment worth more than Rs.23 crores through schemes such as Cancer Suraksha, Chis Plus, Karunya Benevolent Fund, Thalolam, Comprehensive Health Care Scheme for Scheduled Castes/ Scheduled Tribe, Snehasanthwanam for endosulfan victims, Prime Minister's Relief Fund and Rashtriya Arogya Nidhi. Under the scheme 'Akshayapathra' free food was provided to poor patients through voluntary contributions from well wishers.

RCC spearheaded various cancer control activities targeting schools and general public. We organized 259 cancer detection programmes and 155 cancer awareness programmes throughout the State. A series of 12 proactive workshops on early detection and management of oral pre-cancers and cancers were organized in all districts with the support of NRHM. Special breast cancer screening clinics and awareness programmes were conducted in connection with Breast Cancer Awareness month in October. Free clinics were attended by 630 women. The Global Adult Tobacco Survey, Kerala fact sheet was officially released by the Hon'ble Chief Minister. Several district level programmes were organised with support of District Medical Offices, District Panchayats, and Kerala State Literary Mission to achieve a 'cancer free society'. A statewide school based cancer awareness programme was inaugurated by His Excellency the Governor of Mizoram Shri. Vakkom B. Purushothaman. The Centre also formed part of National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) and intensive training were provided to doctors in areas of cancer control, diagnosis and treatment.

On the academic front, in addition to the ongoing DM programmes in Surgical Oncology and Medical Oncology, DM Paediatric Oncology, MD Radiotherapy and MD Radiodiagnosis were started during the reporting period. Accreditation has also been received for the commencement of MD programme in Anaesthesiology in the coming academic year. 14 students in various superspeciality courses, 10 students in postgraduate courses and 30 PhD students are undergoing training.

An international conference on oncology surgery held in connection with 30th anniversary celebrations of Division of Surgical Oncology focused attention on evidence based management of colorectal, head & neck and gynecologic cancers. Eminent oncologists from National Cancer Centre, Singapore and from within the country led the sessions. The World Palliative Care Day celebrations were held with usual elegance. The Centre hosted the 28th annual meeting of National Cancer Registry Programme and 14th National Conference Oncology Nursing. As part of 'International childhood day' several programmes were organised. During the reporting period, 105 scientific papers, including journal articles, chapters in books and conference papers were published. Out of 57 journal articles, 48 were published in peer-reviewed indexed journals.

Several of our faculty, staff and students were awarded fellowships, PhDs and other awards of excellence. Dr. P. Kusumakumary, Professor and Additional Director received the best doctor award of department of Health and Family welfare, Government of Kerala. Dr. P.G. Jayaprakash, Head of Radiation Oncology division was presented with the FICRO award by Indian Association of Oncologists.

Visitors from abroad included Mr. Rolf Kjellstrom, Global Vice-President, Electa Medical Systems, Dr. Parameswaran Hari, Section and Clinical Director, Bone Marrow Transplantation and Associate Professor of Medicine, Medical College Wisconsin, USA, Prof. Kian Ang, Professor of Radiation Oncology, MD Anderson Cancer Center, Houston, Texas, USA and Dr. Francesco Grossi, Director, Lung Cancer Unit and Chairman, Disease Management Team (Lung cancer), National Institute of Cancer Research, Genova, Italy.

Activities of RCC based NGO's such as Prathyasa, Ashraya and Care Plus are commendable. The 'Prathyasa' joined hands with Delhi based 'CANKIDS', to set up 'Sukrutam', a home away from home environment for pediatric patients, in proximity with the Centre. Adding mental solace to cancer afflicted population at RCC, several literary and culture programs were organized during the period. Shri. S. Jayaram, noted Malayalam cine artist has consented to be the 'Goodwill Ambassador' for the cancer awareness campaigns of RCC. We gratefully acknowledge the support provided by all our well wishers during the report period.

I am very pleased to present the annual report, which contains activities of various divisions, clinics and peripheral centres of RCC for the period 2012-2013.



Dr. Paul Sebastian  
Director

# RCC Profile At A Glance

- 14,985 new cases.
- 1,93,941 review cases.
- 11,155 in-patient admissions.
- 42,252 pathology reports.
- 60,354 imaging studies.
- 35,594 nuclear medicine studies.
- 2,88,500 clinical laboratory investigations.
- 7,909 patients treated with radiotherapy.
- 6,081 surgical and 2,724 diagnostic & endoscopic procedures.
- 9,796 patients administered chemotherapy.
- 33 bone marrow transplantations.
- 14 students in Surgical, Medical and Paediatric Oncology superspeciality courses.
- 10 students in Radiotherapy and Radiodiagnosis postgraduate courses.
- 30 PhD trainees.
- 259 cancer detection programmes and 155 cancer education programmes.
- 130 ongoing research projects.

## Major Diagnostic & Treatment Facilities Available

### DIAGNOSTIC FACILITIES

#### Pathology

- Surgical pathology
- Cytopathology
- Haematopathology
- Molecular pathology: Flow cytometry, FISH, PCR, RT/PCR

#### Imageology

- MRI
- Multidetector CT
- Digital mammography with prone biopsy table & mammotome
- Stereotactic mammography unit
- Ultrasound machines & X-ray units
- Computed radiography system
- Picture Archiving and Communication System (PACS)

#### Nuclear Medicine

- SPECT Dual head gamma camera
- Chemiluminescence assay system

#### Clinical Laboratory

- Beckman coulter LH 750 5-part haematology analyser
- LH 780 Fully automated 5-part haematology analyser
- VITROS 5600 integrated system
- VITROS 5.1 FS chemistry system

- Helena SAS 3/SAS 4 fully automated electrophoretic system
- Amax destiny plus fully automated coagulation analyser (TCoag)
- ABL flex blood gas analyser (Radiometer)
- Shimadzu HPLC system
- Heraeus megafuge 16R refrigerated centrifuge

## Transfusion Medicine

- NACO approved fully automated blood bank
- Blood irradiator
- Cryofuge
- Plateletapheresis
- Plasma thaw bath
- Automatic component extractor T-ACE, for preparation of leucoreduced products.
- Fully automate ELISA machine
- Automated haematology analyser

## Microbiology

- Automated blood culture system (BacT/Alert)
- Automated identification and sensitivity testing (VITEK)
- Microscopy, routine culture, sensitivity tests, fungal culture, AFB culture, Surveillance culture.

## TREATMENT FACILITIES

### Radiotherapy

- Linear accelerators (4)
- Telecobalt units (2)
- IGRT, IMRT/Rapid Arc, SRS/SRT, 3-D conformal RT & portal imaging
- Image guided brachytherapy for cervix cancer
- Digital simulator & CT simulator
- Treatment planning systems
- HDR brachytherapy
- Quality assurance equipments

### Surgical Oncology

- 7 Modern operation theatres
- Operating microscope & video endoscopes
- Minimally invasive surgery
- Limb salvage surgery
- Sentinel lymph node biopsy
- State-of-the-art ICU
- Mobile C-arm image intensifier
- Laser for microlaryngeal surgery
- Precision drill & saw system

### Medical Oncology

- Facilities to administer chemotherapy for all types of cancers
- 4 Bedded bone marrow transplantation unit
- High dependency chemotherapy ward

## Paediatric Oncology

- First Paediatric Oncology division in India.
- 50 bedded exclusive Paediatric Oncology ward.
- A four bedded state-of-the-art ICU with two ventilators.
- Indian Paediatric Oncology Initiative (IPOI) supported by Jiv Daya Foundation, USA aimed at improving the quality of paediatric oncology patient care.

## Palliative Care

- First organised cancer pain clinic in the country
- Availability of oral morphine in liquid, tablet and capsule forms.
- Inpatient service and hospice care
- Home care service, rehabilitation, support groups
- Networking of palliative care services throughout Kerala

## DIAGNOSTIC & TREATMENT FACILITIES ADDED DURING THE PERIOD

### Radiation Oncology

- Real time USS unit for prostate brachytherapy.
- Anaesthetic workstation in brachytherapy theatre.

### Paediatric Oncology

- A four bedded state-of-the-art ICU with two ventilators

### Imageology

- Picture Archiving and Communication System (PACS).

### Anaesthesiology

- Anaesthesia for children undergoing MRI scan and anaesthesia for brachytherapy.

### Clinical Laboratory

- Beckman Coulter LH 780 fully automated 5- part haematology analyser.

### Cancer Research

- High Performance Liquid Chromatography system
- DNA sequencer
- PCR machine
- Multidetector microplate reader

### Library

- Introduced Radio Frequency Identification technology (RFID) for issue/return, document tracking, security and physical verification of documents.

### Information Systems

- Implemented a disaster recovery system by establishing a secondary server site.
- The entire RCC campus was Wi-Fi enabled.

## Pharmacy

- 24 hour pharmacy & in-patient pharmacy.

## Chemotherapy

- 24 hour chemotherapy facility.

## Waste Management

- Commissioned a biogas plant.

## Human Resource Development

RCC has been playing a key role in generating trained manpower in cancer control through conducting superspeciality, postgraduate, post-doctoral, fellowship, graduate and diploma level academic programmes. The Centre is also sought-after by students from various Universities for their training in different areas such as Radiotherapy, Surgical Oncology, Cancer Research (Biotechnology), Cancer Epidemiology, Nursing, Blood Banking, Laboratory Technology, Cytopathology, Microbiology, Radiation Physics, etc. Community Oncology Division also generates trained manpower through organising trainer-trainee programmes for Doctors, Gynaecologists, Dentists, Nurses, Paramedicals, Health workers, other professionals and lay-public to enable early detection of cancer. Training is also provided for postgraduate trainees from various Medical and Dental Colleges in Kerala, Tamil Nadu, Karnataka and Maharashtra. Over 500 post graduate medical and life science students from different institutions all over the country came for rotation postings and project training as part of their curriculum.

Course name	Intake capacity	Duration
MCh (Surgical Oncology)	4	3 Yrs
DM (Medical Oncology)	2	3 Yrs
DM (Paediatric Oncology)	2	3 Yrs
MD (Radiotherapy)	8	3 Yrs
MD (Radiodiagnosis)	2	3 Yrs
DNB (Surgical Oncology)*	2	3 Yrs
DNB (Medical Oncology)*	1	3 Yrs
DNB (Radiotherapy)*	4	3 Yrs
DNB (Radiodiagnosis)*	4	3 Yrs
DNB (Pathology)*	4	3 Yrs
DNB (Anaesthesiology)*	4	3 Yrs
Fellowship training (Head & Neck Surgery)	1	2 Yrs
Fellowship training (Gynecologic Oncology)	1	2 Yrs
Post-doctoral (Oncopathology)	2	2 Yrs
Doctoral research programme	30	
Quality excellence programme in Pathology	6	1 Yr
Advanced training in Diagnostic Imaging	2	1 Yr
Post-basic Diploma in Oncology Nursing	20	1 Yr
Cytotechnology	4	1 Yr
Cytotechnician	6	6 Months
Histotechnology	4	9 Months
Certificate Course in Palliative Care	25/session	8 weeks distance learning programme (July & November sessions)

\*Discontinued admissions from 2012

## PATIENT WELFARE SERVICES

### Officers-in-charge

Patient Welfare Officer: Dr. Latha P.T.

Public Relations Officer: Surendran Nair V.

Medical Records Officer: Chandrika D.

Assistant Administrative Officer (Clinical Services): Sreekumar B.

RCC has implemented several schemes for providing economic assistance, free food, free drugs and various rehabilitation facilities for patients and their families through governmental and non-governmental support programmes.

### Central and State Government Schemes

Both the Central and State Governments have initiated several generous schemes to ensure free or subsidized treatment for patients. During the report year, 14634 patients benefitted from such schemes as shown in the table below.

State and Central Government Schemes (1 April 2012 to 31 March 2013)

Scheme	Total no. benefited	No. of new cases	Amount Spent (Rs.)
Cancer Suraksha Scheme (Govt. of Kerala)	2463	510	4,27,85,400.90
Chis Plus (Govt. of Kerala)	8004	3171	10,52,81,503.07
Karunya Benevolent Fund (Govt. of Kerala)	2166	895	4,57,15,860.22
Thalolam (Govt. of Kerala)	35	6	2,79,124.50
Comprehensive Health Care Scheme for Scheduled Castes/Scheduled Tribe (STDD) (Govt. of Kerala)	220	33	21,29,809.66
Snehasanthwanam for Endosulfan victims (Govt. of Kerala)	18	0	12,14,647.37
Prime Minister's Relief Fund	508	40	1,01,95,854.87
Health Minister's Rashtriya Arogya Nidhi (RAN)	1220	378	2,39,50,633.65
<b>Total</b>	<b>14,634</b>	<b>5033</b>	<b>23,15,52,834.24</b>

### RCC INITIATIVES

In addition to the Government supported schemes RCC provides support to patients' and families through various other schemes as detailed below:

#### 1. Cancer Care for Life (CCL) Scheme

During the reporting period 17,568 new members were enrolled into this unique insurance programme and 911 patients (new & old) were availed treatment during the period.

#### 2. Free Food ('Akshayapathram')

Free food was provided to 3,600 patients belonging to low socio-economic status during the report year. This was possible due to funds donated by many philanthropic organisations.

#### 3. Free Drug Bank

The Free Drug Bank functions according to specific guide lines and is monitored by a committee constituted by the Director, RCC. Donations are collected in the form of cash or medicines from various organizations, pharmaceutical firms, etc. The drug bank provided full/partial help to 6748 patients during the reporting period.



#### 4. Support for Paediatric patients

Special schemes are available for children suffering from cancer. Under the 'Kingingicheppu' scheme, free food and treatment was provided to poor paediatric patients through voluntary contributions. Prathyasa', a voluntary group working in collaboration with Paediatric Oncology division gave financial and psychosocial support to children and their families.

#### Major contributors to RCC's patient welfare schemes are:

Share & Care, Ireland

Titanium Social Welfare Fund

Tata Global Beverages Ltd.

UST Welfare, Technopark, Thiruvananthapuram

UST Global Welfare, Technopark, Thiruvananthapuram.

Dammam Medi Forum, Anaswara Samskarika Vedi, Kudumbasree Unit, Thiruvalla, MAUK Sangam, UK, Kairali Vidya Mandir

NSS College for Women, Karamana

Balakrishna Financiers, Ala, Chengannur

IISER, Thiruvananthapuram

Jayaram Cancer Foundation

St.Mary's Cathedral Public School, Mavelikara

Institute of Management in Kerala, Kollam

Trivandrum Association

Navoothan Charitable Foundation

Govt. Higher Secondary School, Njekkadu

Cotton Hill Girls High School, Thiruvananthapuram

Engineering Wing, Doordarshan Kendra, Thiruvananthapuram

Music for Peace, USA 12

Kannandevan Tea Ltd.

#### Indian Cancer Society Support Scheme

RCC was selected as one of the five cancer centres across India for receiving financial support from the Indian Cancer Society for treatment of cancer. During the report year 89 patients including 39 new patients received support worth Rs 44,79,364/-.



# DIVISIONS

# RADIATION ONCOLOGY

**Jayaprakash P.G.**

Professor & Head

**Professors:** Parameswaran S., Ramadas K, Ratheesan K

**Additional Professors:** Jayaprakash Madhavan (on leave),  
Francis V. James, Beela Sarah Mathew, Aswin Kumar,  
Sivanandan C.D., Rejnish Kumar R.

**Associate Professors:** Thomas Koilparambil, Susan Mathews

**Assistant Professors:** Asha Arjunan, Sajeed A., Kainickal C.T

**Lecturers:** Arun Sankar S., Lakshmi Balakrishnan, Roshni S.,  
Naveen B., Malu Rafi, Rajeev K.R.





The Division is responsible for primary care of majority of solid tumours through the four major site-specific clinics, Head & Neck, Breast & Central Nervous System, Chest & Gastrointestinal and Gynaec, Genitourinary & others. The Division handled 10916 new cases during the reporting period.

The Division commenced MCI approved MD programme affiliated to KUHS with an intake of 8 students annually.

Specialised Radiotherapy Services	
Service	No.
3D CRT	765
IGRT/IMRT	327
SRS+SRT	44
Image guided brachytherapy	225

## Clinical services

External radiotherapy treatments were executed in 6346 cases and 1563 brachytherapy techniques were carried out.

## New treatment facility added

- Real time USS unit for prostate brachytherapy.
- Anaesthetic workstation in brachytherapy theatre.

## Academic activities

- Regular clinical posting to MD and PG diploma radiotherapy students of government Medical College, Thiruvananthapuram.
- Regular tumour board meeting in gynaecologic oncology, gastroenterology and neurooncology with faculty from Medical College/Sree Avitom Thirunal hospital, Thiruvananthapuram.
- Head & neck tumour board.

Ongoing Doctoral Research Programmes		
Research Scholar	Title of Study/University	Guide
Ramadas K.	Molecular epidemiology and treatment outcome of oral cancer/ University of Kerala.	Dr. M. Krishnan Nair
Aswin Kumar	Quality of life of cervical cancer patients undergoing radical radiotherapy/ University of Tampere, Finland.	Dr. Ansi Auvinen
Susan Mathews	Image guided adaptive brachytherapy of carcinoma cervix in a resource limited setting/ University of Kerala	Dr. M. Krishnan Nair
Sajeed A.	Modification of radiotherapy by physical parameters/ University of Kerala	Dr. Raghu Ram K. Nair

# SURGICAL ONCOLOGY

Paul Sebastian

Professor and Director

---

**Professor & Head:** Iqbal Ahamed M

**Additional Professors:** Jem Prabhakar, Shaji Thomas, Bipin T. Varghese, Paul Augustine, Chandramohan K., Elizabeth Mathew Iype, Balagopal P.G.

**Associate Professors:** Rema P, Madhu Muralee, Arun Peter Mathew

**Assistant Professors:** Kurian Cherian, Suchetha S.

**Lecturer:** Nebu Abraham George





The year 2013 is a landmark year for the Division as it completes three decades since its inception as a comprehensive division, the first of its kind in the entire State. An international multidisciplinary conference was organized on this occasion and the founder faculty Dr. Thomas Cherian and Dr. Gladys Jeevy were honoured.

## Major Achievements

- As part of infrastructural upgradation, work is in progress for two state-of-the-art modern operation theatres.
- Steady increase in laser surgeries and minimally invasive surgeries for early oral and laryngeal cancers.
- Enhancement of minimal access surgeries and increase in number of laparoscopic esophageal, colorectal and gynecological cancer surgeries.

## Surgical & Endoscopic Procedures

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 3905.

### Major Procedures

Sites	No. of patients
Head and Neck	1275
Breast	1178
Gastrointestinal	515
Gynecologic	442
Genito-Urology	87
Bone and sarcoma	180
Miscellaneous	228
<b>Total</b>	<b>3905</b>

### Minor Procedures

Procedure	No. of patients
Minor cases	2142
LEEP	34
<b>Total</b>	<b>2176</b>

Endoscopic Procedures	
Procedure	Number
Nasopharyngolaryngoscopy	887
Nasal & DL scopy	405
Bronchoscopy	211
Oesophagoduodenoscopy	1197
Oesophageal dilatation + stenting	83
Colonoscopy	955
Colposcopy	56
Hysteroscopy	8
<b>Total</b>	<b>2724</b>

## Academic Activities

- India- Singapore International Conference to commemorate the 30th year of the inception of the Division.
- International Conference on Colorectal Cancers (15 -16 March 2013).
- International Conference on Gynecological Cancers (16 March 2013).
- International Conference on Laser in Head and Neck Cancers (16 March 2013).
- Dr. Ankush Rathi and Dr. Syam Vikram were awarded DNB in Surgical Oncology.

Ongoing Doctoral Programmes		
Research Scholar	Title of Study/University	Guide
Elizabeth Mathew lype	Selected molecular markers as indicators of clinical profile, tumour characteristics, and treatment outcome in squamous cell carcinoma of the larynx/University of Kerala.	Dr. B. Rajan



# MEDICAL ONCOLOGY

Geetha N.

Professor & Head

**Additional Professors:** Sreejith G. Nair; Prakash N.P. (on leave)

**Assistant Professors:** Shruti Prem, Santhosh Thyagu (on leave)

**Lecturers:** Anoop V.M., Jain Nidhi Devendra

**Resident Medical Officer:** Lali V.S.

The Division is responsible for the diagnosis and management of haematological and lymphoreticular malignancies, sarcomas and other solid tumours where intensive chemotherapy is indicated. Dose intense protocols were used for the treatment of all leukaemias and lymphomas. Two hundred new patients with chronic myeloid leukaemia were enrolled

in the Novartis Patient Assistance (NOVA) programme and were given imatinib free of cost. In the BMT unit, during the above period, stem cell transplantation following high dose chemotherapy was performed for 33 patients (Autologous bone marrow transplantation in 30 and allogenic bone marrow transplantation in 3 patients).





## Academic Activities

DM Medical Oncology programme is ongoing with an annual intake of two students. 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.

# PAEDIATRIC ONCOLOGY

Kusumakumary P.  
Professor & Head

---

*Additional Professor:* Priya Kumari T.

*Assistant Professor:* Anu Ninan (on leave)

*Lecturer:* Binitha R.

The Division provides comprehensive cancer treatment for childhood malignancies up to the age of 14 years. 649 new cases and 24,984 review cases were seen during the report

period. Children are admitted for diagnosis and administration of chemotherapy including high dose chemotherapy.



## Major Achievements

- Started DM programme in Paediatric Oncology with an annual intake of two students.
- A four-bedded ICU with two ventilators and other state-of-the-art equipment was established with the support of MP fund of Dr. Shashi Tharoor, Hon'ble Union Minister for State for Human Resources Development.

## Academic activities

- Regular training to the radiotherapy postgraduates of RCC,
- Regular training to postgraduate students of other Medical Colleges in Kerala as well as to postgraduate students from SAT Hospital, Thiruvananthapuram and various private Medical Colleges.
- Neuro-oncology sessions with active participation from the Radiotherapy, Imageology and Pathology Divisions of RCC and Neurosurgery, Neuroradiology and Pathology departments of SCTIMST.

## Cultural activities and visits

Various cultural activities were organized for children and their parents during festivals like Onam, Christmas, New Year, Vishu, Deepavali and Childrens Day. The International Childhood Cancer Day was celebrated in the Division. Major visitors to the Division included Dr. Shashi Tharoor, Hon'ble Union Minister for State for Human Resources Development, Smt. Elizabeth Antony, wife of Hon'ble Union Minister for Defence Sri. A.K. Antony and His Highness Uthradom Thirunal Marthanda Varma. Other visitors of note were Sri. K.J. Yesudas and Shri. G. Venugopal, Malayalam playback singers, cine artist Shri. S. Jayaram and Smt. Bhagyalekshmi, dubbing artist.

### Patient Statistics

Cases	No	%
Acute Lymphoblastic Leukaemia	207	31.9
Acute Myeloid Leukaemia	39	6.02
Chronic Myeloid Leukaemia	6	0.92
Brain tumour	85	13.13
Osteosarcoma	19	2.93
Ewings sarcoma/ PNET	21	3.25
Rhabdomyosarcoma	13	2.0
Hodgkins lymphoma	23	3.55
Non-Hodgkins lymphoma	25	3.86
Wilms' tumour	12	1.85
Neuroblastoma	39	6.02
Hepatoblastoma	13	2.0
Germ cell tumour	17	2.62
Retinoblastoma	11	1.70
Soft tissue sarcoma	11	1.70
Nasopharyngeal carcinoma	2	0.31
Langerhans Cell Histiocytosis	9	1.39
Thyroid	7	1.08
Miscellaneous	42	6.18
Non malignant	34	5.25
Not Yet Diagnosed	14	2.16
<b>Total number of new cases</b>	<b>649</b>	<b>100</b>

### Ongoing Doctoral Research Programme

Research Scholar	Title of Study/University	Guide
Priya Kumari T.	Molecular Genetics of Pediatric Acute Lymphoblastic Leukemia/University of Kerala	Dr. M. Radhakrishna Pillai and Dr. K.E. Elizabeth

# PATHOLOGY

Jayasree K.

Professor & Head

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**Additional Professors:** Rekha A. Nair, Anitha Mathews, Thara Somanathan, Nileena Nayak

**Associate Professors:** Preethi T.R.

**Lecturers:** Anila K.R., Renu S., Priya Mary Jacob

**Resident Medical Officer:** Sindhu Nair P.

The Division provided diagnostic services such as Surgical Pathology, Cytopathology and Haematopathology along with advanced tests such as immunohistochemistry, FISH, flow cytometry and frozen section diagnosis. Second opinion was

provided for tissue samples referred from all over Kerala and neighbouring States. The division was also engaged in community oriented cancer control programmes including screening and early detection of cancers.





## Diagnostic Services

Surgical pathology	Cytopathology	Haematopathology	Total
15,918	18,745	7,589	42,252

Immunohistochemical staining (Surgical pathology + Cytopathology + Haematopathology)	Frozen section	FISH	Flow cytometry	Total
16,745	816	64	664	18,289

Surgical Pathology			
Specimens from RCC	Specimens for Review	Specimens for Second Opinion	Total
10,111	5,192	615	15,918

Cytopathology			
FNAC	Cervical smear	Sputum	Total
9,069	8,321	1,355	18,745

Haematopathology			
Bone marrow	Blood smear	Slide review	Total
3,882	3,525	182	7,589



## Academic Activities

- Academic programmes include DNB Pathology (4 seats), Post Doctoral Certificate in Oncopathology (2 seats), Advanced Training Course in Histotechnology for Laboratory Technicians (4 seats), Quality Excellence Programme for Technicians (6 seats), Cytotechnology (4 seats) and Cytotechnician courses (6 seats).
- Dr. Rari P. Mony and Dr. Priya V. were awarded DNB in Pathology.
- Mrs. Dharsana P and Mrs. Remya, trainees secured first rank in the national examination for Cytotechnician and Cytotechnologists held by Indian Academy of Cytologists.
- Training given to DNB students in Radiation Oncology, Surgical Oncology and Medical Oncology from the Centre, MD Radiotherapy and MD Pathology students from various Medical Colleges, MDS Pathology students from Dental Colleges, M.Sc.(MLT), B.Sc.(MLT) students and Histotechnology/Immunohistochemistry trainees.
- As part of Trivandrum Pathology club, various teaching programmes and slide seminars were also conducted.
- Dr. Krishnan Unni, MD, Professor of Pathology, Medical College of Wisconsin, conducted a slide discussion on 'Bone and soft tissue tumours', on 20th October 2012.
- Dr. Mariamma Joseph, MBBS, FRCPC, University of Western Ontario, conducted a slide discussion on 'Challenging cases in melanocytic lesions' in August 2012.

# IMAGEOLOGY

Ramachandran K.  
Professor & Head

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







## Major Achievements

- Commenced MCI approved MD programme in Radiodiagnosis with an annual intake of two students.
- Commissioned PACS (Picture Archiving and Communication System). PACS is a combination of hardware and software dedicated to the short and long term storage, retrieval, management, distribution and presentation of images in digital format on multiple terminals.

The Division added one state-of-the-art portable X-ray unit during the period. The Division hosts two 500 mA X-ray machines (converted to CR), two portable 60 mA units, three doppler and one black & white ultrasound scanners, mammography -X-ray machines with stereotaxy, mammotome biopsy unit, 16 slice MD CT, 1.5T MRI scanner, digital mammography with prone biopsy table, etc. There are facilities for breast disease diagnosis and MRI under anaesthesia.

Academic activities included DNB in Radiodiagnosis and training given to DNB students in other disciplines from the Centre and MD post graduates from various Medical Colleges. The faculty participated in activities like Monthly Trivandrum Radiology Club, Neuro Oncology Club, Pulmonary Radiology

in SUT, RCC Breast Clinic, Seminars in MRI in SCTIMST, etc.

The Division organized 'Radiology Teaching Programme on Neurooncology' jointly with SCTIMIST and Department of Radiodiagnosis, Medical College, Thiruvananthapuram. The Division was also the Co-organizer of IRIA Annual Conference held on 24th March 2013 at Mascot Hotel, Thiruvananthapuram.

### Diagnostic & Interventional Studies

Investigations	No.
Plain X-rays	25611
Barium studies	204
Ultrasound scans	10268
Ultrasound guided intervention	604
Ultrasound guided prostatic biopsy	39
Doppler studies	131
Digital mammography	6415
Stereotactic breast biopsy	53
CT scans	14628
CT guided aspiration	376
MRI scans	2025
<b>Total</b>	<b>60,354</b>

# NUCLEAR MEDICINE

Pradeep V.M.

Professor & Head

Additional Professor: Sreekumar A.



Nuclear Medicine division provides therapeutic and diagnostic services involving open radioactive sources. This is the only functioning Nuclear Medicine unit in government sector in the state. The Division has facilities for imaging (dual head SPECT Gamma camera) as well as for therapy (thyrotoxicosis and high dose therapy for thyroid cancer).

## Diagnostic & Clinical services

Service	No.
SPECT Gamma camera imaging	7,071
Radio immunoassays	28,523
Thyroid cancer therapy	525
Thyrotoxicosis therapy	483

# ANAESTHESIOLOGY

Rachel Cherian Koshy  
Professor & Head

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**Additional Professors:** Mary Thomas, Venugopal A.

**Associate Professors:** Mallika Balakrishnan, Sudha P,  
Viji S. Pillai

**Assistant Professors:** Bhagyalekshmi R., Rajasree O.,  
Deepthi J. Prabhu

**Lecturer:** Subha R



## Major Achievements

- The Division got MCI approval to start MD Programme in Anaesthesiology with an annual intake of three students.
- Two new services were started in the form of anaesthesia for children undergoing MRI scan and anaesthesia for brachytherapy.

## Clinical services

Clinical work involved provision of anaesthesia, pain relief and intensive care. Central venous access service was expanded to include Hickman line insertions and femoral line insertion for peripheral blood stem cell transplant patients under ultrasound guidance. Provided anaesthetic support for paediatric patients undergoing MRI and radiotherapy and for patients undergoing brachytherapy. Patient controlled analgesia pump, epidural analgesia and interventional management for chronic pain were also provided.

## Academic Activities

- Post graduate seminars, journal clubs and case discussions.
- Grand Rounds was conducted on a weekly basis with guest lectures at least once a month.
- Joint mortality/morbidity meeting with Surgical Oncology division every month.
- In house hands-on training on advanced cardiac life support for doctors and nurses.
- Conducted Code Blue mock drill in casualty and hospital wards.
- Conducted three day in house modular training programme on mechanical ventilation for doctors and nurses in RCC on 26-28 November 2012.

### Anaesthetic Services

#### Pre-anaesthesia clinic

New cases	4162
Review cases	4562
Total	8724

#### Anaesthesia Techniques

Total Intravenous Anaesthesia	521
GA+Epidural	1087
Combined spinal + epidural	276
Subarachnoid Block	217
Laryngeal Mask Airway	1029
Plexus & other blocks	41

#### Surgical ICU

Number of patients on ventilator	99
Total ventilator days	258

#### Acute pain service

Number of patients with epidural catheters	1087
Number of epidural days	3261





# RADIATION PHYSICS

Raghu Ram K. Nair  
Professor & Head

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

**Assistant Professors:** Zhenia Gopalakrishnan, Divya K.T.,  
Giri Purushothaman

**Lecturers:** Debjani Phani, Shaiju V.S., Sharika V. Menon, Sarin B.

Activities of the division include calibration and quality assurance of radiotherapy equipments, treatment planning and quality assurance for 3D CRT, IMRT, IGRT, SRS, SRT, dose computation, radiation safety in Radiation Oncology, Imageology and Nuclear Medicine divisions, participation in intercomparison and external verification of dose output of

treatment machines using TLD in BARC/IAEA/Equal ESTRO programmes, daily maintenance, checking and repair of all teletherapy and brachytherapy equipments, intraoperative, intraluminal and mould brachytherapy using Microselectron (V3) HDR.





## Patient Services

Treatment given	Total No. of Patients
<b>2D Radiotherapy</b>	
CT based planning	452
Conventional planning	4758
<b>3DCRT</b>	765
<b>IMRT+IGRT</b>	327
<b>SRS+SRT</b>	44
<b>Total</b>	<b>6346</b>
<b>Brachytherapy (Microselectron HDR)</b>	
Gynaecologic	1258
Oesophagus	14
Image guided	225
Others	66
<b>Total</b>	<b>1563</b>
<b>Grand total</b>	<b>7909</b>
<b>Simulation</b>	
CT simulation	1588
Conventional simulation	4194

## Academic Activities

Classes in Medical Physics and practical training to students of DMRT/MD/DNB (Radiotherapy), MD/DMRD/DNB (Radiodiagnosis), DRT, B.Sc. Radiological Technology, B.Sc. & M.Sc. Nursing and Master of Hospital Administration and Post M.Sc. DipRP (Mumbai University).

## Ongoing Doctoral Programmes

Sl. No.	Research Scholar	Title of Study/University	Guide
1	Zhenia Gopalakrishnan	Evaluation of radiotherapy treatment planning systems and different dose calculation algorithms for the management of cancer/University of Kerala	Dr. Raghu Ram K. Nair
2	Divya K.T.	Evaluation of patient specific dosimetric quality assurance tools in radiotherapy/ University of Kerala	Dr. Raghu Ram K. Nair

# CLINICAL LABORATORY SERVICES

Thomas Abraham  
Scientific Officer Gr. I & Head

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The activities of the division include specimen collection, processing, analysis and reporting of various tests for both out-patients and inpatients. The laboratory processed and analysed 2,88,500 samples consisting of 1,75,018 haematology, 1,07,080 biochemistry and 6,402 urine samples and generated 1.54 million test reports.

### New equipment acquired

- Beckman Coulter LH 780 fully automated 5- part haematology analyser

### Clinical chemistry

Clinical chemistry lab processed, analysed and reported 8,23,374 tests in the reporting period. The Lab carried out special investigations such as Free Kappa and Free Lambda, HbA1c and direct LDL. Bidirectional interfacing for automated high through-put clinical chemistry analyser has improved quality and decreased turnaround time.

### Haematology

Haematology lab carried out and reported 6,46,740 tests.

### Serology

The laboratory started testing of HBsAg, anti-HIV and anti-HCV by enhanced chemiluminescence immunoassay using VITROS 5600 fully automated random access integrated system.

### Quality assurance

The division 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. Comprehensive training was provided to the staff on basic life support, fire and safety, quality control, waste management, infection control, etc.



Investigations done	
Investigation	No.
Biochemistry	6,65,094
Haematology	2,06,761
Coagulation parameters	9,366
Urinalysis	38,513
CSF (Sugar & Protein)	268
HbA1C	134
Cyclosporin	207
Serum Immunoglobulin Assay (IgG, IgA & IgM)	1576
Free Kappa	1350
Free Lambda	1345
Serum electrophoresis	1122
Immunofixation electrophoresis	17
Blood gas (ABG)	606
Serology	
HIV	10945
HBsAg	11076
HCV	10992

Academic Activities	
Training provided	No. trained
M.Sc. Biochemistry students	3
M.Sc. MLT students	2
B.Tech. Biotechnology students	14

# MICROBIOLOGY

Swapna R. Nath

Assistant Professor & Head

Lecturer: Sagila S.G.

The Division continued to function with the state-of-the-art BacT/ALERT and VITEK 2 automated identification and sensitivity systems along with the conventional microbiological tools for diagnostic services. The Division was also involved

in the infection control activities of the hospital and carried out routine environmental, critical area and potable water surveillance.





## Major achievement

- The Division is recognised as the Designated Microscopy Centre for detection of acid fast bacilli (AFB staining), by the District Tuberculosis Centre, Thiruvananthapuram under Revised National TB Control Programme (RNTCP). From March 2013 onwards, the service is being provided free of cost.

## Academic activities

- Classes for staff nurses on infection control.
- Classes for the students of Post Basic Diploma in Oncology Nursing.
- Three months project training for M.Sc. Microbiology students.
- Six months training for B.Sc. Medical Microbiology students.
- Classes in virology for students of Department of Plant Biotechnology, College of Agriculture, Kerala Agricultural University (KAU), Vellayani, Thiruvananthapuram as part of KAU integrated biotechnology course lecture schedule.

Investigations done	
Culture, Sensitivity & Other tests	Number
Blood	4832
Exudate	1032
Urine	1035
Throat swab	336
Sputum	561
Aspirate	225
Faeces	171
Surveillance culture	150
Cerebrospinal fluid	56
Acid-fast bacteria	32
Fungus	16
Widal test	7
Microscopy (Gram stain, AFB stain, KOH mount, etc.)	350
<b>Total</b>	<b>8803</b>

# TRANSFUSION MEDICINE

Vijayalakshmi K.

Associate Professor & Head

Resident Medical Officer: Rajesh R. Chandran

The Division is a National Aids Control Organization (NACO) recognized Regional Blood Transfusion Centre with an annual blood collection of over 25000 units. This is one of the largest blood collection facilities in Kerala State, with all the amenities of a modern blood bank, including platelet aphaeresis and blood irradiation. All collected units are separated into components, most of which are used up by patients in RCC, and the rest are issued to patients in hospitals in and around

Thiruvananthapuram city. The Division also supports the Bone Marrow Transplant Unit by way of irradiated blood products and platelet aphaeresis, and performed 1588 blood irradiations and 150 aphaeresis during the period. The Division conducts outreach blood collection camps and provided induction training in blood bank procedures for new recruits coming from M/s Terumo Penpol Ltd.





## Academic Activities

Conducted teaching programmes for postgraduate students of Pathology, postgraduate and undergraduate students of Laboratory Technology and Nursing specialties.



### Blood components issued

Components	No. Issued
Packed Red Cells	14932
Platelet Rich Plasma	2393
Fresh Frozen Plasma	3954
Platelet Concentrate	21244
Single Donor Plasma	62
Cryoprecipitate	25

# PALLIATIVE MEDICINE

Cherian M. Koshy  
Additional Professor & Head

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







The Division is recognized as a training centre for Doctors and Nurses in Palliative Medicine by the NRHM, and successfully conducted the November session of the 'Certificate Course in Essentials of Palliative Care'. The Division conducted peripheral clinics at Neyyattinkara, Nedumangad, Kattakkada and Attingal in liaison with the NGO 'Care Plus'. Patients who are either poor or sick to travel were seen through the home care programme.

The World Palliative Care day was celebrated on 13th October 2012. A continuing education programme on 'Care of the elderly' was held in connection with this event. The morphine manufacturing process and weekly tele-clinic are functioning successfully.

#### Patient services

Cases	No.
New	4050
Review	9442
Tele-clinic consultations	290
<b>Total</b>	<b>13782</b>

#### Academic Activities

- Certificate course on Essentials of Palliative Care.
- Hands on training in palliative care for doctors and nurses.
- Classes for MSW students and receptionist trainees.

# DENTAL CARE

Nalina Kumari K.R.  
Associate Professor & Head



Routine activities included various approaches for the oral health and radiation protection of teeth of cancer patients. These included procedures such as oral prophylaxis, conservative therapy, occlusal adjustments, therapeutic management of pre-cancerous oral lesions, pre and post-radiation care of teeth, pre-surgical care and reconstructive procedures like construction of maxillofacial prosthesis, management of ulcers, spontaneous bleeding, toothache and management of oral problems and advice of patients undergoing BMT/stem cell therapy.

## Patient Statistics

Cases	No.
Post radiation care	4522
Temporary filling	4
Maxillofacial prosthesis	8
Management of osteoradionecrosis	8
Management of precancerous lesions	13
Management of post chemotherapy problems	5
BMT/Stem cell therapy consultation	18



# NURSING SERVICES

Sreelekha R.

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Chief Nursing Officer

Nursing Superintendent: Flower Augustine





The Division renders patient care in wards, day care services, OPDs, high dependency units, operation theatres and speciality units.

## Clinical services

In order to shorten the waiting time for chemotherapy administration, overnight chemotherapy services were started in June 2012. Occupational and environmental safety were ensured by installing biological safety cabinet for preparation of chemotherapy in all major units. Quality improvement measures were initiated to ensure patient safety and care.

## Nursing services

Service	Number
Chemotherapy administration (OP)	81,011
Central Venous Access Device Clinic:	
Peripherally Inserted Central Catheter (PICC) insertion	752
Total patient visits	7500
Lymphoedema clinic (patient visits)	3106
Stoma clinic (patient visits)	2145

## Academic activities

- Post Basic Diploma in Oncology Nursing course affiliated to Indian Nursing Council and Kerala Nurses and Midwives Council is being conducted with an annual intake of 20 students. The first batch passed out in November 2012.

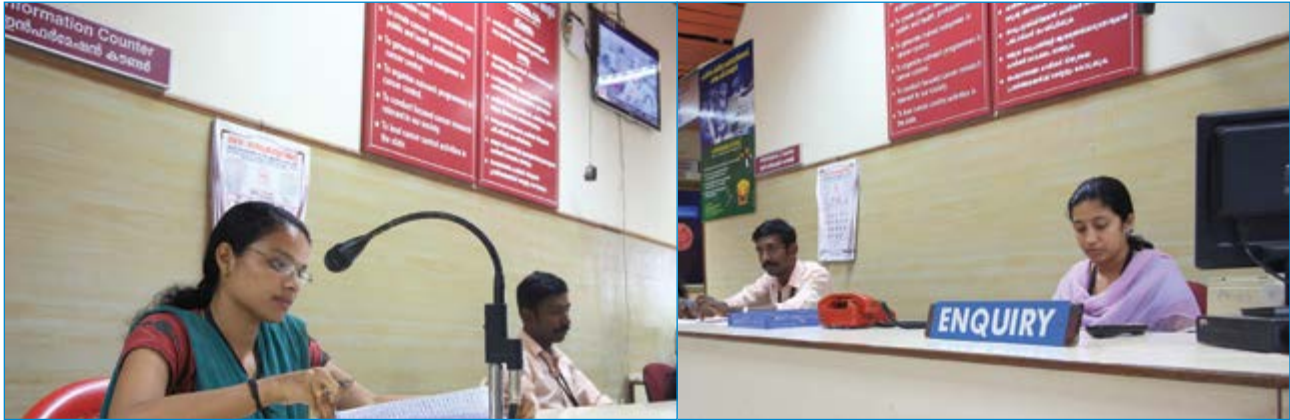
- Organised a one day workshop on 'Basics of Oncology Nursing' jointly with Oncology Nurses Association of India (ONAI) Thiruvananthapuram chapter from 16-17 November 2012. The workshop was attended by 650 nursing students.
- Three DGHS aided workshops of one week duration on 'Oncology Nursing Update' was organised for registered nurses of Kerala from 7-13 August 2012, 4-10 September 2012 and 13-19 November 2012. Thirty nurses from Government and private sectors attended these workshops.
- A seven day workshop (DGHS aided) on 'Managerial Skill for Nurse Managers' was organised from 25th September to 1st October 2012, which was attended by 30 nurse managers from different parts of the State.
- 1st batch of registered nurses from Government sector successfully completed the two weeks certification course on 'Cancer chemotherapy' held from 7-19 January 2013.
- 14th National Conference in Oncology Nursing was organized jointly with ONAI Thiruvananthapuram chapter from 1-2 February 2013. 250 delegates attended the conference and 100 attended the pre-conference session.
- All the nursing staff have been trained in Basic Life Support/Advanced Cardiac Life Support.

# CLINICAL SERVICES & MEDICAL RECORDS

Medical Records Officer: Chandrika D.  
Assistant Administrative Officer  
(Clinical Services): Sreekumar B.

This Division is responsible for maintenance of medical records and management of follow-up appointments, co-ordination of inter-clinic referrals, arranging admissions and issuance of certificates.





### Hospital statistics

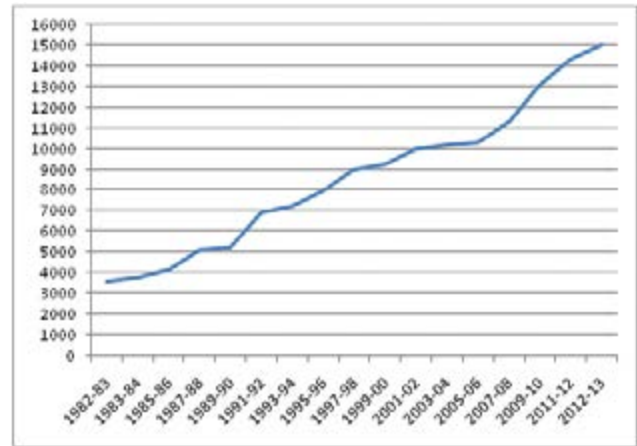
Item	No.
New cases	14985
Review cases*	193941
Total patients (New + Review)	208926
Daily average	696
In-Patient admissions	11155
In-Patient bed**	275
Total bed occupancy	84430
Average bed occupancy	231
Bed occupancy rate***	86
Average length of stay (days)	7.5
Hospital death	737
Telemedicine consultation	2768

\*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.

\*\*\* Excluded Nuclear Medicine beds

New cases registered (1982-83 to 2012-13)



### Patient Statistics

Patients are broadly grouped into the following 3 categories according to their socio-economic status and payment capacities.

- F – Minimum Payment
- M – Subsidised payment
- O – Normal rate

Patients were further re-distributed after their category change and inclusion in various welfare schemes

Patient categories based on socio-economic status (At the time of registration)		
Category	No. of patients	%
F	6849	45.71
M	4383	29.25
O	3753	25.04
<b>Total</b>	<b>14985</b>	<b>100</b>

Re-distribution of patients under different categories and welfare schemes		
Category	No	%
F	3513	23.44
M	4432	29.58
O	2304	15.38
P	219	1.46
R	1640	10.94
S	510	3.40
C	2047	13.66
N	320	2.14
<b>Total</b>	<b>14985</b>	<b>100</b>

F - Minimum Payment

M - Subsidised payment

O - Normal rate

P - Private

R - Reimbursable

S - Cancer Suraksha Scheme

C - Comprehensive Health Insurance Scheme (CHIS +)

N - Rashtriya Arogya Nidhi (RAN) Scheme

New cases registered (Speciality clinic wise)		
Clinic	No.	%
A	2150	14.34
B	2442	16.30
C	2442	16.30
D	2499	16.68
E	3533	23.57
F	649	4.33
G	1270	8.48
<b>Total</b>	<b>14985</b>	<b>100</b>

A – Haemato-lympho reticular, bone and soft tissue sarcoma

B – Head & Neck

C – Breast & Central Nervous System

D – Gynaec, Genitourinary & others

E – Chest & Gastrointestinal

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

G – Thyroid

New & Review cases (Speciality clinic wise)			
Clinic	New	Review*	Total
A	2150	31348	33498
B	2442	27667	30109
C	2442	40525	42967
D	2499	28506	31005
E	3533	28952	32485
F	649	24984	25633
G	1270	11959	13229
<b>Total</b>	<b>14985</b>	<b>193941</b>	<b>208926</b>

New cases (Age & Sex wise)						
Age Group	Male	%	Female	%	Total	%
0 -14	374	5.10	306	3.10	680	4.54
15-24	282	3.85	343	4.48	625	4.17
25-34	350	4.77	644	8.42	994	6.63
35-44	694	9.46	1296	16.93	1990	13.28
45-54	1415	19.29	1865	24.38	3280	21.89
55-64	2086	28.45	1738	22.72	3825	25.52
65-74	1509	20.57	1014	13.25	2523	16.84
75+	623	8.50	446	5.82	1069	7.13
<b>Total</b>	<b>7333</b>	<b>100</b>	<b>7652</b>	<b>100</b>	<b>14985</b>	<b>100</b>



New cases registered (Religion wise)						
Religion	Male	%	Female	%	Total	%
Hindu	4367	59.55	4847	63.34	9213	61.48
Muslim	1665	22.70	1414	18.48	3079	20.54
Christian	1301	17.75	1391	18.18	2693	17.98
<b>Total</b>	<b>7333</b>	<b>100</b>	<b>7652</b>	<b>100</b>	<b>14985</b>	<b>100</b>

New cases registered (Gender wise)									
Clinic	A	B	C	D	E	F	G	Total	%
Male	1297	1744	287	852	2534	359	260	7333	48.94
Female	856	696	2155	1646	999	291	1009	7652	51.06
<b>Total</b>	<b>2153</b>	<b>2440</b>	<b>2442</b>	<b>2498</b>	<b>3533</b>	<b>650</b>	<b>1269</b>	<b>14985</b>	<b>100</b>

## Referral System

RCC is a tertiary level referral hospital and patients were referred from other government and private hospitals.

Referred cases		
Referred from	No.	%
Teaching hospitals (MCH)	3155	21.05%
District/General hospitals	410	2.75%
Other Govt. hospitals	764	5.09%
VSSC/ECCHS/ESI/CGHS/ Railway hospitals	1704	11.38%
ECDC and peripheral centers	79	0.53%
Other Cancer Centers	37	0.24%
Private doctors	5969	39.83%
Private hospitals	2651	17.69%
International	192	1.28%
Self/RCC	24	0.16%
<b>Total</b>	<b>14985</b>	<b>100</b>

Referred cases (Geographical area wise)		
Kerala	No.	%
Thiruvananthapuram	3276	22.86%
Kollam	2496	16.65%
Pathanamthitta	781	5.21%
Alappuzha	839	5.59%
Kottayam	378	2.52%
Idukki	226	1.5%
Ernakulam	539	3.59%
Thrissur	881	5.87%
Palakkad	911	6.07%
Kozhikode	515	3.43%
Malappuram	1047	6.98%
Wayanad	124	0.82%
Kannur	395	2.63%
Kasargod	218	1.45%
Other States		
Tamil Nadu	2051	13.68%
Karnataka	11	0.77%
Lakshadweep	7	0.04%
Others	98	0.65%
International		
Middle East	2	0.01%
Maldives	190	1.26%
<b>Total</b>	<b>14985</b>	<b>100</b>

## Training provided

Training in medical records and patients services was given to Master of Applied Science & Medical Documentation and MAMSW students from various universities.

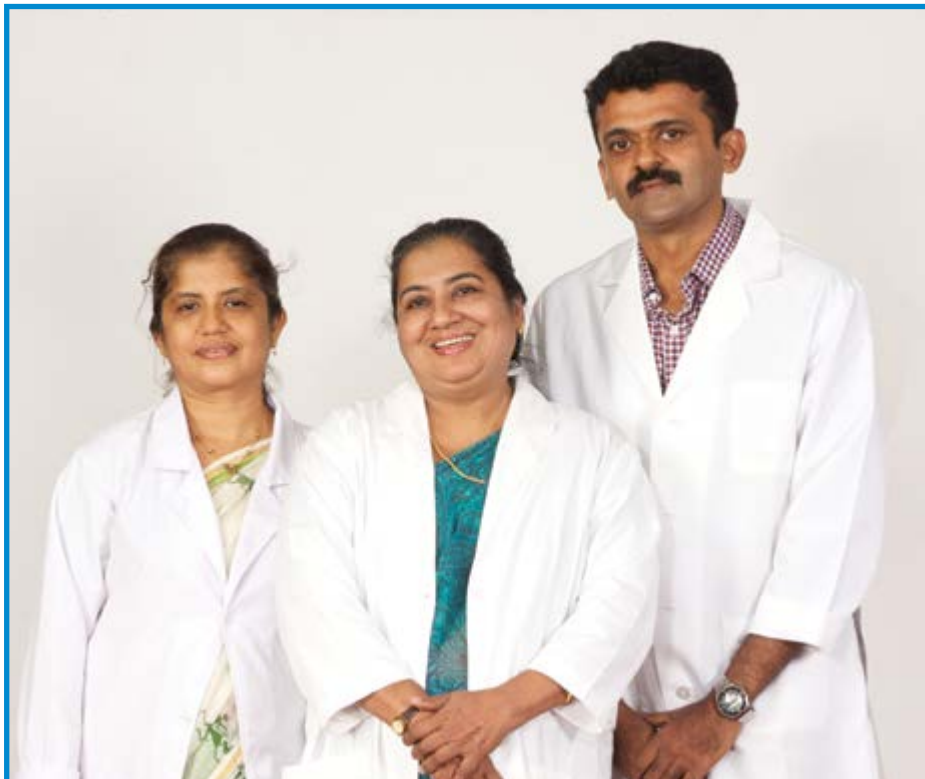
# COMMUNITY ONCOLOGY

Ramani S. Wesley  
Professor & Head

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Additional Professor: Gigi Thomas  
Assistant Professor: Jayakrishnan R.

The major activities of this division are 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

- Trainer-trainee programmes: Through 74 programmes, 4329 trainers were educated.
- International School of Colposcopy: One week hands on training was given to nine gynaecologists. One day orientation programme on VIA, VILI and colposcopy was given to 215 B.Sc. (MLT) students.

Trainer-Trainee programmes		
Categories of Trainees	No. of programmes	No. trained
Doctors	4	222
Dentists/Dental students	12	457
Nurses	13	511
Paramedicals (B.Sc. MLT)	15	215
Health supervisors and workers	4	400
Community volunteers/NGO's	20	1557
Bank/Factory/Technopark/VSSC	6	967
<b>Total</b>	<b>74</b>	<b>4329</b>

### Early Cancer Detection

The peripheral centres and nodal centres are referring patients with suspected cancers to the Early Cancer Detection Clinic functioning at the division for diagnosis, colposcopy, LEEP, cryotherapy, etc. Propagation of breast self-examination and clinical evaluation of breast disease and referral for mammography were done for 1116 patients. Cancers and pre-cancers detected among persons underwent screening are detailed below.

Cancers and Pre-cancers detected		
(No. screened: 5615)		
Sites	Cancers	Precancers
Oral	119	505
Breast	70	----
Cervix	69	163
Others	29	----
<b>Total</b>	<b>287</b>	<b>668</b>

Colposcopy clinic	
Procedures done	No.
Colposcopy	3146
Colpodirected biopsy	187
LEEP therapy	44
Cold coagulation	4
Pap smear	2526

Oral dysplasia clinic	
(No. screened=1237)	
Cases detected	No.
Leukoplakia	181
Oral submucous fibrosis	156
Benign lesions	164
<b>Total</b>	<b>501</b>

**Tobacco Cessation Clinic (TCC):** 146 tobacco users attended the clinic. Among the tobacco habitués, 75% were smokers, 10% were tobacco chewers and 14% had both the habits. They were given behavioral counselling and for patients with severe nicotine dependence, Nicotine Replacement Therapy was also given.

### Leadership activities initiated for tobacco control

TCC organized 17 awareness programmes on tobacco hazards in various districts of the state.

In collaboration with Regional Cancer Association, the TCC observed a 'No Tobacco Month' programme from 31 May 2012. Anti-tobacco awareness programmes were organised for high school/higher secondary school students in Thiruvananthapuram district as part of the programme. A presentation on the health implications of tobacco use along with sensitisation of the Cigarettes and Other Tobacco Products Act (COTPA, 2003) was given to senior police officers on 9 October 2012. TCC has launched a project to raise awareness against substance abuse threat in high schools of Thiruvananthapuram district with the support of Jilla Panchayat. One of the key issues taken up was 'tobacco control' in schools. The TCC also took efforts to reach the tribal population of Idukki and Palakkad districts since the



tribal community is vulnerable to substance abuse threat particularly tobacco.

### Cancer Outreach Programmes

Sixtyfive cancer education programmes were conducted and 7748 persons were attended. The programmes were given mainly for student representatives and teachers, lay public and vulnerable groups like the tribal population, fishermen community, rural population, etc. Seventy two cancer detection camps were conducted in various parts of the State in which 5694 people underwent screening.

Cancers & Pre-cancers detected in cancer detection camps	
No. of camps	72
No. screened	5694
Oral cancer	9
Breast cancer	2
Others	6
Oral pre-cancer	170
Cervical pre-cancer	57

## Academic Activities

### World No Tobacco Day (31 May 2012)

The World No Tobacco Day was organised in collaboration with Kerala State Health Services, Sree Chitra Tirunal Institute for Medical Sciences and Technology and Regional Cancer Association. The programme was inaugurated by Hon. Minister for Health and Family Welfare, Shri. V.S. Sivakumar. Around 600 health volunteers participated in the programme.

### Workshop series on role of dental surgeons in prevention and control of oral cancer

For the first time, a series of 12 workshops in early detection, diagnostic evaluation and management of oral precancers and cancers were organised in all districts with the support of National Rural Health Mission and Indian Dental Association, Kerala State to train dental surgeons. This programme was inaugurated by Hon'ble Minister for Health and Family Welfare, Shri. V.S. Sivakumar at RCC on 20th May 2012. There were 457 participants.

### World Cancer Day (4 February 2013)

RCC joined hands with Swasthi Charitable Foundation and Tobacco Free Kerala to initiate a state-wide school based cancer awareness programme on World Cancer Day. The programme was inaugurated by His Excellency the Governor of Mizoram Shri. Vakkom B. Purushothaman at St. Mary's Higher Secondary School, Thiruvananthapuram.

### Global Adult Tobacco survey (GATS): Dissemination of Kerala Fact Sheet

The Global Adult Tobacco Survey, Kerala State fact sheet was officially released by the Hon'ble Chief Minister Shri. Oommen Chandy on 10th October 2012 by handing over a copy to Dr. Paul Sebastian, Director, Regional Cancer Centre. The objectives of this project were the official release of the Kerala fact sheet based on the knowledge, attitude and practice of tobacco use among adults and also to sensitize the media by giving an overview of the tobacco prevalence in Kerala.

Table 44: Ongoing Doctoral Programmes pursued by staff

Sl. No.	Research Scholar	Title of the Study/University	Guide
1.	Gigi Thomas	Search for predictive genetic markers of high risk malignant transformation potential in oral leukoplakia patients/University of Kerala	Dr. Ravindran Ankathil
2.	Jayakrishnan R.	Effectiveness of community based tobacco cessation intervention in rural Kerala/ University of Tampere, Finland.	Dr. Antti Uutela Dr. Aleyamma Mathew

# CANCER RESEARCH

Remani P.

Additional Professor & Head

Professor: Kannan S.

Associate Professors: Raveendran Pillai K. (on leave),  
Sujathan K.

Assistant Professors: Lakshmi S., Hariharan S.

Scientific Officer Gr.I: Sreelekha T.T.

The Division carries out interdisciplinary research on different aspects of diagnostic, prognostic and therapeutic areas of oncology. Various laboratories are carrying out research in the fields of molecular and cellular aspects of tumour biology and related topics.





The Laboratory of Phytopharmacology isolated and extracted two novel compounds (IMD and DMD) from the seeds of *Annona squamosa*, which showed significant antimicrobial, antioxidant and cytotoxic activities. The Laboratory of Cell Cycle Regulation is evaluating the effect of Cyclin D1 overexpression and transcriptomal differences between young and elderly patients to identify any genetic effect in the occurrence of oral cancers. MicroRNA profiling in relation to HPV infection status in cervical cancer has also been evaluated by this team.

The Laboratory of Proteomics is evaluating the significance of immunocytochemistry of marker proteins in FNACs for the differential diagnosis of thyroid malignancy. Galectin-3 and HBME are found to be more sensitive than the other proteins for the differential diagnosis of malignancies in FNAC.

Work on molecular genetics of paediatric acute lymphoblastic leukemia in Kerala, role of molecular markers in the diagnosis and prognostication of squamous cell carcinoma of the larynx and assessment of the molecular mechanisms of multidrug resistance in ovarian cancer is being carried out in the Laboratory of Molecular Medicine.

The Cytogenetics Laboratory is mainly concentrating on leukaemia research and identification of genetic markers for prognostic stratification of haematological malignancies. Cytogenetic and molecular studies are also being conducted in inhabitants of high natural background radiation areas of Karunagappally Taluk in Kollam District.

The Laboratory of Biopharmaceuticals is focusing on innovative

cost effective technology creation, new drug discovery and novel drug delivery systems. Development of biomarkers for lung cancer and leukaemia using PCR based studies is another important area of activity in this laboratory.

The Division conducts doctoral research programmes and provides training for M.Sc/MD/MDS dissertation, B.Sc., M.Sc., B.Tech, M.Tech and B.Sc. MLT students.

## New Equipment Acquired

High Performance Liquid Chromatography	1
DNA Sequencer	1
PCR Machine	1
Multidetector Microplate Reader	2
-20 degree C deep freezer	1

Diagnostic services provided	
Services	No.
Karyotype analysis	1020
Quantitative RT-PCR for bcr-abl	553
Qualitative RT-PCR for bcr-abl & pml-rara	408
Fluorescent in situ hybridization	326

## Academic Activities

Training was provided for:	
Dissertation work of MD/MDS student	1
Three months project work for M. Sc Biotechnology/ Life Science students	42
Two weeks summer training for M.Sc. students	16
B.Sc. MLT students	141
MD/MS/DNB students	18

Ongoing Doctoral Research Programmes			
Sl. No.	Research Scholar	Title of the Study/University	Guide
1.	Abitha Murali	Characterization of molecular alterations in the retinoblastoma (Rb) gene in oral carcinoma/University of Kerala.	Dr. S. Kannan
2.	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.	Dileep Kumar U.	Studies on the biology of carcinoma of buccal mucosa and tongue/ University of Kerala.	Dr. S. Kannan
4.	Christo Rajan	Study of the significance of miRNA expression pattern in oral carcinoma /University of Kerala.	Dr. S. Kannan
5.	Sivadas V.P.	Molecular dissection of TGFβ/Smad pathway in oral carcinoma / University of Kerala.	Dr. S. Kannan
6.	Dhanya G. S.	Cytotoxic and immunological studies of two Solanaceae plants/ University of Kerala.	Dr. P. Remani
7.	Biba V. S.	Antimicrobial, antitumour and immunomodulatory properties of two species of <i>Annona</i> (Annonaceae)/University of Kerala.	Dr. P. Remani
8.	Farha A. K.	Molecular mechanisms involved in the cell death induced by deoxyelephantopin, a sesquiterpene lactone from <i>Elephantopus scaber</i> /University of Kerala.	Dr. P. Remani
9.	Shanone C. Pereira	Identification of biomarkers for the differential diagnosis of thyroid malignancies in FNACs/M.S. University	Dr. K. Sujathan
10	Veena V.S.	Study of biomarkers for lung cancer in sputum/ Bharathiar University	Dr. K. Sujathan
11	Nimi G.K.	Study of galectins in triple negative breast cancers/M.S. University	Dr. K. Sujathan
12	Saritha V.N.	Proteome analysis in squamous cell carcinoma and its precursor lesions of cervix./ M.S. University	Dr. K. Sujathan
13	Rajesh S.V	Study of cell cycle regulatory proteins in thyroid nodules./M.S. University	Dr. K. Sujathan
14	Binu K.A.	Role of estrogen receptor co-regulators in breast cancer/ University of Kerala	Dr. S. Lakshmi
15	Prabha Pillai	Role of signal transducers and activators of transcription in breast carcinogenesis/University of Kerala	Dr. S. Lakshmi
16	Sreeja R.	Molecular analysis of multidrug resistance gene and its expression in ovarian cancer/ University of Kerala	Dr. S. Lakshmi
17.	Sangeetha Vijay	Molecular genetic basis of resistance to imatinib mesylate treatment in chronic myeloid leukaemia patients/University of Kerala.	Dr. S. Hariharan
18.	Santhi S.	Prognostic significance of chromosomal aberrations and FLT3 gene mutation status in patients with acute myeloid leukaemia/ University of Kerala.	Dr. S. Hariharan
19.	Suresh Kumar V.	Detection of nucleophosmin 1 gene mutations in AML patients and its impact on treatment/ University of Kerala.	Dr. S. Hariharan
20	Aswathy C. G.	A study of gene expression profile in inhabitants of high background radiation of Karunagappally, Kerala, India/Mahatma Gandhi University	Dr. S. Hariharan

21	Krishnachandran R.	Blastic transformation of chronic myelogenous leukemia: Cytogenetic and molecular mechanisms orchestrating the disease progression/ University of Kerala	Dr. S. Hariharan
22.	Aravind S.R.	Immunomodulatory and anticancerous properties of Tamarind seed polysaccharides/University of Kerala.	Dr.T.T. Sreelekha
23	Manu M. Joseph	Studies on <i>Tamarindus indica</i> polysaccharide nanoparticle as immunomodulatory/anticancer agent and as a potent drug carrier/ University of Kerala.	Dr.T.T. Sreelekha
24.	Sheeja Varghese	Studies on the molecular mechanisms of antitumour/ immunomodulatory polysaccharide from <i>Mangifera indica</i> / University of Kerala.	Dr.T.T. Sreelekha
25.	Alphy Rose James	Evaluation of molecular basis of drug response in lung cancer cells by gene profiling for targeted personalized medicine / University of Kerala.	Dr.T.T. Sreelekha

# CANCER EPIDEMIOLOGY & BIostatISTICS

**Aleyamma Mathew**

Additional Professor & Head

Associate Professor: Jayalekshmi P.

Assistant Professors: Padmakumary Amma G., Latha P.T.,  
Kalavathy M.C., Preethi Sara George







## Hospital Based Cancer Registry (HBCR)

HBCR of Regional Cancer Centre, Thiruvananthapuram has been functioning for 30 years under the network of National Cancer Registry Programme (NCRP) of Indian Council of Medical Research (ICMR), Govt. of India. The report provides the magnitude, patterns of cancer; stage at diagnosis and treatment modalities of patient seen at RCC (Table 1). The Division also brought out the 30-year consolidated report of HBCR (1982-2011) during the report period.

## Population-Based Cancer Registry (PBCR), Thiruvananthapuram

PBCR, Thiruvananthapuram has been functioning under the network of NCRP of ICMR for the past 7 years. Table 2 shows the PBCR for the year 2011. NCRP has accorded approval for expansion of Thiruvananthapuram Taluk PBCR, to cover the entire district and enhanced the budget.

## Academic activities

- Published 30-year consolidated report of Hospital Based Cancer Registry (1982-2011).
- Organised the 28th Annual Review Meeting (ARM) of National Cancer Registries from 6-7 December 2012. As part of this meeting, a pre-ARM workshop was also conducted from 4-5 December 2012.
- Provided teaching to all postgraduate students in RCC on Bio-statistics.
- Provided statistical consultancy/analytical support to research.

Ongoing Doctoral Programmes			
Sl. No.	Research Scholar	Title of Study/University	Guide
1.	Manju L.	Risk estimates of bladder cancer: multiple logistic regression model/University of Kerala	Dr. Aleyamma Mathew
2.	Grata Ildaphonsa	Risk factors of kidney cancer: a matched case-control study/University of Kerala	Dr. Aleyamma Mathew
3.	Sona P.S.	Performance status and quality of life of ovarian cancer patients/University of Kerala	Dr. Aleyamma Mathew
4.	Subha R. Nair	Risk prediction models for the development of breast cancer/University of Kerala	Dr. Aleyamma Mathew
5.	Jayakrishnan R.	Evaluating the effectiveness of community based tobacco cessation strategies in Thiruvananthapuram district/University of Tampere	Dr. Aleyamma Mathew
6.	Melbin John	Burden and projection of cancer in India/University of Tampere	Dr. Aleyamma Mathew
7.	Devi Vijaya A.	Statistical prediction of breast cancer patient survival using artificial neural network models- undergoing course work/Mahatma Gandhi University	Dr. Aleyamma Mathew

### Visiting Trainees

#### Training provided

- Training in Biostatistics for graduate and postgraduate students from various colleges.
- Training on prevention and early detection of cancers was given to 724 medical officers and other health workers from various primary health centres in Thiruvananthapuram district on 10-11 August 2012 and on 19th & 28th September 2012.
- Four seminars were conducted on prevention and early detection of breast cancers, which were attended by 586 medical officers, health workers and other Panchayat representatives in Thiruvananthapuram district.

Table I: Site-wise distribution of patient registration by gender (2012 - 2013)

ICD-10	Site	Male		Female		Total	
		No.	%	No.	%	No.	%
C00	Lip	24	0.4	19	0.3	43	0.3
C01	Base of tongue	22	0.3	4	0.1	26	0.2
C02	Tongue	400	6.1	151	2.3	551	4.2
C03	Gum	106	1.6	91	1.4	197	1.5
C04	Floor of mouth	53	0.8	4	0.1	57	0.4
C05	Palate	48	0.7	24	0.4	72	0.5
C06	Other mouth	259	3.9	157	2.4	416	3.1
C07	Parotid gland	20	0.3	21	0.3	41	0.3
C08	Salivary gland	14	0.2	9	0.1	23	0.2



C09	Tonsil	30	0.5	4	0.1	34	0.3
C10	Oropharynx	100	1.5	6	0.1	106	0.8
C11	Nasopharynx	32	0.5	16	0.2	48	0.4
C12	Pyiform sinus	62	0.9	5	0.1	67	0.5
C13	Hypopharynx	74	1.1	35	0.5	109	0.8
C14	Pharynx unspecified	4	0.1	1	0.0	5	0.0
C15	Oesophagus	250	3.8	98	1.5	348	2.6
C16	Stomach	332	5.1	139	2.1	471	3.6
C17	Small intestine	23	0.4	9	0.1	32	0.2
C18	Colon	140	2.1	91	1.4	231	1.7
C19	Rectosigmoid colon	21	0.3	13	0.2	34	0.3
C20	Rectum	201	3.1	143	2.1	344	2.6
C21	Anus & anal canal	16	0.2	14	0.2	30	0.2
C22	Liver	153	2.3	45	0.7	198	1.5
C23	Gall bladder	14	0.2	12	0.2	26	0.2
C24	Other biliary tract	33	0.5	17	0.3	50	0.4
C25	Pancreas	84	1.3	53	0.8	137	1.0
C30	Nasal cavity	19	0.3	8	0.1	27	0.2
C31	Accessory sinus	19	0.3	13	0.2	32	0.2
C32	Larynx	252	3.8	10	0.1	262	2.0
C34	Lung	909	13.9	211	3.2	1120	8.5
C37	Thymus	1	0.0	0	0.0	1	0.0
C38	Heart & mediastinum	16	0.2	12	0.2	28	0.2
C40	Bone of limbs	34	0.5	33	0.5	67	0.5
C41	Other bone	37	0.6	22	0.3	59	0.4
C43	Skin melanoma	31	0.5	21	0.3	52	0.4
C44	Skin other	67	1.0	50	0.7	117	0.9
C47	Peripheral nervous system	5	0.1	2	0.0	7	0.1
C48	Retroperitoneum	15	0.2	12	0.2	27	0.2
C49	Connective tissue	88	1.3	71	1.1	159	1.2
C50	Breast	15	0.2	1819	27.2	1834	13.9
C51	Vulva	--	0.0	8	0.1	8	0.1
C52	Vagina	--	0.0	32	0.5	32	0.2
C53	Cervix uteri	--	0.0	493	7.4	493	3.7
C54	Corpus uteri	--	0.0	180	2.7	180	1.4
C55	Uterus, nos	--	0.0	55	0.8	55	0.4
C56	Ovary	--	0.0	349	5.2	349	2.6
C57	Other female genital organs	--	0.0	5	0.1	5	0.0
C60	Penis	24	0.4	--	0.0	24	0.2
C61	Prostate	230	3.5	--	0.0	230	1.7
C62	Testis	43	0.7	--	0.0	43	0.3

C64	Kidney	105	1.6	35	0.5	140	1.1
C65	Renal pelvis	3	0.0	5	0.1	8	0.1
C66	Ureter	164	2.5	19	0.3	183	1.4
C67	Urinary bladder	1	0.0	0	0.0	1	0.0
C68	Other urinary organs	13	0.2	12	0.2	25	0.2
C69	Eye	0	0.0	1	0.0	1	0.0
C71	Brain	219	3.3	125	1.9	344	2.6
C72	Spinal cord	7	0.1	5	0.1	12	0.1
C73	Thyroid gland	247	3.8	972	14.6	1219	9.2
C74	Adrenal gland	9	0.1	19	0.3	28	0.2
C75	Other endocrine gland	1	0.0	6	0.1	7	0.1
C76	Ill defined sites	21	0.3	22	0.3	43	0.3
C77	Secondary lymphnode	108	1.6	44	0.7	152	1.1
C78	Secondary respiratory & digestive	61	0.9	45	0.7	106	0.8
C79	Secondary Other sites	44	0.7	35	0.5	79	0.6
C80	Primary unknown	69	1.1	36	0.5	105	0.8
C81	Hodgkin's disease	98	1.5	54	0.8	152	1.1
C82	Follicular NHL	67	1.0	30	0.4	97	0.7
C83	Diffuse NHL	163	2.5	106	1.6	269	2.0
C84	T-cell lymphoma	21	0.3	9	0.1	30	0.2
C85	Other NHL	67	1.0	44	0.7	111	0.8
C90	Multiple myeloma	169	2.6	102	1.5	271	2.0
C91	Leukemia, lymphoid	240	3.7	116	1.7	356	2.7
C92	Leukemia, myeloid	230	3.5	159	2.4	389	2.9
C93	Leukemia, monocytic	43	0.7	34	0.5	77	0.6
C94	Other specified leukaemia	7	0.1	7	0.1	14	0.1
C95	Leukemia, unspecified	53	0.8	34	0.5	87	0.7
C96	Other lymphoid neoplasm	12	0.2	14	0.2	26	0.2
<b>C00-C96</b>	<b>Total (Invasive)</b>	<b>6562</b>		<b>6677</b>		<b>13,239</b>	
	In-situ	12	1.6	54	5.5	66	3.8
	Borderline malignancy	38	4.9	78	8.0	116	6.6
	Benign tumours	83	10.8	198	20.3	281	16.1
	Non-neoplastic (include pre-malignant conditions & others)	283	36.7	353	36.2	636	36.4
	Diagnosis not confirmed	355	46.0	292	29.9	647	37.1
	<b>Total</b>	<b>771</b>		<b>975</b>		<b>1746</b>	
	<b>Total No. of Patients</b>	<b>7333</b>		<b>7652</b>		<b>14,985</b>	

**Table 2: Population-based cancer registry, Thiruvananthapuram Taluk (2011):  
Age-Adjusted Incidence Rate (AAR) per 100,000 persons of leading cancer sites**

ICD_10 code	Site	Male (833)			Female (923)		
		#	AAR	Rank	#	AAR	Rank
C00-06	Oral cavity	86	13.3	2	54	7.2	4
C09-10, C12-14	Pharynx	28	4.4	8	4	0.5	>10
C15	Esophagus	24	4.0	>10	5	0.7	>10
C16	Stomach	35	5.6	7	14	1.7	>10
C19-C20	Rectum	43	6.8	5	23	3.1	9
C22	Liver	27	4.2	10	7	0.9	>10
C32	Larynx	38	5.9	6	4	0.6	>10
C33- C34	Lung	89	14.0	1	19	2.5	>10
C50	Breast	11	1.6	>10	279	37.9	1
C53	Cervix uteri	--	--	--	62	8.2	3
C54	Corpus uteri	--	--	--	40	5.7	6
C56	Ovary	--	--	--	45	6.3	5
C61	Prostate	64	10.0	3	--	--	--
C64-C66	Kidney	15	2.2	>10	9	1.4	>10
C67	Urinary Bladder	25	4.0	>10	5	0.6	>10
C70-72	Brain & CNS	22	3.6	>10	19	3.0	10
C73	Thyroid	25	3.8	>10	74	9.9	2
C81-C85 & C96	Lymphoma	53	8.4	4	29	4.2	8
C91- C95	Leukemia	28	4.4	9	26	4.3	7
<b>Total Incidence Cases</b>		<b>870</b>	<b>136.9</b>		<b>917</b>	<b>126.1</b>	

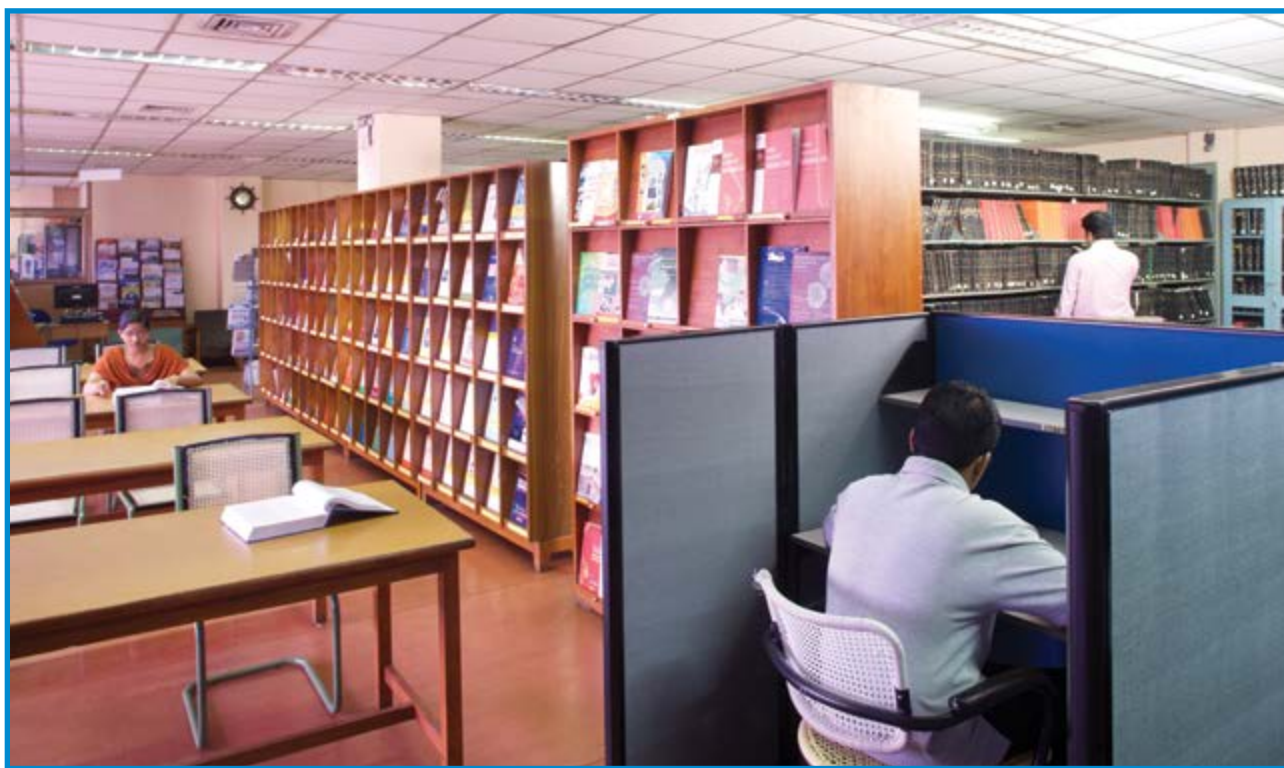
# LIBRARY AND INFORMATION SERVICES

Vishnu V.

Librarian cum Information Officer

The Division continued its activity in collecting, organizing, disseminating and simplifying the means by which the busy oncology professionals can navigate the ever increasing ocean of international research literature and bring these knowledge and discoveries to the benefit of the patient. The Division provided support to all academic and administrative activities of the Centre. In addition to its own patrons, library was used by students and faculty from within and outside the State.





## Major Achievements

- The library was made the first RFID enabled medical library in the State by introducing Radio Frequency Identification technology.
- Library was made Wi-Fi enabled.
- Acquired a computer server (AMD Opteron), which now hosts the RFID middleware and library management software (Liberty).

## Collection Development

New editions of frequently referred books were procured on a need based manner. Suggestions from users and journal usage statistics were considered in the collection building process. The Division continued to have subscription to ScienceDirect, Wiley online library, UpToDate, Ovid, Oxford University Press, Springer, Informa Health, Nature Publishing, AAAS and reprint procurement arrangement with DELNET.

Information sources added		
Document type	Additions	Collection as on 31 March '13
Books, Monographs & Back Volumes	250	12443
Current Journals	1	108
E-Books	11	76
E-Journals	---	96
Reprints	143	6735
CD ROMs/DVDs	8	430

## Library Intranet

A new interactive library intranet page was designed and made functional by utilizing the features offered by the library management software. It acts as a one stop reference facility for searching the library collections including books, RCC publications, reprints, journal holdings, list of CD/DVD Roms, e-books, current journals with links to full text, contents pages of current journals, important news paper clippings, etc. A link was also provided on the Centre's website to the new library page.

## Support services

The Division handled all the audio-visual and reprographic requirements of the Centre. Compilation and edition works related to the publication of Centre's annual report (2011-12) were fulfilled and copies were distributed.

## Training provided

Internship training was provided to Master of Library and Information Science students from Department of Library and Information Science, University of Kerala.





# INFORMATION SYSTEMS

Neelima N.

Systems Manager & Head

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The main responsibilities include developing and implementing information technology for the hospital. It supports and maintains operational systems and trains hospital staff in the use of information technology.





## Major achievements

- Implemented a disaster recovery system by establishing a secondary server site.
- The entire RCC campus was Wi-Fi enabled.

### **Activities of the Division include:**

Maintenance of Hospital Information System, 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 trouble shooting, administration and maintenance of telemedicine software and equipment, scanning of case sheets, etc.

## Hospital Information System (HIS)

HIS in RCC known as TEJHAS (Telemedicine Enabled Java based Hospital Automation System) is a network of computers, used to collect process and retrieve patient care and administrative information on all hospital activities from various departments to satisfy the functional requirement of the users.



# EARLY CANCER DETECTION CENTRE (ECDC), ERNAKULAM

Latha A.

Cytopathologist

Early Cancer Detection Centre, Kaloor, Ernakulam primarily aims at screening and early diagnosis of cancer cases through cervical smear examination, oral scrape smear examination, fine needle aspiration cytology, colposcopy and fluid cytology. In addition to the daily clinics of about 50-60 patients per day, ECDC conducts cancer detection camps in the rural and urban areas of Ernakulam and neighbouring districts, cancer awareness classes, seminars and health talks. The monthly follow up clinic conducted on every 3rd Saturday was attended by 764 patients. Video conferencing, consultations, slide discussions, patient referral and cancer awareness classes were conducted through telemedicine facility. During the reported period the Centre enrolled 945 families under CCL scheme.

Screening services	
Services	Total No.
Persons screened	15188
Cancer detection camps	66
Awareness classes	35
Patients referred to RCC	30

Clinical activities			
Tasks	ECDC	Camp	Total
Cervical smear	3746	2945	6691
Oral smear	237	84	321
Fine Needle Aspiration Cytology	2432	833	3265
Sputum cytology	23	.....	23
Fluid cytology	217	92	309

Cancers & Precancers detected			
Cases	ECDC	Camp	Total
Oral cancer	10	1	11
Breast cancer	126	4	130
Cervical cancer	17	1	18
Thyroid	23	4	27
Others	98	6	104
Precancers	155	110	265

# EARLY CANCER DETECTION CENTRE (ECDC), PALAKKAD

Sanil P.N.

Cytotechnologist

Creating cancer awareness among the public and cancer screening are the main functions of this ECDC. The Centre has extended its services to the tribal areas of Palakkad district such as Anakal, Nadupathy and Agali and 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. Programmes for the early detection of cervical cancer were conducted through mass screening at the District Hospital, Palakkad. Breast self examination classes were attended by 989 women. 'Meet the oncologist' programme, a joint venture with Fluid Control Research Institute, Palakkad, continued. Follow up clinics were conducted every three months and 232 persons attended.

Screening services	
Services	Total No.
Persons screened	13,465
Cancer detection camps	38
Awareness classes	45
Patients referred to RCC	18
Attendance at 'Meet the oncologist'	278

Clinical activities			
Tasks	ECDC	Camp	Total
Cervical smear	1198	2183	3381
Oral smear	22	43	65
FNAC	18	50	68
Sputum cytology	14	NA	14
Nipple discharge	12	10	22
<b>Total</b>	<b>1264</b>	<b>2286</b>	<b>3550</b>

Cancers detected			
Cases	ECDC	Camp	Total
Oral cancer	3	1	4
Oral pre-cancers	20	38	58
Breast cancer	3	..	3
Cervix cancer	9	1	10
Cervix pre-cancers	30	61	91
Other malignancies	2	--	2
<b>Total</b>	<b>67</b>	<b>101</b>	<b>168</b>

# NATURAL BACKGROUND RADIATION CANCER REGISTRY (NBRR), KARUNAGAPPALLY

Jayalekshmi P.

Associate Professor & Officer-in-charge

The Natural Background Radiation Cancer Registry (NBRR), 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 of Kerala. NBRR carries out radiation epidemiologic studies on cancer and non-cancerous diseases and other biological parameters. The registry also proposed to conduct studies on the incidence of cataract and atherosclerosis in the population living in this area.

Patient services		
Particulars	No.	Persons attended
Cancer awareness classes & palliative care training programmes	10	1825
Review clinics	6	467
Pain clinics & supportive clinics	Daily	8726
Field detection camps	83	8802
Pap smear screening	-	2930
Other cytology investigations	-	197
Cancer cases detected	26	-

# MULTIDISCIPLINARY CLINICS

# 'A' CLINIC

(HAEMATOLOGICAL, LYMPHORETICULAR, BONE & SOFT TISSUE SARCOMA)



'A' Clinic is responsible for the diagnosis and management of haematological and lymphoreticular malignancies, sarcomas and other solid tumors where intensive chemotherapy is indicated. Over 2000 new cases were treated during the reporting period. Majority of the patients attending OPD were for chemotherapy. In the BMT unit, during the above period, autologous bone marrow transplantation following high dose chemotherapy was performed in 30 patients. Allogenic bone marrow transplantation for various leukaemias was performed in 3 patients. Clinical training was given to post graduate students of Radiation Oncology, Surgical Oncology and Medical Oncology from within RCC and other Medical Colleges.

## Clinical Procedures/Services Offered

Patients consulted	
Patients	Number
New cases	2150
Review cases	31348
<b>Total</b>	<b>33498</b>
Inpatient admissions	2763

## Specialised services

High Dose chemo	Autologous BMT	Allogenic BMT
2000	30	3

## Surgical Procedures

<b>Total</b>	<b>:</b>	<b>200</b>
Radiation treatments	:	651
Observers/Trainees	:	31
Trainees	:	2

# 'B' CLINIC (HEAD & NECK)



'B' clinic is a multidisciplinary clinic comprising of Radiation Oncologists and Surgical Oncologists. The services provided include state-of-the-art radiotherapy including 3DCRT, IMRT and standard chemotherapy. Surgical oncology services included complex cranio-facial resections and microvascular reconstructions. The clinic also provides rehabilitation services to head & neck cancer patients through trained staff. Weekly multi-disciplinary tumour boards were conducted. Clinic was actively involved in 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. This clinic runs the 2 year fellowship programme in head and neck surgical oncology.

## Clinical Procedures/Services Offered

Patients consulted	
Cases	Number
New cases	2,442
Review cases	27,667
<b>Total</b>	<b>30,109</b>

## Radiotherapy

Radical			Palliative
3D CRT	IMRT	2D Planning	
2	207	1050	100

## Surgical Procedures

Oral cancers	Laryngo-pharyngeal	Salivary glands	Sino-nasal cancers	Others
715	99	65	29	154

## Chemotherapy

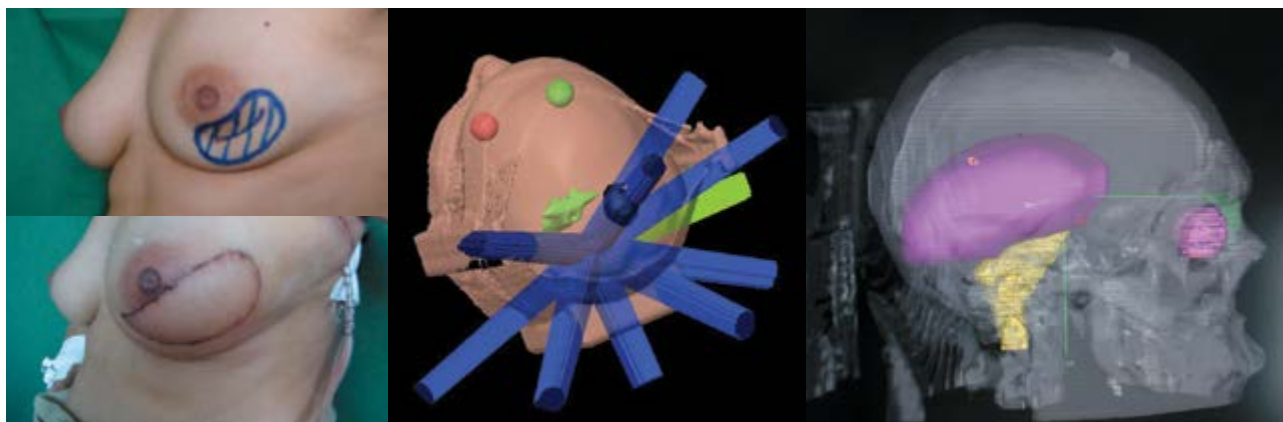
Concurrent chemo-radiotherapy	Neo-adjuvant chemotherapy
800	290

## Visitor

Late Prof. Kian Ang MD, Professor of Radiation Oncology, MD Anderson Cancer Center, Houston, Texas, USA.

# 'C' CLINIC

(BREAST & CENTRAL NERVOUS SYSTEM)



'C' clinic deals with the treatment of cancers arising in the breast and central nervous system by offering surgery, radiotherapy, chemotherapy, targeted therapy and endocrine therapy services. The clinic also caters to paediatric patients who need radiotherapy. Stereotactic Radiosurgery (SRS)/ Stereotactic radiotherapy (SRT) was done for 34 patients, mostly for arteriovenous malformations (91%), the others being single brain metastasis, schwannomas and pituitary adenomas. The activities of the lymphoedema clinic were streamlined so as to cater to more number of patients. The month of October was observed as 'Breast Cancer Awareness' month. Clinical training was given to post graduate students of Radiation Oncology, Surgical Oncology and Medical Oncology from within RCC and other Medical Colleges.

## Clinical Procedures/Services Offered

Patients consulted	
Patients	Number
New cases	2442
Review cases	40,525
<b>Total</b>	<b>42,967</b>

### Radiotherapy

Radical				Palliative
Conformal	Conventional	IMRT	Stereotactic Radiosurgery	
558	872	33	34	110

### Surgical Procedures

Mastectomy	Breast Conservation & Oncoplastic procedures	Others
861	145	172

**Chemotherapy:** More than 90% of patients required systemic form of treatment. All forms of systemic chemotherapy, biological agents and endocrine treatment were given to breast cancer patients. Patients with CNS malignancies were given chemotherapy where indicated.



# 'D' CLINIC

## (GYNAEC, GENITO-URINARY & OTHERS)



'D' clinic provides care for patients with gynaecologic, urologic, skin cancers and carcinoma of unknown primary origin. Apart from offering state-of-the-art radiotherapy facilities (IMRT, IGRT and 3D Conformal RT), chemotherapy, hormonal and targeted therapies were also administered. 3D image based optimized brachytherapy treatment was given to 75 patients. This clinic was actively involved in screening and translational research and also conducts phase II and III clinical trials. Clinical training is given to post graduate students from Radiation Oncology, Surgical Oncology, Medical Oncology, Gynaecologic Oncology and Gynaecology. The clinic conducts monthly tumour boards jointly with the Gynaecology & Radiotherapy faculty of Medical College Hospital, Thiruvananthapuram.

### Clinical Procedures/Services Offered

Patients consulted	
Patients	No.
New cases	2499
Review cases	28,506
<b>Total</b>	<b>31,005</b>

### Radiotherapy

Radical			Palliative
3D CRT	IMRT	2D Planning	
529	49	508	90

### Surgical Procedures

#### Gynaecological cancers

Ovarian	231
Endometrial	156
Cervical	55

#### Urological cancers

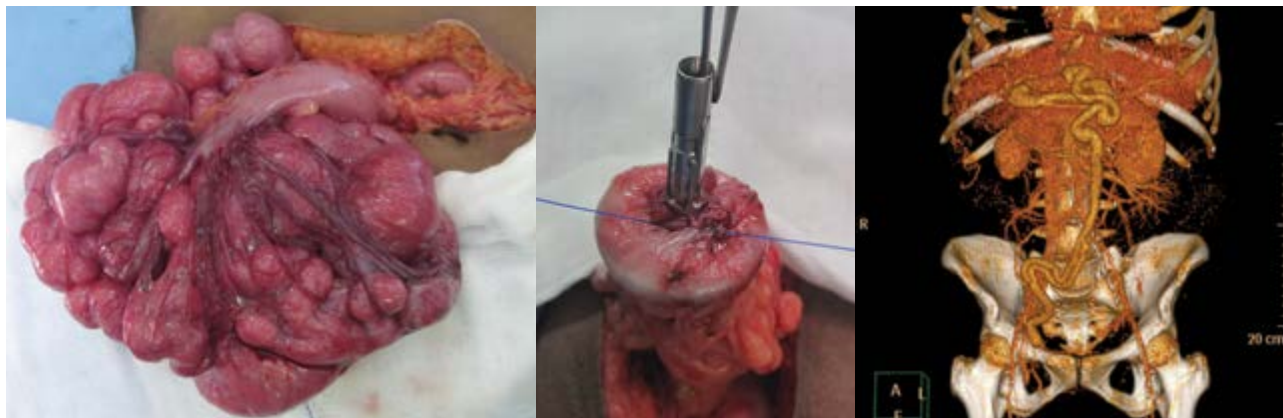
Nephrectomy	25
Penectomy	7
Bladder	18
Others	37

#### Chemotherapy

Concurrent chemo-radiotherapy	480
Neoadjuvant chemotherapy/ Hormone therapy	290

# 'E' CLINIC

## (CHEST & GASTRO-INTESTINAL)



'E' clinic caters to patients with cancers of lung, mediastinum, gastro-intestinal tract and hepatobiliary tract. The clinic offers comprehensive multidisciplinary state-of-the-art radiotherapy, surgery and chemotherapy services. Clinical training was given to post graduate students of Radiation Oncology, Surgical Oncology and Medical Oncology from within RCC and other Medical Colleges.

### Clinical Procedures/Services Offered

Patients consulted	
Patients	Number
New cases	3533
Review cases	28,952
<b>Total</b>	<b>32,485</b>

### Radiotherapy

Radical				Palliative
Conformal	IMRT	CT/2D Plan	Brachytherapy	
158	40	360	12	320

### Surgical procedures

Esophagus	Stomach	Hepatobiliary & Pancreas	Colorectal	Others
83	108	36	260	28

### Chemotherapy

The clinic provided both day care as well as inpatient chemotherapy services. Chemotherapy infusions were given through infusion pump using PICC line, hence inpatient admissions were not necessary for infusion chemotherapy.

### Visitor

Dr. Francesco Grossi, Director, Lung Cancer Unit and Chairman, Disease Management Team (Lung cancer) at the National Institute of Cancer Research, Genova, Italy, visited the clinic on 28th March 2013 and shared his experience in lung cancer management.

# 'F' CLINIC

## (PAEDIATRIC ONCOLOGY)



'F' clinic handles childhood malignancies up to the age of 14 years. Children from the entire state of Kerala, southern Tamil Nadu, southern Karnataka, Maldives and Lakshadweep reached this clinic for medical care. The clinic provided outpatient and inpatient services including ICU care with ventilatory support. Among the new cases reported, acute lymphoblastic leukaemia and brain tumour were the most common malignancies. A total of 1214 admissions were recorded in paediatric ward. The regular running of the clinic was supported by the Indian Paediatric Oncology Initiative (IPOI) of Jiv Daya foundation.

### Clinical Procedures/Services Offered

Patients consulted	
Patients	No.
New cases	649
Review cases	24,984
<b>Total</b>	<b>25,633</b>

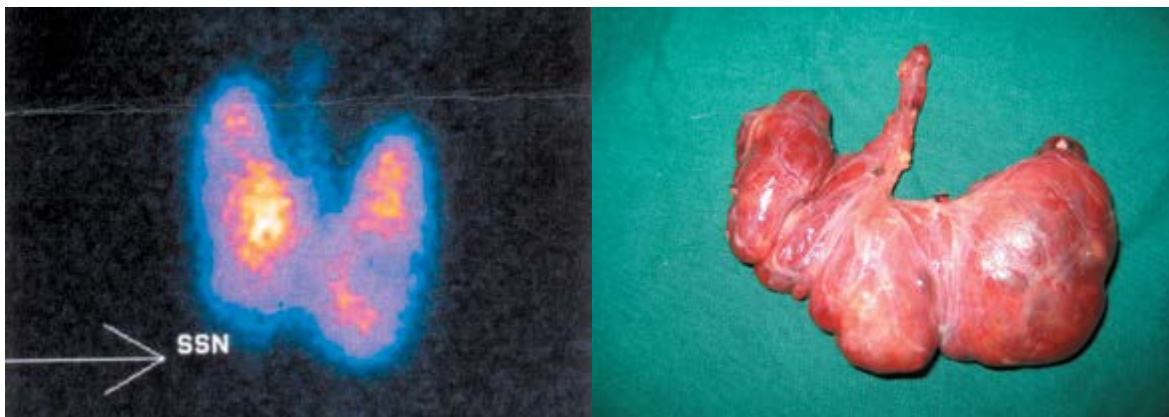
### Surgical Procedures

Broviac insertions	28
PICC line insertions	62
Bone marrow + Lumbar puncture (diagnostic and therapeutic)	4191

### Radiotherapy: 220

**Observers/Trainees:** The clinic provided regular training to postgraduate students in Radiotherapy and Medical Oncology from within RCC and also from various Medical Colleges. Observers from foreign academic institutions also attended the clinic.

# 'G' CLINIC (THYROID)



'G' clinic is a multidisciplinary clinic comprising experts from Nuclear Medicine, Surgical Oncology and Radiation Oncology divisions. The Thyroid clinic attracts cases of thyroid cancer as well as non-malignant cases. The number of thyroid cancer cases has shown a steady increase.

## Clinical Procedures/Services Offered

Patients consulted	
Patients	Number
New cases	1270
Review cases	11,959
<b>Total</b>	<b>13,229</b>

## Nuclear Medicine services

Immunoassays	SPECT Gamma camera	Radio-iodine Therapy	
		Thyroid Cancer	Thyrotoxicosis
28,523	7071	525	483

## Surgical Procedures

Total Thyroidectomy	Hemi Thyroidectomy	Revision/ Completion Thyroidectomy	Local Recurrence
156	3	89	5

**Radiotherapy: 158**

# Public Relations Activities

## Public Relations Officer: Surendran Nair V.

The Public Relations wing deals with reputation management of the centre, media relations, Cancer Care for Life scheme, security services, telephone exchange, fund raising programme, feedback process, public complaint redressal, information counter, public functions, advertisements, coordination of volunteers, poor patients welfare fund campaign, guidance to patients and preparation of brochures, articles, documentaries and other media publicity material apart from day to day communication with the patients and public.

## Fund Raising Activities

Fund raising campaign to promote contribution to the poor patients welfare fund (Akshayapathra) has been organized with the help of Philanthropic organizations. Cine artist Shri. S. Jayaram, on behalf of Jayaram Cancer Foundation agreed to associate with cancer patients welfare activities and kindly consented to be the 'Goodwill Ambassador' for the cancer awareness and rehabilitation programmes of RCC. Police Welfare Association started distribution of lunch for the bystanders since August 2012. Contributions to the poor patient welfare fund were received from several individuals and philanthropic organizations.



## Cancer Awareness Programmes

A live teleserial, 'Arogyabharatham' telecasted through Doordarshan Kendra, Thiruvananthapuram featuring various aspects of cancer is being anchored by the Public Relations Officer. More than 50 episodes of this live awareness programme were aired during the period. All India Radio, Trivandrum and various TV channels aired awareness programme on cancer with the support of PR wing.

Breast Cancer Awareness month was observed in October 2012 and 630 women underwent breast cancer detection procedure. Articles in print media, detection and awareness camps under various organizations and awareness programmes in electronic media have also been organized as part of this event. To create awareness about various patients welfare schemes of the centre classes were conducted at different parts of the State.

## Training programme

- PR wing started a unique one year 'Receptionist Trainee' programme in June 2012. Eight candidates are undergoing training.
- Public relation and communication orientation classes were conducted for various students and trainees in MSW, MHA, MBA Medical Documentation, Public Relations & Journalism etc.



# Honours, Awards and Recognitions Received

**Aleyamma Mathew**, was awarded PhD in Statistics by Mahatma Gandhi University, Kottayam.

**Aleyamma Mathew**, was awarded fellowship for attending Asia Pacific Organization of Cancer Prevention meeting at Pattaya, Thailand held on 15-17 February 2013.

**Ambily T.K.**, received 'Best Nursing Assistant-Jayashree Ramachandran Memorial Sewana Shree Award 2012'- by Jayashree Ramachandran Memorial Endowment Project.

**Asha Arjunan**, was awarded Avon Global Breast Cancer Clinical Scholars Fellowship, 2012.

**Biba V.S.**, received best poster award in the International Seminar on World Bioheritage Concerns over Climate Change (BOTANICA 2012), held at Thiruvananthapuram, 7-8 September 2012.

**Bipin T. Varghese**, was awarded PhD in Head and Neck Oncology by University of Kerala for the thesis 'Development of a strategy comprehensive post-laryngectomy rehabilitation: A Kerala perspective'.

**Bipin T. Varghese**, was selected as member, task force of ICMR subcommittee on formulation of treatment guidelines in tongue cancer and larynx and hypopharynx cancers.

**Cherian M. Koshy**, was selected as member, advisory committee constituted by the State Drugs Controller to oversee Registered Medical Institutions.

**Cherian M. Koshy**, received the bursary and award from the President of Singapore Dr. Tony Tan at the Singapore Palliative Care Congress.

**Francis V. James**, was awarded AROI-KTPL International fellowship to visit Mount Vernon Hospital, Middlesex, UK, 24 September – 12 October 2012.

**Geetha N.**, received 'Life Time Achievement Award' from Tamil Nadu Dr. MGR Medical University.

**Jayaprakash PG**, was awarded Fellowship by Indian College of Radiation Oncology (FICRO).

**Kusumakumary P.**, received special award in Modern Medicine 2011 for meritorious and dedicated services rendered to the community by State Government of Kerala.

**Kusumakumary P.**, received 'Sthree Retna' award 2013

instituted by Kerala Kalakendram.

**Maya Madhavan**, was awarded PhD by University of Kerala for the thesis, 'Molecular Biology of Tumour Metastasis'.

**Mayoora Vaidurium**, won 1st prize in the quiz competition at National conference of Association of Radiation Oncologists of India (AROICON 2012), Kolkata, 29 November - 02 December 2012.

**Paul Sebastian**, received 'Prof. Raghavachary Memorial Oration Award 2012', instituted by Association of Surgeons of India, Kerala Chapter.

**Paul Sebastian**, received 'Dr. T.B. Patel Oration Award 2012', instituted by Gujarat Cancer Society and Gujarat Cancer Research Institute, Ahmedabad.

**Prabha Pillai**, received Award of Excellence for oral presentation at 3rd International Conference of the Carcinogenesis Foundation: Frontiers in Carcinogenesis and Preventive Oncology, Molecular Mechanisms of Therapeutics, New Delhi, 19-21 November 2012.

**Preethi Sara George**, received Young Investigator Award at the 6th Asia Pacific Organization of Cancer Prevention General Assembly meeting, Sarawak, Malaysia, 26-29 April 2012.

**Ramadas K.**, received Spirits of Humanity Award for Oncology Research for the year 2011 from Americares India.

**Rekha A. Nair**, was selected as Research Guide, University of Kerala and Amrita Vishwa Vidyapeetham.

**Sangeetha Vijay**, received Travel Award from ICMR, DST and DBT to present a poster at the 'International Conference on Emerging Cell Therapies', 1-3 October 2012.

**Sanudev Sadanandan**, won the 1st prize in the quiz in connection with the ESMO updates 2012 at AIMS Kochi.

**Sindhu. G.**, received 'Best Nurse-Jayashree Ramachandran Memorial Sewana Shree Award 2012'- by Jayashree Ramachandran Memorial Endowment Project.

**Sudha. P.**, secured 1st rank in MHA examination conducted by University of Kerala.

**Transfusion Medicine Division** has been chosen as the Blood Bank with the maximum number of voluntary donors for the year 2012 by Kerala State AIDS Control Society.

# Functions, Workshops & Conferences Organised

Sl. No.	Name of Programme	Date
1.	Inauguration of State Level Workshop for Dental Surgeons on 'Prevention & Control of Oral Cancer'.	20 May 2012
2.	Inauguration of High-tech Ambulance by Dr.T.N. Seema, MP, Rajyasabha. (Acquired using MP's LAD fund )	18 June 2012
3.	Commissioning of Picture Archiving & Communication System (PACS) & Digital Breast Imaging Unit by Hon'ble Chief Minister Shri. Oommen Chandy.	10 July 2012
4.	RCC Day Celebrations	7 Oct 2012
5.	World Palliative Care Day.Theme:'Living to the end, palliative care for an aging population'.	13 Oct 2012
6.	National Cancer Registry Programme (ICMR): 28th Annual Review Meeting	4-7 Dec 2012
7.	14th National Conference on Oncology Nursing.Theme: 'Overcoming challenges in oncology nursing: Harmonizing our voices'.	1-2 Feb 2013
8.	International Childhood Cancer Day	15 Feb 2013
9.	ISCON 2013: India-Singapore International Conference.	15-16 Mar 2013
10.	Inauguration of state-of-the-art ICU in Paediatric Oncology Division by Dr. Shashi Tharoor, Hon'ble Union Minister of State for Human Resource Development. (Acquired using MP's LAD fund)	28 Mar 2013



## Distinguished Visitors/Talk delivered

Sl. No.	Visitor/Talk delivered	Date
1.	Mr. Rolf Kjellstrom, Global Vice-President, Elekta Medical Systems. Talk: 'Non-invasive treatment of intracranial tumours'.	22 August 2012
2.	Dr. Parameswaran Hari, Section and Clinical Director, Bone Marrow Transplantation and Associate Professor of Medicine, Medical College Wisconsin, USA. Talk: 'Current role of stem cell transplant in solid tumours'.	1 January 2013
3.	Late Prof. Kian Ang, Professor of Radiation Oncology, MD Anderson Cancer Center, Houston, Texas, USA. Talk: 'Treatment modalities in locally advanced head and neck cancer'.	11 March 2013
4.	Dr. Francesco Grossi, Director, Lung Cancer Unit and Chairman, Disease Management Team (Lung cancer), National Institute of Cancer Research, Genova, Italy.	28 March 2013

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

## INTERNATIONAL

Sl. No.	Participant/Speaker	Conference/Meeting	Date & Venue	Title of the Paper/Participants' status
1	Aleyamma Mathew	6 <sup>th</sup> Asia Pacific Organization of Cancer Prevention General Assembly Meeting	26-29 Apr 2012, Sarawak, Malaysia	Paper: 'Improvement of cancer registration in Thiruvananthapuram after overcoming the barriers'.
2	Aleyamma Mathew	12 <sup>th</sup> Annual Meeting of Asia Pacific Organization for Cancer Prevention	15-17 Feb 2013, Pattaya, Thailand	Talk: 'Cancer registration and cancer control programmes in India'.
3	Asha Arjunan	Society for Neuro Oncology (SNO) Annual Meeting	15-18 Nov 2012, Washington, USA	Participant
4	Beela Sarah Mathew	ATLAS Steering Committee & EBCTCG Meeting	Sept 2012, Oxford University, UK.	ATLAS Investigator
5	Chandramohan K.	ACRSICON 2012: Colorectal meeting	25-26 Sept 2012, Dubai	Talk: 'Carcinoma rectum'.
6	Cherian M. Koshy	5 <sup>th</sup> Singapore Palliative Care Congress	14 -15 July 2012, Singapore	Poster: 'Telemedicine services in palliative care'.
7	Divya K.T.	Varian Advanced Techniques Physics Course	8-9 Nov 2012, Zug, Switzerland	Participant
8	Elizabeth Mathew lype	Annual meeting of the Laryngology Association: 'Cutting Edge Laryngology for the 21 <sup>st</sup> Century'.	1-3 June 2013, Kuala Lumpur	Talk: 1. 'Tracheal resection: surgical and functional results'. 2. 'Neck metastasis in carcinoma larynx'.
9	Geetha, N.	Educational Cancer Convention Lugano	April 2012, Lugano	Paper: 'Hematologic and cytogenetic response to Imatinib in CML'.
10	Jayaprakash P.G.	7 <sup>th</sup> International Conference on Teenage & Young adult Cancer Medicine.	25-26 June 2012, London, UK.	Participant
11	Jayaprakash P.G., Ratheesan K, Asha Arjunan	Breast Cancer Symposium 2012	13-15 Sept 2012, San Francisco, USA	Participants
12	Jayaprakash P.G., Ratheesan K.	ASTRO Annual Conference.	28-31 Oct 2012, Boston, USA	Participants
13	Jayaprakash V.	Training in Epicure Software for Statistical analysis.	18 Dec 2012- 10 Jan 2013, Japan	Participant

14	Joe D'Cruz	Centricity PACS RA 1000 Application Management Advanced HQ Instructor Led	17- 18 Dec 2012, Illinois, USA	Participant
15	Madhu Muralee	Surgical Oncology Conference at National Cancer Centre, Singapore	17-19 May 2012, Singapore	Best paper award: 'Role of level III nodal dissection in carcinoma breast'.
16	Madhu Muralee	'Randomized Control Trial Course' organized by Oxford University	16-21 Sept 2012, Oxford	Participant
17	Nebu A. George	Surgical Oncology Conference at National Cancer Centre, Singapore	17-19 May 2012, Singapore	Paper: 'Comorbidity as a predictor of mortality in head and neck cancers'.
18	Nebu A. George	American Head and Neck Society Meeting 2012: 8 <sup>th</sup> International Congress on Head and Neck Cancer	21-25 July 2012, Toronto, Canada	Paper: 'A novel morbidity prediction score for head and neck oncosurgery'.
19	Neelima N., Shaji J.	Center for Office Automation, Information Technology and Telecommunication: CeBIT 2013	5-9 Mar 2103, Herbon, Germany	Participants
20	Preethi Sara George	6 <sup>th</sup> Asia Pacific Organization of Cancer Prevention General Assembly Meeting	26-29 Apr 2012, Sarawak, Malaysia	Paper: 'Comparison of artificial neural network with logistic regression as classification models for variable selection for prediction of breast cancer patients outcome'.
21	Priya Kumari T.	SIOP 2012. The 44 <sup>th</sup> Congress of the International Society of Pediatric Oncology	5- 8 Oct 2012, London, UK	Poster: 'Molecular analysis of fusion genes among pediatric B lineage acute lymphoblastic leukemia in Kerala'.
22	Rachel Cherian Koshy	Workshop on Advanced Haemodynamic monitoring in Centres of Excellence	Dec 2012, Asan Medical Center, Seoul, South Korea	Participant
23	Ramachandran K.	Centricity PACS RA 1000 Application Management Advanced HQ Instructor Led	17- 18 Dec 2012, Illinois, USA	Participant
24	Ramadas K.	Richard Dole Centenary Celebrations	28-31 Oct 2012, Oxford, UK	Faculty
25	Rekha A. Nair	16 <sup>th</sup> meeting of the European Association for Haematopathology	20 -25 Oct 2012, Lisbon, Portugal	Paper: 'Adult T cell leukemia/lymphoma: Hotspot in South India'.

26	Sangeetha Vijay	Asian Oncology Summit 2013	22-24 Mar 2013, Bangkok, Thailand.	Paper: 'Disease modifying effect of glutathione-S-transferase (GST's) polymorphisms in chronic myeloid leukemia patients on Imatinib Mesylate: Role in treatment response and resistance patterns'.
24	Sangeetha Vijay	International Conference on Emerging Cell Therapies	1-3 Oct 2012, Chicago, USA	Paper: 'Significance of BCR-ABL mutations, atypical FISH signal patterns and gene amplifications in Imatinib Mesylate: A South Indian study'.
28	Sreekumar A.	Working Group Meeting of Thyroidologists	14-25 Dec 2012, Japan	Talk: 'Thyroid disorders in HBRA'.
29	Sumod Mathew Koshy	Workshop on Mammography and Breast Interventions	28 Mar 2013, Sultan Khaboos University Hospital, Muscat	Talk: 'Stereotactic breast biopsy: our institutional experience'.
30	Sumod Mathew Koshy, Basil Varghese	GE Centricity PACS RA1000 Master Trainer course: Training for Picture Archiving and Communication System	27-31 Aug 2012, GE Healthcare Institute, Waukesha, USA	Participants
31	Susan Mathews	'IGCS' biennial meeting.	13-16 Oct 2012, Vancouver, Canada	Participant

## NATIONAL

Sl. No	Participant/Speaker	Conference/Meeting	Date & Venue	Title of the Paper/Talk/ Participants' status
1.	Abraham Shiny, Geetha Kumari D, Simmy Panicker, Anila Kumari PV	Managerial skills for Nurse Administrator	25-26 May 2012 College of Nursing, Thiruvananthapuram	Participants
2.	Aleyamma Mathew	52 <sup>nd</sup> Annual Conference of National Academy of Medical Sciences	12-14 Oct 2012, Chennai	To receive scroll of honour as Fellow of the National Academy of Medical Sciences.
3.	Aleyamma Mathew	Workshop on Statistics for College Teachers	8 Dec 2012, UGC-Academic Staff College, University of Kerala	Talk: 'Research methods in Life & Medical Sciences'.
4.	Aleyamma Mathew	National Conference on Statistics for 21 <sup>st</sup> Century	10-12 Dec 2012, University of Kerala.	Talk: 'Cancer registries and cancer statistics in India'.
5.	Aleyamma Mathew	International Conference on Epidemiology	16-18 Aug 2012, Pala, Kottayam	Talk: 'Cancer in India and risk factors'.
6	Aleyamma Mathew	Workshop on Survey Methods	28 Feb-2 Mar 2013, Thiruvananthapuram	Talk: 'Bias in epidemiologic studies'.
7	Alfy Ann George, Smitha P. Nair, Preethi, T.R., Nileena Nayak	69th Annual Conference of Indian Association of Pathologists and Microbiologists, Kerala Chapter Meeting	11 Aug 2012, Thiruvalla	Participant
8	Alfy Ann George, Smitha P. Nair	Postgraduate CME in Haematology	August 2012, Christian Medical College, Vellore	Participant
9	Alfy Ann George, Smitha P. Nair	Calipath 2012	October 2012	Participant
10	Alphy Rose James	25th Kerala Science Congress	29 Jan 2013, Thiruvananthapuram	Paper: 'Multiple RT-PCR in analyzing multiple translocations and mutations in leukemia: A step forward to personalized medicine.'
11	Anila K.R.	APCON 2012: 61 <sup>st</sup> Annual Conference of Indian Association of Pathologists and Microbiologists	14-16 Dec 2012, Jamnagar	Paper: 'Role of frozen section in intraoperative analysis of margins during breast conserving surgery'.
12	Anila K.R.	ISCON 2013: India-Singapore International Conference.	15-16 Mar 2013, Thiruvananthapuram	Faculty
13	Anila K.R.	Update in Thyroid Pathology	7-8 Feb 2013, CMC, Vellore	Participant
14	Anitha Mathews, Anila K.R., Preethi T.R.	International Academy of Pathology – Indian Division Mid year Teaching Programme 2012: Pathology of Endometrium and Ovary.	29-30 June 2012, Bangaluru.	Participants

15	Anitha Mathews	Neuropath 2013: Recent advances in Diagnostic Neuropathology.	1-3 Feb 2013, Delhi	Faculty
16	Anoop, T.M., Abdul Shahid, Lakshmi Haridas	Evidence-Based Management of Common Cancers	1-3 March 2013, TMH, Mumbai	Participants
17	Anto Baby	10 <sup>th</sup> Asian Society of Neuro-Oncology Meeting.	20-24 Mar 2013, Mumbai	Poster: 'Anaplastic ependymoma presenting as an extradural mass: a case report'.
18	Anupama Susmitha	14 <sup>th</sup> National Oncology Nursing Conference: Preconference Session	31 Jan 2013, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Evidence based practice in mucositis'.
19	Anupama Susmitha	14 <sup>th</sup> National Conference in Oncology Nursing	1-2 Feb 2013, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Nursing Issues in managing patients undergoing radiation therapy'.
20	Anupama Susmitha	Care of the elderly: World hospice and palliative care day	13 Oct 2012, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Challenges in the care of elderly'.
21	Aravind S.R.	Workshop on Microarray Analysis	16-20 July 2012, Bangaluru	Participant
22	Arunkumar N.	Current concepts in Pathology	27 Oct 2012, Mahatma Gandhi Medical and Research Institute, Pondicherry	Participant
23	Arunkumar N.	69 <sup>th</sup> Annual Conference of Indian Association of Pathologists and Microbiologists, Kerala Chapter Meeting	11 Aug 2012, Thiruvalla	Poster: 'Usual tumours at unusual sites in GIT'.  Paper: 'Diagnosis of germ cell tumors by cytology: a one year study in correlation with tumour markers and clinical follow up'.
24	Arunkumar N.	70 <sup>th</sup> Annual Conference of Indian Association of Pathologists and Microbiologists, Kerala Chapter Meeting	9 Feb 2013, Alappuzha	Paper: 'Anaplastic large cell lymphoma of cerebellum'.
25	Arunkumar N.	39 <sup>th</sup> Annual KCIAPM conference and CME	6-9 Sept 2012, Bangaluru	Participant
26	Arunkumar N.	CME on Breast Pathology	10 Nov 2012, Jubilee Mission Medical College, Thrissur.	Participant

27	Arunkumar N.	Genopath2013	10-11 Feb 2013, Alappuzha	Participant
28	Arunkumar N., Sindhu Nair P.	INSIGHT: CME on Bone Tumours	3 Mar 2013, Thiruvananthapuram	Participants
29	Arun Sankar S.	Young Radiation Oncologists' Conference 2013	2-3 Feb 2013, Malabar Cancer Centre, Thalassery	Best paper award: 'Accelerated fractionation for early glottic carcinoma: single institute experience'.
30	Basil Varghese, Shaji J.	National Knowledge Network: Annual Meet	9-10 May 2012, NIIIST, Thiruvananthapuram	Participants
31	Beela Sarah Mathew	27 <sup>th</sup> Annual Conference of the Association of Radiation Oncologists of India, TN & Puducherry Chapter	Oct 2012, Puducherry	Invited talk: 'Radiation therapy for the conserved breast: Is there a standard?'
32	Beela Sarah Mathew	10 <sup>th</sup> Asian Society of Neuro-Oncology Meeting.	20-24 Mar 2013, Mumbai	Participant
33	Beena Koshy	14 <sup>th</sup> National Oncology Nursing Conference: Preconference Session	31 Jan 2013, Thiruvananthapuram	Talk: 'Standards in oncology nursing practice'.
35	Beena Koshy	14 <sup>th</sup> National Conference in Oncology Nursing	1-2 Feb 2013, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Biotherapy'.
36	Bhagyalakshmi R., Deepthi J. Prabhu, Viji S. Pillai	JAI CME and workshop on ultrasound guided nerve block	4-5 July 2012, Thrissur	Participants
37	Bhagyalakshmy R, Mallika Balakrishnan, Viji S. Pillai	Ultrasound in Critical Care	27 Oct 2012, Thiruvananthapuram	Participants
38	Biba V.S.	International Seminar on World Bio-heritage Concerns over Climate Change with a special reference to Ethnic Vegetables (Botanica 2012).	7- 8 Sept 2012, Thiruvananthapuram	Paper: 'Antimicrobial, antioxidant, antiproliferative and apoptosis inducing properties of active principles from <i>Annona squamosa</i> seeds.
39	Biba V.S.	Carcinogenesis 2012	19-22 Nov 2012, New Delhi	Paper: 'Antiproliferative, apoptotic and chemopreventive efficacy of active fraction from <i>Annona squamosa</i> seeds.'
40	Biju Azariah, Rajeev KR, Mayoora Vaidooriam, Sanudev Sadanandan	Oncology 2012	4-6 May 2012, Kovalam	Poster: 'Image guided brachytherapy in carcinoma cervix: a feasibility study'.



41	Biju Azariah, Rajeev KR, Mayoora Vaidooriam, Sanudev Sadanandan	Association of Radiation Oncologists of India National Conference	28 Nov-2 Dec 2012, Kolkata	Poster: 1. 'Pure epithelial pecoma of kidney: a case report and literature review'. 2. 'Comparison of dosimetry between electrons and tangential photons in postmastectomy chest wall irradiation'.
42	Bindhu M, Bincy Lukose, Divya Das, Ducakis	Oncology Nursing Update II	4-10 Sep 2012, Regional Cancer Centre, Thiruvananthapuram	Participants
43	Binitha R., Priya Kumari T., Venugopal M.	International Health Summit and Diamond Medicon 2012	30-31 Dec 2012, Thiruvananthapuram	Participants
44	Bipin T. Varghese	8 <sup>th</sup> South Zone and the 31 <sup>st</sup> Andhra Pradesh ENT Conference.	12 – 14 Oct 2012, Vijayawada.	Panelist for thyroid cancer and Chaired session. Paper: 'Stapler laryngectomy'.
45	Bipin T. Varghese	APLAST 2013: Tutorials in Plastic Surgery conducted jointly by the Plastic surgery Department of Amrita Institute of Medical Sciences and the Kerala Plastic Surgeons Association (KPSA).	29-31 Mar 2013, AIMS, Kochi.	Talk: 'Reconstruction of lip'.
46	Bipin T. Varghese	CME on T3 Laryngeal and Hypopharyngeal Cancers	1 Aug 2012, Mumbai	Panelist
47	Bipin T. Varghese	CME and Cadaveric Workshop on Head and Neck Oncology.	1-3 June 2012, Kasturba Medical College, Manipal	Panelist for reconstruction panel and faculty for cadaver dissection course.
48	Chandramohan K.	National Congress of International Hepato-Pancreato Biliary Association	15-17 Feb 2013, Coimbatore	Participant
49	Chandramohan K., Madhu Muralee	Evidence-Based Management of Common Cancers	1-3 March 2013, TMH, Mumbai	Participants
50	Chandramohan K.	Indian Association of Surgical Oncology National Conference	24-27 Oct 2012, Goa	Panelist for: 'Should all rectal cancers be managed laparoscopically?'  Paper: 'Diagnostic thoracoscopy'.
51	Chandramohan K.	Association of Surgeons of India National Conference	25-30 Dec 2012, Kolkata	Participant
52	Chandramohan K.	Global Oncology Summit	28-31 Mar 2013, Hyderabad	Panelist

53	Cherian M. Koshy	14 <sup>th</sup> National Conference on Oncology Nursing	1-2 Feb 2013, RCC, Thiruvananthapuram	Talk: 'Living before leaving: the ethos of palliative care'.
54	Cherian M. Koshy	'Jiv Daya' Annual Meeting	15 Mar 2013, New Delhi	Talk: 'Palliative care activities in RCC, Trivandrum'.
55	Chithra V.G., Julie Mariyam Jacob	Workshop on Paediatric Oncology Nursing	10-14 Dec 2012, Tata Memorial Hospital, Mumbai	Participants
56	Christo Rajan	Carcinogenesis 2012	19-22 Nov 2012, New Delhi	Paper: 'MiRNA signature in oral squamous cell carcinoma.'
57	Christo Rajan	25th Kerala Science Congress	29 Jan 2013, Thiruvananthapuram	Paper: 'Study on the significance of micro-RNA expression pattern in oral carcinoma.'
58	Christo Rajan	Workshop on microarray data analysis using R/Bioconductor.	16 – 18 Jan 2013, Thiruvananthapuram	Participant
59	Deepak Roshan V.G.	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Influence of transcriptional and post-translational pathways in maintaining high level cyclin D1 in oral carcinoma.'
60	Deepthi J. Prabhu, Subha R.	SWASTHI 2012: Workshop on Ultrasound Guided Nerve Blocks	23 Sep 2012, Thiruvananthapuram	Participants
61	Deepthi J. Prabhu, Venugopal A.	NIZWAS 2012: Critical care session	9 Sep 2012, Thiruvananthapuram	Participants
62	Elizabeth Mathew Iype	ISCON 2013: India-Singapore International Conference	15-16 Mar 2013, Thiruvananthapuram	Chaired session on 'Organ preservation protocols in laryngeal cancers'.
63	Elizabeth Mathew Iype	International Federation of Head and Neck Oncology Meeting	20-23 Oct 2012, Ahmedabad	Judge for the free paper presentation
64	Farha A.K.	International Seminar on World Bio-heritage Concerns over Climate Change with a special reference to Ethnic Vegetables (Botanica 2012).	7-8 Sept 2012, Thiruvananthapuram	Paper: 'Isodeoxyelephantopin, a sesquiterpene lactone, from <i>Elephantopus scaber</i> induces cell cycle arrest and apoptosis in tumour cells.'
65	Farha A.K.	25th Kerala Science Congress	29 Jan 2013, Thiruvananthapuram	Paper: 'Apoptotic effect of deoxyelephantopin, a sesquiterpene lactone, from <i>Elephantopus scaber</i> on lung adenocarcinoma cells'.

66	Farha A.K.	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Deoxyelephantopin induces caspase 3 dependent apoptosis in colon cancer (HCT116) cells'.
67	Geetha Kumari B.S.	Leadership skills and group dynamics.	25 Mar 2013, KIMS, Thiruvananthapuram	Participant
68	Hariharan S.	Symposium and Workshop on Epigenomics and Cancer Informatics	10-12 Jan 2013, Manipal	Participant
69	Hashim K.V.	Railway Forum ISAKON	Aug 2012, Kolkata	Best paper award: 'Management of acute massive blood loss in oncosurgery: a case report'.
70	Jayakrishnan R.	14 <sup>th</sup> National Conference in Oncology Nursing	1-2 Feb 2013, Regional Cancer Centre, Thiruvananthapuram	Paper: 'Tobacco related cancers: where we stand and what next?'
71	Jayalekshmi P.	Annual Review Meeting of NCRP (ICMR)	4 -7 Dec 2012, Thiruvananthapuram	Talk: 'Cancer incidence and mortality in Kollam for the year 2009-2010'.
72	Jayaprakash P.G., Francis V. James	Oncology-2012	4-6 May 2012, Kovalam	Faculty
73	Jayaprakash P.G., Francis V. James	Association of Radiation Oncologists of India National Conference	28 Nov-2 Dec 2012, Kolkata	Faculty
74	Jayaprakash P.G., Sanudev Sadanandan, Milan, Jacob	Cancer Conference International 2013	8-10 Feb 2013, Hyderabad	Poster: 'Solitary plasmacytoma of testis: a case report & review of literature'.
75	Jayaprakash P.G., Rajeev KR, Sanudev Sadanandan	Symposium on advances in Radiobiology	23- 24 Feb 2013, AIMS, Kochi	Faculty Participants
76	Jayasree C.G.	14 <sup>th</sup> National Oncology Nursing Conference: Preconference Session	31 Jan 2013, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Care of patients after reconstructive surgeries'.
77	Jayasree K., Thara Somanathan	2nd CME on Biopsy Interpretation in Surgical Oncopathology and Ortho Patho Radio meeting	12-14, Oct 2012, Tata Memorial Hospital, Mumbai	Faculty
78	Jayasree K.	Symposium on Lung Tumours	Aug 2012, Thiruvananthapuram	Faculty
79	Jayasree K.	Lung Tumour Update	Oct 2012, MIMS, Kozhikode	Faculty
80	Jayasree K.	CME on Breast Pathology Interpretation in Oncopathology.	Nov 2012, Thrissur	Faculty

81	Jayasree K.	Biopsy interpretation in Surgical Pathology	20 Oct 2012, TMH, Mumbai	Participant
82	Jayasree K.	Seminar on Prevention of Workplace Sexual Harassment.	13 Feb 2013, Thiruvananthapuram	Participant
83	Jayasree K.	2013: Annual CME on Bone Tumours	24 Mar 2012, Thiruvananthapuram	Faculty
84	Jayasudha A.V.	70 <sup>th</sup> Annual Conference of Indian Association of Pathologists and Microbiologists, Kerala Chapter Meeting	9 Feb 2013, Alappuzha	Participant
85	Jayasudha A.V., Nileena Nayak, Thara Somanathan	2nd CME on Biopsy Interpretation in Surgical Oncopathology and Ortho Patho Radio meeting	12-14, Oct 2012, Tata Memorial Hospital, Mumbai	Participants
86	Jessy Thomas, Jikky M., Jaya T.S., Saraswathy Amma P., Sindhu S., Maya K.B., Lizy Varkey, Anitha Kumari P.V., Jyothilekshmi D., Mangalam S., Indu V.S., Sajitha S., Kumari Sindhu S., Indira Devi, Vijaya A.K., Sindhu G.	HIV/AIDS and ART Training for Nurses under Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM)	6 days training each April 2012-March 2013 Govt. College of Nursing, Thiruvananthapuram	Participants
87	Jessy Thomas, Joby Paul	Workshop on Haematological Malignancy.	1-2 Mar 2013, Pune	Participants
88	John S., Geetha O.	National Cancer Registry Programme (ICMR): 28 <sup>th</sup> Annual Review Meeting	4-12 Dec 2012, Thiruvananthapuram	Participants
89	Justin K. George	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Study of estrogen and progesterone receptor status in thyroid tumors'.
90	Kannan S.	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Talk: 'MicroRNA signature in oral squamous cell carcinoma'.
91	Kurian Cherian, Venugopal M.	India- Singapore International Conference	15-16 Mar 2013, Thiruvananthapuram	Participants
92	Kusumakumary P.	Kerala Pedicon 2012	24-25 Oct 2012, Kozhikode	Talk 1: 'Having a hematology oncology set-up forth have nots'.  Talk 2: 'Emergencies in childhood malignancies: readiness to respond rapidly'.

93	Kusumakumary P.	COPE 2013: Cancer Institute orientation program for DM students	23 Feb 2013, Chennai	Participant
94	Lakshmi S.	Summer School Programme in Role of Infections in Human Cancers.	Nov 2012, Thiruvananthapuram	Participant
95	Lakshmi S., Sreelekha T.T.	DST Training Program on Communication and Presentation Skills	7-11 Jan 2013, GOA	Participants
96	Lakshmi S.	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Participant
97	Lakshmi S.	One Day Seminar On Methodology and Perspectives in Plant Science	19 Feb 2013, Thiruvananthapuram	Talk: 'A look inside the biological building blocks'.
98	Lal K. Nair	16 <sup>th</sup> Annual Conference of Radiation Therapy Technologists of India	12-14 Oct 2012, Hyderabad	Paper: 'Role of multi leaf collimators in IMRT'.
99	Lizyamma Jacob	13 <sup>th</sup> National Conference on Oncology Nursing	2-4 May 2012, Tata Memorial Hospital, Mumbai	Paper: 'Adequacy of information provided to head and neck surgical patients'.
100	Lizyamma Jacob	HIV/AIDS training for Nurse managers	26 Sep 2012, College of Nursing, Thiruvananthapuram	Participant
101	Lizyamma Jacob, Bindhu Rani P.V.	Issue and Challenges in Managing Biomedical waste and the Phasing out of Mercury from Health care sector in Kerala	28 Nov 2012, Thiruvananthapuram	Participants
102	Madhu Muralee	KASICON 2012 : Annual Conference of Association of Surgeons of India (Kerala chapter)	6-9 May 2012, Kottayam	Participant
103	Madhu Muralee	ASCON2012: Golden Jubilee CME on Head and Neck Surgery.	10 Nov 2012, Alappuzha	Quiz master
104	Madhu Muralee	ASGCON 2013	26-27 Jan 2013, Kannur	Talk: 'Incomplete doughnut in anterior resection'.
105	Madhu Muralee	ASI peripheral meet	23-24 Feb 2013, Wayanad	Panel discussion on: 'Ductal carcinoma in situ'.
106	Madhu Muralee	India- Singapore International Conference	15-16 Mar 2013, Thiruvananthapuram	Moderator for a panel discussion on rectal cancers. Quiz master

107	Mallika Balakrishnan	India- Singapore International Conference	16 Mar 2013, Thiruvananthapuram	Talk: 'Enhanced recovery after colorectal surgery'.
108	Mallika Balakrishnan	Annual CME of ISCCM Trivandrum: Intensive Care Update	28 Oct 2012, Thiruvananthapuram	Participant
109	Manu M. Joseph	Workshop on Microarray Analysis	16-20 July 2012, Bangaluru	Participant
110	Manu M. Joseph	25 <sup>th</sup> Kerala Science Congress	29 Jan 2013, Thiruvananthapuram	Paper: 'PST-Dox nanoparticles abate doxorubicin induced toxicity while maintaining anti-tumor efficacy'.
111	Manu M. Joseph	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Polysaccharide PST001 attenuates doxorubicin induced toxicity in PST-Dox nanoparticle with enhanced antitumor efficacy'.
112	Manu M. Joseph	National Colloquial on Transnational Health Science	18-19 Mar 2013, Thiruvananthapuram	Participant
113	Nalinakumari K.R.	CME on Diagnostic Pathology of Head & Neck Tumours	20 Jan 2013, Govt. Dental College, Thiruvananthapuram	Participant
114	Nileena Nayak	Symposium on Management of Neck nodes: Preoperative assessment of neck nodes: Role of pathologist.	Nov 2012, Alapuzha	Faculty
115	Parameswaran S.	Breast Cancer Foundation of India Meeting	March 2013, Pune	Chairperson: Opening scientific session
116	Parameswaran S.	CME on Breast Cancer	May 2012, Patna	Chairperson: Session on partial breast irradiation
117	Paul Sebastian	Tobacco Control Leadership Programme by the Johns Hopkins Bloomberg School of Public Health (JHSPH)	5 – 9 Nov 2012, New Delhi	Participant
118	Paul Sebastian, Francis V. James, Beela Sarah Mathew, Chandramohan K.	INDOX Annual Meeting	24 Nov 2012, Jaipur	Participants
119	Paul Sebastian	ASCON2012: Golden Jubilee CME on Head and Neck Surgery.	10 Nov 2012, Alappuzha	Participant

120	Paul Sebastian	KASICON 2012: Annual conference of Association of Surgeons of India (Kerala chapter)	6-9 May 2012, Kottayam	Talk: 'Prof. Raghavachary oration 2012 on 'Philosophy and Science of Oral Cancer Control: Journey Over Three Decades'.
121	Prabha Pillai	Carcinogenesis 2012	19-21 Nov 2012, New Delhi	Paper: 'Implications of STAT3 inhibition in breast cancer progression'.
122	Preethi Sara George	International Conference on Epidemiology	16-18 Aug 2012, Kottayam	Paper: 'Prognostic factors of breast cancer: Comparison of three data mining methods'.
123	Preethi Sara George	National Conference on Statistics for 21 <sup>st</sup> Century	10-12 Dec 2012, Thiruvananthapuram	Talk: 'Comparison of decision tree model Vs. regression model'.
124	Preethi Sara George	Workshop on Survey Methods	28 Feb-2 Mar 2013, Thiruvananthapuram	Talk: 'Data processing and analysis'.
125	Preethi T.R., Sindhu Nair P.	18 <sup>th</sup> Indo- US International CME	1-3 Feb 2013, JIPMER , Puducherry	Participant
126	Priya K.L.	World Hospice and Palliative care day: Care of the elderly	13 Oct 2012, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Introduction to geriatric nursing'.
127	Priya Kumari T.	Oncology 2012: International Conference on Multidisciplinary Management of Common Cancers	4 -6 May 2012, Thiruvananthapuram	Participant
128	Priya Mary Jacob	Oncology 2012: Workshop on Molecular Oncology	6 May 2012, Thiruvananthapuram	Participant
129	Priya Mary Jacob	5 <sup>th</sup> Annual Meeting of the Cytometry Society	12-13 Oct 2012, Kolkata	Talk: 'Challenges in diagnosis of leukemias/lymphomas'.
130	Priya Mary Jacob	9 <sup>th</sup> Clinical Cytometry Course	15 Feb 2013, TMH, Mumbai	Participant
131	Rachel Cherian Koshy	'Inspire' CME	14 Dec 2012, Thiruvananthapuram	Participant
132	Rachel Cherian Koshy	ISA meeting	17 Nov 2012, Thiruvananthapuram	Chaired session: 'Acute pain service'.
133	Raghukumar P.	Workshop on Radiation safety & QA in Medical Imaging	4 Mar 2013, Kochi	Talk: 'Computed/digital radiography'.
134	Raghukumar P, Thayal Sigh Elias, Saju B.	Annual Conference of Association of Medical Physicists of India.	1-3 Nov 2012, Mangalore	Participants



135	Raghukumar P.	2D-3D Transition in Image based Brachytherapy for Cervical Cancers.	11-12 Jan 2013, TMH, Mumbai	Participant
136	Raghukumar P.	Association of Radiation Oncologists of India National Conference	28 Nov-2 Dec 2012, Kolkata	Poster: 'Image guidance in cervical brachytherapy: a feasibility study'.
137	Rajani R.V.	14 <sup>th</sup> National Conference in Oncology Nursing	1-2 Feb 2013, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Bone marrow depression: Nursing concerns'.
138	Rajesh R. Chandran	Indian Society of Blood Transfusion & Immunohaematology: ISBTI National Conference	Nov 2012, Jaipur	Participant
139	Rajeev K.R.	Association of Radiation Oncologists of India National Conference	28 Nov-2 Dec 2012, Kolkata	Paper: 'Comparative study of set up variations and bowel volumes in supine Vs prone positions of patients treated with EBRT for Ca rectum'.
140	Rajeev K.R.	10 <sup>th</sup> Asian Society of Neuro-Oncology Meeting.	20-24 Mar 2013, Mumbai	Paper: 'Primary Ewings sarcoma spine: case report and review of literature.
141	Rajeev KR	Young Radiation Oncologists' Conference 2013	2-3 Feb 2013, Malabar Cancer Centre, Thalassery	Best paper award: 'A comparative study of set up variations and bowel volumes in supine Vs prone positions of patients treated with external beam radiation for carcinoma rectum'.
142	Ramachandran K.	IRIA Kerala Teaching Programme on Neuroradiology	10 & 12 Aug 2012, Thiruvananthapuram	Talk: 'Worked up cases in neuroradiology'.
143	Ramachandran K.	ISCON 2013: International Conference on Gynaecological Cancers	16 <sup>th</sup> Mar 2013, Thiruvananthapuram.	Panelist in carcinoma cervix
144	Ramachandran K.	IR & IA, Kerala State Annual Conference	24 Mar 2013, Thiruvananthapuram	Conducted Radiology Quiz
145	Ramachandran K., Venugopal M., Jiji V.	Jyothir Gamaya – 9: Paediatric Ultrasound Clinics	25 Nov 2012, Thiruvananthapuram	Participants
146	Ramadas K.	ISCON 2013: International Conference on Head & Neck Cancers.	March 2012, Thiruvananthapuram	Faculty
147	Ramadas K.	American Oncology Cancer Congress	26 Aug 2012, Hyderabad	Faculty

148	Ramadas K.	Summer School Programme in Role of Infections in Human Cancers.	5-7 Nov 2012, Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram.	Faculty
149	Rekha A. Nair	CME on Oncology update 2012: GIST and Lymphoma	20-21 Jul 2012, Thrissur	Faculty
150	Rekha A. Nair	Clinical and Research Applications	7-12 May 2012, SCTIMST, Thiruvananthapuram	Faculty
151	Rema P.	CME 2012: Annual Meet of Indian Society of Oncology.	14 July 2012, AIMS, Kochi	Talk: 'HPV vaccination: Where are we now?'
152	Rema P.	Annual Conference of Association of Gynecologic Oncologists of India	30 Nov-2 Dec 2012, Mumbai	Talk: 'Endometrial pathology in breast cancer patients on tamoxifen'.
153	Rema P.	India- Singapore International Conference	15-16 Mar 2013, Thiruvananthapuram	Talk: 'Germ cell tumors: Decoding the enigma'.
154	Renu S.	ISCON 2013: India-Singapore International Conference.	15-16 Mar 2013, Thiruvananthapuram	Faculty
155	Renu S.	Oncology 2012: International Conference on Multidisciplinary Management of Common Cancers.	May 2012, Thiruvananthapuram	Paper: 'The accuracy of frozen section examination in the diagnosis of breast lesions: A 3 year study'
156	Roshni S.	ISCON 2013: India-Singapore International Conference.	15-16 Mar 2013, Thiruvananthapuram	Faculty
157	Roshni S.	Trivandrum Oncology Club Meeting	9 Nov 2012, Thiruvananthapuram	Talk: 'Management of advanced stomach cancer'.
158	Roshni S.	14 <sup>th</sup> National conference on Oncology Nursing	1 Feb 2013, RCC, Thiruvananthapuram	Chaired session
159	Sagila S.G.	Emerging Infectious Diseases: A Clinical Challenge.	13 Jul 2012, Thrissur	Participant
160	Santhi S.	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Comprehensive analysis of class I and class II mutations in de novo acute myeloid leukemia'.
161	Sanudev Sadanandan, Milan, Jaacob, Rajeev K.R.	ESMO updates 2012	Dec.2012, AIMS, Kochi	Participants
162	Sarin B.	ESTRO Teaching Course on Advanced Technologies	14-18 Oct 2012, New Delhi	Participant
163	Saritha V.N.	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Significance of DNA replication licensing proteins as markers of cervical intra-epithelial lesions'.

164	Shaji Thomas	KASICON 2012: Annual conference of Association of Surgeons of India (Kerala chapter)	6-9 May 2012, Kottayam	Video presentation on neck dissection
165	Shaji Thomas	ASCON2012: Golden Jubilee CME on Head and Neck Surgery.	10 Nov 2012, Alappuzha	Talk: 'Reconstructive options after head and neck resections'.
166	Shaji Thomas	Diamond MEDCON and International Health Summit	30-31 Dec 2012, Thiruvananthapuram	Talk: 'Locoregional flaps in head and neck reconstructions'.
167	Shanone C. Pereira	25 <sup>th</sup> Kerala Science Congress	29 Jan 2013, Thiruvananthapuram	Paper: 'Up regulation of galectins in thyroid tumors: its significance as a diagnostic marker'.
168	Sheeja Varghese	32 <sup>nd</sup> Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Antitumor polysaccharides as antimetastatic agents'.
169	Sheela Rodriguez, Anupama Susmitha	Prevention of Hospital Acquired Pressure Ulcers.	5 Nov 2012, KIMS, Thiruvananthapuram	Participants
170	Shridhan Anand Patil	69 <sup>th</sup> Annual Conference of Indian Association of Pathologists and Microbiologists, Kerala Chapter Meeting	11 Aug 2012, Thiruvalla	Poster: 'Amyloidosis of tongue with chondroid metaplasia'.
171	Shridhan Anand Patil	18 <sup>th</sup> Indo-American CME in Pathology	1-3 February 2013, JIPMER, Puducherry	Participant
172	Shridhan Anand Patil	70 <sup>th</sup> Annual Conference of Indian Association of Pathologists and Microbiologists, Kerala Chapter Meeting	9 Feb 2013, T.D. Medical College, Alappuzha	Paper: 'Gliosarcoma with rhabdomyosarcomatous differentiation'.
173	Simmy Panicker	Infection Control Certificate Programme	8-10 Aug 2012, 9-11 Oct 2012, AIMS, Kochi	Participant
174	Sindhu Nair P.	Respiratory Update	Jul 2012, Goa	Participant
175	Sinto M.S.	25 <sup>th</sup> Kerala Science Congress	29 Jan 2013, Thiruvananthapuram	Paper: 'STAT3 pathway regulates cyclin D1 expression in oral carcinoma'.
176	Sinto M.S.	32 <sup>nd</sup> Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'RNA interference mediated down regulation of STAT3 and EGFR effects the cyclin D1 expression level and viability in OSCC cell lines'.
177	Sivakumari P.R.	14 <sup>th</sup> National Conference on Oncology Nursing	1-2 Feb 2013, Thiruvananthapuram	Best paper: 'Risk factors associated with secondary lymphedema'.

178	Sivakumari P.R., Vijayalekshmi Ammal	13 <sup>th</sup> National Conference on Oncology Nursing	2-4 May 2012, Tata Memorial Hospital, Mumbai.	Participants
179	Smitha P.Nair	70 <sup>th</sup> Annual Conference of Indian Association of Pathologists and Microbiologists, Kerala Chapter Meeting	9 Feb 2013, Alappuzha	Participant.
180	Sreeja A.P.	14 <sup>th</sup> National Conference on Oncology Nursing	1-2 Feb 2013, Thiruvananthapuram	Best Poster: 'Awareness regarding Infection control practices among nursing students'.
181	Sreelekha R.	13 <sup>th</sup> National Conference on Oncology Nursing	2-4 May 2012, Tata Memorial Hospital, Mumbai	Talk: 'Quality cancer care: aetiology and signs and symptoms of head & neck cancers'.
182	Sreelekha R.	International Nurses Day Celebration 2012	12 May 2012, KIMS, Thiruvananthapuram	Talk: 'Closing the gap: from evidence to action'.
183	Sreelekha R.	14 <sup>th</sup> National Oncology Nursing Conference: Preconference Session	31 Jan 2013, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Occupational hazards of chemotherapy'.
184	Sreelekha T.T.	Refresher Course in Life Sciences: Academic Staff College, University of Kerala	19 July 2012, Thiruvananthapuram	Talks: 'An introduction to cancer biology'.
185	Subha R.	ISA CME on Metabolic and Endocrine system for Practicing Anaesthesiologist	17 June 2012, Thrissur	Participant
186	Subha R, Venugopal A, Viji S. Pillai	2nd National Conference and Workshop organised by Academy of Regional Anaesthesia	20-22 Apr 2012, Coimbatore	Participants
187	Suchetha S.	Annual Conference of Association of Gynecologic Oncologists of India	30 Nov-2 Dec 2012, Mumbai	Paper: 'Radical hysterectomy after failed brachytherapy in cancer cervix'.
188	Suchetha S.	ISCCP 2013: Conference of Indian Society of Colposcopy and Cervical Pathology	23-24 Mar 2013, Tata Memorial Hospital, Mumbai	Talk: 'Role of cold coagulation in the management of CIN'.
189	Sujathan K., Lakshmi S., Sreelekha T.T., Prabha Pillai	25 <sup>th</sup> Kerala Science Congress	29 Jan 2013, Thiruvananthapuram	Participants
190	Sumod Mathew Koshy	Annual Meeting of ASNO and ISNO	21-23 Mar 2013, Mumbai	Poster: 'Anaplastic ependymoma presenting as an extradural mass'.
191	Sumod Mathew Koshy	ISCON 2013: India- Singapore International Conference on colorectal malignancies	15-16 Mar 2013, Thiruvananthapuram	Talk: 'Imaging strategies in colorectal malignancies'. Panelist: 'Rectal malignancy'.

192	Sumod Mathew Koshy	INSIGHT: CME on Bone Tumours	3 Mar 2013, Thiruvananthapuram	Talk: 'Radiology of malignant bone tumours'.
193	Sumod Mathew Koshy	IR & IA: Neuroradiology Teaching Programme	10 – 12 Aug 2012, Thiruvananthapuram	Talk: 'Neurooncology case studies'.
194	Sunilkumar S.	Annual Conference of Radiation Therapy Technologists of India	12-14 Oct 2012, Hyderabad	Paper : 'Biological effects from low doses of ionizing radiation and dose-effect models'
195	Sunilkumar S	World Radiology Day, Tripura Inst of Paramedical Sciences	7 Nov 2012, Agarthala	Talk 'Radiotherapy yesterday, today, tomorrow'.
196	Sunithakumari R, Vivek M, Minija Mathew, Reshmi V, Santhosh Abraham, Daisy A, Aradhana, Mayadevi L, Jesna R	Training on Soft skill for Nurses	14-15 Sep 2012 Medical College, Thiruvananthapuram	Participants
197	Sunitha Kumari R	14 <sup>th</sup> National Oncology Nursing Conference: Preconference Session	31 Jan 2013, Regional Cancer Centre, Thiruvananthapuram	Talk: 'Care of implantable ports'.
198	Sureshkumar R.	32 <sup>nd</sup> Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Prevalence of type A nucleophosmin 1 (NPM1) gene mutation in normal karyotype acute myeloid leukemia patients in south India'.
199	Swapna R. Nath	2 <sup>nd</sup> Annual Conference and Workshop of the Clinical Infectious Disease Society	24-26 Aug 2012, Chennai	Papers: 1. 'Infectious pseudo-tumors of breast'. 2. 'Rare infective isolates in meningitis in patients with cancer'.
200	Swapna R. Nath	Workshop on Research Methodology in Health Sciences.	26-28 Jul 2012, Thiruvananthapuram	Participant
201	Swapna R. Nath	12 <sup>th</sup> National Conference on Prevention and Control of Healthcare Associated Infections.	7 -9 Feb 2013, Tata Memorial Hospital, Mumbai	Participant
202	Thara Somanathan	ISCON 2013: India-Singapore International Conference.	15-16 Mar 2013, Thiruvananthapuram	Faculty
203	Thara Somanathan	CME in Soft Tissue Tumors	Feb 2013, Kidwai Institute of Oncology, Bangaluru	Participant

204	Veena V.S.	32nd Annual Convention of the Indian Association for Cancer Research	13-16 Feb 2013, Delhi	Paper: 'Analysis of epidermal growth factor receptor protein expression levels in malignant and premalignant lesions of the lung: Its correlation with clinic pathological features'.
205	Venugopal A.	CRITICON 2012: CME on Critical Care	25 Jul 2012, Thiruvananthapuram	Participant
206	Venugopal A.	National Conference and workshop on Difficult Airway	31 Nov- 2 Dec 2012, Tata Memorial Hospital, Mumbai	Participant
207	Venugopal A.	YUGMA 2012: Annual Conference of Operation Theatre Technicians	22 Jul.2012, Thiruvananthapuram	Talk: 'Airway equipment devices'.
208	Venugopal A.	ISACON KERALA 2012	13-14 Oct 2012, Kasargod	Talk: 'Anaesthetic implications in a patient coming for surgery'.
209	Venugopal A.	Hands on Training Anesthesia for Laparoscopic Procedures	16-1 Apr 2012, GEM Endosurgery National Training Institute Coimbatore	Participant
210	Venugopal M.	Conference of the Association of Stomatologists & Maxillofacial Imageologists of Kerala.	18 Apr 2012, Thiruvananthapuram	Faculty
211	Venugopal M.	CME by the Dept. of Health and Family Welfare, Govt. of Kerala	4 Mar 2013, Thiruvananthapuram	Participant
212	Venugopal M.	IR & IA Annual Conference	24 Mar 2013, Thiruvananthapuram	Participant
213	Vijayalakshmi K.	Indian Society of Blood Transfusion & Immunohaematology: ISBTI Kerala Chapter CME	24 June 2012, Kozhikode	Participant
214	Vijayalakshmi K.	Indian Society of Blood Transfusion & Immunohaematology: ISBTI	17 Feb 2013, Kochi	Participant

# ONGOING RESEARCH PROJECTS

## EXTRAMURAL

Sl. No.	Principal Investigator	Project Title	Funded by	Status
<b>BREAST</b>				
1	Beela Sarah Mathew	ATLAS: tamoxifen longer Vs shorter.	Oxford University	Ongoing
	Continuing follow up. Results show benefits for prolonged use of Tamoxifen beyond five years; published in The Lancet 2013/381 (9869): 805-816			
2	Beela Sarah Mathew	Risk factors for breast cancer in India: an INDOX case-control study.	Oxford University	Recruitment Ongoing
3	Ramadas K.	Randomised controlled evaluation of clinical early detection in the control of breast cancer in low-and medium- resource settings.	IARC, Lyon, France	Ongoing
	The objective of this project initiated in January 2006 is to evaluate whether three rounds of triennial clinical breast examination (CBE) can reduce the incidence rate of advanced disease by 30% and mortality by 20% in Trivandrum district, India. The 275 clusters with 144238 healthy women aged between 30 and 69 years were randomly assigned to one of two groups. The groups were randomly allocated to CBE (66,278 women) or no screening (69,802 women). Women with abnormal CBE underwent additional investigations and those with confirmed breast cancer received appropriate treatment. The third round of screening is in progress. A total of 177 breast cancers and 26 deaths due to breast cancer occurred in the intervention arm compared to 133 breast cancers and 25 deaths in the control arm.			
<b>CHEST &amp; GASTRO-INTESTINAL</b>				
4	Chandramohan K.	Tumour primordial cells in colorectal cancer: implications for surgical margins and minimal residual disease.	Dept. of Biotechnology, Govt. of India	Completed: The results are being analyzed
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.	Singapore Clinical Research Institute, Singapore	Ongoing (Follow up phase)
<b>GYNAEC &amp; GENITO-URINARY</b>				
6	Suchetha S.	Non-invasive detection of cervical malignancies using diffuse reflectance imaging and fluorescence/reflectance point monitoring techniques	Dept. of Biotechnology, Govt. of India	Ongoing
<b>HAEMATOLOGICAL, LYMPHORETICULAR, BONE &amp; SOFT TISSUE</b>				
7	Geetha N.	Cytogenetic and molecular response to imatinib in patients with chronic myeloid leukemia.	Kerala State Council for Science, Technology & Environment	Ongoing



HEAD & NECK				
8	Paul Sebastian	Non-Invasive detection of malignant changes in the epithelial tissues using multi-spectral diffuse reflectance imaging.	Dept. of Biotechnology, Govt. of India	Ongoing
	Aims to develop an algorithm for grading cervical lesions based on DR imaging and point monitoring techniques and to find out the feasibility of using DR imaging system as a guiding tool in oral lesions requiring incision biopsy. 40 patients with lesions in the oral cavity underwent DR guided biopsy and the results showed that biopsy positivity was higher in this procedure (96%) when compared with clinical judgment (75%). 43 patients with positive smear reports involved in the cervical lesion study yielded considerable sensitivity and specificity (73%, 88% and 100% respectively) for lesion discrimination. Initially study results show that DR imaging is a non-invasive procedure which is useful in a clinical situation and can avoid multiple/random biopsies. With necessary modifications in the DR instrumentation for adaptability, this technique could be a clinical adjuvant for cervical/oral lesion diagnosis.			
9	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
	This is a multicentric Phase II double –blind placebo controlled randomized clinical trial funded by the National Cancer Institute, USA and conducted in collaboration with the Memorial Sloan Kettering Cancer Centre New York and the Majumdar Shaw Cancer Centre Bangalore. The objective of this study is to evaluate the efficacy of Sulindac a pan COX inhibitor, in subjects with early or advanced oral premalignant lesion (OPL) by both clinical response (reduction in size of all lesions) and histological response (change in histological grade) after six months of oral administration of Sulindac (150mg bid). The change in expression of biomarkers before and after 6 months of drug administration will also be assessed. A total of 66 subjects are to be enrolled into the study from all sites.			
10	Paul Sebastian	Phase 3, double blind, placebo controlled study of post-operative adjuvant concurrent chemo-radiotherapy with or without nimotuzumab for stage 3/4 head and neck squamous cell carcinoma.	National Cancer Centre, Singapore	Ongoing
	IHNO1, a global investigator-initiated multicentric trial is the first International Head and Neck Network trial targeting 710 subjects over 21 participating sites on a competitive basis. The standard of care (SOC) in advanced head and neck cancer is to treat patients with post operative radiation/chemo radiation. IHNO1 trial is expected to answer the question whether addition of a targeted agent against EGFR (Epidermal Growth Factor Receptor) in a post operative setting concurrently with SOC would help in improving results. RCC has contributed 16 subjects to the 159 subjects randomized globally and is the Principal site collaborating two other satellite centers in India presently.			
11	Ramadas K.	Cluster randomized controlled trial of oral cancer screening.	IARC, Lyon, France	Ongoing
	The objective of this community based study, initiated in October 1995 is to evaluate oral cancer screening by examination of mouth by trained health workers to identify oral cancer in early stages and to prevent death from oral cancer. A total of 191,931 eligible persons were recruited. A analysis at the end of 9 years showed a significant 34% reduction in mortality among tobacco and alcohol users in the intervention arm. The results of third round screening were published in Lancet journal in June 2005. In view of the significant benefit documented in the study area, it was decided to extend the screening program to the control population. Two rounds of screening were provided to the control group. A total of 286 oral cancers and 190 deaths occurred in the intervention arm compared to 265 cases and 199 deaths in control arm. Currently updating the follow up information.			
12	Ramadas K.	Estimation of tobacco attributable mortality in Kerala.	IARC, Lyon, France	Ongoing

	The study was initiated in 1996, in the 14 Panchayats of Kazhakuttam and Chirayinkil blocks with the objective to find the prevalence and pattern of various forms of tobacco use in the community and to estimate the cause of death attributable to tobacco use. Information about death were collected from Trivandrum Corporation, Panchayat offices and also from records kept in churches, mosques and other religious organizations. The cause of death (verbal autopsy) was routinely collected from the houses of the deceased individuals by a data collector (35,658 deaths were collected so far). The cause of death is being analysed using ICD-10.			
13	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
	This is a multi centre, phase II, randomized, double-blind, placebo controlled, chemoprevention study to determine the clinical efficacy and safety of curcumin, a polyphenol, in oral premalignant lesions. The objectives of this study were to test the efficacy of oral administration of curcumin in bringing about regression of leukoplakia clinically and histopathologically and preventing its malignant transformation. The changes in molecular markers in both arms will also be assessed. A total of 202 patients with leukoplakia were randomized into the trial of which 110 patients were from this Centre. The final statistical analysis of the study is being carried out.			
14	Ramadas K.	Role of human papillomavirus infection and other co-factors in the aetiology of head and neck cancer in Europe and India (HPV-AHEAD).	IARC, Lyon, France	Ongoing
	Human papillomavirus (HPV) is responsible for approximately 25% of head and neck cancers worldwide and appears to be associated with a better response to treatment and improved prognosis. This study aims to know about the natural history and risk factors of oral HPV infection on head and neck cancers, its etiology and epidemiology in Europe and India. HNC tissues from several European and Indian centres together with epidemiological and clinical data will be collected and analysed. RCC, Thiruvananthapuram will provide approximately 1,000 prospective and 500 retrospective specimens. Each Indian collection centre will deliver the specimens to the Rajiv Gandhi Centre for Biotechnology in Thiruvananthapuram, where they will be classified, stored and processed. RCC has already collected 170 prospective samples and 258 retrospective samples for the study.			
<b>IMAGEOLOGY</b>				
15	Ramachandran K.	Development of CAD system for mammograms	Department of Electronics and Information Technology	Ongoing: Data collection and initial analysis on.
<b>PATHOLOGY</b>				
16	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
<b>CANCER EPIDEMIOLOGY</b>				
17	Aleyamma Mathew	Population Based Cancer Registry, Thiruvananthapuram.	ICMR, Govt. of India	Ongoing
	PBCR, Thiruvananthapuram has been functioning under the network of NCRP of ICMR for the past 7 years. The average annual age-adjusted (AAR) incidence rates (per 10 <sup>5</sup> ) is 136.9 in males and 126.1 in females respectively. Lung (AAR: 14.0), Oral cavity (AAR: 13.3) and prostate (AAR: 10.0) are the first three leading cancer sites among males. Breast (AAR: 37.9), Thyroid (AAR: 9.9) and Cervix uteri (AAR: 8.2), are the corresponding cancer sites among females (AAR per 10 <sup>5</sup> females) (Table 2).			

18	Aleyamma Mathew	Risk factors of bladder and kidney cancers: a case-control study.	Kerala State Council for Science, Technology & Environment	Ongoing
Information on socio-demographic characteristics, tobacco-smoking, passive smoking, alcohol use, occupational history, physical activity, medical history and family history of cancer; consumption of analgesics and diet history were collected from a total of 195 kidney cancer and 291 bladder cancers. Similar details from 470 hospital based controls and 300 population based controls were collected. Risk factor analysis is in progress.				
19	Paul Sebastian	Pattern of care and survival studies on cancers of cervix, female breast and head and neck cancers.	ICMR, Govt. of India	Ongoing
Data abstraction of a total of 5806 female breast, 1667 cervix uteri and 9216 head and neck cancer patients reported to the RCC during the period 2006-2010 was completed. In 2012, more than 80% follow-up information was obtained for these cancer sites in order to estimate more realistic survival.				
<b>CANCER RESEARCH</b>				
20	Kannan S.	Study on the significance of Micro-RNA expression pattern in oral carcinoma: Phase II: Validation of microarray results and assessment of its prognostic significance.	Dept. of Biotechnology, Govt. of India	Ongoing
21	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
22	Remani P.	Evaluation of the anti-tumor and immunomodulatory properties of deoxy elephantopus and isodeoxy elephantopus isolated from <i>Elephantopus scaber</i> .	Kerala State Council for Science, Technology & Environment	Completed
In this study our aim was (i) to isolate and characterize the active principles from the plant <i>Elephantopus scaber</i> (ii) to evaluate the different properties of the active principles such as antimicrobial, cytotoxic and antitumour activities and (iii) to determine the efficacy of the active principle in inducing apoptosis in human tumour cells. We have isolated two pure compounds namely Deoxyelephantopin (DOE) and Isodeoxyelephantopin (IDOE). These compounds exhibited strong antimicrobial, cytotoxic, apoptotic and antitumour properties. Apoptosis inducing capacity of the compounds in tumour cells suggests the potential of the compounds to be exploited further to develop as novel anticancer agents.				
23	Remani P.	Chemical investigation and antitumour studies of <i>Annona squamosa</i> L.	ICMR, Govt. of India	Ongoing
Many of the current chemotherapeutics designed to inhibit proliferation or induce apoptosis are often less selective and may result in damage to normal cells limiting their clinical potential. Hence selective attack on apoptotic abnormalities in cancerous cells can generate a potential, more selective, proapoptotic stimuli leading to destruction of tumour cells only. Thus phytochemicals that can modify apoptosis are likely to be useful anticancer drugs. In this study our aim is to purify anticancer principles from <i>Annona squamosa</i> and to evaluate its apoptosis inducing capacity and to delineate different molecular mechanism of action on different tumour cells.				

24	Sujathan K.	Medical image analysis for cervical cancer	Dept. of Information Technology, Govt. of India	Ongoing
Developed software for automated Pap smear screening with a sensitivity of 80% and specificity 60%.The system is now approved for multi-centric trial in India.				
25	Sujathan K.	Identification of a biomarker for the differential diagnosis of thyroid malignancies in FNAC.	Dept. of Biotechnology, Govt. of India	Ongoing
In this study we evaluate the significance of immunocytochemistry and quantitative analysis of a set of 7 marker proteins in FNAC s for the differential diagnosis of malignancy. Immuno-cytochemistry was found possible with cell blocks prepared from FNA materials. Galectin-3 and HBME were found to be more sensitive than the other proteins for the differential diagnosis of thyroid malignancies in FNAC.QRT-PCR also substantiates the same.We suggest Immunocytochemistry of Gal-3 and HBME in the FNAC slide itself without de-staining, if it is found suspicious on microscopy.				
26	Sujathan K.	Proteome analysis of squamous cell carcinoma and its precursor lesions of cervix.	Kerala State Council For Science, Technology & Environment	Ongoing
Standardization of protein profiling is going on.				
27	Lakshmi S.	Isolation and characterization of primary tumor cells for screening of anacardic acid derivatives on the regulation of MMP and EGF pathways.	Amrita School of Biotechnology	Ongoing
Cancer cells purified from tumor tissues can be used immediately for a wide range of applications, including biomarker identification, microarray and proteomic analysis. Studying the role of anacardic acid in the regulation of MMPs and other key components of the EGFR cascade in cancer can be further extrapolated with this system to gain a better understanding of cancer therapeutics. Experimentation in primary cells allows a deeper and more physiologically relevant view into the cellular function of proteins and enzymes that will allow the design of more specific drugs with meaningful and specific targets.				
28	Lakshmi S.	Role of EGFR signaling in breast cancer.	Kerala State Council for Science, Technology & Environment	Ongoing
Experimental models and clinical correlative studies have shown that growth factor receptor pathways and steroid hormone receptor pathways are closely linked to one another. Breast cancer cells appear to have the capacity to switch between proliferation that is dependent on growth factors, depending on whether the latter pathway is activated or inhibited. It is necessary to understand the regulation of these pathways in order to establish improved therapies and develop new concepts for treatment and prevention of breast cancer.				
29	Lakshmi S.	Implications of mdr1 gene polymorphisms and p-glycoprotein expression in ovarian cancer in relation to treatment response	Board of Studies in Nuclear Sciences (BRNS)- Dept of Atomic Energy	Lakshmi S.
This study is designed to assess the effect of ABCB1 genotypes and the expression of p glycoprotein on disease progression in women with ovarian cancer.It is proposed to correlate variations in response to chemotherapy to inter-individual variability in P-glycoprotein expression which is in turn influenced by mdr1 polymorphisms.This study also proposes to develop and characterize drug resistant ovarian cancer cell line and to study the effect of MDR on cell cycle regulation and apoptosis.				

30	Hariharan S.	Molecular genetic basis of resistance to IM treatment in CML	Kerala State Council for Science, Technology & Environment	Ongoing
<p>Targeting the tyrosine kinases activity of BCRABL represents a very promising therapeutic strategy in CML. Despite the strong efficacy of the tyrosine kinase inhibitor STI571, resistance has been observed in a significant proportion of patients in advanced CML stage. We investigated in this study the mechanism of resistance to STI571 through point mutations in the tyrosine kinase domain and /or BCRABL gene amplification. This screening may allow intervention before relapse by identifying emerging mutations with defined impacts on IM binding. Certain mutations may respond to higher doses of IM, whereas other mutations may mandate switching to another therapeutic strategy.</p>				
31	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	Completed
<p>In vitro cytotoxicity experiments on DLA, EAC, A549, KB, MCF-7 and K562 cell lines showed that IC50 values of PST001 falls in the range of 50-150 µg/ml. Apoptosis was evident in DLA, EAC, A549 and KB cell lines supported by increased expression of Caspase -3, Annexin V binding status and TUNEL positive cells whereas MCF-7 and K562 cells showed only mild positivity for all these parameters. Gene expression profiling with microarray analysis followed by TaqMan Low Density Array (TLDA) for a panel of apoptotic genes to elucidate the cell death mechanism and pathway regulation by PST001 revealed majority of the altered genes in A549 and KB cells to belong to the TRAIL mediated apoptotic pathways.</p>				
32	Sreelekha T.T.	Preparation and characterization of nanoparticles from antitumor polysaccharide PST001 and elucidation of its pharmacokinetics.	Kerala State Council for Science, Technology & Environment	Ongoing
<p>In this study, a novel strategy for synthesis and stabilization of gold nanoparticles using anticancer polysaccharide PST001 was employed and its antitumor activity was evaluated. PST - Gold nanoparticles were prepared in which PST001 acts both as a reducing and a capping agent. PST- Gold nanoparticles showed a high stability, without obvious aggregation for months and showed a wide range of pH tolerance. PST - Gold nanoparticles not only retained the antitumor effect of PST001 but also showed an enhanced effect even at a lower concentration and exert its antitumor effects through the induction of apoptosis. In vivo assays on BALB/c mice revealed that PST- Gold nanoparticles exhibited immunomodulatory effects. Similarly, PST-Dox (doxorubicin) nanoparticles were also synthesized and its activities are being analyzed in our laboratory.</p>				
33	Sreelekha T.T.	Development of a microarray biochip to detect chromosomal translocations in leukaemia.	Kerala State Council for Science, Technology & Environment	Completed
<p>The project was undertaken in collaboration with uBio Biotechnology Systems Pvt.Ltd, and the study demonstrated the use of multiplex PCR for analyzing several translocations and mutations together in leukemia samples. Multiplex PCR is clinically useful as an efficient and fast procedure for the detection of various genetic changes like chromosomal translocations and mutations as it complements cytogenetic analysis and yields new information in the retrospective setting as well as in the initial diagnosis. Moreover, we have developed a biochip, which is analysing by the biochip imager developed by the participating Industry (uBio Biotechnology Pvt. Ltd), for the evaluation of multiple chromosomal translocations and certain gene mutations together in a chip avoid the time lag for the identification of the multiplex PCR results using conventional gel method, and also makes the test more cost effective using a smaller amount of samples</p>				

COMMUNITY ONCOLOGY				
34	Gigi Thomas	Search for predictive genetic markers of high-risk malignant transformation potential in oral leukoplakia patients.	Kerala State Council for Science, Technology and Environment, Govt. of Kerala	Ongoing
	This study aims to investigate the DNA ploidy content, intrinsic DNA repair capacity and telomerase expression as predictive markers of high risk malignant transformation potential of leukoplakia patients. 180 patients with oral leukoplakia, 75 patients with oral cancer and 100 healthy, age and sex matched adults with normal oral mucosa as controls were recruited into the study. The results of our study show that all the three biological markers are useful as an initial screening test for assessing cancer risk in patients with leukoplakia and they should be done along with routine histopathology. This can help identify individuals at high risk of transformation to malignancy. Patients who have an increased risk of malignant transformation can be treated aggressively by surgical excision while those having low risk precancers can be kept on follow-up. Hence treatment for precancers can be given on an individual approach.			
35	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
	The preliminary analysis was evaluation of Visual Inspection using Acetic Acid (VIA), Visual Inspection using Lugol's Iodine (VILI) for the early detection of cervical precancers, whereas the latter part of the study is planning to evaluate visual inspection using magnifying lens (VIAM). We have evaluated the effectiveness of cryotherapy and Loop Electrosurgical Excision Procedure (LEEP) in the management of preinvasive lesions whereas now we are studying the evaluation of efficacy and effectiveness of cold coagulation in treating Cervical Intra Epithelial (CIN) lesions.			
36	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
	As part of the community based cluster randomized controlled trial study in connection with the Trivandrum Breast Cancer Screening project, cervical cancer screening using VIA, VILI is being conducted in the control group of the study areas.			
NATURAL BACKGROUND RADIATION CANCER REGISTRY				
37	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
	Unstable chromosome abnormalities were analyzed in subjects living in HBR areas of Karunagappally taluk. The abnormalities were compared with that of normal areas. We found an increase of abnormalities in the HBRA. There is an association between cumulative dose and chromosomal abnormalities.			
38	Paul Sebastian	Radiation Epidemiologic studies, Karunagappally, Kerala, India.	Health Research Foundation, Japan	Ongoing
	This project is being carried out with the aim of estimating excess relative risk per unit radiation dose present in the sea coast of Karunagappally taluk of Kollam District of Kerala. The outcome of the study so far indicated there is no excess risk of any type of cancer in this area. An analysis after collecting more cancer cases with precise individual dose measurements is needed for final conclusion. Study is ongoing concentrating on surveillance activities and dosimetric measurements.			
39	Paul Sebastian	Thyroid nodularity studies	Health Research Foundation, Japan	Ongoing

	Thyroid nodularity studies are continuing by concentrating on thyroid nodularity among females in the high background radiation area. Thyroid investigations undertaken among 456 subjects do not show any increased thyroid abnormalities among the residents.			
40	Paul Sebastian	Natural Background Radiation Studies	BARC, Govt. of India	Ongoing
	The socio-demographic cancer incidence survey and dosimetric studies initiated under this project to strengthen the studies already ongoing in Karunagappally taluk. Two lakhs population health related data and 53378 houses dose measurements undertaken in this regard.			
41	Raghu Ram K. Nair	Natural Background Radiation Registry (NBRR): Radiation measurement of Sakthikulangara, Poothakulam, Mayyanad and Paravur.	BARC, Mumbai	Ongoing
42	Raghu Ram K. Nair	Natural Background Radiation Registry (NBRR): Individual & ingested dose estimation	Health Research Foundation, Japan	Ongoing
<b>RADIATION PHYSICS</b>				
43	Thayal Singh Elias	Design and Development of Beam Direction Device for Radiation Simulation and Calculation R & V S/w for Radiotherapy.	Kerala State Council for Science, Technology & Environment	Ongoing

## PHARMA/INDUSTRY SPONSORED

Sl. No.	Principal Investigator	Project title	Funded by	Status
<b>BREAST</b>				
1	Asha Arjunan	Phase III 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	Pierre-Fabre Medicament	Ongoing
2	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
3	Beela Sarah Mathew	A randomized, multi-centre, open-label, phase III study of adjuvant lapatinib, trastuzumab, their sequence and their combination in patients with HER2/ErbB2 positive primary breast cancer (ALTTO) in collaboration with Breast International Group.	Glaxo Smith Kline	Ongoing: Interim analyses showed that single agent Lapatinib is inferior to Trastuzumab.
4	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: Follow-up phase



5	Ratheesan K.	An open label, phase II trial of BIBW 2992 (afatinib) in patients with metastatic HER2-overexpressing breast cancer failing HER2-targeted treatment in the neoadjuvant and/or adjuvant treatment setting.	Boehringer Ingelheim	Ongoing
6	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	Completed
7	Ratheesan K.	An open label, randomized, parallel-group, multicentre study to compare Zoladex 10.8 mg 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	Completed
8	Ratheesan K.	A phase II, randomised, double-blind, placebo-controlled, multi-centre study to assess the efficacy and safety of AZD8931 in combination with Anastrozole, compared to Anastrozole alone, in post-menopausal women with hormone receptor-positive, endocrine therapy-naïve, locally-advanced or metastatic breast cancer (MINT).	Astra Zeneca	Completed
<b>CHEST &amp; GASTRO-INTESTINAL</b>				
9	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 oxaliplatin with or without lapatinib.	Glaxo Smithkline	Ongoing (Follow up phase)
10	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 (Follow up phase)

11	Sivanandan C. D.	A phase 3, randomized, double-blind, phase 3 study of docetaxel and ramucirumab versus docetaxel and placebo in the treatment of stage IV non-small cell lung cancer following disease progression after one prior platinum-based therapy.	Eli Lilly	Ongoing (Follow up phase)
12	Sivanandan C. D.	A phase II/III, multi-center, randomized controlled study to compare the efficacy and safety of gemcitabine alone vs. ON 01910.Na combined with gemcitabine in patients with previously untreated metastatic pancreatic cancer.	Onconova	Ongoing (Follow up phase)
<b>GYNAEC &amp; GENITO-URINARY</b>				
13	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
14	Francis V James	An observational study to evaluate the PSA response and safety of docetaxel in patients with hormone refractory prostate cancer.	Sanofi aventis	Ongoing
15	Jayaprakash P.G.	A randomized double-blind phase 3 trial comparing docetaxel combined with dasatinib to docetaxel combined with placebo in castration-resistant prostate cancer	Bristol Myers Squibb	Completed
16	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	Completed
17	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
18	Jayaprakash P.G.	An open-label, multicentre study to assess the safety of RO5185426 in patients with metastatic melanoma.	Roche	Ongoing

**HAEMATOLOGICAL, LYMPHORETICULAR, BONE & SOFT TISSUE**

19	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
20	Geetha N.	A phase II study of dasatinib therapy in children and adolescents with newly diagnosed chronic phase chronic myelogenous leukemia or with Ph+ leukemias resistant or intolerant to imatinib.	Bristol Myers Squibb	Ongoing
21	Sreejith G. Nair	Protocol no. GP13-301: A randomized, controlled, double-blind phase III trial to compare the efficacy, safety and pharmacokinetics of GP2013 plus cyclophosphamide, vincristine and prednisone vs. MabThera® plus cyclophosphamide, vincristine, prednisone, followed by GP2013 or MabThera® maintenance therapy in patients with previously untreated, advanced stage follicular lymphoma	Novartis	Ongoing

**HEAD & NECK**

22	Arun Sankar S.	A multicenter; phase II/III study to assess radiation induced mucositis in Subjects with locally advanced squamous cell carcinoma of head and neck administered cisplatin and radiation with or without P276-00	Piramal Healthcare Ltd	ongoing
23	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 III and IVA, B squamous cell carcinoma of the head and neck.	Glaxo Smithkline	Ongoing
24	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

25	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
26	Rejnish Kumar R.	A phase III, open label, randomised, multi-centre study of the effects of leukocyte interleukin injection [Multikine] plus standard of care (surgery + radiotherapy or surgery + concurrent chemoradiotherapy) in subjects with advanced primary squamous cell carcinoma of oral cavity/soft palate versus standard of care only.	Cell Science	Ongoing
27	Rejnish Kumar R.	A phase III randomized trial of chemotherapy with or without panitumumab in patients with metastatic and/or recurrent squamous cell carcinoma of head and neck.	Amgen	Ongoing

## OTHER FUNDED PROJECTS

1	Kalavathy M.C.	Thiruvananthapuram Corporation cancer control programme.	Thiruvananthapuram Corporation	Ongoing
	31 cancer detection programmes were conducted as part of this programme in which 2151 women were examined, out of which we could get 2 breast cancers and out of 585 Papsmeears collected, 2 cervical pre-cancers were detected.			
2	Kalavathy M.C.	Cancer Control Programme in Thiruvananthapuram Jilla Panchayath Area	Thiruvanatahapuram Jilla Panchayath	Ongoing
	31 Cancer detection programmes were conducted as part of this programme (2 breast cancers out of 3248 women examined and 6 cervical pre-cancers and 3 cervical cancers out of Papsmeears collected from 1003 women). A total of 3 oral cancers were also detected.			
3	Paul Sebastian	Hospital Based Cancer Registry.	ICMR, Govt. of India	Ongoing:
	HBCR of Regional Cancer Centre, Thiruvananthapuram has been functioning for 30 years under the network of National Cancer Registry Programme (NCRP) of Indian Council of Medical Research (ICMR), Govt. of India. HBCR report is published annually. The report provides the magnitude, patterns of cancer, stage at diagnosis and treatment modalities of patients seen at RCC. Among the total 14,985 registered cases during the period under reported, 13239 (89.3%) cases were invasive cancers (Table 1). Further, during the period under reported, 30-year consolidated report for the period 1982-2011 was published.			
<b>COMMUNITY ONCOLOGY</b>				
5	Gigi Thomas Jayakrishnan R.	Prevention and control of oral cancer: Challenges and opportunities for dental surgeons.	National Rural Health Mission, Kerala	Completed

	For the first time, a series of proactive workshops in early detection and prevention of oral cancer was conducted by RCC for the dental surgeons in all districts of Kerala. The programme was supported by National Rural Health Mission, Kerala in collaboration with Indian Dental association, Kerala state. The thrust of the workshop was to keep the clinician abreast of the current concepts of early detection, diagnostic evaluation and management of oral precancer and cancers. More than 600 dental surgeons became certified experts in oral cancer diagnostic and preventive specialists through 12 workshops.			
6	Jayakrishnan R.	School based programmes to counter substance abuse.	Jilla Panchayath, Thiruvananthapuram	Ongoing
7	Jayakrishnan R.	School based programmes against tobacco and alcohol consumption in high school/higher secondary schools of rural Kerala.	State Health Systems Resource Centre, Kerala	Ongoing
8	Jayakrishnan R.	Tobacco Cessation Clinic Project	World Health Organisation	Completed
	146 tobacco users attended the Clinic during the period. Among the tobacco habitués, 75% were smokers, 10% were tobacco chewers and 14% had both the habits. They were given behavioral counseling and for patients with severe nicotine dependence, Nicotine Replacement Therapy was given.			
9	Jayakrishnan R.	Randomised controlled trial for evaluating the effectiveness of community based tobacco cessation strategies in Kerala State.	Part funding from Tobacco Cessation Project	Completed
	928 smokers were identified from 3304 subjects through a house to house survey conducted in 4 community developmental blocks in Thiruvananthapuram district. Smokers in the intervention area (474 subjects) were given 4 rounds of counseling which included group and individual counseling along with a tobacco cessation booklet in Malayalam prepared by the tobacco cessation clinic. The outcome of the study will be analysed using appropriate statistical tests.			
10	Jayakrishnan R.	Release and dissemination of Global Adult Tobacco Survey (GATS) - Kerala Fact sheet to media personnels through media advocacy workshop.	World Health Organisation	Completed
	The first objective was the official release of the Kerala fact sheet on adult tobacco use and the second objective was to sensitize the media by giving an overview of the tobacco prevalence (smoking and smokeless tobacco) in Kerala and to highlight associated background information on exposure to second-hand smoke, tobacco cessation, economics, media, knowledge, attitudes and perceptions towards tobacco use. The media publicity was reflected in the coverage in 13 print editions and 51 online stories in various newspapers. To fulfill the second objective, a press conference was conducted at the press club Thiruvananthapuram on 27 March 2013. 43 participants were present for the programme.			
11	Sreekumar C.	Prevention and control of cancer among the tribal population of Kerala state.	Kerala State Development Corporation for SC & ST	Ongoing
12	Sreekumar C.	Cancer control programmes in Palakkad district.	Kerala State Development Corporation for SC & ST	Ongoing
<b>NATURAL BACKGROUND RADIATION CANCER REGISTRY</b>				
13	Jayalekshmi P.	Prevention & Cancer Control among scheduled caste people	Jilla Panchayath, Kollam	Ongoing

	The objective is to control cancer among the scheduled caste people. People who are in the lower level of the community become aware about the need of tobacco control and life style modulation for preventing cancer.			
14	Jayalekshmi P.	Prevention and cancer control among female coir/fish workers	Jilla Panchayath, Kollam	Ongoing
	Project started with the objective of prevention and detection of cancer among the people in the traditional industries such as coir and fishing in Kollam District. The project benefitted to a lot of women by undergoing early screening for breast and cervix cancers.			
15	Jayalekshmi P.	Cancer detection and cancer patients service projects	Grama Block Panchayats Karunagapally Taluk	Ongoing
	Cancer detection and cancer patients service projects of 12 Grama panchayath & 3 Block panchayats were undertaken with the objective of implementing cancer control in Karunagapally taluk and also for providing medical and welfare services to cancer patients. This project helped a lot of poor cancer patients to alleviate their pain and sufferings.			
16	Paul Sebastian	District Cancer Registry	ICMR, Govt. of India	Ongoing
	District Cancer Registry of Kollam covers the entire Kollam District and registers the incident cancer cases every year. The age adjusted cancer incidence rates in males of Kollam District was 109.4 and among females 82.7 per 100,000 population. The leading cancer sites among males were lung, stomach, mouth and prostate and among females breast, thyroid, cervix and ovary.			
<b>PAEDIATRIC ONCOLOGY</b>				
17	Kusumakumary P.	Indian Paediatric Oncology Initiative	Jiv Daya Foundation	Ongoing
	JDF is a US based charity providing support for quality cancer treatment for children. They focus on training more physicians, nurses & social workers in paediatric oncology. The project provides salary support for 3 staff nurses, 1 social worker, 1 data manager, 1 pharmacist and 1 project co-ordinator.			
<b>PALLIATIVE MEDICINE</b>				
18	Cherian M. Koshy	Indian Palliative Care Initiative	Jiv Daya Foundation	Ongoing
	This is the first initiative by Jiv Daya Foundation for palliative care. The aim is to improve delivery of palliative care delivery by providing a doctor, social worker and nurse.			

## IN-HOUSE PROJECTS

Sl. No.	Principal Investigator	Project title	Status
<b>ANAESTHESIOLOGY</b>			
1	Mallika Balakrishnan	A comparison of Malampatti classification and upper lip bite test in predicting difficult intubation.	Completed
2	Mary Thomas	Sensitivity of the Palm Print sign in prediction of difficult laryngoscopy in diabetics: A comparison with other airway indices.	Ongoing
3	Rachel Cherian Koshy	Efficacy of paravertebral block in pain relief in patients undergoing breast surgery under general anaesthesia.	Ongoing
4	Rachel Cherian Koshy	Efficacy of dexmedetomidine for post operative endotracheal tube tolerance, analgesia, sedation: a prospective RCT (double blind).	Completed
5	Sudha P.	Comparison of the effect of two doses of rocuronium bromide on intubating conditions.	Ongoing
6	Sudha P.	Peroperative transfusion of blood and blood products in patients undergoing cancer surgery: a prospective analysis.	Ongoing

7	Sudha P.	Analysis of the effects of drugs and techniques used in anaesthesia on tumour recurrence, metastasis and survival in ovarian serous adenocarcinoma.	Ongoing
8	Venugopal A.	Effects of intravenous dexmedetomidine on perioperative haemodynamics and quality of emergence in patients undergoing head and neck surgery following general anaesthesia: A comparative randomized double blind placebo controlled study.	Ongoing
9	Venugopal A.	An evaluation of a single dose of oral gabapentin in attenuating haemodynamic responses to direct laryngoscopy and tracheal intubation.	Ongoing
<b>BREAST</b>			
10	Beela Sarah Mathew	Results of breast conservative therapy at Regional Cancer Centre, Thiruvananthapuram. (DNB Thesis)	Completed data collection. Analyses ongoing.
11	Beela Sarah Mathew	Comparison of 3DCRT, tangent – beam IMRT and VMAT (Rapidarc) for whole breast radiotherapy following breast conservation: a dosimetric study.	Ongoing
<b>CHEST &amp; GASTRO-INTESTINAL</b>			
12	Chandramohan K.	Minimally important clinical changes in colorectal cancer patients undergoing treatment in RCC, Thiruvananthapuram.	Ongoing
13	Chandramohan K.	Health-related quality of life and the supportive care needs of women with breast Cancer	Ongoing
14	Roshni S.	Demographic profile of lung cancer	Ongoing
15	Sivanandan C.D.	Role of high dose conformal radiotherapy in unresectable hepatocellular carcinoma.	Ongoing
<b>GYNAC &amp; GENITO-URINARY</b>			
16	Francis V. James	Comparison of different schedules of radiation therapy in carcinoma cervix.	Ongoing
17	Rema P.	A study comparing primary cytoreduction and interval cytoreduction in stage III epithelial ovarian cancer.	Ongoing
18	Suchetha S.	Noninvasive detection of cervical malignancies using diffuse reflectance imaging and fluorescence/reflectance point monitoring techniques in collaboration with Biophotonics laboratory, CESS, Thiruvananthapuram.	Ongoing
<b>HAEMATOLOGICAL &amp; LYMPHORETICULAR</b>			
19	Geetha N.	Clinical and prognostic significance of molecular factors in adult acute myeloid leukemia.	Ongoing
20	Geetha N.	Prospective study of melphalan, prednisolone and lenalidamide in the treatment of elderly patients with newly diagnosed multiple myeloma	Ongoing
21	Geetha N.	Prospective study of CDEP chemotherapy in patients with relapsed/ refractory multiple myeloma	Ongoing
22	Geetha N.	Role of NF B activation and target-gene expression in malignant lymphomas.	Ongoing



23	Anoop T.M.	Free Light chain assay in Non Hodgkin's Lymphoma and its correlation with outcome	Ongoing
<b>HEAD &amp; NECK</b>			
24	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.	Prospective recruitment going on
26	Bipin T.Varghese	Matched pair analysis of outcomes of conventional versus microvascular reconstruction in head and neck cancers.	Prospective recruitment going on
27	Elizabeth Mathew lype	Selected molecular markers as indicators of clinical profile, tumor characteristics, and treatment outcome in squamous cell carcinoma of the larynx.	Completed
28	Elizabeth Mathew lype	Clinico-pathological and molecular predictive factors of neck node metastasis in carcinoma larynx and hypopharynx and its oncological outcome: A retrospective analysis	Completed
29	Nebu Abraham George	Frozen section for assessing depth of invasion in squamous cell carcinoma tongue.	Ongoing
30	Ramadas K.	Comparison between conventional and accelerated hyper-fractionation radiotherapy schedules in oral cavity cancers.	ongoing
31	Ramadas K.	A dosimetric analysis of the benefit of one time adaptive radiotherapy in IMRT for squamous cell carcinoma of the orophaynx.	ongoing
32	Rejnish Kumar R.	Comparison of weekly versus three weekly cisplatin concurrently with radiation in the treatment of locally advanced head and neck squamous cell carcinoma.	ongoing
<b>PATHOLOGY</b>			
33	Anitha Mathews	Immunohistochemical characterization of high grade ductal carcinoma breast and correlation of morphological features with special reference to basal phenotype. (DNB Thesis).	Ongoing
34	Jayasree K.	Histological and immunohistochemical prognostic factors in paediatric osteosarcomas: a retrospective study. (DNB Thesis)	Ongoing
35	Nileena Nayak	Immunophenotyping of Hodgkin Lymphoma: Observational study. (DNB Thesis)	Ongoing
36	Preethi T.R.	Hepatocellular carcinoma versus metastatic adenocarcinoma to liver – A cytological observational study in correlation with clinical and radiological data. (DNB Thesis)	Ongoing
37	Thara Somanathan	Correlation and agreement between colposcopy and histological diagnosis in the early detection of cervical neoplasia. (DNB Thesis)	Ongoing
<b>CANCER EPIDEMIOLOGY</b>			
38	Kalavathy M.C.	Papsmear screening programme, Women & Children Hospital, Thycaudu.	Ongoing

39	Kalavathy M.C.	Papsmear screening programme, Govt. Hospital, Peroorkkada.	Ongoing
Papsmear clinics in Govt. Hospital, Thycaudu and Govt. Hospital, Peroorkkada are ongoing. A total of 2425 Papsmeas were collected out of which 18 precancers and 3 cancers were detected.			
<b>CANCER RESEARCH</b>			
40	Hariharan S.	A study of gene expression profile in inhabitants of high background radiation of Karunagappally, Kerala, India.	Ongoing
The coastal belt of Karunagappally, Kerala, India, is known for high background radiation. This study is to evaluate the comprehensive gene expression profiles in individuals residing in this area. Cytogenetic studies have shown an increase in the frequency of the chromosomal aberrations in the circulating lymphocytes of exposed persons. The increased frequency of such aberrations in the absence of any significant increase in cancer incidence is noteworthy, given the putative role of DNA damage in carcinogenesis. We are hopeful that this approach would throw light on underlying mechanisms associated with long term exposure to background radiation.			
41	Hariharan S.	Blastic transformation of CML: cytogenetic and molecular Mechanisms orchestrating the disease progression.	Ongoing
This study is an attempt to identify the molecular marker(s) that can predict the relentless progression of CML-CP to BC. Even with the most aggressive treatment, almost all patients entering the blastic transformation die of acute leukaemia within a few months. Therefore, finding secondary molecular lesions heralding the advanced disease phases is hoped to both provide a marker for existing treatments and reveal targets for new therapies in the future. It is hoped that the present study may identify or characterize the various chromosomal abnormalities and /or gene alterations responsible for disease progression. The identified gene (s) might serve as prognostic marker (s) to recognize patients at diagnosis with an increased probability for development of BC.			
42	Hariharan S.	Clinical relevance of molecular gene-expression signatures in AML with normal cytogenetics for a prognostically prioritized molecular classification.	Ongoing
This study focusing on NC-AML patients, who pose considerable challenges in diagnosis, risk stratification, and post-treatment monitoring for minimal residual disease. This study shall stratify the patients into two groups as clinically favorable or unfavorable genotypes. Depending on the genotype, risk of relapse or survival can be predicted and also help in overall treatment outcomes. Our analysis shall confirm the applicability of the molecular/gene-expression profiling strategy in proposing a prioritized schema that stratifies patients with NC-AML to risk adapted therapies based on molecular markers. Once the prognostic importance of these genetic abnormalities is clear, it may be possible to appropriately tailor the aggressiveness of therapy to NC-AML patients.			

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JOURNAL ARTICLES	
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2	Anil Kumar, P.; <b>Jiji, V.</b> 'Four-quadrant osteoplastic decompressive craniotomy: a novel technique for decompressive craniectomy avoiding revision cranioplasty after surgery' Neurology India. 2012/60(6): 672-74
3	<b>Anila, K.R.; Arun Peter Mathew; Thara Somanathan; Anitha Mathews; Jayasree, K.</b> Chromophobe renal cell carcinoma with heterologous (Liposarcomatous) differentiation: A case report' International Journal of Surgical Pathology. 2012/20(4): 416-419
4	<b>Anila, K.R.; Paul Sebastian; Thara Somanathan; Nebu A. George; Jayasree, K.</b> 'Significance of incidentally detected thyroid tissue in lymph nodes of neck dissections in patients with head and neck carcinoma' International Journal of Surgical Pathology. 2012: 564-569
5	<b>Anila, K.R.; Rekha A. Nair; Sumod Mathew Koshy; Priya M. Jacob.</b> 'Primary intravascular large B-cell lymphoma of pituitary' Indian Journal of Pathology and Microbiology. 2012/55(4): 549-551
6	<b>Anila, K.R.; Thara Somanathan; Anitha Mathews; Jayasree, K.</b> 'An unusual variant of prostatic adenocarcinoma with metastasis to testis: A case report' Gulf Journal of Oncology. 2012/1(12): 73-6
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14	<b>Balagopal, P.G.; Nebu A. George; Venugopal, A.; Aleyamma Mathew; Iqbal Ahmed, M.; Paul Sebastian.</b> 'Tobacco related habits among first degree relatives of patients undergoing surgery for advanced head and neck malignancies in India' Asian Pacific Journal of Cancer Prevention. 2012/13(1): 217-20
15	<b>Beela Sarah Mathew.</b> 'Trastuzumab in the treatment of breast cancer: current status' JIPMER Journal of Oncology. 2012/1(1): 13-19
16	<b>Biba, V.S.;</b> Jeba Malar, P.W.; <b>Remani, P.</b> 'Differential effects of <i>Annona squamosa</i> seed extracts: Antioxidant, antibacterial, cytotoxic and apoptotic study' International Journal of Pharma and Bio Sciences. 2013/4(2): 899-907
17	<b>Binitha, R.; Anu Ninan; Sindhu Nair, P.; Kusumakumary, P.</b> 'Acute myeloid leukemia presenting as obstructive jaundice ' Indian Pediatrics. 2012/49(5): 414-5
18	<b>Bipin T.Varghese.</b> 'Near total laryngectomy and laryngopharyngectomy' International Journal of Phonosurgery and Laryngology. 2012/2(2): 77-78
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20	Chandra P.Belani; Brodowicz, T.; Krzakowski, Maciej; Yang, Sung Hyun; Franke, Fabio; Cucevic, Branka; <b>Jayaprakash Madhavan</b> ; Santoro, Armando; Peterson, Patrick; John, William J; Zielinski, Christoph C. 'Quality of life in patients with advanced non-small-cell lung cancer given maintenance treatment with pemetrexed versus placebo (H3E-MC-JMEN): results from a randomised, double-blind, phase 3 study' <i>Lancet Oncology</i> 2012, 13(3):292-9. 2012/13(3): 292-9
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101	<b>Sujathan, K.;</b> <b>Shanone C.Pereira;</b> <b>Jestin K. George;</b> <b>Sreeja, S.;</b> <b>Farha, A.K.</b> . 'Study of estrogen and progesterone receptor status in thyroid tumors (Abstract)'. In: Book of Abstracts: 32nd Annual convention of Indian Association for Cancer Research, 2013. p.247
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# Administration, Standing Committees & Right to Information Act

## a. ADMINISTRATION

Director : Dr. Paul Sebastian  
 Additional Director (Academic) : Dr. P. Kusumakumary  
 Medical Superintendent : Dr. K. Ramadas  
 Deputy Medical Superintendent : Dr. Aswin Kumar



## b. STAFF STRENGTH

Type of Staff	Permanent	New Recruits	Temporary	Daily wages	Deputation		Consultants engaged	Total
					In	Out		
Academic	97	7	6	....	....	....	6	116
Non-Academic	524	33	66	106	4	....	3	736
Total	621	40	72	92	4	---	9	852

## c. ACADEMIC SAFF STRENGTH

Professors-15, Additional Professors-29, Associate Professors-20, Assistant Professors-28, Lecturers- 12.

## d. NON-ACADEMIC STAFF

### Administrative Office

Francis M.G. (Sri.) Administrative Officer (From 16.04.2012 to 30.09.2012)  
 Anil Kumar V (Sri) Administrative Officer (01.10.2012 onwards)  
 Lalitha B (Smt.) Asst. Administrative Officer Gr. I  
 Sylaja C (Smt.) Office Assistant Sel.Gr.  
 Jumailathu Beevi K M (Smt.) Office Assistant Sel.Gr.  
 Snehalatha H B (Smt.) Office Assistant Sr. Gr.  
 Vijayan S (Sri.) Office Assistant Sr. Gr.  
 Sudevi R (Smt.) Senior Personal Assistant  
 Ambili S (Smt.) Clinical Records Assistant  
 Kalpana Soni (Smt.) Office Assistant  
 Balachandran L (Sri.) Senior Helper

Seethalakshmi P S (Smt.) Despatcher  
 Suliman S (Sri.) Hospital Attender

### Cancer Epidemiology & Clinical Research

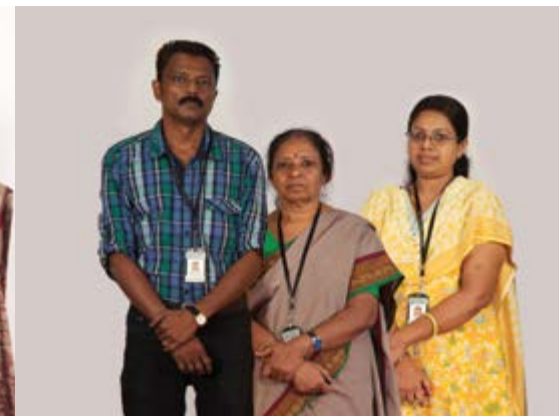
Anita Nayar (Smt.) Social Investigator Sel. Gr.  
 Asha N M (Smt.) Clerk Gr.I  
 Jaya Kumar P (Sri.) Clerk Gr.I  
 Prasanth Kumar R K (Sri.) Data Entry Operator Gr. I

### Cancer Research

Sreelekha TT (Dr.) Scientific Officer Gr.I  
 Hareendran N K (Sri.) Research Assistant Gr. I  
 Vikraman Nair K (Sri.) Sr. Animal House Keeper

### Clinical Laboratory

Thomas Abraham (Dr.) Scientific Officer Gr. I  
 Gangadevi C (Smt.) Technical Officer (Lab)  
 Usha J (Smt.) Technical Officer (Lab)





Helen B (Smt.) Technical Officer (Lab)  
 Rajesh K R (Sri.) Technical Officer (Lab)  
 Renuka P (Smt.) Technical Officer (Lab)  
 Ajaya Kumar R (Sri.) Lab. Technician Sr.Gr.  
 Jaya Kumar B (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.  
 Anil Kumar R (Sri.) Senior Helper

#### **Clinical Services & Medical Records**

Chandrika D (Smt.) Medical Records Officer  
 Surendran Nair V (Sri.) Public Relations Officer Gr.I  
 Ambily O (Smt.) Clerk Gr. I  
 Anil Kumar K (Sri.) Clerk (MRT) Gr. I  
 Geetha O (Smt.) Clerk Gr. I  
 John S (Sri.) Clerk (MRT) Gr. I  
 Kumari Bindu P K (Smt.) Clerk Gr. I  
 Mariamma M A (Smt.) Clerk Sr. Gr.  
 Pradeep Kumar B (Sri.) Clerk Gr. I  
 Siju R. Nair (Smt.) Clerk Sr. Gr.  
 Sreekumar B (Sri.) Clerk Gr. I (Asst. Admn. Officer  
 from 29/05/2012)  
 Sreelatha S (Smt.) Clerk Sr. Gr.

Thankamony Amma P (Smt.) Clerk Gr. I  
 Padmarajan R (Sri.) Typist  
 Sherly K Ninan (Smt.) Data Entry Operator Gr. I  
 Girija R (Smt.) Clinical Records Assistant  
 Bindu Sadasivan (Smt.) Clinical Records Assistant  
 Ajitha S (Smt.) Clinical Records Assistant  
 Gireesh S (Sri.) Clinical Records Assistant  
 Jayalekshmi P (Smt.) Coding Clerk  
 Satheeshkumar K S (Sri.) Tel. Operator Cum Receptionist Gr. I  
 Sreekumar C (Sri.) Tel. Operator Cum Receptionist  
 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  
 Anil Kumar T.T. (Sri.) Driver  
 Balachandran B.K. Driver  
 Ajitha Kumari R B (Smt.) Senior Helper  
 Mariamma Varghese (Smt.) Senior Helper  
 Amrithamma M (Smt.) Hospital Assistant  
 Sivankutty K (Sri.) Hospital Assistant  
 Hari C (Sri.) Dark Room Asst. Gr. I  
 Gangadharan V (Sri.) Gardener

#### **Community Oncology**

Sreekumar C (Sri.) Social Investigator Sr.Gr.  
 Jeena Joseph N (Smt.) Protocol Nurse

#### **Director's Office**

Antony P (Sri.) Despatcher  
 Senan S (Sri.) Senior Helper

#### **ECDC, Ernakulam**

Latha A (Dr) Cytopathologist  
 James Thomas M (Sri.) Technical Officer (Cyto)  
 Radha C (Smt.) Cytotechnologist Sr.Gr.  
 Lijo TV (Sri.) Lab. Technician Sr.Gr.







Renjini Thomas (Smt.) Lab.Technician Sr.Gr.  
 Ambika T B (Smt.) Staff Nurse Sr.Gr.  
 Gracy George (Smt.) Staff Nurse  
 Letha B (Smt.) Typist Gr. I  
 Gopakumar P (Sri.) Helper  
 John Evidus P P (Sri.) Hospital Assistant

### **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.  
 Venugopalan Nair V R (Sri.) Supervisor (Electrical)  
 Giji P S (Sri.) Supervisor (Electrical)  
 Jayakumar P (Sri.) Electrician Gr.I  
 Rajmohan M B (Sri.) Electrician Gr.I  
 Suresh Kumar G (Sri.) Electrician  
 Sivarajan L (Sri.) Electronic Technician Sr.Gr.  
 Jayanthy J K (Smt.) Data Entry Operator Sr.Gr.  
 Harikumar S (Sri.) Semi Skilled Worker  
 Jayabalan Nair B (Sri.) Semi Skilled Worker  
 Rajan P C (Sri.) Senior Helper

### **Finance & Accounts**

Lekshmi Rani KS (Smt.) Controller of Finance  
 Mathai KO (Sri.) Accounts Officer  
 Sasikumar SV (Sri.) Purchase Officer  
 Beena N (Smt.) Asst.Accounts Officer Gr.I  
 Remila C K (Smt.) Office Assistant Sel.Gr.  
 Girija Kumari L S (Smt.) Office Assistant Sr.Gr.  
 John Joseph (Sri.) Office Assistant  
 Johnson X (Sri.) Cashier Cum Receptionist Sr.Gr.  
 Mallika Devi S (Smt.) Senior Personal Assistant  
 Sasikumar K (Sri.) Asst. Internal Audit Officer  
 Usha V (Smt.) Data Entry Operator Sr.Gr.  
 Ajitha O S (Smt.) Office Assistant Sr. Gr.  
 Veena C L (Smt.) Office Assistant Sr. Gr.  
 Shajkumar K R (Sri.) Office Assistant Sr Gr.  
 Vijayaprasad B (Sri.) Office Assistant  
 Nandakumar T (Sri.) Office Assistant  
 Vindhya Sugathan (Smt.) Office Assistant  
 Sheeja S.S. Office Assistant  
 Prabhavathi Devi AK (Smt.) Clerk Gr. I  
 Saraladevi P G (Smt.) Cashier Sel.Gr.  
 Sheela Kumari R (Smt.) Cashier Sel.Gr.  
 Savitha V.M. (Smt.) Clinical Records Assistant  
 Kaladevi S (Smt.) Clinical Records Assistant  
 Liji S. (Smt.) Clinical Records Assistant





### Imageology

Asha S (Smt.)	Radiographer
Binoy B G (Sri.)	Radiographer
Jayakumar P(Sri.)	Radiographer
Joe D'cruz A (Sri.)	Technical Officer (Radiation)
Savithri Amma B (Smt.)	Junior Personal Assistant
Pradeep S (Sri.)	Technical Officer (Radiation)
Prasad P P (Sri.)	Radiographer Sel.Gr.
Santhosh Kumar C S (Sri.)	Hospital Assistant
Sathyalekha S I (Smt.)	Technical Officer (Radiation)
Shailesh Kumar K N (Sri.)	Radiographer Sel.Gr.
Udayakumar K R (Sri.)	Technical Officer (Radiation)
Sreelekha L D (Smt.)	Radiographer
Veena R R (Smt.)	Radiographer
Vijayakumar C	Hospital Attender

### Information Systems

Neelima N (Smt.)	Systems Manager
Rajesh P (Sri.)	System Analyst
Shaji J (Sri.)	System Analyst
Pradeep Chandran (Sri.)	Junior System Analyst
Basil Varghese (Sri)	Junior System Analyst
Suseela Devi B (Smt.)	Data Entry Operator Sr.Gr.

### Library & Information Services

Vishnu V (Sri.)	Librarian cum Information Officer
Saji S Nair (Sri.)	Library Assistant Gr. I
Ganga A P (Smt.)	Clinical Records Assistant
Balachandran K G (Sri.)	Senior Helper
Vijayakumaran Nair R (Sri.)	Audio Visual Operator Gr. I

### Medical Oncology

Lali V S (Dr)	Resident Medical Officer Gr.I
Archana Surendran (Dr.)	Resident Medical Officer

### Nuclear Medicine

Sheela V (Smt.)	Technical Officer (Radiation)
Suja B R (Smt.)	Technical Officer (Radiation)
Sheeja S R (Smt.)	Radiographer Sel.Gr.
Bindu B (Smt.)	Technical Officer (RIA)
Minyamma K (Smt.)	Technical Officer (RIA)
Sindhu P (Smt.)	Technical Officer (RIA)
Saritha V S (Smt.)	Radiographer Sr.Gr.
Sibi K S (Smt.)	Radiographer
Sunitha S (Smt.)	Radiographer
Salini PS (Smt)	Radiographer
Ananda Kumar K (Sri.)	R I A Technician Gr. I
Usha R (Smt.)	Data Entry Operator Gr.I

### Nursing Services

Sreelekha R (Smt.)	Chief Nursing Officer
Flower Augustine (Smt.)	Nursing Supt. Gr. I
Geetha S (Smt.)	Nursing Supervisor
Lizyamma Jacob (Smt.)	Nursing Supervisor
Mariamamma James (Smt.)	Nursing Supervisor
Sally Abraham (Smt.)	Nursing Supervisor
Geetha Kumari B S (Smt.)	Head Nurse Gr. I
Jaya T S (Smt.)	Head Nurse Gr. I
Jikki M (Smt.)	Head Nurse Gr. I
Prasanna Kumari S (Smt.)	Head Nurse Gr. I
Rajila Beegum (Smt.)	Head Nurse Gr. I





Sheeba SV (Smt.)	Head Nurse Gr. I	Leemol Mathew (Smt.)	Staff Nurse Gr. I
Shobha S (Smt.)	Head Nurse Gr. I	Mangalam S (Smt.)	Staff Nurse Gr. I
Sunitha Kumari R (Smt.)	Head Nurse Gr. I	Marykutty Mathew (Smt.)	Staff Nurse Gr. I
Vijaya A K (Smt.)	Head Nurse Gr. I	Maya K B (Smt.)	Staff Nurse Gr. I
Vijayalekshmy Ammal (Smt.)	Head Nurse Gr. I	Moly MT (Smt.)	Staff Nurse Gr. I
Aniamma Joseph (Smt.)	Head Nurse	Nisha Vidyadhar R (Smt.)	Staff Nurse Gr. I
Sheela Rodriguez (Smt.)	Head Nurse	Ranichandra V (Smt.)	Staff Nurse Gr. I
Shema C (Smt.)	Head Nurse	Rethidevi G S (Smt.)	Staff Nurse Gr. I
Sindhu S (Smt.)	Head Nurse	Sajitha S (Smt.)	Staff Nurse Gr. I
Aleyamma Mathew (Smt.)	Staff Nurse Sr. Gr.	Santhi Rani N (Smt.)	Staff Nurse Gr. I
Bensamma Varghese (Smt.)	Staff Nurse Sr. Gr.	Saraswathy Amma P (Smt.)	Staff Nurse Gr. I
Sindhu G S (Smt.)	Staff Nurse Sr. Gr.	Sheeba P (Smt.)	Staff Nurse Gr. I
Siva Kumari P R (Smt.)	Staff Nurse Sr. Gr.	Sherly M (Smt.)	Staff Nurse Gr. I
Abraham Shini (Smt.)	Staff Nurse Gr. I	Shijikumary N G (Smt.)	Staff Nurse Gr. I
Ajitha S (Smt.)	Staff Nurse Gr. I	Sindhumul M G (Smt.)	Staff Nurse Gr. I
Ajitha T L (Smt.)	Staff Nurse Gr. I	Sophiya Lilly (Smt.)	Staff Nurse Gr. I
Aleyamma Chacko (Smt.)	Staff Nurse Gr. I	Suma PV (Smt.)	Staff Nurse Gr. I
Anila Kumari S (Smt.)	Staff Nurse Gr. I	Swapna C R (Smt.)	Staff Nurse Gr. I
Bindhu M (Smt.)	Staff Nurse Gr. I	Jainamma Standal (Smt.)	Staff Nurse Gr. I
Bini A (Smt.)	Staff Nurse Gr. I	Kumari Thankam S (Smt.)	Staff Nurse Gr. I
Binu O (Smt.)	Staff Nurse Gr. I	Sheeja Samuel (Smt.)	Staff Nurse Gr. I
Chandrika P (Smt.)	Staff Nurse Gr. I	Sindhumole L K (Smt.)	Staff Nurse Gr. I
Elsamma Joseph (Smt.)	Staff Nurse Gr. I	Ajila M S (Smt.)	Staff Nurse
Geetha Kumari D (Smt.)	Staff Nurse Gr. I	Ajitha S (Smt.)	Staff Nurse
Ilin William (Smt.)	Staff Nurse Gr. I	Amrutha L Raj (Smt.)	Staff Nurse
Indira Devi G (Smt.)	Staff Nurse Gr. I	Aneeta J George (Smt.)	Staff Nurse
Indu V S (Smt.)	Staff Nurse Gr. I	Anitha Kumary PV (Smt.)	Staff Nurse
Jessy Thomas (Smt.)	Staff Nurse Gr. I	Annamma E J (Smt.)	Staff Nurse
Joby Paul (Smt.)	Staff Nurse Gr. I	Anupama B (Smt.)	Staff Nurse
Kumari Sindhu S (Smt.)	Staff Nurse Gr. I	Anupama Susmitha (Smt.)	Staff Nurse
Laly Joseph (Smt.)	Staff Nurse Gr. I	Aparna B (Smt.)	Staff Nurse



Aradhana S (Smt.)	Staff Nurse	Preetha A (Smt)	Staff Nurse
Archana M.Nair (Smt.)	Staff Nurse	Preetha S (Smt)	Staff Nurse
Ariya Sreedharan B (Smt.)	Staff Nurse	Preethi P R (Smt)	Staff Nurse
Aswathy M R (Smt.)	Staff Nurse	Priya K L (Smt)	Staff Nurse
Beena K G (Smt.)	Staff Nurse	Rajani R V (Smt)	Staff Nurse
Beena Kumari N (Smt.)	Staff Nurse	Rajaram S K (Sri)	Staff Nurse
Bency Varghese (Smt.)	Staff Nurse	Raji K R (Smt.)	Staff Nurse
Biji P R (Smt.)	Staff Nurse	Reena A (Smt.)	Staff Nurse
Bincy Lukose (Smt.)	Staff Nurse	Rejani Mole A (Smt.)	Staff Nurse
Bindhu K G (Smt.)	Staff Nurse	Renjini R S (Smt.)	Staff Nurse
Bindhu P D (Smt.)	Staff Nurse	Resmi V (Smt.)	Staff Nurse
Bindhu Rani PV (Smt.)	Staff Nurse	Roja S Anand (Smt.)	Staff Nurse
Bindu Kumari T C (Smt.)	Staff Nurse	Rosamma Joseph (Smt.)	Staff Nurse
Bini R (Smt.)	Staff Nurse	Rugmini M D (Smt.)	Staff Nurse
Cherupushpam M (Smt.)	Staff Nurse	Saji G S (Smt.)	Staff Nurse
Chithra VG (Smt.)	Staff Nurse	Saloma P S (Smt.)	Staff Nurse
Deepa Davis (Smt.)	Staff Nurse	Sandhya V Nair (Smt.)	Staff Nurse
Deepa A S (Smt.)	Staff Nurse	Sandhyamol K S (Smt.)	Staff Nurse
Deepa T P (Smt.)	Staff Nurse	Sangeetha K S (Smt.)	Staff Nurse
Divya Das S (Smt.)	Staff Nurse	Saritha SS (Smt.)	Staff Nurse
Girija L (Smt.)	Staff Nurse	Sheeba P Varghese (Smt.)	Staff Nurse
Gracy Sebastian (Smt.)	Staff Nurse	Sheeba V L (Smt.)	Staff Nurse
Indulekha K S (Smt.)	Staff Nurse	Sheeja BT (Smt.)	Staff Nurse
Jayasree C G (Smt.)	Staff Nurse	Sheeja D B (Smt.)	Staff Nurse
Jeeja Rajan (Smt.)	Staff Nurse	Sherry M (Smt.)	Staff Nurse
Jyothilekshmi D (Smt.)	Staff Nurse	Shiny George (Smt.)	Staff Nurse
Kavitha S G (Smt.)	Staff Nurse	Shiny P Thankappan (Smt.)	Staff Nurse
Kumari Sobha D (Smt.)	Staff Nurse	Simmy Panicker S (Smt.)	Staff Nurse
Ligi Das R S (Smt.)	Staff Nurse	Sindhu G (Smt.)	Staff Nurse
Lija K (Smt.)	Staff Nurse	Sindhu K (Smt.)	Staff Nurse
Linsa George (Smt)	Staff Nurse	Sindhu L (Smt.)	Staff Nurse
Lizy Varkey (Smt)	Staff Nurse	Sindhu P Nair (Smt.)	Staff Nurse
Manju M S (Smt)	Staff Nurse	Sindhu R (Smt.)	Staff Nurse
Manju VP (Smt)	Staff Nurse	Sindhu V (Smt.)	Staff Nurse
Manjusha G S (Smt)	Staff Nurse	Sithara Balakrishnan (Smt.)	Staff Nurse
Mareena Silas (Smt)	Staff Nurse	Smitha S Mani (Smt.)	Staff Nurse
Maya N Nair (Smt)	Staff Nurse	Soni John (Smt.)	Staff Nurse
Maya S S (Smt)	Staff Nurse	Sreeja A P (Smt.)	Staff Nurse
Mayadevi L (Smt)	Staff Nurse	Sreeja S (Smt.)	Staff Nurse
Nisha K N (Smt)	Staff Nurse	Sreekala P (Smt.)	Staff Nurse
Nisha K Thomas (Smt)	Staff Nurse	Sreekala T (Smt.)	Staff Nurse
Preeja S (Smt)	Staff Nurse	Sreekumaran Pillai V (Sri.)	Staff Nurse

Sreelatha C S (Smt.)	Staff Nurse	Bindu A B (Smt)	Nursing Assistant
Sreelekha S (Smt.)	Staff Nurse	Bindhu S (Smt)	Nursing Assistant
Sukanya Kumari S R (Smt.)	Staff Nurse	Darley Grace A E (Smt)	Nursing Assistant
Suma V (Smt.)	Staff Nurse	Deenamma M J (Smt)	Nursing Assistant
Suma John (Smt.)	Staff Nurse	Deepthi S S (Smt)	Nursing Assistant
Suma K (Smt.)	Staff Nurse	Felcy Jesslet A (Smt)	Nursing Assistant
Suma P S (Smt.)	Staff Nurse	Geetha P K (Smt)	Nursing Assistant
Sumathy P (Smt.)	Staff Nurse	Geetha S (Smt)	Nursing Assistant
Suni Mathew (Smt.)	Staff Nurse	Hendit Florin S D (Smt)	Nursing Assistant
Sunitha L (Smt.)	Staff Nurse	Jaya Kumari R (Smt)	Nursing Assistant
Swapna K (Smt.)	Staff Nurse	Jessy Philipose (Smt)	Nursing Assistant
Thara S S (Smt.)	Staff Nurse	Jessy Thomas (Smt)	Nursing Assistant
Vasanthakumari R (Smt.)	Staff Nurse	Jessy Xavier (Smt)	Nursing Assistant
Georjee George(Smt.)	Staff Nurse	Jubilet Malar C (Smt)	Nursing Assistant
Gigi Mol Chacko (Smt)	Staff Nurse	Kumari Prameela R G (Smt)	Nursing Assistant
Sreeja MS (Smt)	Staff Nurse	Kumari Sindhu T S (Smt)	Nursing Assistant
Sumam L (Smt)	Staff Nurse	Laly V J (Smt)	Nursing Assistant
Jaichitra MV (Smt)	Staff Nurse	Mariamamma Joseph (Smt)	Nursing Assistant
Nisa Khalam (Smt)	Staff Nurse	Mary Helen S (Smt)	Nursing Assistant
Sreekala NS (Smt)	Staff Nurse	Mini A K (Smt)	Nursing Assistant
Sandhya G (Smt)	Staff Nurse	Priya S (Smt)	Nursing Assistant
Beena Koshy (Smt.)	Staff Nurse	Reeja A S (Smt)	Nursing Assistant
	(Resigned on 28.02.2013)	Rema K (Smt)	Nursing Assistant
Umarali (Sri)	Staff Nurse	Sajini John (Smt)	Nursing Assistant
	(Resigned on 24.10.2012)	Sali Varghese (Smt)	Nursing Assistant
Anas B.J. (Sri)	Staff Nurse	Sithalekshmi V S (Smt)	Nursing Assistant
	(Resigned on 28.02.2013)	Sheeba P K (Smt)	Nursing Assistant
Nisha Cherian (Smt)	Staff Nurse	Sheeja Rani G (Smt)	Nursing Assistant
	(Resigned on 27.03.2013)	Sheela M (Smt)	Nursing Assistant
Renjini R (Smt.)	Nursing Assistant	Sherly P K (Smt)	Nursing Assistant
Manju C (Smt.)	Nursing Assistant	Shaija K (Smt)	Nursing Assistant
Babitha Beegum (Smt.)	Nursing Assistant	Shyni John (Smt)	Nursing Assistant
Sunitha Devi RR (Smt.)	Nursing Assistant	Sindhumol V A (Smt)	Nursing Assistant
Jayasree S (Smt.)	Nursing Assistant	Smitha D (Smt)	Nursing Assistant
Sheela L (Smt.)	Nursing Assistant	Sneha Latha S (Smt)	Nursing Assistant
Manju I (Smt.)	Nursing Assistant	Sreekumari M(Smt)	Nursing Assistant
Subhamoly O. (Smt)	Nursing Assistant	Sreekumari N (Smt)	Nursing Assistant
Ambika V (Smt)	Nursing Assistant	Subhadra T K (Smt)	Nursing Assistant
Ambily T K (Smt)	Nursing Assistant	Sudha S (Smt)	Nursing Assistant
Beenamma Chacko(Smt)	Nursing Assistant	Suja Kuruvilla (Smt)	Nursing Assistant
Bigimol Dominic (Smt)	Nursing Assistant	Suja V (Smt)	Nursing Assistant



Sunila R S (Smt)	Nursing Assistant
Usha L (Smt)	Nursing Assistant
Varghese Thomas (Sri)	Nursing Assistant
Rajan J (Sri)	Cleaner
Santhakumary A (Smt)	Cleaner
Sajeesh C.K. (Sri)	Cleaner
Ajithakumari N K (Smt)	Cleaner
Ambikadevi S (Smt)	Cleaner
Ambili S (Smt)	Cleaner
Anila Kumary S (Smt)	Cleaner
Anitha Kumary Amma M (Smt)	Cleaner
Anitha V(Smt)	Cleaner
Baby D (Smt)	Cleaner
Chandramathi Amma S (Smt)	Cleaner
Chandrasekharan Nair M (Sri)	Cleaner
Durgadevi B(Smt)	Cleaner
Ebsiba D (Smt)	Cleaner
Geethakumari K (Smt)	Cleaner
Girija S (Smt)	Cleaner
Gopakumar P (Sri)	Cleaner
Jayanthi D (Smt)	Cleaner
Justin Raj T (Sri)	Cleaner
Kala Krishnan (Smt)	Cleaner
Kaladevi B (Smt)	Cleaner
Lysal S (Smt)	Cleaner
Lathakumary K	Cleaner
Radha S (Lathika. S)	Cleaner
Lethakumari K (Smt)	Cleaner
Mallika V (Smt)	Cleaner
Moly B (Smt)	Cleaner
Newton C (Sri)	Cleaner
Omana D (Smt)	Cleaner
Pradeep A (Sri)	Cleaner
Prasanna S (Smt)	Cleaner
Premaletha OT (Smt)	Cleaner
Pushpa T (Smt)	Cleaner
Pushpakumari P (Smt)	Cleaner
Radha R (Smt)	Cleaner
Rajalakshmy R (Smt)	Cleaner
Raheela N (Smt)	Cleaner
Rajeswari L (Smt)	Cleaner

Raju T (Sri)	Cleaner
Remadevi R (Smt)	Cleaner
Remany R (Smt)	Cleaner
Retnamma P (Smt)	Cleaner
Saju F (Sri)	Cleaner
Syamala T (Sakunthala.T)	Cleaner
Sarojam D (Smt)	Cleaner
Sarojam T (Smt)	Cleaner
Sasikala P (Smt)	Cleaner
Sailaja A (Smt)	Cleaner
Kumari Sailaja K P (Smt)	Cleaner
Sobhana S (Smt)	Cleaner
Sobhana S (Smt)	Cleaner
Sreekanton K (Sri)	Cleaner
Sreelatha P (Smt)	Cleaner
Stalin Bright N (Sri)	Cleaner
Subhashini K (Smt)	Cleaner
Sukumary L (Smt)	Cleaner
Suma L (Smt)	Cleaner
Sunilkumar G (Sri)	Cleaner
Sureshkumar K (Sri)	Cleaner
Sushama G (Smt)	Cleaner
Syamalakumari S (Smt)	Cleaner
Thankamoni M (Smt)	Cleaner
Thanky S (Smt)	Cleaner
Thulasi P (Smt)	Cleaner
Unnikrishnan S (Sri)	Cleaner
Valsala P (Smt)	Cleaner
Valsala T K (Smt)	Cleaner
Vanajakumari P (Smt)	Cleaner
Vijayakumar S (Sri)	Cleaner

#### **Palliative Medicine**

---

Prasanth CV (Dr.)	Resident Medical Officer
Manju Achamma Varghese (Dr.)	Resident Medical Officer
Dennison G (Sri)	Manufacturing Chemist
Sanal AD (Sri)	Skilled Worker

#### **Pathology**

---

Sindhu Nair P (Dr.)	Resident Medical Officer
Najeeya S (Smt.)	Technical Officer (Lab)
Jayalal K S (Sri.)	Cytotechnologist Sr.Gr.



Mani K S (Sri.)	Cytotechnologist Sr.Gr.
Veena V S (Smt.)	Cytotechnologist Sr.Gr.
Anitha S (Smt.)	Cytotechnologist
Nataraj A (Sri.)	Technical Officer (Lab)
Brinda T P (Smt.)	Technical Officer (Lab)
Saina A (Smt.)	Technical Officer (Lab)
Sulochana S (Smt.)	Technical Officer (Lab)
Jayasree P S (Smt.)	Lab.Technician Sr.Gr.
Jiju J S (Sri.)	Lab.Technician Sr.Gr.
Lathamalathy L (Smt.)	Lab.Technician Sr.Gr.
Sheena Rani G.S.	Typist
Krishnankutty R (Sri.)	Senior Helper
Vijayakumar C (Sri.)	Hospital Assistant

### Pharmacy & Store

Suresh G (Sri.)	Stores Officer
Dinesh P S (Sri.)	Pharmacist Gr. I
Shaji SS (Sri.)	Pharmacist
Mini KL (Smt.)	Pharmacist
Krishnapriya V (Smt.)	Pharmacist
Saritha SS (Smt.)	Pharmacist
Thomas Rajasekharan (Sri.)	Senior Helper
Vimal Kumar Y S (Sri.)	Helper

### Project Cell

Vijayakumar G (Sri.)	Project Assistant Gr.I
Thrivikraman Nair M G (Sri.)	Clerk Gr. I

### Radiation Physics

Ramabhadran P (Sri.)	Technical Officer
Ambily Govind K (Smt.)	Radiographer Sel.Gr.
Anitha C (Smt.)	Technical Officer
Geetha P (Smt.)	Radiographer Sel.Gr.
Geethamma K (Smt.)	Radiographer Sel.Gr.
Jayasree C G (Smt.)	Radiographer Sel.Gr.
Premeela Devi T (Smt.)	Radiographer Sel.Gr.
Radhakrishnan Nair T (Sri.)	Technical Officer
Santhan H (Sri.)	Radiographer Sel.Gr.
Sheeba D R (Smt.)	Radiographer Sel.Gr.
Sherif J S (Sri.)	Technical Officer
Sreekala R (Smt.)	Technical Officer
Sunil Kumar S (Sri.)	Radiographer Sel.Gr.
Viddiul Latha P A (Smt.)	Radiographer Sel.Gr.
Maheswari J (Smt.)	Radiographer Sr.Gr.
Mariamamma Jacob (Smt.)	Technical Officer
Mini V L (Smt.)	Radiographer Sr.Gr.
Rajesh P R (Sri.)	Radiographer Sr.Gr.
Sindhu S S (Smt.)	Radiographer Sr.Gr.
Abhilash Sudh S S (Sri.)	Radiographer
Asa Rani K S (Smt.)	Radiographer
Lal K Nair (Sri.)	Radiographer
Manju P M (Smt.)	Radiographer
Maya M (Smt.)	Radiographer
Salini G S (Smt.)	Radiographer
Seena C S (Smt.)	Radiographer
Sheena J (Smt.)	Radiographer
Shinu R S (Sri.)	Radiographer
Sunitha Kumari U P (Smt.)	Radiographer Sr.Gr.
Vinod S L (Sri.)	Radiographer
Sreekala D (Smt.)	Technical Officer (Mould)
Santhosh Kumar M S (Sri.)	Electronic Technician GR.I





### Security

Jyothikumar S (Sri.)	Sergeant
Sukumaran Nair R (Sri)	Security Guard
Vikraman Chettiar B. (Sri.)	Security Guard
Krishnan Kutty A. (Sri)	Security Guard
Unnikrishnapillai V (Sri)	Security Guard
Ajithkumar M. (Sri.)	Security Guard
Ajikumar S.L.(Sri)	Security Guard
Jayachandran R (Sri)	Security Guard

### Supporting Services

Surendran Nair V (Sri)	Public Relations Officer
Mini N.(Smt.)	Dietician Gr. I

### Surgical Oncology

Divya Raj (Dr)	Resident Medical Officer
Mohan Pillai B (Sri.)	Theatre Technician (Aneasthesia) Sr.Gr.
Abin Issac (Sri.)	Operation Theatre Technician
Rajendran Nair P (Sri.)	Operation Theatre Technician
Manju RS (Smt.)	Operation Theatre Technician

Kirankumar (Sri.)	Operation Theatre Technician
Santhosh S (Sri.)	Operation Theatre Technician
Devaraja Panicker K (Sri.)	Senior Helper
Jayasree S (Smt.)	Typist Gr. I
Viswakumar N (Sri.)	Typist Gr. I
Suresh P S (Sri.)	Senior Helper
Louis T C (Sri.)	Hospital Assistant

### Transfusion Medicine

Jayalekshmi P (Dr.)	Resident Medical Officer
Rajesh R Chandran (Dr.)	Resident Medical Officer
Bindu A P (Smt.)	Scientific Assistant
Renukadevi V (Smt.)	Lab Technician Sel. Gr.
Asha S R (Smt.)	Lab. Technician Sr.Gr.
Mini S P (Smt.)	Lab. Technician Sr.Gr.

### e. DISMISSALS/RETRENCHMENTS: Nil

### f. RETIREMENTS

Krishnan Nair P (Sri.)	Driver Sel. Gr. (30.06.2012)
Annamma J (Smt.)	Clerk Gr. I (31.03.2012)
Subair M (Sri.)	Senior Helper (30.09.2012)
Mercy Joseph K (Smt.)	Cytotechnologist Sr. Gr. (31.08.2012)
Sudharmadevi K. (Smt.)	Helper (31.07.2012)
Thankamani B (Smt.)	Cleaner (30.04.2012)

### g. OBITUARY

Sini F.K. (Smt)	Radiographer (expired on 18.08.2012)
Jayachandran Nair T.S. (Sri)	Security Guard (expired on 27.08.2012)





## Standing Committees

### a. Scientific Committee

1. Dr. K. Radhakrishnan 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  
Professor of Radiation Oncology  
RCC, Thiruvananthapuram

### b. Institutional Review Board

1. 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  
Professor & Head, Division of Pathology,  
Regional Cancer Centre, Thiruvananthapuram.
8. Dr. N. Geetha, Member  
Professor & Head, Division of Medical Oncology,  
Regional Cancer Centre, Thiruvananthapuram.
9. Dr. Aleyamma Mathew Member  
Additional Professor & Head  
Division of Cancer Epidemiology & Biostatistics  
Regional Cancer Centre, Thiruvananthapuram.
10. Dr. S. Kannan Member  
Professor, Division of Cancer Research,  
Regional Cancer Centre, Thiruvananthapuram.
11. Dr. Francis V. James Convener  
Additional Professor, Division of Radiation Oncology,  
Regional Cancer Centre, Thiruvananthapuram.

### c. Ethics Committee

1. Dr. M. Narendranathan Chairman  
'Sreenilayam', Veerabhadra Gardens, Pottakuzhi,  
Pattom P.O., Thiruvananthapuram.
2. Dr. M. Radhakrishna Pillai Member  
Director, Rajiv Gandhi Centre for Biotechnology  
Thiruvananthapuram.
3. Dr. M. Sambasivan 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.

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|-----|--|----------|
| 6.  | Sri. M.Yunnus Kunju<br>Advocate, No. 7, 'Kaleekal', East Pattom,<br>Thiruvananthapuram.  | Member   |
| 7.  | Smt. Darly Francis<br>'Bethlehem', D7D Moolayil Lane<br>Sasthamangalam, Thiruvananthapuram.                                    | Member   |
| 8.  | Dr. Sanjeev V.Thomas<br>Professor of Neurology, Sree Chitra Tirunal<br>Institute for Science & Technology, Thiruvananthapuram. | Member   |
| 9.  | Dr. N. Geetha<br>Additional Professor & Head<br>Division of Medical Oncology, Regional Cancer Centre,<br>Thiruvananthapuram.   | Member   |
| 10. | Dr. Rejnish Kumar R<br>Associate Professor of Radiation Oncology<br>Regional Cancer Centre, Thiruvananthapuram.                | Convener |

#### **d. Medical Audit Committee**

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|-----|--|----------|
| 1.  | Dr. K. Ramadas, Medical Superintendent                   | Chairman |
| 2.  | Dr. P.G. Jayaprakash,<br>Professor; Radiotherapy         | Member   |
| 3.  | Dr. Iqbal Ahamed,<br>HOD, Surgical Oncology              | Member   |
| 4.  | Dr. N. Geetha,<br>Professor, HOD, Medical Oncology       | Member   |
| 5.  | Dr. P. Kusumamumary,<br>HOD, Paediatric Oncology         | Member   |
| 6.  | Dr. K. Ramachandran,<br>HOD, Imageology                  | Member   |
| 7.  | Dr.V.M. Pradeep,<br>HOD, Nuclear Medicine                | Member   |
| 8.  | Dr. Cherian M. Koshy,<br>HOD, Palliative Care            | Member   |
| 9.  | Dr. Beela Sarah Mathew,<br>Addl. Professor; Radiotherapy | Member   |
| 10. | Dr. R. Rejnish Kumar,<br>Assoc. Professor; Radiotherapy  | Member   |
| 11. | Ms. R. Sreelekha,<br>Chief Nursing Officer               | Member   |
| 12. | Smt. Chandrika D,<br>Medical Records Officer             | Member   |

#### **e. Hospital Infection Control Committee**

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|-----|--|----------|
| 1.  | Dr. K. Ramadas,<br>Medical Superintendent                | Chairman |
| 2.  | Dr. Iqbal Ahamed,<br>HOD, Surgical Oncology              | Member   |
| 3.  | Dr. N. Geetha,<br>HOD, Medical Oncology                  | Member   |
| 4.  | Dr. Rachel Cherian Koshy,<br>HOD, Anaesthesiology        | Member   |
| 5.  | Dr. Swapna R. Nath,<br>HOD, Microbiology                 | Member   |
| 6.  | Dr. K.Vijayalekshmi,<br>HOD, Transfusion Medicine        | Member   |
| 7.  | Ms. R. Sreelekha,<br>Chief Nursing Officer               | Member   |
| 8.  | Nursing Supdt., in charge of Laundry &<br>Linen Services | Member   |
| 9.  | Nursing Supdt., in charge of<br>Housekeeping Services    | Member   |
| 10. | Head Nurse in charge of CVAD                             | Member   |
| 11. | Infection Control Nurse                                  | Member   |
| 12. | Controller of Finance                                    | Member   |
| 13. | Purchase Officer   | Member   |
| 14. | Ms. Lizyamma Jacob, Nursing Supervisor                   | Convener |

#### **f. Building Committee**

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|----|---|----------|
| 1. | Chief Engineer,<br>PWD (Buildings & Local Works)  | Chairman |
| 2. | Chief Architect, PWD                              | Member   |
| 3. | Director of Medical Education                     | Member   |
| 4. | Principal, Medical College,<br>Thiruvananthapuram | Member   |
| 5. | Director, RCC                                     | Member   |
| 6. | Controller of Finance, RCC                        | Member   |
| 7. | Chief Construction Engineer, RCC                  | Convener |

#### **g. Library Committee**

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|----|--|----------|
| 1. | Dr. Paul Sebastian                                     | Chairman |
| 2. | Dr. P. Kusumakumary,<br>Additional Director (Academic) | Member   |
| 3. | Dr. K. Ramadas, Medical Superintendent                 | Member   |
| 4. | Smt. Lekshmi Rani, Controller of Finance               | Member   |

- |   |          |
|---|----------|
| 5. Dr. K. Ramachandran,<br>HOD, Imageology Division   | Member   |
| 6. Dr. K. Jayasree, HOD, Pathology Division           | Member   |
| 7. Sri.V.Vishnu,<br>Librarian cum Information Officer | Convener |

## Right To Information Act

### a. Public Information Officers

1. Sri. K.O. Mathai, Accounts Officer
2. Smt. Lalitha B, Assistant Administrative Officer Gr. I
3. Smt. Chandrika D., Medical Records Officer
4. Smt. N. Neelima, Systems Manager

### b. Assistant Public Information Officers

Smt. C. Shylaja, Office Assistant Sel. Gr.  
Sri. S.V. Sasikumar, Purchase Officer  
Smt. N. Beena, Assistant Accounts Officer  
Sri.V. Surendran Nair, Public Relations Officer

### c. Appellate Authority

Dr. K. Ramadas, Medical Superintendent

### d. Number of Applications

Received: 73

Disposed: 68 (including 1 pending application of the previous year)

Pending: 6

e. Penalties levied for non-supply of information: Nil

f. Cases pending with State Information Commission: Nil

## Internal Control Mechanism

- a. Staff used exclusively for internal audit : 1
- 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.

## 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 : Completed

# EVENTS



Inauguration of the State Level Workshop for Dental Surgeons on 'Prevention and Control of Oral Cancer' by Sri.V.S. Sivakumar, Hon'ble Minister for Health, Family Welfare and Devaswoms (20 May 2012)



Observance of World No Tobacco Day, inaugurated by Dr. Paul Sebastian, Director (31 May 2012)



Inauguration of hightech ambulance by Dr.T.N. Seema, MP, Rajyasabha (18 June 2012)



Commissioning of Picture Archiving & Communication System and Digital Breast Imaging Unit by Sri. Oommen Chandy, Hon'ble Chief Minister (10 July 2012)



Release of Global Adult Tobacco Survey Kerala State Fact Sheet by Sri. Oommen Chandy, Hon'ble Chief Minister (10 October 2012)



Observance of World Palliative Care Day, inaugurated by Smt.Aruna Sundararajan, IAS (13 October 2012)





Inauguration of 28th National Cancer Registry Meeting and Workshop by Sri. V.S. Sivakumar, Hon'ble Minister for Health, Family Welfare and Devaswoms (4-7 Dec 2012)



Inauguration of 14th National Conference on Oncology Nursing by Sri. V.S. Sivakumar, Hon'ble Minister for Health, Family Welfare and Devaswoms (1-2 Feb 2013)



Observance of World Cancer Day, inaugurated by His Excellency, The Governor of Mizoram Sri. Vakkom B. Purushothaman (4 February 2013)



Observance of International Childhood Cancer Day, inaugurated by Dr. Paul Sebastian, Director (15 Feb 2013)



Inauguration of India-Singapore International Conference by Sri. V.S. Sivakumar, Hon'ble Minister for Health, Family Welfare and Devaswoms (15-16 Mar 2013)



## RENOVATED CONFERENCE HALL



ACCOUNTS  
2012-2013

**REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM (Reg. No. 567/81)  
BALANCE SHEET AS ON 31st MARCH 2013**

Previous Year Rs. Ps.	Schedule	Liabilities	Current Year Rs. Ps.	Previous Year Rs. Ps.	Schedule	Assets	Rs. Ps.	Current Year Rs. Ps.
1,341,445,057.17	I	CAPITAL FUND	1,588,936,952.17	1,317,433,284.76	V	FIXED ASSETS	1,564,505,179.76	
228,566,560.08	II	SPECIFIC FUNDS	403,008,911.33	674,312,102.91		Less: PROVISION FOR DEPRECIATION	779,553,918.22	
		GRANT IN AID FROM GOVT OF INDIA	48,000,000.00	643,121,181.85		FIXED ASSETS (net of provision for dep.)		784,951,261.54
266,912,865.00		GRANT IN AID FROM GOVT OF KERALA	358,030,598.00	290,462,131.00	VI	INVESTMENTS		396,348,346.00
		CURRENT LIABILITIES & PROVISIONS				CURRENT ASSETS, LOANS & ADVANCES		
105,312,338.00	III	CREDITORS FOR GOODS SUPPLIED	55,205,948.25	83,913,648.00	VII	CLOSING STOCK		66,444,381.00
91,356,983.82	IV	OTHER CURRENT LIABILITIES	123,764,130.75	1,76,547,192.72	VIII	INVESTIGATION FEES RECEIVABLE		247,948,949.50
		PROVISION FOR GRATUITY	41,891,550.00	309,708,606.56	IX	BALANCE WITH BANKS		546,030,923.20
				748,363.03	X	CASH IN HAND		550,167.13
				13,481,716.17	XI	OTHER ASSETS		33,739,428.41
				515,610,964.74	XII	INCOME & EXPENDITURE A/C		542,824,633.72
2,033,593,804.07		TOTAL	2,618,838,090.50	2,033,593,804.07		TOTAL		2,618,838,090.50

XIII SIGNIFICANT ACCOUNTING POLICIES  
XIV NOTES ON ACCOUNTS

Schedules I to XIV form an integral part of this Balance Sheet.

Thiruvananthapuram,  
5th October 2013

DR. PAUL SEBASTIAN  
(Director)

As per my report of even date attached

K SHAJAHAN  
(Controller of Finance)

SAJI V S  
Bcom, BGL, DISA((CAI), 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 2013**

Previous Year Rs. Ps.	Schedule	Expenditure	Current Year Rs. Ps.	Previous Year Rs. Ps.	Schedule	Income	Current Year Rs. Ps.
61,924,512.00		Opening Stock	83,913,648.00	331,665,525.23		Investigation Fees	395,074,310.98
429,606,675.70	A	Purchases Medicines, Chemicals etc.	477,704,290.00	385,214,047.33		Medicine Receipts	473,146,868.15
367,146,444.70	B	Salaries and Allowances	493,906,958.90	8,492,947.37		Interest Income	8,717,176.03
322,981.00		Uniform and Livenies	1,166,666.00	3,024,250.00	K	Training Fees	7,670,302.00
134,748.00	C	Rent, Rates & Taxes	516,306.00	5,642,642.00	L	Miscellaneous Income	8,192,982.40
348,840.00	D	Postage, Telephone & Telegrams	399,656.50	83,913,648.00	VII	Closing Stock	66,444,381.00
229,455.00	E	Travelling Expenses	482,380.00				
2,469,557.00		Printing & Stationary	2,770,650.00	200,000,000.00		Grant-in-Aid from Govt of Kerala	253,778,628.00
1,773,683.00		Advertisement Charges	2,507,119.00				
16,621,819.00	F	Electricity and Water Charges	26,226,522.00				
7,016,799.45	G	Repairs & Maintenance	16,226,122.00	(17,633,014.79)		Excess of Expenditure over Income	25,294,629.50
11,891,298.00	H	Service Contract Charges	13,625,082.00				
200,000.00		Audit Fees	250,000.00				
934,972.00	I	Computer Expenses	649,039.00				
8,450.00		Books & Periodicals	9,795.00				
3,124,793.10		Expenses to NTR	3,675,891.00				
1,315,390.00		Medicine issues (free)	866,598.45				
1,234,162.95	J	Miscellaneous Expenses	3,211,854.60				
		Matress, Linen, Laundry and other					
4,545,738.70		Housekeeping Expenses	4,590,884.30				
89,469,725.54	V	Depreciation	105,619,815.31				
1,000,320,045.14		TOTAL	1,238,319,278.06	1,000,320,045.14		TOTAL	1,238,319,278.06

XIV SIGNIFICANT ACCOUNTING POLICIES

XV NOTES ON ACCOUNTS

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

Thiruvananthapuram,

5th October 2013

DR. PAUL SEBASTIAN  
(Director)

K SHAJAHAN  
(Controller of Finance)

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

As per my report of even date attached

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

## SCHEDULE - V

Item	Gross Block			Depreciation			Net Block				
	As on 1.4.12	Additions during the year	Deduction during the year	As on 31.3.2013	Rate %	Up To 31.3.12	Provided during the year	Adjustments/ deletions	Total Up to 31.3.2013	As On 31.3.2013	As On 31.3.12
LAND	1,000.00	-	-	1,000.00	-	-	-	-	-	1,000.00	1,000.00
BUILDINGS	210,282,606.57	7,273,215.00	-	217,555,821.57	5.00	91,008,765.38	6,327,352.81	-	97,336,118.19	120,219,703.38	119,273,841.19
CIVIL WORKS	309,140.63	-	-	309,140.63	5.00	107,748.80	10,069.59	-	117,818.39	191,322.24	201,391.83
COBALT UNIT	18,123,455.30	-	-	18,123,455.30	15.00	15,110,545.98	451,936.40	-	15,562,482.38	2,560,972.92	3,012,909.32
WATER SUPPLY & DRAINAGE	5,454,492.43	209,126.00	-	5,663,618.43	15.00	3,117,606.92	381,901.73	-	3,499,508.65	2,164,109.78	2,336,885.51
FURNITURE AND FITTINGS	21,792,724.48	1,881,382.00	-	23,674,106.48	10.00	11,177,789.27	1,249,631.72	-	12,427,420.99	11,246,685.49	10,614,935.21
OFFICE EQUIPMENTS	2,718,018.43	-	-	2,718,018.43	15.00	2,374,650.33	51,505.21	-	2,426,155.55	291,862.88	343,368.10
HOSPITAL & LAB. EQUIPMENTS	73,181,900.97	1,331,645,770.00	-	864,983,582.97	15.00	372,553,713.69	73,864,480.39	-	446,418,194.08	418,565,388.89	359,265,292.28
ELECTRICAL INSTALLATION	43,537,768.90	1,972,137,200.00	420,000.00	62,839,140.90	15.00	37,613,834.44	3,846,795.97	378,000.00	41,082,630.41	21,756,510.49	5,923,934.46
FIRE DETECTION	4,514,703.00	91,902.00	-	4,606,605.00	15.00	3,793,770.12	121,925.23	-	3,915,695.35	690,909.65	720,932.88
AIR CONDITIONING	38,138,771.35	221,135.00	-	38,359,906.35	15.00	19,029,204.83	2,899,605.23	-	21,928,810.06	16,431,096.29	19,109,566.52
COMPUTER HARDWARE & SOFTWARE	11,020,685.00	2,238,654.00	-	13,259,339.00	60.00	9,900,140.03	2,015,519.38	-	11,915,659.41	1,343,679.59	1,120,544.97
GAS AND CYLINDER	7,586,344.05	-	-	7,586,344.05	15.00	6,728,045.35	128,744.80	-	6,856,790.16	729,553.89	858,298.70
VEHICLES	2,407,646.60	654,029.00	-	3,061,675.60	20.00	879,668.45	436,401.43	-	1,316,069.88	1,745,605.72	1,527,978.15
LIBRARY BOOKS & JOURNALS	46,163,057.65	4,288,108.00	-	50,451,165.65	15.00	26,359,287.41	3,613,781.74	-	29,973,069.15	20,478,096.50	19,803,770.24
LIFT AND ELEVATOR	7,437,240.00	2,962,868.00	-	10,400,108.00	15.00	5,804,996.78	689,266.68	-	6,494,263.46	3,905,844.54	1,632,243.22
ASSETS (DONATIONS)	370,112.00	-	-	370,112.00	15.00	327,869.34	6,336.40	-	334,205.74	35,906.26	42,242.66
TELEPHONE EQUIPMENTS	4,457,371.00	79,787.00	-	4,537,158.00	15.00	3,540,833.86	149,448.62	-	3,690,282.48	846,875.52	916,537.14
HIGH ENERGY LINEAR ACCELERATOR	52,987,763.00	-	-	52,987,763.00	15.00	38,549,099.49	2,165,799.53	-	40,714,899.02	12,272,863.98	14,438,663.51
ASSETS-TELEMEDICINES PROJECT	7,718,623.00	-	-	7,718,623.00	15.00	5,873,715.00	276,736.20	-	6,150,451.20	1,568,171.80	1,844,908.00
HOSPITAL EQUIPMENTS & OTHER ASSETS (PROJECT)	39,589,177.00	23,477,326.00	-	63,066,503.00	15.00	18,451,765.07	6,692,210.69	-	25,143,975.76	37,922,527.24	21,137,411.93
LOW ENERGY LINEAR ACCELERATOR	3,611,489.40	-	-	3,611,489.40	15.00	2,009,052.37	240,365.55	-	2,249,417.92	1,362,071.48	1,602,437.03
BUILDINGS WORK IN PROGRESS	57,392,089.00	5,122,841,400.00	-	108,620,503.00	-	-	-	-	-	108,620,503.00	57,392,089.00
TOTAL	1,317,433,284.76	247,491,895.00	420,000.00	1,564,505,179.76	674,312,102.91	105,619,815.31	378,000.00	779,553,918.22	784,951,261.54	643,121,181.85	

**REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM**  
**(Reg. no. 567/81)**  
**CANCER CARE FOR LIFE SCHEME**  
**INCOME AND EXPENDITURE ACCOUNT FOR**  
**THE YEAR ENDED 31st MARCH 2013**

Previous Year Rs. Ps.	EXPENDITURE	Current Year Rs. Ps.	Previous Year Rs. Ps.	INCOME	Current Year Rs. Ps.
11,791,511.00	Reimbursement to Patients	12,138,493.48	7,422,260.00	Interest on FD & Investments	10,219,454.00
			4,369,251.00	Excess of Expenditure over Income	1,919,039.48
11,791,511.00	TOTAL	12,138,493.48	11,791,511.00	TOTAL	12,138,493.48

Thiruvananthapuram,  
5th October 2013

DR. PAUL SEBASTIAN  
(Director)

As per my report of even date attached

K SHAJAHAN  
(Controller of Finance)

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



# INDEPENDENT AUDITOR'S REPORT

To

The Members of  
Regional Cancer Centre Society,  
Thiruvananthapuram.

I have audited the accompanying financial statements of Regional Cancer Centre Society, Trivandrum ("the Society") which comprise the Balance Sheet as at March 31, 2013, and the Income and Expenditure Account for the year then ended, and a summary of significant accounting policies and other explanatory information.

## **Management's Responsibility for the Financial Statements**

The Society's Management is responsible for the preparation of these financial statements in accordance with the Travancore Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 of India. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the financial statements that are from material misstatement, whether due to fraud or error.

## **Auditor's Responsibility**

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risk of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Society's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

## **Opinion**

In my opinion and to the best of my information and according to the explanations given to me, the financial statements of Regional Cancer Centre Society for the year ended March 31, 2013 are prepared, in all material respects, in accordance with the Travancore Cochin Literary, Scientific and Charitable Societies Registration Act, 1955 of India.

Thiruvananthapuram

5th October 2013

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

# SCHEDULE – XIV

## SIGNIFICANT ACCOUNTING POLICIES

### **1. 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 as 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.1 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 the year full depreciation is provided at the rates mentioned above while no depreciation is charged during the year in the case of assets disposed/demolished/discarded or otherwise retired during the year.

### **6. GRANT IN AID**

Grant in Aid received during the year from the Government, both Central and State, under the plan fund to the extent of the value of addition of fixed assets in the current year is transferred and included under Capital Fund Account and the balance amount is retained under Grant in Aid from the respective Government Account. Grant in Aid received under non plan fund from the State Government is transferred to Income and Expenditure Account to the extent utilized in the current year for the purpose for which it is received and the amount to the extent not utilized in the current year for the stated purpose, but set apart to be used for the purpose in the subsequent year(s), is retained under Grant in Aid from the State Government 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, specific donation used during the current year for acquiring 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.

### **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 to capital fund account as the society received these assets at free of cost.

### **10. RETIREMENT BENEFITS**

The liability on account of post-employment benefit in the form of gratuity, as and when it arises, is met from Regional Cancer Centre Employees Group Gratuity Fund set up under a Group Gratuity Scheme administered by Life Insurance Corporation of India. The premium paid to the scheme is treated as revenue expenditure and disclosed in the Income and Expenditure account.

## 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 there would have been 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. A sum of Rs. 5 crores received during 2011-12 under the head of account 2210-05-800-89-36 Grant-in-Aid General-Non Salary (NP) vide G.O (Rt) No. 1105/2012/H&FWD dated 29.03.2012 for meeting the expenditure towards establishment charges and renovating electrical power supply installation was set apart in the year 2011-12 and kept under 'Grant in Aid from Govt. of Kerala', to be utilized in the year 2012-13 for the purpose. Whereas during the year 2012-13 the society has spent Rs.1,97,21,372/- towards renovating electrical power supply and installation and accordingly the same has been transferred to Capital Fund and the balance amount of Rs. 3,02,78,628/-, has been credited to the Income and Expenditure Account and is included under the head "Grant-in-aid from Government of Kerala".
3. Investigation Fee includes income from registration fee, ward charges, nuclear medicine, radiotherapy, surgery and lab.
4. There is no surplus or profit during the year, according to the Society, which is chargeable to income tax.
5. Contingent liability towards property tax and interest thereon is amounting to Rs.1,04,67,369/-. Non-refund of Grant in aid is contingent up on the fulfillment of all the conditions attached to such assistance.
6. Government of Kerala have sanctioned, vide order No. G.O (Rt)No. 2299/2012/H & FWD Dated 10/07/2012, the revision of pay structure of 6th Central Pay Commission to the faculties of Regional Cancer Centre with effect from 01/01/2006 subject to the condition that the benefit from 01/01/2006 to 31/12/2006 will be notional and the monetary benefit will be available from 01/01/2007. The liability towards such payment is estimated to be Rs.562 lakhs-(approx.) and against which a provision Rs.158Lakhs has been made in the books during the current year.
7. The balance in Grant in Aid from Govt. of Kerala a/c includes grant received under plan fund of Rs.35,80,30,598/- and similarly Grant in Aid from Govt. of India represents the unutilized amount of Grant received under plan from the Central Government.
8. Figures for the previous year have been regrouped and recast wherever necessary to suit the current year lay out.

Thiruvananthapuram  
5th October 2013

**DR. PAUL SEBASTIAN**  
(Director)

**K SHAJAHAN**  
(Controller of Finance)

As per my report of even date attached

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

# UTILISATION CERTIFICATE

1. During the year 2012-13, the Regional Cancer Centre Society, Trivandrum has received Rs.3400 Lakhs under the head of account 2210-05-800-89-35-RCC-Grant in Aid(P), Rs.360 Lakhs under the head of account 2210-05-800-89-36(NP)Grant in Aid-Non-salary and Rs.1875 Lakhs under the head of account 2210-05-800-89-31 Grant in Aid-Salary(NP) from the Govt. of Kerala. The details of such receipts are as follows:

Installment	G.O.Numbers	Amount (Rs. In Lakhs)
A.	Head of Account-2210-05-800-89-35-RCC-Grant in Aid(P)	
1	G.O.(Rt)No.4112/2012/H&FWD dated 15/12/2012	300.00
2	G.O.(Rt)No.382/2013/H&FWD dated 04/02/2013	2,070.00
3	G.O.(Rt)No.792/2013/H&FWD dated 11/03/2013	910.00
4	G.O.(Rt)No.1105/2013/H&FWD dtd. 26/03/2013	120.00
	<b>Total</b>	<b>3,400.00</b>
B.	Head of Account -2210-05-800-89-36(NP) Grant in Aid-Non-salary	
1	G.O.(Rt)No.1846/2012/H&FWD dated 04/06/2012	100.00
2.	G.O.(Rt)No.2717/2012/H&FWD dated 16/08/2012	100.00
3.	G.O.(Rt)No.3453/2012/H&FWD dated 18/10/2012	160.00
	<b>Total</b>	<b>360.00</b>
C.	Head of Account 2210-05-800-89-31(NP) Grant in Aid-Salary	
1	G.O.(Rt)No.1846/2012/H&FWD dated 04/06/2012	200.00
2	G.O.(Rt)No.2717/2012/H&FWD dated 16/08/2012	200.00
3	G.O.(Rt)No.3453/2012/H&FWD dated 18/10/2012	200.00
4	G.O.(Rt)No.4217/2012/H&FWD dated 24/12/2012	600.00
5	G.O.(Rt)No.446/2013/H&FWD dated 08/02/2013	675.00
	<b>Total</b>	<b>1,875.00</b>
	<b>Grand Total(A+B+C)</b>	<b>5,635.00</b>

2. The amount was used for the followings:

Sl. No.	Purpose	Amount (Rs. in lakhs)
1	Acquisition of Assets	1,457.46
2	Opening LC for acquiring fixed Asset (Margin Deposit for Letter of Credit opened for acquiring fixed assets)	711.72
3	Operational Expenditure including salary	2,235.00
	<b>Total</b>	<b>4,404.18</b>

Acquisition/renovation of assets includes security deposits deducted from contractors/suppliers of Rs.59.12 lakhs.

3. In addition to the above the Society, during the year 2012-13, has spent Rs.197.21Lakhs for renovating electrical power supply, and installation out of the grant in aid received under the head of account 2210-05-800-89-36 Grant-in-Aid General-Non Salary (NP) vide G.O (Rt) No. 1105/2012/H&FWD dated 29.03.2012.
4. That the utilisation mentioned above is true and correct as disclosed by the Books of account of the Society

Thiruvananthapuram

5th October 2013

**SAJIV S**

BCom, BGL, DISA(ICAI), FCA

**Chartered Accountant**

Membership No.212594

**T.AJITH KUMAR B.Com, FCA**  
**CHARTERED ACCOUNTANT**

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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, 2013 and relevant books and vouchers and certify that according to the audited accounts.

1. The brought forward foreign contribution at the beginning of the financial year 2012-2013 was Rs.2,84,40,539.30
2. Foreign Contribution worth Rs.1,84,03,170.86 was received by the Association during the year ended 31st March, 2013.
3. The balance in foreign contribution account together with interest earned thereon at the end of the financial year 2012-2013 was Rs.3,47,45,015.62
4. Certified that the Association has maintained the accounts of foreign contribution and records relating thereto in the manner specified in section 19 of the foreign contribution (Regulation) Act, 2010(42 of 2010) read with rule 16 of the foreign contribution (Regulation) Rules, 2011.
5. The information furnished above and in the Balance Sheet and statement of receipts and payments are correct as checked by me.

Trivandrum  
19<sup>th</sup> September, 2013

**T.AJITH KUMAR B.Com, FCA**  
**CHARTERED ACCOUNTANT**  
MEM. NO. 209348

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

**Foreign contribution for Research Projects**  
**Balance Sheet as at 31st March 2013**

<b>LIABILITIES</b>	Amt (Rs. Ps.)	Amt (Rs. Ps.)	<b>ASSETS</b>	Amt (Rs. Ps.)
<b>CAPITAL FUND</b>			<b>FIXED ASSETS</b>	
As on 1-4-2012	111,03,017.84		Computer	21,83,574.00
			Printer & UPS	2,71,010.00
Balance as at the end of the year		111,03,017.84	Fax Machine	51,359.00
			Refrigerator	11,953.00
			Deep Freezer	1,23,674.00
			Vehicle	23,80,744.00
			FAN	3,687.00
			Furniture	6,68,672.29
			Equipments	40,76,541.00
			Air Conditioner	2,23,239.00
Project Balances as Per Schedule		153,82,142.86	Photocopier	3,22,735.00
Research Funds as per Schedule		193,62,872.76	Building Addl. Facilities	7,85,829.55
<b>CURRENT LIABILITIES</b>			<b>INVESTMENTS</b>	
Salary Recovery		32,668.00	Term Deposit with Syndicate Bank	39,57,772.09
			Term Deposit with S.B.T	249,55,929.00
Payable to res: Project a/c		11,13,682.39	Term Deposit with Fed.Bank	19,59,075.00
			Term Deposit with PNB	13,30,966.00
			<b>CURRENT ASSETS &amp;</b>	
			<b>LOANS AND ADVANCES</b>	
			Cash in Hand	13,755.00
			Cash at Bank	28,50,364.92
			Interest Accrued but not due	7,87,504.00
			Imprest	6,000.00
			Rent Deposits	30,000.00
<b>TOTAL</b>		<b>469,94,383.85</b>	<b>TOTAL</b>	<b>469,94,383.85</b>

Vide my report of even date attached.

Thiruvananthapuram  
19 September, 2013

**Finance Manager**  
(Projects)

**DIRECTOR**

**T.AJITH KUMAR B.Com, FCA**  
**CHARTERED ACCOUNTANT**  
**MEM. NO: 209348**

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

**Foreign contribution for Research Projects**  
**Receipts and Payments Account for the**  
**year ended on 31st March 2013**

RECEIPTS	Amt (Rs)	PAYMENTS	Amt (Rs)
To Opening Balance:-		By Project Expenses:-	
Cash in Hand	18,372.00	" Revenue Expenses paid	136,89,298.00
Cash at Bank	11,10,738.06		
		" Capital Expenses paid	1,94,576.00
Foreign Receipts for various Projects (As per Schedule attached)	184,03,170.86		
Recovery from Salary	2,79,483.00	Paid to RCC	78,278.00
Other Advance Recovered	46,900.00	Salary Recovery Account	2,59,245.00
Donation received for RCC	8,81,582.00	Other Advances paid	46,900.00
Interest Received	1,94,216.00	Paid to Research Projects	4,20,438.00
		Donation for RCC Paid	8,81,607.00
		Term Deposit SBT	25,00,000.00
TDS deducted	15,101.00	TDS paid	15,101.00
		To Closing Balance:-	
		Cash in Hand	13,755.00
		Cash at Bank	28,50,364.92
TOTAL	209,49,562.92	TOTAL	209,49,562.92

Vide my report of even date attached.

Thiruvananthapuram  
19 September 2013

**Finance Manager**  
**(Projects)**

**DIRECTOR**

**T.AJITH KUMAR B.Com, FCA**  
**CHARTERED ACCOUNTANT**  
**MEM. NO: 209348**



T. AJITH KUMAR B.Com, FCA  
CHARTERED ACCOUNTANT

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E-mail: ajithkumarca@yahoo.com

## AUDITOR'S REPORT

1. I have audited the Balance Sheet of the Project Cell of Regional Cancer Centre, Thiruvananthapuram as at 31st March, 2013 and the Income and Expenditure Account together with the Schedules thereon for the year ended on that date.

2. Subject to :-

(a) Tax deducted from the receipts are accounted as per the position of 26AS available as on the date of Audit and

(b) The 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.

Thiruvananthapuram  
19 September 2013

**T.AJITH KUMAR B.Com, FCA**  
**CHARTERED ACCOUNTANT**  
**MEM. NO: 209348**

**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 2013**

Liabilities	Amt (Rs. Ps.)	Amt (Rs. Ps.)	Assets	Amt (Rs. Ps.)	Amt (Rs. Ps.)
Capital Fund		99,63,577.62			
			Fixed Assets:- Sch-2		1,62,221.37
R&D Fund -Sch.5		135,44,862.05			
			Foreign Contribution		
Income & Expenditure Account		273,97,905.36	Receivable Account		11,13,682.39
Training Fund(Schedule-6)		109,30,428.75	TERM DEPOSITS :		
			Syndicate Bank	12,01,676.49	
			Union Bank of India	10,00,000.00	
			SBT	674,90,238.00	
Current Liabilities			Punjab Nat. Bank	51,84,669.00	748,76,583.49
Security Deposits	1,29,061.00				
Project Balances as per Sch-I	450,16,938.61	451,45,999.61	Cash in Hand - Sch-3		5,533.00
Salary Recovery		23,781.00	Cash at Bank - Sch-4		202,13,534.61
VAT Payable		2,116.00			
Welfare Fund Payable		705.00	Rent Deposit		45,000.00
			Other Advance		10,000.00
			Interest Accrued but not Due		39,90,547.00
			TDS		65,92,273.53
<b>TOTAL</b>		<b>1070,09,375.39</b>	<b>TOTAL</b>		<b>1070,09,375.39</b>

Vide my report of even date attached

Thiruvananthapuram  
19 September 2013

**Finance Manager**  
**(Projects)**

**DIRECTOR**

**T.AJITH KUMAR B.Com, FCA**  
**CHARTERED ACCOUNTANT**  
**MEM. NO: 209348**

**PROJECT CELL**  
**REGIONAL CANCER CENTRE SOCIETY, TRIVANDRUM**  
**(REG. No. 567/81)**  
**Income and Expenditure Account**  
**for the year ended on 31st March 2013**

<b>Expenditure</b>	<b>Amt (Rs. Ps.)</b>	<b>Income</b>	<b>Amt (Rs. Ps.)</b>
Salary Paid	379157.15	Income from Projects	2974908.00
Travelling Expenses	10100.00	Interest received	7850759.14
Audit Fee	29000.00		
Printing & Stationery	1557.00		
Computer Stationery	2484.00		
Postage Expenses	333.00		
Other Miscellaneous Expenses	13802.00		
Depreciation	20864.09		
Excess of Income Over Expenditure	10368369.90		
<b>TOTAL</b>	<b>10825667.14</b>	<b>TOTAL</b>	<b>10825667.14</b>

Vide my report of even date attached

Thiruvananthapuram  
19 September 2013

**Finance Manager  
(Projects)**

**DIRECTOR**

**T.AJITH KUMAR B.Com, FCA  
CHARTERED ACCOUNTANT  
MEM. NO: 209348**

## ACKNOWLEDGEMENTS

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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, Geneva, 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  
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 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  
Medical College, Thiruvananthapuram  
Sree Avittam Thirunal Hospital for Women and Children, Thiruvananthapuram  
Dental College, Thiruvananthapuram  
Department of Economics and Statistics, Kerala  
Drugs Controller, Thiruvananthapuram  
College of Pharmaceutical Sciences, Thiruvananthapuram  
Corporation of Thiruvananthapuram  
Regional Cancer Association, Thiruvananthapuram  
Asianet TV  
Kairali TV  
Care Plus, Thiruvananthapuram  
Asraya, Thiruvananthapuram  
Navoothan Charitable Foundation  
Prathyasa, Thiruvananthapuram  
SDM Cancer Relief Fund, California  
All our well-wishers and friends





REGIONAL  
CANCER  
CENTRE

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