

# The Gujarat Cancer & Research Institute

# (M. P. Shah Cancer Hospital)

STATE CANCER INSTITUTE

(Recognized by Ministry of Health & Family Welfare, Govt. of India)



### Shri Pankaj R. Patel Chairman, Governing Board, GCRI

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Shri Roopwant Singh, IAS Secretary, Finance Department (Expenditure), Government of Gujarat

Chairman/Managing Director, GMDC

**Dr. Bharat Amin, MS** Nominated by Government of Gujarat

#### Nominated by **Gujarat Cancer Society**

Shri Pankaj R. Patel Executive Chairman, Guiarat Cancer Society Shri Prashant Kinarivala General Secretary, Gujarat Cancer Society Shri Kshitish Madanmohan Vice President, Gujarat Cancer Society Shri Chintan Parikh Vice President, Gujarat Cancer Society Dr. Devendra Patel Former Director, GCRI

#### Nominated by Govt. of India

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Director (IF), Ministry of Health, Government of India

**Dr. Shashank Pandya** Director, GCRI & Member Secretary

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Dr. Shashank Pandya Director, GCRI Member Secretary

Shri Divyesh Radia Special Invitee

Shri Kshitish Madanmohan Memher

> **Dr. Pariseema Dave** Deputy Director, GCRI Special Invitee

Shri Kaushik Patel Special Invitee

Shri Narendrasinh Chavda Special Invitee



'JOINT VENTURE OF GOVERNMENT OF GUJARAT AND THE GUJARAT CANCER SOCIETY'

# THE GUJARAT CANCER & RESEARCH INSTITUTE

(M. P. SHAH CANCER HOSPITAL) Affiliated to B J Medical College

# **STATE CANCER INSTITUTE**

(Recognised by Ministry of Health & Family Welfare, Government of India)

### **MEMBER OF UICC**



global cancer control International Union Against Cancer (UICC)

### ANNUAL REPORT 2018 - 2019

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# **Our Mission**

The mission of the GCRI is to provide state-ofthe art diagnostic and therapeutic services to the patients of all types of origin and financial background suffering from cancer. Its scope also encompasses registering the tumor burden in the population, prevention through awareness drives, solving local medical problems through research and training of medical students as well as imparting knowledge to the medical fraternity.

## **To Fulfil The Mission, GCRI**

- Conducts OPD and indoor activities for diagnosis, staging, treatment and monitoring disease progress.
- Renders free or subsidized treatment to needy patients without any distinction of caste, creed or religion.
- Provides training to new generation of doctors as well as practicing fraternity.
- Offers unique experimental and research-oriented diagnosis and treatment services to test new forms of diagnosis and therapy in order to improve quality of life and expected survival of those afflicted with cancer.
- Organizes public education programmes, the diagnostic and blood donation camps, conferences and other scientific meets.
- Displays a permanent Cancer Awareness and Anti-tobacco exhibition and arranges other preventive efforts.
- Runs instruction based Hospice Centre, Home-Hospice Services and Rehabilitation Service.



# **Our Vision**

GCRI, with a multi-disciplinary close relationship between cancer care, research and education, intends to provide the greatest hope to the patients and the general population whose needs, we endeavour to cater to. It strives to see that fruits of modern science reach up to the last man. GCRI believes that the world class cancer research, state of art therapeutic efforts and intensive and extensive educational efforts regarding prevention, detection, treatment and palliation in the field of cancer will improve the quality of life of all those who suffer from it. GCRI collaboration believes that with other cancer organisations, research laboratories and pharma-research establishments will bring a better tomorrow.

# **Our Core Values**

### GCRI is dedicated to

- Scientific attitude and humane approach to diagnosis and treatment of cancer.
- Inquisitiveness, innovation and creativity in the field of research and its translation into day-to-day clinical applications.
- Value oriented as well as information and skill-intensive educational programmes.
- Respect to all schools of thoughts and endeavours for free exchange of ideas with due acknowledgements of contributions by each member of GCRI.
- Simple, effective and targeted awareness programmes for prevention as well as early detection of cancer and anti-tobacco drive directed at the medical profession and population at large.
- Providing hope, sympathy and respect to all those who are terminally ill.

# कवचिदर्थं कवचिद्धर्मं कवचित् मैत्रीपरायणम् । कर्माभ्यासं कवचिच्चैति चिकित्सा नास्ति निष्फला ॥

"Sometimes money, sometimes wisdom, sometimes social support or sometimes work experience is obtained. One's efforts to alleviate suffering never go un-rewarded."

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**Chairman's Message** 

Cancer is a complex disease and continues to be a scourge for humanity. It is estimated that cancer incidence in India will double every 20 years. Cancer is ranked as the first or second leading cause of death in 91 of 172 countries and is the second and fourth leading cause of adult death in urban and rural India, respectively.

Cancer research and treatment has been constantly evolving. Over the decades, with a greater understanding and knowledge gained through research we have shifted from the well accepted 'one target, one drug' model to a new 'multi-target, multi-drug' model. While we have made considerable progress in the diagnosis and treatment of various cancers and increased the survival rates, there is a lot to be done to stop the march of this deadly menace as it strikes indiscriminately with greater frequency, whatever be the age, gender or social background of its victims.

At the Gujarat Cancer and Research Institute, our attempt has been to fight cancer on multiple fronts. From awareness to prevention programmes, preventive health check-ups, setting up super specialities in cancer care and even other allied areas like home hospice care, physiotherapy, stoma clinic, speech therapy, prosthesis and rehabilitation, GCRI has been at the forefront leading the march against this dreaded disease.

Nearly 30,000 new cases were registered and 3,38,865 outdoor patients were attended to, at GCRI last year. The number of tests and screenings which is an important part of cancer detection and treatment handled by GCRI last year is truly noteworthy - 18,77,720 laboratory tests, 1,66,217 histologic, cytologic and bone marrow examinations, 1,25,922 imaging and radiological investigations besides 19,865 major and minor surgeries, 50,136 chemotherapy and 13,356 radiation treatments have been conducted. The institute also runs early detection programmes, palliative care OPD and offers home care services. All this stands testimony to GCRI's ongoing commitment to help patients receive cutting-edge treatment and services, especially those who are underprivileged and needy.

The most effective cancer treatments, from surgical techniques to state-of-the-art radiation to a variety of drug therapies in the genomic era, all began in the laboratories and the researchers and clinicians who have dedicated their lives to the study of cancer - how it develops, why it spreads, what makes it grow and what can combat it. To further the cause of education and



research in the field of oncology, GCRI has initiated courses on DM (Medical Oncology), M.Ch (Surgical Oncology), M.Ch Gynec Oncology, DM Oncopathology, MD (Radiotherapy), MD (Radiodiagnosis), MD (Anesthesiology), MD (Palliative Medicine), M. Sc. in Cancer Biology and PhD in Life Science.

I am happy to share that under the GCRI Master Development Plan, the Govt. of Gujarat has sanctioned 350 crores for infrastructural development. The first phase of building I A&B was inaugurated by the Hon'ble Prime Minister of India, Shri. Narendra Modi, on 4<sup>th</sup> March, 2019. We have already started OPD, diagnostic, air-conditioned general wards and other ancillary services in the new building. Pneumatic System for transportation of medicine and blood samples has also been procured, which is a first in the entire civil hospital campus.

After full expansion, there will be 19 Operator Theatres. Bone Marrow Transplantation (BMT) capacity will be increased from 4 beds to 11 beds. By the end of April 2020, building I C will be ready for housing the Tomography, Cyber Knife, High Energy Linear Accelerator, HDR Brachytherapy and CT Simulator, Digital Mammography, 3.5 Tesla MRI, Digital Radiography & Fluorography etc. All buildings are constructed as per GRIHA 3 Star for energy and water conservation.

Improvements in healthcare services is always an ongoing journey and GCRI is fortunate to have a team of dedicated and highly committed physicians, surgeons, academicians, researchers, administrators and healthcare management professionals who are on a mission to serve this cause and do all that it takes to help and support patients. Needless to say, we will undertake initiatives and programmes that will take us to higher levels of excellence in care and treatment. Our vision is to transform GCRI into a world-class cancer care, treatment and research centre.

Date : July 29, 2019

Pankaj R. Patel Chairman Governing Board, GCRI





#### **From The Desk of Director**

The Gujarat Cancer & Research Institute (GCRI) is a State Cancer Institute of Gujarat recognized by Government of India and one of the largest cancer care center of the country with modern cancer facilities for diagnosis and treatment. GCRI is now added responsibility by extending support to tertiary cancer centres (TCC) coming under GCRI. GCRI may extend support in establishing and making the new TCCs functional at Bhavnagar, Surat, etc. as it is currently managing Siddhpur and Rajkot Cancer Centres. The institute has taken up leadership in the state cancer control program by conducting community out-reach programs and early detection camps. GCRI is committed to provide latest facilities and cancer care at affordable cost to patients of state and neighbouring states. GCRI has set a priority to provide maximum support to all patients with curable cancer and optimum support to those with advanced disease. It provides services to all class of patients under Ayushman Bharat (PM-JAY), MA & MA Vatsalya Yojna, School Health, SC/ST, State & Central Govt. employee, Pensioner, freedom fighter, ESIS & LIG etc. It is the most affordable centre for Bone Marrow Transplantation in malignant and non-malignant conditions.

The new building of GCRI is established by Government of Gujarat & Government of India in Medicity Civil Hospital Campus, Building IA and IB inaugurated by Prime Minister of India Shri Narendrabhai Modi on March 4, 2019 which is now functional and diligent to get NABH Accreditation. The first phase of new building has 590 beds dedicated for adult and paediatric cancer patients. The institute has ultra-modern 4 modular operation theatres, 15 new operation theatres along with minor operation theatres equipped with state of the art gadgets required for all the types of major and minor surgeries for cancer patients. The hospital building is centrally air-conditioned including general wards with energy efficient three stars Green Rating for Integrated Habitat Assessment GRIHA. It is equipped with pneumatic system to deliver drugs, documents and specimens to and from laboratories, nursing stations and wards. After complete execution of master development plan of the second phase, the hospital indoor strength will be 1000 beds. Future expansion would include establishing cyclotron and proton beam therapy.

It is an amalgamation of specialties in surgical oncology, medical oncology, radiation oncology, preventive oncology, paediatric oncology, neuro-oncology, gynec-oncology, radio-diagnosis and nuclear medicine, palliative medicine, laboratory and transfusion medicine, oncopathology and microbiology. GCRI also provides other allied services like home hospice care, physiotherapy, stoma clinic, speech therapy, cancer health check-up, prosthesis and rehabilitation. GCRI has a dedicated research wing – Cancer Biology which is exclusively involved in translational cancer research, and interdisciplinary advanced molecular diagnostic services for patient management.

GCRI provides medical education and training to future health professionals. The medical education of the institute is affiliated to B J Medical College for conducting MD, D.M./M.Ch. courses in oncology and 145 medical students are enrolled. This year DM in Onco-pathology has been started with the



enrolment of 8 students. MSc in Cancer Biology, MPhil and Ph.D. in Life Sciences affiliated with Gujarat University are also conducted at the institute. MSc in Medical Physics will start from next academic year in affiliation with Gujarat University.

We endeavor to accomplish our goals by conducting world class cancer care research, state of the art therapeutic efforts as well as intensive and extensive educational efforts towards prevention, early detection and disease management. We are committed to take all those steps that can prevent cancer and above all to make our world cancer free.

Date : July 29, 2019

Dr. Shashank Pandya Director



# **GCRI Profile At A Glance**

### GCRI - Speciality Hospital for Cancer Regional Cancer Centre

- 650 indoor beds Largest Cancer Hospital of the country
- 29,293 New Cases
- 3,38,865 Outdoor patients
- 2,26,468 Indoor admissions
- 18,77,720 Laboratory tests
- 1,66,217 Histologic, Cytologic and Bone Marrow examinations
- 1,25,922 Imaging and Radiological investigations
- 19,865 Major and Minor Surgeries
- 50,136 Chemotherapy Treatment
- 13,356 Radiation Treatment

### **GCRI - Speciality Medical Education Centre**

- DM Medical Oncology, Oncopathology
- MCh Surgical Oncology, Gynaecological Oncology
- MD Microbiology, Radiodiagnosis, Anaesthesiology, Radiotherapy, Palliative Medicine
- DMRE Radiodiagnosis; DA Anaesthesiology; DCP – Pathology; DGO – Gynaecological Oncology
- Postgraduate Students 145 Students
- PhD Life Sciences & Medical Microbiology 12 Students
- MSc in Cancer Biology 40 Students
- Diploma in Medical Laboratory Technologists 50 Students



## **GCRI Profile At A Glance**

## **GCRI - Research Organisation**

- 6 well equipped Research Labs
- 47 on-going Research Projects; 19 Clinical Trials
- Scientists are PhD Guides
- Additional support from National Cancer Institute (NCI), USA/Germany/IARC/DST/DBT/CSIR/ICMR/ DAE/GSBTM/DMER/GUJCOST/GCS/IACA
- Clinical Research hub for National and International drug trials

### **GCRI – Community Commitments**

- National Registry Programme ICMR
- Prevention of Cancer Anti-tobacco Drive & Tobacco Cessation Centre
- Early Detection Health Checkup & Cancer Detection Camps
- Cancer Awareness: Exhibition, Cancer Information Center
- Hospice Care; Home Service Care
- Poor Patient Support
- Telepathology and Telemedicine Projects
- Patient Care Evaluation Committee
- Sanskar Chowk (Entertainment and Education of Patients and their Relatives)
- Night Shelter for Patient's Relatives



# A. Anaesthesiology

Professor & Head: Dr. Bhavna Shah

Associate Professors: Dr. Jayshree Thakkar, Dr. Dipika Patel, Dr. Neeta Gosai, Dr. Damini Makwana Assistant Professors: Dr. Leena Patel, Dr. Kinna Shah, Dr. Bijal Shah, Dr. Priti Patel, Dr. Madhuri Bhade, Dr. Rekha Solanki, Dr. Misha Agarwal, Dr. Tanmay Tank, Dr. Sheetal Baranda, Dr. Kinjal Mistry Junior Lecturers: Dr. Jenish Patel, Dr. Amita Jansari



**Clinical Services:** The department provides services of anesthesia for oncosurgical patients. Anesthesia services are provided during peri-operative period, which includes pre-anesthetic checkup and anesthesia fitness, intra-operative management and post-operative care of the patients. Our department provides anesthesia or monitored anesthesia care as per the requirement of the patient and surgeons. Different super specialties like Plastic surgery, Musculo-skeleton surgeries, Urology surgeries, Neuro Oncology; Gynecological surgeries etc. are involved in treatment of cancer. Treatment and care of critically ill patients in ICUs (Surgical, Medical & Neuro Oncology) is part of anesthesia services. These services are provided for all major and minor surgical procedures, gynecological surgeries, neurological surgeries and day stay surgeries. Anesthesia department also gives services for either providing anesthesia or providing only monitoring care for radiotherapy patients, patients undergoing radiological procedures, invasive procedures in IVTC

or CT scan, PET Scan & MRI. Our department takes lead in peripheral venous access as well as central venous access as per requirement of the patient. All emergency calls for resuscitation, monitored anesthesia and venous access are attended by the departmental staff. The department provides emergency services in all the wards for central / peripheral venous access of the patient.

Academic Activities: Regular lectures and teaching programmes are conducted for Resident Doctors and academic staff in the department.

**Major Achievements:** The department received **'Vimala Agrawal Rotating Trophy'** for maximum number of publications among clinical departments for year 2018 shared with Gynecological Oncology department.

Dr. Rekha Solanki, Dr. Kinna Shah, Dr. Dipika Patel, and Dr. Bhavna Shah received Appreciation Award

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Details of Work Done	Number
Major Operations, DSU OT (Elective + Emergency surgeries)	4469+371
Neuro OT Elective + Emergency surgeries	1029
Day Stay Unit (GA + LA)	3727+3694
CT Scan + MRI + USG Guided Biopsy + PET Scan	169+95+64+23
Intra Cavitory Radium + Implant under Anesthesia	979
Radiotherapy in pediatric patients under Anesthesia	74
Interventional Therapy under anesthesia (IVTC)	305
Central venous access + PICC + LP	306+365+209
Pulmonary function tests measurement	180

for excellent participation in World Restart a Heart Day - COLS by Indian Resuscitation Council on January 1, 2019.

**Dr. Kinna Shah,** Assistant Professor, received Dr. H M Desai Award for best paper presentation in the Instututional category at 51<sup>st</sup> Gujarat State Annual Conference of ISA at Surat in October 2018. She also received academic excellence award from BJMC on August 15, 2018.

**Dr. Rekha Solanki,** Assistant Professor, received silver Medal for T. B. Patel Young Scientist Award

competition during Hospital week celebrations on February 9, 2019. She was Instructor-BCLS-CPR in accordance with ISA CPR Resuscitation Council.

**Public Services:** CPR-Compression Only Life Support (World Restart a Heart Day) hands on training to 211 trainees on October 23, 2018 by Dr. Rekha Solanki, Dr. Dipika Patel, and Dr. Kinna Shah. CPR Training to school children on February 26, 2019 by Dr. Rekha Solanki, Dr. Dipika Patel, Dr. Kinna Shah, Dr. Bhavna Shah, and Dr. Jayshree Thakkar.







# **B. Community Oncology & Medical Records**

Assistant Professor and Head: Dr. Janmesh Shah Assistant Professor: Dr. Anand Shah Medical Officer: Dr. Rohini Patel Medical Record Officer: Mr. Himanshu Patel Statistical Assistant: Mr. Jayesh Solanki, Ms.Vishruti Pandya Junior Statistical Assistant: Ms. Neha Jadav



**Clinical Services: New O.P.D.** - During the year 2018, a total of 29,293 patients were registered. The documents under various schemes/categories such as Mukhyamantri Amrutam Yojana (MA Yojana), MAVatsalyaYojana, Pradhanmantri Jan Arogya Yojana (PMJAY), School Health Programme, Employees State Insurance Scheme (E.S.I.S.), State government employees/pensioners, Lower income group category (L.I.G.), Indian Cancer Society (ICS) fund, Scheduled Castes (SC), Scheduled Tribes (ST) categories etc. are verified for the needy patients who seek free/concession in treatment. Some special radiological and laboratory investigation cards are also issued. Year wise general statistics of hospital is prepared here.

**Old O.P.D.** - It maintains the records of newly registered cases as well as old (follow-up) cases. There were 3,38,865 outdoor patients came for follow up during the year 2018. Pathology reports, Traveling

passes (ST/Railway) and stickers are issued here. Patient's admission-discharge and hospital death registrations work are done. Medical reimbursement work is also carried out at Old OPD. Patient's follow up information are also kept. For patient's convenience, SMS software is implemented. Patient can inform through SMS prior to his/her follow up day so that his/her casefiles are kept ready before patient's arrival. Helpline facility through phone call is also started for follow up. Patient can make appointment the day before his/her followup day by phone call on helpline number. His/her appointment is registered and sms is send to his/her mobile number. The MRD staff keeps the file ready when patients come for follow up. Case files are provided to other departments for their research/ dissertation study purpose. Computerized medical certificate are issued and forms of Medi-claim policy and Life Insurance policy of expired patients are filled here.



#### **GENERAL STATISTICS: YEAR 2018**

Details of Work Done	Year 2018
Total new cases registered (Cancer & Non-cancer)	29293
Adult Cases	28054
Peadiatric Cases	1239
Total No. of Outdoor Patients visited	338865
New Admission during the year	28262
Inpatient days	226468
Average inpatient stay	8.01
Strength of beds	650
Death During the year	1728
Haematological Investigations	946539
Biochemical Investigations	816581
Bacteriology Investigations	16978
Serology Investigations	97622
Cytological Investigations	15952
Histological Examinations	97827
Bone Marrow Examinations	5107
Biopsy & procedures (Other than Endoscopies & B.M.Bx.)	13349
Total Blood Transfusion given to the patients	19918
Total Plasma, PRP, FFP, SDP given to the patients	27962
Imaging & Radiological Investigations	5
MMR Ba.Swallow & other X-rays	61693
Ultrasound examinations	22865
CT Scan Investigations	28361
MRI	3022
Mammograms	6476
OPG	2718
Colour Doppler	787
Radiation Treatment	
Brachy Therapy	638
Linear Accelerator	5091
BHABHATRON	1509
Mould prepared for Planning	2080
Simulator treatment Planning	4038

Details of Work Done	Year 2018	
Surgical Operations		
Major	4018	
Minor	8495	
I.V.T.C	6385	
Neurosurgical Operations	967	
Nuclear Medicine (Isotope)		
PET CT SCAN	1411	
ISOTOP SCAN	3313	
IODINE THERAPY	54	
Tumor Marker Investigations	41706	
Immunohistochemistry & Flow Cytometry Tests	47331	
HLA typing	215	
Cytogenetics Lab	2793	
Physiotherapy treatment	30708	
Total Number of Chemotherapeutic procedures	50136	
Bone Marrow Transplants	36	
ECG	22966	
Stoma Clinic Patients	2958	
Prosthetic Patients	2434	
Molecular Oncology Lab	1686	
Stem Cell Biology Lab	1911	
Palliative Care OPD	19785	
Outside Patients referred for Special Investigations	8405	

Academic Activities: The department is a very important section of the Institute. It works largely in three different areas. (a) Cancer Registry Programme, (b) Cancer Epidemiology, and (c) Cancer Control Programme.

(a) Cancer Registry Programme: Cancer registry plays a major role in ensuring good quality cancer data which can be helpful in cancer care, planning of health service and cancer control programmes. The department has been maintaining both hospital based cancer registry and population based cancer registry under the network of National Cancer



Registry Programme (NCRP) - National Centre for Disease Informatics and Research (NCDIR) - Indian Council of Medical Research (ICMR), Bengaluru.

**1. Rural Cancer Registry Ahmedabad District Project:** It has been functioning since the year 2004 with the objective of assessing the magnitude and types of cancers in Ahmedabad rural areas and to calculate estimate of cancer incidence in Ahmedabad district.

**Activities:** Work of cancer data collection from various sources for the year 2018 and 2019 is in progress.

**2. Population Based Cancer Registry Ahmedabad Urban Agglomeration Area:** It has been functioning since the year 2007 with the objective of assessing the magnitude and types of cancers in Ahmedabad city and to calculate estimate of cancer incidence in Ahmedabad urban area.

**Activities:** Case files abstraction and outside data collection for the year 2017 is completed. Work for the year 2018 and 2019 is in progress.

3. Hospital Based Cancer Registry: The hospital based cancer registry has been functioning since long as per the standards and norms prescribed by the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research (ICMR). From January 2014, the National Cancer Registry Programme (NCRP) - National Centre for Disease Informatics and Research (NCDIR), ICMR sanctioned project 'Hospital Based Cancer Registry and Patterns of Care and Survival Studies on Cancer Breast, Cancer Cervix and Head and Neck Cancers' at our Institute. The broad objectives of this study is to assess quality of hospital care and cancer services in covered area and to describe length and quality of survival in relation to anatomical site, clinical stage and aspects of types of treatment and to undertake epidemiological research through short term case control studies.

**Activities:** Case file abstraction and quality checks for the year 2017 have been completed.Case file abstraction and online data entry work for the year 2018 is in progress.

#### (b) Cancer Epidemiology:

The statisticians of the department help doctors and researchers for statistical analysis of their studies. It provides various data to the doctors and researchers for their dissertation / research work. The statistical information is also provided to the Administration and Government as and when required.

This year, a total of 72 GCRI staff requested for data retrieval and 8 GCRI staff were assisted for their statistical analysis work.

(C) Cancer Control Programme: The department runs cancer control programme as per the aim and objectives laid down by National Cancer Control Programme, Govt. of India. The department organizes various cancer awareness and detection camps for primary prevention of cancers by health education especially hazards of tobacco consumption and necessity of genital hygiene for prevention of cervical cancers and secondary prevention i.e. early detection and diagnosis of cancers.

**Research Activities:** HPV Vaccine Project: The Gujarat Cancer and Research Institute is having a collaborative research agreement with International Agency for Research on Cancer (IARC), Lyon, France and working on a project named 'Implementation plan for extended follow-up of the participants of IARC - Indian HPV vaccination study to evaluate the effectiveness of one, two and three doses of Quadrivalent HPV vaccine in preventing cervical neoplasias'.

As project is extended for follow-up phase, follow-up activities like cervical cell collection from married participants, new consent to be signed by participants for extension study, to collect HC-2 samples from participants who have reached 25 years of age and to report updated information by doing house to house visit and by phone calls are continued. All the cervical cell samples have been transferred to Rajiv Gandhi Center for Biotechnology and HC-2 samples are transferred to Pune as and when suggested by IARC. As per project amendment, recruitment of new control has been completed. A representative from IARC visited Ahmedabad site in August, 2018 for training of the staff and supervision of the activity.



**Major Achievement : Dr. Janmesh Shah**, Assistant Professor has successfully completed 3 years MBA course with Marketing as major subject from B.K. School of Business Management, Gujarat University from 2015-2018.

**Mr. Jayesh Solanki,** Statistical Assistant has been awarded as Best Employee of the Month in January 2019. He got second rank in Chess competition of Gandhinagar Taluka and Gandhinagar district in Khel Mahakumbh – 2018 organized by Government of Gujarat.

**Mr. Jayesh Solanki and Ms.Vishruti Pandya,** Statistical Assistants, and Ms. Neha Jadav, Jr. Statistical Assistant had successfully completed online certificate course on 'Health Research Fundamentals' conducted by National Institute of Epidemiology (NIE), ICMR with a score of 73% (ELITE Certificate), 78% (ELITE Silver Certificate) and 74% (ELITE certificate) respectively on March 31, 2019.

#### Training Organized:

- 1. The Gujarat Cancer and Research Institute had organized Data Safety Monitoring Board Meeting (HPV Vaccine Project) on December 20-21, 2018. Project Principal Investigator from IARC, France and members of DSMB attended this meeting.
- 2. GCRI has adopted Mehsana Taluka for screening of three common cancers – Breast, Cervical and Head & Neck. As a part of this programme, expert team from The Gujarat Cancer & Research Institute conducted training for cancer screening in Mehsana. Total 5 trainings were conducted on different days for taluka's Medical Officers, staff nurses, ASHA, Anganwadi workers and multipurpose health workers. They were trained for common signs and symptoms of these cancers.
- 3. Subsequently, ASHA, Anganwadi workers and Multi-Purpose Health Workers (MPHW) have conducted home-based screening of 66,285 people in their respective areas. After this, a team of GCRI organized camps at the nearby Primary Health Center to further investigate the people with these signs. So far, 3 such camps have been

conducted, in which around 400 beneficiaries have been further investigated. Total 201 PAP Tests, 21 mammography were conducted during these 3 camps. Suspected cases are referred to GCRI for further investigation and treatment. Thus, efforts are made to diagnose patients before they reach to advanced stage.

- 4. A lecture on 'The elimination of cervical cancer: reality or blissful thinking?' by Prof. Peter Sasieni was organized on December 18, 2018 at Telemedicine Centre, GCRI.
- 5. A lecture by Prof. Peter Sasieni, Director of King's Clinical Trials Unit and Professor of Cancer Prevention and Vice Director of the Policy Research Unit in Cancer Awareness, Screening and Early Diagnosis at King's College, London was organized for oral cancer and its prevention on December 19, 2018 where Head & Neck cancer surgeons and residents participated and discussed current status of Head & Neck cancer.

**Public Services:** As per the guidelines of National Cancer Control Programme, the department is actively involved in cancer control activities and reaches to the community which addresses primary prevention and early detection of cancer within the community.

(a) Cancer Awareness Camps: The department organizes cancer awareness camps with the objectives of promoting awareness about the risks of common cancers and their curability if detected early in the community. During these camps, knowledge on cancer like its causes and natural history, warning signs and symptoms of cancer are explained to the visitors. Self-examination methods are emphasized particularly of oral cavity with need for quitting tobacco. Method of breast self-examination is also propagated among women visitors. Awareness about cancer is created by distribution of publicity material like pamphlets, posters, flip charts, exhibition and audio-visual programmes.

A total of 13 education camps (Cancer Exhibition) were organized during April 2018 to March 2019.



No. of Education Camps during April 2018	13
- March 2019	
Number of Visitors	1305

(b) Cancer Screening Camp with Sanjeevani Rath (mobile cancer screening van) GCRI: A high tech cancer screening mobile van (SanjeevaniRath) was launched in the year 2009 to detect the cancer patients in their early stages of the ailment, especially in rural areas. The expert team identifies suspected cases of possible cancer and if needed, refers them to GCRI for further evaluation. This mobile cancer screening van is equipped with advanced mammography machine which is very useful to detect breast cancer - the most common cancer found in women in their very early stage.

A total of 42 Cancer Screening (Sanjeevani Rath, GCRI) camps were organized in various places of Gujarat state during April 2018 to March 2019. Following table shows summary report of Sanjeevani Rath camp activities.

No. of cancer screening camps	42	
during April 2018 - March 2019	#	%
Number of beneficiaries attended	4329	100
Head and Neck Examinations	2382	55.02
Breast Examinations	2762	63.80
Cervix Examinations	3227	74.54
Other Sites Examinations	1	0.02
Suspicious cases referred to GCRI	142	3.28
Head and Neck	53	37.25
Breast	18	12.68
Cervix	70	49.30
Other sites	1	0.70

(c) Cancer Screening camps without Sanjeevani Rath: Department involves in arrangement of cancer detection camps at various places in Gujarat. The objectives of the detection camps are to detect cancers in their early stage especially oral cancers in men and breast and cervical cancers in women. Suspicious cases were referred to GCRI for further diagnostic and therapeutic care. A total of 10 cancer detection camps were organized across the Gujarat state during April 2018 to March 2019.

Following table shows summary report of cancer detection camps.

No. of Cancer detection Camps	10	
during April 2018 - March 2019	#	%
Number of beneficiaries attended	626	100
Head and Neck Examinations	206	32.91
Breast Examinations	240	38.34
Cervix Examinations	488	77.96
Suspicious cases referred to GCRI	3	0.48
Head and Neck	1	0.16
Breast	0	0.00
Cervix	2	0.32

**Siddhpur Cancer Care Centre:** To provide an excellent cancer care to the people of North Gujarat, the Government of Gujarat set up a Cancer Care Centre at Siddhpur, Patan district in 2012. The radiation unit also started since October 2013 at Siddhpur Care Centre. Every Tuesday, GCRI sends an expert team which consists of Oncosurgeon, Gynecologist, Radiotherapist Doctor and other Para medical staff at Siddhpur Care Centre.

The activities carried out at Siddhpur Cancer Care Centre during April 2018 to March 2019 are as following tables.

No. of Siddhpur Sanjeevani Rath Camps during	45	
April 2018 - March 2019	#	%
Number of beneficiaries attended	2088	100
Head and Neck Examinations	389	18.63
Breast Examinations	114	5.46
Cervix Examinations	25	1.20
Other Sites Examinations	12	0.57
Suspicious cases referred to GCRI	118	5.65
Head and Neck	94	4.50
Breast	18	0.86
Cervix	6	0.29



During this period total 74 camps were organized across the state. District wise distribution is mentioned in following table.

No.	District	No. of Camps
1	Ahmedabad	28
2	Arvalli	02
3	Bhavnagar	01
4	Banaskantha	01
5	Bharuch	03
6	Dahod	02
7	Gandhinagar	08
8	Godhara	01
9	Mehsana	06
10	Jamnagar	02
11	Nadiad (Kheda)	01
12	Navsari	01
13	Patan	02
14	Porbandar	05
15	Panchmahal	01
16	Rajkot	03
17	Sabarkantha	05
18	Surendranagar	02
	Total	74

**Day Celebration:** Department is taking active participation in celebration of different days like World No Tobacco Day, World Cancer Day, National Cancer Awareness Day, Kite Flying Day, Holi, Navratri etc. The objectives of these celebrations are:

- i) To create awareness about cancer among common people
- ii) To motivate people about screening of common cancers (Oral, Breast and Cervix)
- iii) To sensitize people against tobacco hazards

Following are the reports of various day celebrations organized during April 2018 to March 2019.

May 31, 2018 - World No Tobacco Day Celebration: GCRI celebrated 'World No Tobacco Day' on May 31, 2018. The event was organized in the morning with public at Riverfront Park, Subhash Bridge, Ahmedabad. The programme started with the walk of the staff members and aerobic session. The staff shared important information regarding tobacco and its hazards to common public and motivated them to quit tobacco and unite against the noble cause of fighting against cancer. The oncologists emphasized public on basic essentials of healthy life including balanced diet, weight control, daily exercise and abstinence from tobacco completely. Public also enthusiastically shared their experience regarding ill effects of tobacco with some wonderful poems on tobacco too.

There were many dignitaries gracing their presence in this noble cause – Dr. Shashank Pandya, Director, GCRI, Mr. Narendrasinh Chavda, Hospital Administrator, Padmashree Dr. Pankaj Shah, Former Director, GCRI, Mr. Kshitish Madanmohan, Trustee, Gujarat Cancer Society (GCS), Dr. Kirti Patel, Dean GCS Medical College, Dr. Shilin Shukla, Former Director, Dr. Geeta Joshi, CEO, Community Oncology Centre, Vasna, and various subject experts. The program ended with vote of thanks by Dr. Shashank Pandya, Director, GCRI.

#### February 4, 2019 - World Cancer Day Celebration:

GCRI being a premier cancer care centre of India, had planned various activities to celebrate World Cancer Day. The theme of this year's World Cancer Day was "I AM & I WILL". Our team celebrated World Cancer Day with IIT, Gandhinagar students. Nearly 100 students attended this event which was held on February 4, 2019. The similar program was planned in a rural school of Gandhinagar district on February 8, 2019.



# C. Gynaecological Oncology

Professor, Head & Chief of Unit I : Dr. Shilpa Patel Professor Practicing & Chief of Unit II : Dr. Ava Desai Professor Practicing & Chief of Unit III : Dr. Meeta Mankad Deputy Director, Professor & Chief of Unit IV: Dr. Pariseema Dave Associate Professors: Dr. Ruchi Arora, Dr. Bijal Patel, Dr. Chetana Parekh



**Clinical Services:** The department offers services in following areas (1) Well Woman Clinic for early detection of gynecological malignancies, especially Pap's smears for cervical cancer. (2) Colposcopy Clinic: The Colposcopy clinic is run with the help of a state-of-the-art Zeiss colposcope with teaching aid. Colposcopies are performed and Colposcopic directed biopsies are taken. Total 168 Colposcopies were performed. (3) Conservative management of pre-invasive cervical cancer by Large Loop Excision of the Transformation Zone (LLETZ). It is one of the first centers in India to have established the facilities of LLETZ, which is considered the best method for the diagnosis and treatment of premalignant cervical lesions. During the year, 9 Large Loop Excision of the Transformation Zone were performed. (4) Referral Center for diagnosis and management of all premalignant and invasive Gynecological malignancies such as cervical cancer, endometrial cancer, trophoblastic disease, ovarian tumors and vulvar carcinoma. Hysteroscopy: Institute has 'Stryker hysteroscope' with monitor for diagnosis and hysteroscopic guided biopsy.

Details of Work Done	Number
OPD patient	New case: 3886
	Old cases: 13210
Pap smear	Pap Smear: 1527
	LBC: 2234
	Camp: 3598
Cervical Biopsy	1615
Vulval Biopsy	80
Endometrial Aspiration	343
Colposcopy	175 (All units)

Details of Work Done	Number
Surgeries	
Radical Hysterectomy + BPLND	29
Laparotomy for Ovarian Tumors	526
Staging Laparotomy for Endometrial Cancer	75
Radical Vulvectomy + Groin Dissection	13
Other Major Surgeries	132
Total Major Surgeries	591
Total Minor Surgical procedures	192
Total Hysteroscopies	12



**Academic Activities:** There are 3 M.Ch. students and 15 fellows. A total of 232 lectures were taken in the department for teaching and academic purpose. The Department also participates in GCRI academic meetings and Tumor Board discussion.

**Major Achievements:** The department received **'Vimala Agrawal Rotating Trophy**' for maximum number of publications among clinical departments for year 2018 shared with Anaesthesiology department.

**Dr. Pariseema Dave,** Professor, appointed as Deputy Director of GCRI from January 2019. She has served as Associate Editor of 'Indian Journal of Gynecologic Oncology'. She has also served as Chief Editor of 'Gujarat Cancer Society Research Journal'.

**Dr. Vinod Dalal,** Fellow received Gold Medal Gold Medal for T. B. Patel Young Scientist Award competition during Hospital week celebrations on February 9, 2019.

**Dr. Sonal Srivastava Garg,** Fellow, received Bronze Medal for T. B. Patel Young Scientist Award competition during Hospital week celebrations on February 9, 2019.

**Public Services:** The gynecological department conducts a well woman clinic daily at the hospital especially for early detection of pre-invasive and invasive cervical malignancy. Pap's smears are performed free of charge for the patients from Gujarat. Colposcopy is performed free of charge for all the patients. Biopsies are taken at nominal charge.

**Camp Activities:** Camps for early detection are conducted at various places in Gujarat including organizations such as BSF, Air Force, Armed Forces, ECHS Polyclinic Airport, Cost Guard, Gandhinagar, Dhurpur, Patan, Cantonment Shahibaug etc and distant places like Surendranagar, Nadiad, Porbandar, Rajkot etc. Total 110 camps organized at various places in this year. Total Pap smears taken in camps were 3598.









# **D. Medical and Paediatric Oncology**

Professor Emeritus: Dr. Pankaj Shah, Dr. Shilin Shukla Professor & Chief of Medical Oncology: Dr. Asha Anand Professor & Chief of Medical Oncology Unit I: Dr. Harsha Panchal Professor & Chief of Medical Oncology Unit II: Dr. Apurva Patel Associate Professor & Chief of Medical Oncology Unit III: Dr. Sonia Parikh Associate Professor & Chief of Medical Oncology Unit III: Dr. Sonia Parikh Associate Professor In charge of BMT (Part time practicing): Dr. Sandip Shah Assistant Professors: Dr. Akansha Garg, Dr. Nahush Tahiliani Junior Lecturer – Pediatrician: Dr. Nitin Joshi, Dr. Chinmay Doctor Psychiatrist: Dr. Rohan Kusumgar Gastroenterologist: Dr. Sachet Chandak, Dr. Pinakin Shah Medical Officer-BMT: Dr. Kamlesh Shah, Dr. Kinnari Patel Clinical Assistant (Clinical Trial Wing): Dr. Bhadresh Shashtri, Dr. Ila Patel



**Clinical Services:** The department of Medical Oncology was established in 1972 and nurtured by stalwarts like Dr. Pankaj M. Shah, Dr. Kirti M. Patel, Dr. Shilin N. Shukla, Dr. Bharat J. Parikh and Dr. Shailesh Talati. The goal of the department is to provide best possible comprehensive medical treatment even to patients with low socio-economical background maintaining scientific attitude and humane approach. It has dedicated medical and pediatric oncology wings, BMT services and clinical trial services.

The department of Medical and Paediatric Oncology provides comprehensive care for adult and paediatric patients with solid tumours and haematological malignancies. Every year approximately 14000 new and refer adult patients are registered under medical department and approximately 55000 patients receive curative or palliative chemotherapy either indoor (127 beds) or in day care center (46 beds). About 15000 minor procedures are performed annually.

The Indumati Kinariwala Paediatric Oncology center was established in 1992 and was first of it's kind in India to give care to pediatric patients in an ambient environment. Number of cancer patients registering in Paediatric center per year is approximately 1223. The center also has special OPD for care of central lines (PICC and Hickman catheter). The Department of Medical Oncology renders services to Adult and Paediatric patients.

Indoor Beds: Adult 76, Paediatric 25, Leukemia 22,

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Details of Work Done	Adult patients	Pediatric patients	Total
Clinical Cases	80960	-	-
New + Refer	7094	1286	-
Old	73866	-	
Procedures: Total	13660	4661	18321
Bone Marrow Aspiration	4832	1353	6185
Others (Intrathecal, Plural & Ascitic Fluid Aspiration)	8828	3308	12136
Chemotherapy: Total			
Day Care Chemo – Room No. 7	47924	10842	58766
Day Care Chemo Special Ward	2402		
Day Care Chemo Male Medical Ward	191	4946	
Day Care Chemo Female Medical Ward	-	5896	
(including pediatric chemo)			
BMT: Total			34
Autologus			11
(Multiple Myeloma 2, APML 2, NHL 2, Hodgkin's Disease 5)			
Allogenic			23
AML 4, ALL 1, Aplastic Anaemia 5, Thallesemia Major 7,			
Faconi's anaemia 2, Other 4			

#### BMT 4, Medical ICU 3+2 (Total 132 Beds)

Academic Activities: We run Daily afternoon Academic session for DM students which include case presentation, journal club and other oncology topics under guidance of faculty. Regularly conduct CME on oncology for under graduate and post graduate students of B.J. Medical College. Invite faculty for guest lectures and telecast of lecture series on webcast. The Department runs DM Medical Oncology Super-specialty Course attached to B. J. Medical College and Gujarat University. The course started in 1991 with intake of 4 students per year which has increased to 10 students per year since 2010.

There are 10 First Year DM Residents, 10 Second Year DM Residents and 10 Third Year Residents. They actively participate in Outdoor services, Chemotherapy planning, Day care procedures, Chemotherapy administration, Indoor Services, Emergency services, documentation – data entry, Case discussions, presentation of clinical topics and publications under guidance and supervision of the Teachers and Faculty. They prepare Dissertations under guidance of their Teachers. They also participate in Clinical Trials, BMT services and Education programs for the Rotators, Undergraduates and New comers.

The department provided organized chemotherapy training programme for ESIC doctors from districts across Gujarat State on 10<sup>th</sup> January, 2019 at GCRI.

**Research:** The department has undertaken research projects supported by GCS, ICMR, and Pharmaceutical companies. Clinical Trial Services supports and coordinates the pharma company sponsored projects listed below. The GCRI Clinical Trial services has been established in1995 and have successfully conducted more than 100 global as well as local trials and served more than 1000 patients so far. The clinical trial services have also conducted 4 GCP workshops at GCRI.

**Major Achievement: Dr. Asha Anand** is member of Ethics Committee, NIOH, Ahmedabad. She is Editor of 'Gujarat Cancer Society Research Journal'.

**Dr. Amol Kotalwar,** DM Resident, was a Quiz Winner in Thoracic Oncology in RGCON, Delhi on February 9-10, 2019, and Runner up in Quiz on Immuno Oncology, I-OSICON2019, Mumbai in March 2019.



**Dr. Ananya Pareek,** DM Resident, received first prize in poster presentation in ICON Conference, Ahmedabad, in December 2018.

**Dr Mukesh Kumar, Dr. Mohammed Nasee, Dr. Kiran Kumar**, DM Residents, were Quiz winners in 2<sup>nd</sup> Indian Breast Cancer Conference, IBCC, Jaipur 2019. **Dr. Mukesh Kumar** and **Dr. Mohd Naseer,** DM Residents, were 2<sup>nd</sup> Runner up in Quiz on immunooncology I-OSICON2019, Mumbai in March 2019.

Name of Speaker	Title of Presentation	Name of Conference	Date & Place
Dr. M B Agrawal	Kidney in myeloma	Webinar	30 March 2019
Dr. Sanjeev Kumar	Scientific Program on Pegaspargase	CME (Cadila)	29 March 2019
Dr. Amit Verma	Discussion on Mycidac-C	CME (Cadila)	8 March 2019
Dr. Kalpesh Prajapati	Role of erythropoietin in chemotherapy induced anemia	CME (Intas)	10 January 2019
Dr. Raghunadharao	Meet the master: How to Choose a thesis topic and interpretation of scientific papers	Webinar	30 November 2018
Dr Chintan Shah	Management of Her-2 positive MBC	CME	26 October 2018
Dr. Shona Nag	Next Generation treatment for TNBC – PARP Inhibitors	CME (Cadila)	31 August 2018
Dr. Chirag Shah	Back to Basics: Cancer immunity cycle and its clinical implications	CME	15 June 2018
Dr. Rohit Lal	Management of ROS1 rearrangement in NSCLC	CME (Pfizer)	25 May 2018
Dr. Bhavesh Parekh	Role of Ribocicilib in management of hormone receptor positive HER2 negative advanced breast cancer	CME (Novartis)	14 May 2018

#### **Telemedicine CME organized at Telemedicine Centre, GCRI:**







# **E. Palliative Medicine**

Profesor & Head: Dr. Priti Sanghavi Associate Professor: Dr. Bhavna Patel Medical Officer: Dr. Richa Singh



#### **Clinical Services:**

**Inpatient service:** Department of palliative medicine has been allotted 10 dedicated beds and 20 shared inpatient beds. Bed Occupancy Rate (BOR) is 80%. Inpatients from other specialty are referred to us for pain and symptom control. On rounds, we manage their symptoms and psychosocial issues.

**Outpatient service:** We see about 80-120 patients per day in our OPD. We provide pain & symptom management. Counseling of all patients is done for psychosocial and spiritual issues. We do counseling with patients and family for breaking bad news, collusion, disease status, prognosis, nursing care, dietary advice and for oral hygiene etc. **Homecare service:** We do 2-3 home visits per day for 5 days a week (GCRI – 2/3 days and COC 2/3 days), for home bound cancer patients residing within city of Ahmedabad and Gandhinagar.

**Hospice service:** We admit terminally ill patients requiring palliative care at hospice under Dr. Geeta Joshi, CEO Community Oncology Center, Vasana. We visit our hospice center frequently as per requirement, to see admitted patients who are terminally ill, requiring palliative care and for training of medical and paramedical staffs. There are 19 in patient's beds at Hospice center. BOR of Hospice is 80-90%.

Details of Work Done	Number
OPD: New Patients	5856
OPD: Follow up Patients	14085
Interventions done for Pain Management (Spheno Palatine Ganglion Block, Celiac plexus block, Superior Hypogastric Plexus Block, Epidural, Ganglion Impar Block)	1135
Indoor Patients attended	1615
Home Care	271
Admissions to Hospice, Community Oncology Centre, Vasna	375



Academic Activities: Department has recognized for Certificate Course on 'Essential of Palliative Care' Part A. It was organized from November 1 to December 31, 2018. Total 24 candidates have received the training.

Department is recognized for 'Hands On' Certificate Course on 'Essential of Palliative Care' Part B for 10 days in July for two candidates. Six weeks hands on training on Pain and Palliative Care has been provided to 5 candidates from March 19 to April 28, 2018, and to four candidates from September 3 to October 13, 2018.

**NPPC Training:** The training programme for implementation of palliative care has been organized by the State Palliative Care Cell, Gujarat in collaboration with Gujarat Cancer & Research Institute and Community Oncology Centre to 25 candidates on December 27, 2018. The 3-days training workshop on Palliative Care had been organized by the State Palliative Care Cell, Gujarat in collaboration with Gujarat Cancer and Research Institute and Community Oncology Centre, to 24 candidates from February 18-20, 2019. Training for 40 GCRI nursing staff for Demonstration of Applying Fentanyl Transdermal Patch was organized on July 24, 2018.

Major Achivements: Department has received approval to start new course MD in Palliative Medicine by Medical Council of India. Department of Palliative Medicine, GCRI is recognized as training center for Medical use of Essential Narcotic Drugs by FDCA, Government of Gujarat. Pain and Palliative Medicine OPD received Best OPD Award by GCRI in February 2018.

**Dr. Priti Sanghavi,** Professor & Head appointed as Editor for nursing journal (CCNE).

**Dr. Shrenik Agrawal,** Assistant Professor has been awarded first rank in Quiz competition in 25<sup>th</sup>

International Conference of Palliative Care held at Delhi in February 2018.

Awareness Program Organized: An awareness program on current status of palliative care in India, screening of a film "Hippocratic" was organized by department on July 8, 2018. Padmshree Dr. M R Rajagopal was the chief guest for the event and there were 200 participants from all over Gujarat.

Screening of a film **"Hippocratic"** an awareness program on current status of palliative care in India, was arranged at state conference of Anesthesiologists (ISACON - Gujarat 2018) at Surat by Dr Priti Sanghavi. The screening was followed by Panel discussion and expert opinion by Dr. Priti Sanghavi, Prof & Head Department of Palliative Medicine, Dr. M T Bhatia, Senior Anaesthesiologist, Ms Gilly Burn, Director Care Response International, Founder Director Cancer Relief India and Dr. Nikunj Vithhalani, Onco Surgeon. The discussion was on current status of Palliative Care in Gujarat and milestones to be achieved in near future.

A guest lecture on **'Importance of Palliative Care in Medical Education' by Ms Gilly Burn** was arranged for faculties, students and administrative staff at B J Medical College Auditorium. Lecture was honored by Dr. Pranay Shah, Dean BJMC, Dr. Shashank Pandya, Director GCRI, and HODs of various institutes like IKD, Spine, Civil Hospital and GCRI. The program was focused on importance of communication skills, empathetic approach and need for palliative care integration in medical curriculum. Approximately 500 students had attended the program.

**Public Services:** Dr. Bhavna Patel and Dr. Richa Singh, Himanshu Brother and Mrs Queenjal Anandi staff nurse took active part in education and training of nursing students during various training conducted by the Department and for the students from Gujarat vidhyapith for psychological issues in cancer patients.



# F. Pathology

# F1 - Histopathology, Cytology, Biochemistry, Haematology

Professor & Head: Dr. Priti Trivedi Associate Professors: Dr. Dhaval Jetly, Dr. Trupti Patel, Dr. Biren Parikh Assistant Professors: Dr. Beena Brahmbhatt, Dr. Amisha Gami, Dr. Majal Shah, Dr. Jyoti Sawhney, Dr. Ashini Shah, Dr. Vibha Vyas, Dr. Nainesh Menat



**Clinical Services:** The Department of Pathology has been upgraded with various equipments for Clinical Pathological Analysis Report work. It includes various services like Histopathology, Cytology, Haematology, Biochemistry, Blood Bank, Paediatric Oncology Haematology, Vasana Hospice Haematology, Immunohistochemistry and Microbiology. Pathology Department is the heart of our Hospital; central to any cancer management is tissue diagnosis. Metabolic profile and Haematological alteration in a cancer patient plays a pivotal role in overall outcome. The department is well equipped with highly sophisticated microscopes attached with camera and computer for teaching and record purposes. It provides services of histopathological diagnosis, frozen section diagnosis, haematological tests, biochemical tests etc. The department has an internet facility for tele-pathology.

Details of Work Done	Number	Details of Work Done	Number
CBC + DC	154840	APTT Test	31626
DC Manually	73192	Plasma Fibrinogen	844
ESR	5704	FDP	134
Urine Examination	6022	Osmotic Fragility	16
BSBP	6022	RC	3247
PS/Indices	2887	CSF Examination	424
PT	32053	Pleural Fluid	157

#### **Central Laboratory – Haematology**



Details of Work Done	Number
Ascitic Fluid	157
Other Fluid	23
Stool Examination	599
Bone Marrow	4524
Bone Biopsy	2133
Pas Stain	925
G6PD	153
FHB	3

Details of Work Done	Number
LE Cell	0
Sickle Test	18
Sucrose Lysis	74
Sudan Stain	924
Iron Stain	299
Lapa Stain	51
D-Dimer	193
Total	327244

### Central Laboratory – Biochemistry

Details of Work Done	Number
Blood Sugar	41569
S. Acetone	98
Bun	70490
S. Creatinine	98915
S. Electrolytes	73403
S. Alk. Phosphatase	47794
S.G.O.T	68983
S.G.P.T	69052
S. Total Protein	52918
S. Albumin	51859
S. Bilirubin Total	69309
S. Bilirubin Direct	69309
S. Uric Acid	19620
S. Calcium	29287
S. Magnesium	20644
S. Phosphorus	18588
S. Lactate Dehydrogenase (LDH)	23437
S. Amylase	1200
S. Lipase	262

	NT 1
Details of Work Done	Number
S. Acid Phosphatase	1
S. Iron (Fe)	586
S. TIBC (IBCT )	488
Fluids	761
24 Hrs. Urinary Protein Estimation	14
S. Cholesterol	1589
Triglyceride	1558
HDLD	1513
Methotraxate (MTX)	1590
Cyclosporin (Cyclo)	317
S. Protein Electrophoresis	697
S. Immunofixation	577
S. Free Light Chain Kappa	750
S. Free Light Chain Lamda	748
S. IgG	426
S. IgA	448
S. IgM	447
Total	839247

### Endocrinology - Immuno Assays

Details of Work Done	Number	Details of Work Done	Number
Alpha Fetoprotein (AFP)	2762	Human Chronic Gonadotropin (B- HCG)	2130
Carcinoembryogenic Antigen (CEA)	5959	Follicle Stimulating Hormone (FSH)	743
CA-125	4529	Leutinizing Hormone (LH)	407
Prostate Specific Antigen (PSA)	1791	Prolactin (PRL)	347
CA-19-9	3126	Estradiol (E2)	571
CA-15.3	222	Testosterone (T)	155



Details of Work Done	Number
Cortisol	255
Growth Hormones (GH)	155
Parathyroid Hormone (PTH)	205
Total T3	2665
Total T4	2669
Thyroid Stimulating Hormone (TSH)	5872
Free T3 (FT3)	899
Free T4 (FT4)	1090
Thyroglobulin (TG)	488

Details of Work Done	Number
Anti-Thyroid Peroxidase Antibodies (ANTI-TPO)	2
Human Epididymal Protein 4 (HE4)	832
HBA1C	1172
S. Ferritin	602
S. Folate	332
Vitamin B-12	1419
Vitamin D Total	977
ADA	42
Total	42418

#### **Histopathology Laboratory**

Details of Work Done	Number	Details of Work Done	Number
Biopsies	19912	Slides (Review Specimens and Biopsies)	19786
Sections of Biopsies	23884	Frozen Specimens	1731
Operative Specimens	4138	Slides of Frozen Specimens	15209
Slides of Operative Specimens	74382	Total Biopsies and Specimens	24050
Biopsies & Specimens for Review	6630	Total Slides	154642

#### **Cytology Laboratory**

Details of Work Done	Number
Pap Smear	3768
FNAC	4562
Fluid Cytology + Cyto Block	4442

Academic Activities: Practical/Theory training to post-graduate students/doctors for M.D. degree, DCP and post-graduate students/doctors coming from various other hospitals (senior residents). Observers, fellows and rotators come from various local

Details of Work Done	Number
Outside/Camp Pap Smears	3561
Total	16333

hospitals. Undergraduate lectures for MBBS students at BJMC. Practical and theory training to post graduate students from Medical Laboratory Techniques Course. Maintenance of patient's record and statistical data analysis is done.



statistical data analysis is done.

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# F2 - Blood Bank

Blood Transfusion Officers: Dr. Rima Kusumgar, Dr. Dhara Ardeshana



**Clinical Services:** Blood Bank collects blood from voluntary and replacement donors in the Hospital and outside Hospital by arranging the outdoor blood donation camps, collecting more than 15,000 Blood Bags per year. Blood grouping of the donors and patients is done and blood is supplied to the patients after cross-matching with latest technology. The

Details of Work Done	Number
Donor Area	
Blood Tapping	13237+60
Replacement Donors	5784
Voluntary Donors	6182
Single Donor Platelet + other apheresis	1271+60
Outdoor Camps	78
Transfusion	
Whole Blood	1748
PCV (Packed Red Cell)	16213
PC (Platelet Concentrate)	18812
FFP (Fresh Frozen Plasma) + Stored Plasma	5857
Single Donor Platelet	1271
Autologus & Allogenic B.M. Collection & Therapeutic Apheresis	60

Blood Bank is well equipped with all the modern equipment like Fully automated blood grouping and antibody screening machine, column agglutination [Gel-technology], electro chemiluminiscence immunoassay for testing of transfusion transmitted disease testing, Apheresis machines, Blood Irradiator, Fully Automatic Component Seperation Machine like: Opti-press, G5 and for leukoreduction of Components which prevents the blood transfusion reactions. In Apheresis procedures we do routinely plateletpheresis, therapeutic Apheresis and Peripheral Blood stem cell collection.

Tests	For Patients	For Donors
Blood Groups		
Automation	24850	11966
Manual	20000	30321
Coomb's Test (IAT + DAT)		438+438
Du Test for weak antigen		834
Cross Match		28350
HbsAg		14500
HIV		15000
HCV		14500
VDRL		13937
Malarial Parasaites		13237



Academic Activities: MD (Transfusion Medicine) students from the B. J. Medical College as well as Doctors and Technicians from all over Gujarat are coming for training of component separation and apheresis procedures. Doctors and technicians from various blood banks come for training of apheresis especially stem cell collection and preservation. Major Achievements: Dr. Reema Kusumgar invited as a faculty for various training programmes organized by NACO. She was invited as technical expert (resource person) by GSCBT for joint inspection of various blood banks for license.

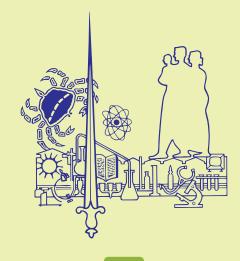
**Public Services:** The blood bank had organized 76 blood donation camps during the year.













# F3 - Microbiology

Professor & Head: Dr. Parijath Goswami Assistant Professor: Dr. Foram Patel Junior Scientific Officer: Dr. Nilima Desai



**Clinical Services:** The Head of the department manages mainly the Clinical Laboratory services for diagnosis of infections in cancer patients. The division has grown from 192-240 samples per year in 1989 to 1,10,031 samples currently and now it is strengthened by the advanced state of art instruments. It looks after the diagnosis of infectious diseases caused by bacteria, fungi, viral infections by sero diagnosis and molecular diagnosis of the infection in cancer patients.

There is well established diagnostic molecular microbiology and it helps to know complication occurring in the patients by different infectious agents which are not diagnosed by conventional methods. This technique called RT-PCR gives the results of quantitation of the infectious agents (number of copies) present in the patients system which complicates and deteriorates the treatment.

Antibiograms: Periodically antibiograms are taken out and issued to clinician for appropriate treatment of infections. The following is the different samples received in the department:

Test	Test Type	Number
Culture & Antibiotic Susceptibility	Aerobic	3949
	Anaerobic	0
	Fungal	2984
	Blood (aerobic)	3283
	Total	10216
Microscopy	Sp. Gram Stain	190
	H. pylori	45
	Z. N. Stain	329
	Pneumocystis Carinii Stain	00
	Stool for Ova/Cyst	19
	Wet preparation	145
	Total	728
Serology	Widal Test	274
	C-reactive Protein	105
	CMV IgG test	94

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Test	Test Type	Number
Serology	CMV IgM test	100
	HBeAg /anti HBeAg	232
	S. HIV	31763
	S. HBsAg	31964
	S. HCV	31677
	B2 Micro globulin	126
	anti HbS	86
	Hbc IgM	513
	S.Procalcitonin	1351
	Dengue test	361
	Malaria	313
	Chikungunya	13
	Total	98972
Infection Surveillance	Surveillance in Critical Areas (No. of Times)	115
	All Samples	1,10,031

# Infections Prevention and Control activities in GCRI:

History of activities of infection control: The concept of Infection prevention and control was brought to GCRI in 1992. Late Dr. D.B. Balar was the Head and Dr. Parijat Goswami, was the secretary. The then Director, Dr. D.D. Patel was the Chairman of the HICC (Hospital Infection control committee). All Heads of the clinical departments were the members of the committee. A sub committee was formed for active working and problem solving in the institute on day to day basis, which is called Hospital Infection Control Team (HICT). On goingly the structure of the committee has been changing with the new coming Directors. Other Directors who chaired the functioning of Infection control and prevention are Dr. Pankaj Shah, Dr. Shilin Shukla, Dr. R. K. Vyas and Dr. Shashank Pandya.

**Training:** Total number of training programs conducted was 20-15 at different occasions in the current year for nursing staff and class IV employees. Topics covered were; HCAI and Prevention Standard precautions, Needle Stick Injury and Management, Bio-Medical Waste Management, Hand Hygiene, Sterilization and Disinfection etc.

#### **Other activities:**

- 1. Monitoring practices done by CSSD & TSSU: The checks on surgical instruments cleaning, washing packing and sterilization process are done every day. Sterilization controls are done by using Process Integrator (PI) to make sure sterilization within the packs/dressing trays and drums, chemical indicators are used to check the set time, pressure and temperature and Biological Indicator (BI) are used to ensure spores as well as organism kill for sterility check.
- 2. For critical areas like OT, DSU, BMT, NICU, SICU, Post-op wards are frequently fumigated and surveillance done as per request.

#### Quality Indicators of Health care associated Infections (January 2018-December 2018)

The health care associated infections had reduced from 2017 to 2018. The surveillance of device associated infections like CAUTIs was reduced from 3.6 to 2.41 catheter days, CABSI reduced from 4.09 to 2.35 catheter days and VAPs reduces from 7.13 to 2.45 ventilator days. These shows how stringent are the bundle care implemented for prevention of device associated infections in our hospital. There was increase in surgical site infections in 2017, from 4.77% to 5.58% in 2018. All the data were within the range, or may be less as compared with the data of the other health care institutes nationally.

In 2008 when rules and guidelines for biomedical waste had become stringent, the then Director, Dr. Pankaj M. Shah, had taken keen interest and activities related to this were formed and followed. The committee for monitoring activities was formed and the rules and regulations are strictly followed since then. Daily rounds are taken to check proper segregation of waste. There are meetings and training which happen throughout the year for smooth running of the activities of waste management. The new biomedical waste management rules – March 2016 have been implemented and been followed as per standards of NABH and GPCB which are in the process of been followed by our institute.





- 1. FICTC (Facility Integrated counseling and Testing center) Active staff involved
- 1 Mrs. Neelam Chauhan Counselor
- 2 Mr. Shailesh Solanki Counselor

HIV counselling and testing services were started in GCRI in March 2015. It is a requirement of a health care facility to have one integrated counselling and testing centre for all groups of people. There is pre and post test counseling for HIV testing because we are testing HIV for all our admitted patients (medical, surgical and gynaec patients).

FICTC-GCRI is run by qualified Councillors who provide HIV counselling. Laboratory technician is also trained under the regional NACO centre of civil hospital. These FICTCs is supported by the National AIDS Control Organization (NACO).

- Counsellors: The counsellor is appointed and he/she is trained from ICTC center of NACO, Civil Hospital. They focus on the following:
- Pre-test counselling
- If HIV test is positive, Post test counselling of the patient
- Send HIV positive patient to civil hospital for ART treatment
- Maintain records of all counselling done
- Communicate with Civil hospital ICTC center
- Be available in the FICTC as per the specified timings
- Ensure that strict confidentiality is maintained
- Ensure that all IEC materials such as posters, etc. are displayed prominently in the FICTC



• Report on a regular basic to Head of FICTC center of GCRI

**Summary of activities in 2018-2019:** In a Year, April 2018 to March 2019 a total of 21,839 patients were counseled with an average Pre-Test counseling of 21839 patients per month. Post test counseling was done for 1.47% (322/21839) HIV positive patients. There was male preponderance (2:1, M:F) amongst HIV positive patients. 99 patients were aware of sexual transmission. 29 patients had given the history use of re-usable needles and 53 patients had given history of blood transfusion. There were only 6 patients who had given history of pre-natal transmission.

Most of the patients (225) were from Gujarat, (24) from Rajasthan, (02) from Madhya Pradesh, (02) Uttar Pradesh and (1) Bihar.

It was also observed that 50 patients were newly diagnosed for HIV infection, and 202 patients were already HIV Positive from outside or either were on Anti Retroviral Therapy. There were 25 patients who underwent repeated HIV testing. Around 234 patients were referred to ART Centre for counseling and treatment as per NACO protocol.

**Conference Organized:** The division had organised State Conference of Hospital Infection Society of India, Gujarat Chapter.

**New Test introduced:** CDAB toxin of the clostridium difficile is detected in patients having antibiotic associated diarrhoea in critically ill patients.



# **G. Radio-Diagnosis**

## **G1 - Imaging Services**

Professor & Incharge: Dr. Hitesh Rajpura Associate Professors: Dr. Saumil Desai, Dr. Himanshu Soni Assistant Professors: Dr. Drashty Chauhan, Dr. Sanjeev Patel, Dr. Sapna Patel Junior Lecturer: Dr. Tejal K. Shah Senior Resident: Dr. Jigna Patel Visiting Interventional Radiologist: Dr. Ajay Upadhyay (2days/week) Visiting Neuro Interventional Radiologist: Dr. Milan Jolapara



**Clinical Services:** The department is fully equipped with 500 MA Siemens X-ray units, OPG machine-Siemens, Siemens IITV guidance Fluroscopy machine, Mammomat-Mammography machine, Siemens G-50Doppler Machine, Two Doppler machines of GE – P5, Fuji CR system, Medsynapse - Department networking and data storage system, USG - High end Siemens USG S3000, Portable GE Ultrasonography, CT

Details of Work Done	Number
X-RAY (PLATES)	61989
IVP	1
USG	22928
USG Portable	656
CT scan	28178
Mammography	6542
Barium Swallow	167
USG Guided Biopsy	3116
CT Guided Biopsy	900
Pleural Tapping	620

Details of Work Done	Number
Ascites Tapping	263
MRI	3304
Color Doppler	895
PTBD	77
OPG	2756
RFA	14
CT Block	4
CT Angio	70
SRS	7
CT RT Planning	1244



Details of Work Done	Number
Loopogram	13
Gastrograffin study	13
Needle localization	5

Somatom 16 Slice, Emotion 6 slice CT scan, Digital Mammography and 3T MRI Machine.

The department conducts radiological part of health checkup programme at COC vasna. X-ray, mammography and ultrasonography are performed at cheaper rates, for early detection of pathology. Department also support radiological part of various camp and health checkup programme managed by institute. The department also participates in GCRI academic meetings.

Details of Work Done	Number
CT STB	24
Nephrostomogram	2
PTBD Dressing & Checking	123

**Academic Activities:** Regular lectures, case presentation, journal presentation, interesting case discussion conducted for resident doctors in the department.

**Research Activities:** We are maintaining patient's data and images. We are generating statistical data and studies which is published in national and international conferences.









# G2 - Nuclear Medicine & PET CT

#### Assistant Professor & Chief of Nuclear Medicine: Dr. Swati Rachh & Dr. Rasna Tiwari Medical Officer: Dr. Zalak Pandya Nuclear Health Physicist / RSO : Om Prakash



Details of Work Done	Number
Bone	2002
Cardiac	0
Parathyroid	30
Silography	0
Thyroid scan	204
Hida scan	29
DTPA scan	305
DMSA	227
DRCG	0
MIBG	9
EC scan	185
I-131 Whole body/Iodine scan	259

Details of Work Done	Number
I-131 Toxicosis (10mci)	30
I131 therapy	134
GI study	0
Liver scan	1
MUGA Scan	1
GE reflux (Milk)	3
Hynic-toc(octreotide scan)	14
Sentineal node imaging	93
Meckle scan	0
Samarium therapy	0
Lympho scintigraphy	1
PET-CT	1502



## H. Radiotherapy

Professor & Head: Dr. U. Suryanarayan Professor: Dr. Ankita Parikh Associate Professors: Dr. Maitrik Mehta, Dr. Pooja Nandwani Patel, Dr. Sonal Patel Shah Assistant Professors: Dr. Jyoti Poddar, Dr. Parag Roy, Dr. Rajan Yadav, Dr. Niketa Thakur



**Clinical Services:** The department conducts daily OPD from 9 a.m. to 5 p.m. and is fully equipped with four Linear Accelerator with facilities of 3 Dimensional Conformal Radiotherapy, Intensity Modulated Radiotherapy(IMRT), Image Guided Radiotherapy(IGRT), Volumetric Arc Therapy (VMAT), Stereotactic Radiotherapy (SRT), Microselectron High Dose Brachytherapy machines, One X-ray simulator Machine and One Siemen's CT Simulator machine which is in Radiology Department.

**Clinical Activities:** The department is treating patients from nearby cities and also from Rajasthan, Madhya Pradesh, Maharashtra and Uttar Pradesh.

Details of Work Done	Number
OPD new cases	851
Linear Accelerators	4810
Cobalt Teletherapy	1451
Brachytherapy	885

Academic Activities: Regular lectures on Wednesdays and Fridays participated by all MD resident doctors and faculty and bed side case presentation and discussion daily conducted in the department. There is a departmental mass round every Tuesday and Friday. The department runs CMRT course for Medical Radiotherapy Technician. The departmental audit is done on every Thursday.

Major Achievements: Dr. Pooja Nandwani Patel, Associate Professor, completed 3 weeks training for advanced conformal techniques and head and neck oncology management at Christie School of Oncology, NHS Foundation Trust, Manchester, England from April 23 to May 11, 2018 under AROI Fellowship. She is Reviewer for Acta Medica International Journal.

**Dr. Jyoti Poddar**, Assistant Professor received best paper presentation at YROC Siliguri, West Bengal during January 19-25, 2019. She was invited speaker at GUJ AROICON 2019 at Rajkot, Gujarat.



## **I. Surgical Oncology**

There are six Surgical Oncology Units (I1), and six Superspeciality Oncology Units (I2-I7), which are Plastic Surgery Oncology (I2), Urosurgery Oncology (I3), Musculoskeletal Onco Surgery (I4), Paediatric Surgery Oncology (I5), Interventional Therapy Centre (I6), and Ophthalmic Surgery (I7).



#### **General Surgical Oncology**

Details of Work Done	Number
Major Surgery	3967
Minor Surgery	645
Emergency Surgeries	381

#### **Superspeciality Oncology**

Department	Number of Surgeries
Plastic Surgery Oncology	62
Urosurgery Oncology	145
Musculoskeletal Onco Surgery	272
Paediatric Surgery Oncology	127
Ophthalmic Surgery	4

## **I1 - General Surgical Oncology**

#### Director, Professor & Head : Dr. Shashank J. Pandya

	GI & HPB	Breast Thorax & MIS	Head & Neck
Professor	Dr. Rajen Tankshali	Dr. Shashank J. Pandya	
Associate Professor	Dr. Vikas Warikoo	Dr. Mohit Sharma Dr. Abhishek Jain	
Assistant Professor	Dr. Shailesh Patel	Dr. Ketul Puj	Dr .Umank Tripathi Dr. Supreet Bhatt Dr. Himanshu Patidar



**Clinical Services:** The department offers services in diagnosis, treatment and palliative care of the patients in the field of Head and Neck, Thoracic, Gastro-intestinal & Colorectal, Hepato-pancreatobilliary, breast and others. In the last year total 3967 major surgeries were performed by general surgical oncology. Different surgical teams occupy eight major surgical operation theatres. Day stay unit facilities are provided for biopsy, endoscopic procedure and evaluation of lesion before planning of surgery. The department is involved in diagnostic perioperative care, follow up and care of terminally ill patients.

Academic Activities: Regular lectures and teaching programmes are conducted for M.Ch. Surgical

Oncology Resident Doctors and Fellows in the department in the form of case presentation, seminar, journal reading and region wise topic presentations. The department also participates in GCRI academic meetings.

**Research Activities:** Maintenance of patient's records and statistical data analysis is done. The data is presented in national level conferences and published in national / international journals.

**Public Services:** Camps for early detection and awareness of cancer are conducted at various places in Gujarat, including organizations such as ONGC, Air Force and Armed Forces etc.

### **I2** - Reconstructive (Plastic) Surgery

#### Visiting Plastic Surgeons : Dr. Hemen Jaju, Dr. Hemant Saraiya, Dr. Parag Kothari

**Clinical Services:** Apart from attending OPD once a week, reconstructive surgeries are done in main operation theatre twice per week. In this period total 62 surgeries were performed. Reconstructive surgeries for head and neck cancer patients and CFRs with the help of neurosurgeons are done. Screening of patients requiring prosthesis is done in OPD and they are guided about the artificial limbs and body parts.

The department offers services to the patients from all over Gujarat who require reconstruction of lost body parts and guides them about prosthesis.

**Academic Activities :** The department is also actively involved in teaching programme of M.Ch. students including dissertation submission and internally case presentations in the institutional clinical meetings.

### **I3 - Urosurgery Oncology**

#### Visiting Urologist : Dr. Keval Patel

**Clinical Services:** The department offers services in OPD, operation theatre and day stay unit. In this period total 145 surgeries were performed. They examine, investigate and treat patients of urogenital cancer.

**Academic Activities:** The department is also actively involved in teaching programme of M.Ch. students including dissertation submission and internally case presentations in the institutional clinical meetings.



## **I4 - Musculoskeletal Onco Surgery**

Full Time Orthopaedic Surgeon : Dr. Jaymin Shah, Dr. Abhijeet Salunke

**Clinical Services:** It has two OPD days in a week. The operation theatre of Musculoskeletal Oncology is well equipped with ultra-modern instruments and equipments like oscillating saw, oscillating drill, universal assimilating drill, laminar air flow, radiolucent operation theatre table with all necessary attachments, Image Intensifier Television (IITV) etc. In this period total 272 surgeries were performed.

**Academic Activities:** The department is also actively involved in teaching programme of M.Ch. students including dissertation submission and internally case presentations in the institutional clinical meetings.

**Major Achievements: Dr Abhijeet Salunke** received first prize in oral paper presentation at Max Ortho Onco Conference 2018 at New Delhi in July 2018. He was selected for International Travelling Fellowship by Indo-American Cancer Association (IACA) at Memorial Sloan Kettering Cancer Centre New York, USA in September 2018. He also received second prize in oral paper presentation and third prize in standup paper session at Gujarat orthopedic Association Conference at Ahmedabad in February 2019.

Conference Organized: Oncoorthocon 2018 was a unique international orthopedic oncosurgey conference organized by Gujarat Cancer & Research Institute on August 4-5, 2018. There was workshop on Live Operative sessions i.e. Bone Biopsy and Saw Bone workshop of megaprosthesis. The organizing chairman was Dr. Shashank Pandya and organizing secretary were Dr. Abhijeet Salunke, Dr. Jaymin Shah and Dr. Vikas Warikoo. The key highlight of this conference was plenary lecture by Prof. Shekhar Kumta (Professor and Vice Dean Hong Kong National University) on Computer Aided Tumor Surgery (CATS). This conference had lectures by more than 20 national orthopedic onco-surgery faculties. This conference had over 100 national and international delegates. There were 5 oral presentations and 16 eposter presentation during this conference.



## **I5 - Paediatric Surgery Oncology**

#### Visiting Paediatric Surgeon : Dr. Kumar Sumit Pramod

**Clinical Services:** The Department offers its services to paediatric OPD, Day stay Unit and operation theatre for treatment of paediatric cancer patients. The department does the procedure of Hickman catheterization, a very important central catheter, for paediatric patients. The procedure is done under radiological guidance. In this period total 127 surgeries were performed.

Academic Activities: The department is also actively involved in teaching programme of M.Ch. students including dissertation submission and internally case presentations in the Institutional clinical meetings.



### **I6 - Interventional Therapeutic Centre (IVTC)**

#### **Full Time Gastroenterologists:** Dr. Pinakin Patel, Dr. Sachet Chandak **Visiting Pulmo-Onco Critical Care Specialists:** Dr. Keyur Patel, Dr. Sujal Patel

**Clinical Services:** The IVTC department under surgical oncology department is high volume center for endoscopy services and includes advanced endoscopy like ERCP & Pleuroscopy. It conducted more than 6290 procedure in period from April 2018 to March 2019 which includes more than 4000 diagnostic endoscopy and 1500 therapeutic endoscopy as well as more than 400 advanced endoscopy procedure including ERCP. It covers many therapeutic procedures like dilatation, EVL, sclerotherapy, balloon dialations, polypectomy and endoprosthesis deployment. The department has also been imparting training programme for those interested in learning endoscopy.

Procedure	Number
UGI scopy	2669
Colonoscopy	926
RT Insertion	351
Dilatation	557
PEG/NJ	11
EVL	204
Glue/Scleotherapy	9
Endoprosthesis	20

346
987
26
130
46
4
5

### **I7** - Ophthalmic Surgery

#### Visiting Ophthalmic Surgeon : Dr. Vaibhavi Trivedi

**Clinical Services:** The Department offers services in OPD, Operation Theatre and Day Stay, thrice per week. They examine, investigate and treat patients.

GCRI has now been recognized as Tertiary Center for Eye Cancers for States of Gujarat, Rajasthan and Madhya Pradesh. All age group patients from children to adults of Eye cancers are treated. Retinoblastoma common in children are diagnosed and treated. Choroidal melanomas, Basal Cell Carcinoma, Squamous Cell Carcinoma etc. in adults are diagnosed and treated. Glass prosthesis and other types of prosthesis are given for social well being once the patients are treated. In this period total 4 surgeries were performed.



## **J. Neuro-Oncology**

Head & Part Time Neurosurgeon: Dr. Dipak Patel Full-Time Neurosurgeons: Dr. Paresh Mody, Dr. Nikhil Modi Part-Time Neurosurgeons: Dr. Navin Patel, Dr. Tejas Patel Medical Officers: Dr. K. G. Patel, Dr. Minesh Patel, Dr. Nilam Patel



**Clinical Activities:** The Department is well equipped with two operation theatres. The operation theatre is well equipped with Laminar Air Flow and state of the art anaesthesia system, Microscope with C.C.T.V. by Zeiss & Leica Ultrasonic Surgical Aspiration by Valley Lab, IITV, Stereotactic Apparatus, Radio Frequency Lesion Generator, Neuro navigation (IGS), Intra operative Neuromonitoring. Intensive Care facilities with state of the art cardiorespiratory monitoring system, advanced ventilators and its own dedicated Central Sterile Supply Department.

The Department is running OPD on Monday and Thursday every week where new patients are examined and the follow up patients are regularly attended in the OPD. The Indoor references are regularly attended. The services to the poor patients for neurosurgical diseases are offered. The department also provides emergency services to the patients. The regular teaching to the Medical Officers and Research Fellow is carried out during the ward round and operation. The clinical meeting presentations are made.

as per the schedule all the medical staff remains update with reading of the standard neurosurgical text books and journals at the library. The department is also having interactions with other departments of the hospital, e.g. Surgical Oncology, Plastic Surgery, Medical Oncology, Endocrine, Biochemistry, Pathology, Radiation Oncology Department, Radiology Department and Physiotherapy Department. The medical staff is regularly presenting the clinical research paper at the national and international conferences. There is also potential to start DNB courses in the specialty of Neurosurgery at Gujarat Cancer & Research Institute.

Details of Work Done	Number of Patients
Selective	13
Supramajor	606
Major	162

<b>Details of Work Done</b>	Number of Patients
Minor	85
Total	866



# **K. Support Services**

### **K1 - General Administration and Human Resources**



This department looks after two important key activities of the Institute. General Administration looks after the day to day general administration aspects related to hospital's administrative procedures like conducting meetings of various committees, executing the decisions taken by the committees, streamlining the administrative processes etc.

General Administration also supports various events arranged by the Institute for different purposes like Cancer Detection Camps, Cancer Awareness Exhibitions, Workshops, Seminars, Lectures, Conferences etc.

Major initiatives taken up by this department is implementing Computerized Grievance and Feedback Management Portal to resolve patients and their relatives' complaints as well as internal maintenance issues of the staff for engineering and computer services. System is interactive and complainant gets immediate response through SMS as well as concern department's Head / Officer or doctor or Matrons also get SMS alert about the complaint. On redressal of the complaints, the same is being updated in the system and the whole process is being closely monitored by the General Administration for effective use.

General Administration also closely works with the computer section for successful implementation of various modules of software for hospital operations as well as administration.

Ultimately goal of the General Administration is to provide seamless services to the patients as well as employees for efficient delivery of patient care.

#### **Outsourcing Services:**

Human Resource Department looks after the Outsourcing Services, it includes Security Staff, Housekeeping staff, Utility Service Staff & Canteen facilities and diet for patients, and Biomedical Waste Collection. Department also manages Outsourcing Services of other Centers of GCRI (Saurashtra Cancer Care Centre, Rajkot & Siddhpur Cancer Care Center, Siddhpur). Department also looks after the process of tendering, evaluation, billing process of outsourcing services and regular monitoring of outsourcing services.



### **Human Resources Section**



Human Resources Section looks after the process of recruitment of new human resources, promotion, disciplinary action, training, maintenance of human resources' records, retirement process etc.

Human Resources Section also identifies different training programmes for capacity building of human resources in the Institute and appropriate staff members are deputed to attend training outside the Institute. As a continuous effort of capacity building of staff, regular training programmes of nurses and other staff are also being arranged internally with the help of NGOs and other organizations. Human Resources Section aims at recruiting and retaining best of talents for the Institute's day to day operations.

# Secretarial Services Section



General Administration Department is also supported by the Secretarial Services. Secretarial staff which provides support for all general administrative activities like organization of workshops, seminars, conferences, publication of various materials, preparing agenda and minutes of meeting, circulars, maintenance of important office records, correspondence and public relations with the visitors visiting Institute to meet higher officials as well as Institute's other activities.



### **Store and Purchase Section**



This section provides efficient services for supply chain management of consumable items required for day to day hospital operations. This section also conducts process of inviting e-tenders and fixing up the contracts as well as efficient management of the contracts. Timely supply and inventory management in any hospital not only smoothen the day to day operations but also prevents unnecessary stocking of various items. This section continuously strives to improve day to day supply chain management. A new software has been procured to improve the efficiency of inventory management.

## **Account Section**



The Functions of the accounting department in organization is very vital. It shows a financial picture, health and stability of the entity. The role and duties of the department include the following:

**Planning:** Prepare, Implement and evaluate Budget. Liaison with Government for budget and their allied matters.

**Money Out:** Making payment to all parties/staff within due date which convert into credit building of the organization.

**Money In:** Processing Incoming Payments and placement of fund for wealth maximization of the organization

**Reporting:** Prepare financial data and reports to comply with applicable laws. Make internal and external reporting in various forms.

**Controls:** To implement financial controls which avoids error, fraud, theft etc and run the organization as per approved policies.

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### **Biomedical Engineering Section**



Biomedical Engineering Section looks after the etender process for procuring new equipments, arranging technical committee, tender committee and purchase committee's meetings, contract management for procurement of new equipments, maintaining the schedule for maintenance of different high-tech medical equipments etc. Efficient management of maintenance schedule helps Institute in keeping down time of the different equipments' negligible. The section also supports hospital's different departments in maintenance and troubleshooting of their equipments. This section is also responsible for providing efficient services in day to day management of operation theatres' equipments. They are also responsible for providing services at Siddhpur Cancer Care Centre and Rajkot Cancer Care Centre managed by Gujarat Cancer & Research Institute under an agreement with Govt. of Gujarat. This section also provides training to Biomedical engineering students, Diploma Biomedical Engineering students and I.T.I. students coming from different institutes. They also look after the work of AMC/CMC of various equipments for proper functioning of medical equipments. They also maintain records and check list of AMC / CMC for preventive maintenance.

### **Engineering and Maintenance Section**



Institute's buildings are old and some of the buildings are more than 50 years old which requires continuous

maintenance for civil, electrical, electronics and communication, air conditioning works etc.. This

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section looks after the day to day maintenance of civil work, interior decoration, electrical installations, air conditioning, lift maintenance etc. This section also helps Institute in procurement of maintenance services as well as new construction work, electrical installations, air conditioning, communication, CCTV etc. This section also provides efficient services for estate management, doctors hostel and COC, Vasna campus as well as maintenance of Rajkot and Siddhpur Cancer Care Centre.

### **Information Technology Section**



The Information Technology section is enabler for better patient services. IT team develops an IT strategy that supports the organization's objectives and helps build a strong competitive advantage. IT team also ensures that the right level of IT resource is available to meet changing levels of demand. IT team is focused on adaption of latest technologies, infusing new and cost effective ideas for ease of operations and patient centric facilities. Our road map is to move towards cloud based computing to minimize on premises IT infrastructure. Business Continuity Planning (BCP) and Disaster Recovery Planning (DR), Network security, Data Security, Data Protection, License compliance, Cloud based email system, Hospital Information Management System are the daily activity of Information Technology section.

## **Resident Medical Officer Section**





This section supports following services

- (1) Efficient management of Out Patient Department's services like Clinical Laboratories, Radiology etc.
- (2) Coordination of various services between the Institute, GCS Medical College, Hospital and Research Centre, Community Oncology Centre, Vasna, Home Hospice Service etc.
- (3) They provide guidance and assistance to the patients for their treatment as well as benefit of various government schemes like MA Yojana, MA Vatsalya Yojana, SC / ST scheme, School Health Programme, support by other NGOs,

accommodation for patients' relatives around Civil Hospital campus etc.

(4) They also conduct Patient Care Evaluation Meeting and decisions taken by the committee are conveyed to the management for execution and improvement of patient care services. Efficient support of Resident Medical Officers has helped large number of patients to avail financial assistance benefit of various government schemes for their treatment. We are happy that the largest number of cancer patients taking benefit of MA Yojana, MA Vatsalya Yojana.







### **K2. Educational Graphics & Medical Photography**



Chief Photography & Publicity : Mr. Rushi Patel

The department plays an important role in catering all the needs of Photography and Graphic work of the institute for the purpose of clinical, educational and public awareness activities. The department has digital in-house production facility of educational material. The annual department workload includes more than 5500 clinical and various institutional activities photographs. Besides this the technical manpower is contributing their experty in designing institutional publication and printing materials e.g. designing Annual Reports, GCS Research Journal, Certificates of various courses run by Institute, Website photo & graphic updates, staff Identity Cards, Institutional Circulars and cancer awareness posters for mobile exhibition. The department is also involved in facilitating preparation of presentation materials and handouts for scientific meetings. The department also participates in all the GCRI/GCS public awareness campaigns. Department staff also involves in designing community awareness material and make it understandable for lay people.





## K3 - Library & Information Services



**Librarian:** Ms. Nuri Kalita **Assistant Librarian:** Mr. Jagdish Gohel

Activities: The Library provides evidence in support it's all activities to provide information and services for Faculties, Resident Doctors, Students, Para Medical Staff, Research Scientists and other Admin staffs. The division is attempting to preserve the record of unique and rare collection of cancer literature, different publications and knowledge in the form of Books, Journals, Databases, E-Resources, Audio-Visual and Multimedia collection. The library has played a key role in reference activities by offering information dissemination services like EBSCO Oncology full text Journal Database, UpToDate Medical Database (anywhere), Clinical Key, OVID Cochrane Library, MEDLINE and other online retrieval activities through Institutional IP and provide more efficient services including

- Access to 1083 Print Books & 160 E-books facility
- Access facility to National & International 44 current print Journals and 239 e-Journals
- Access facility to 1035 Thesis, Dissertation & Logbook
- Access facility to 05 Medical online databases, online books, online journals and other Library resources are available anytime from GCRI campus

- Access facility to Audio-Video collection with 228 CD & DVD
- Access facility to OVID, Clinical Key and Cochrane Library database in hospital campus through Hospital IP by forming part of National Cancer Grid Programme of Govt. of India
- Access to 17 computers with high speed internet facility
- Access to WiFi Facility
- Access to Digital library & Digital Notice board facility
- Access facility to Individual Study room for faculties and Resident Doctors
- Access facility to E-mail Services
- Access facility to 'Anti-plagiarism check' use 'iThenticate' anti-plagiarism software by forming part of Member National Cancer Grid Programme of Govt. of India

#### **Collection Building:**

During the year major collection of GCRI library and Information services are added 89 new Oncology books, 44 Print National and International Journals. Continue subscription for the online Medical database UpToDate and EBSCO. Purchased three new



computers and four Intex Headphones. Renewed UICC Institutional membership for the year 2018-2019.

Details of Work Done	Number
Visiting users record	4932
Digital Library Users	6870
Issue/Return	647
Reprography (Xerox/Print/ Scan)	25541
Article on request	71
Email Services	468
Database uses statistics (EBSCO & UpToDate)	4939+31044= 35983
Collection of Scientific Publication /Research output / Published journal articles	100
Collection of Thesis/Dissertation/Logbook	85

#### Achievement:

- 1. Introduced complimentary Newspaper service to Chemotherapy and other ward patients and their relative's w.e.f. January 22, 2019.
- 2. Introduced Staff Library w.e.f December 1, 2018 for all GCRI academic, research and admin staffs.

The collection of books is Drama, Fiction, Non-Fiction, Poetry, Novel, Motivational, Religion, Computer, Biography and Hindi, Gujarati & English literature books.

- 3. Ms Nuri Kalita, Librarian completed Good Clinical Practice (GCP) online trainning certificate course on April 19, 2018, CTN expiration date April 19, 2021 organized by NIDA clinical trial network
- 4. Digital Library notice board introduced by GCRI Library and Information Services department to replace the wooden notice board for dissemination the relevant and quick digital information to all users.

#### Awards:

1. Academic Excellence award to Ms. Nuri Kalita, Librarian GCRI for the year 2017-2018, By Civil Medicity, Ahmedabad on dated August 15, 2018.

#### Academic Activities:

- 1. Organized training program on EBSCO online Medical Database: search, use and remote login on dated June 21, 2018 at telemedicine centre.
- 2. Ms. Nuri Kalita Librarian, presented 'Copyright Infringement & Plagiarism are really two sides of a coin?' in clinical meeting on November 10, 2018.







## **K4 - Nursing Services**

#### Matron Grade I: Ms. Mona Darji



**Clinical Services:** Nursing wing provide diversified Oncology Nursing Service to the cancer patients through various specialties like Central Venous Devices (CVAD), Stoma Care and management, and Infection Control at various levels etc. In our Nursing Department, we have specially trained oncology nurses to give safe and effective nursing care to the Cancer patients.

CVAD and Stoma Care are run by specially trained nurses Mrs. Pinal Darji and Mrs. Nilam Dave, who are trained by one of the most exclusive and reputed TATA Memorial Hospital, Mumbai.

**CVAD:** We have started these services at GCRI since 2008. This is the first State of the art centre well known in Gujarat State. The services offered by CVAD include pre and post counseling of the cancer patients and give moral support to their relatives. Detail records of indoor and outdoor patients having Catheter Insertion and removal, and dressing of these patients are maintained. Patient's relatives are educated about care of catheter dressing and flushing of catheter. The records of port needle insertion, PICC insertion, Hickman Catheter Insertion, Certofix Catheter Insertion are kept. The trained nurses teach

the same procedures to Nursing Students, Junior/ Senior Nursing staff regarding the Catheter care.

**Chemotherapy training for Nurses of District Hospital:** One day chemotherapy training program have been organized to train the district level nursing staff, hence patient can get advantage of care in their area.

Details of Work Done	Number
Dressing	7404
Hickman Catheter Insertion	117
Port Catheter Insertion	213
Port Needle Insertion	2693
PICC Catheter Insertion	304
Certofix Catheter Insertion	310
Cavafix Catheter Insertion	-
Catheter Removal	416



## **K5 - Stoma Clinic**

Staff Nurse, Colostomy Care : Ms. Nilamben Dave



**Clinical Services:** This is the first Stoma Clinic in Gujarat State started on March 4, 1983. In Stoma Clinic two Enterostomal Therapist, CET special qualified are working. The services offered by the department include: (1) Giving pre-operative counselling to the patients and their relatives, (2) Before operation, stoma marking to prevent future problem, (3) Selection of the stoma bags according to stoma size and applying on ostomy patients as well as faecal fistula drainage patients, (4) Giving detail instruction and advise about stoma bags and stoma management to patients and their relatives and application of stoma bag, (5) Giving Post operative counselling to patients and their relatives, (6) Keeping detail record of Indoor and Outdoor patients like Colostomy, ileostomy, ileal conduit, faecal fistula and drainage, (7) Keeping detail record of various types of stoma bags for indoor and outdoor patients, (8) Teaching nursing students about colostomy care, and (9) Keeping the records of cancer care patients.

<b>Details of Work Done</b>	Number
New Patients	462
Old Patients	2426
Number of colostomy bags	24402





## **K6 - Pharmacy**

Chief Pharmacist & Store Officer: Arvindbhai Kotadiya



**Services:** About 451 medicines are dispensed from pharmacy. The pharmacy computers are linked with all bill collection counters to know the day-to-day availability stock of medicines in pharmacy. Only outdoors patients (with Rx of Tablet/Capsules) are supplied Medicines from ground floor Room No. 25, which is just near to cash collection counter. Indoor Patients (admitted in wards) are dispensed medicines from second floor (Dispensing Pharmacy for Indoor patients) near to B.M.T ward R.No. 210 which remain opened from morning 8:00 am to evening 8:00 pm. Day care patients are dispensed chemotherapy and its supporting drugs near to Chemotherapy ward Room No.7 defined as Chemotherapy Pharmacy. Pediaric patients are supplied medicines from Pediatric Pharmacy located at GCSMC, Naroda. Arrangements

are made for the pharmacy requirement of Siddhpur Cancer Care Centre. Online Ward Indents system is established which is implemented successfully. All Departments as well as wards for their Medicines requirement indents are supplied from Main store first floor above Annapurna Canteen. Management of Pharmacy - procurement, distribution and control of all pharmaceuticals used within the institution and for management of personnel within the pharmacy department is controlled by Main Pharmacy Store first floor above Annapurna Canteen. Patients of MA Yojana and SC/ST category are supplied costly drugs as well as surgical items / ortho-surgical items free of cost. To provide better services to patients the pharmacy services hours are remains open from 8.00 AM. To 8.00 PM.





## **K7 - Physiotherapy**

Senior Physiotherapist : Dr. Manali Shah Physiotherapist : Dr. Vibhuti Shah, Dr. Jasmin Khoja



**Clinical Services:** The department renders services to both indoor and outdoor patients. Indoor services are mainly for postoperative phase who had undergone surgery or for patients who are on ventilators or tracheotomy patients. Outdoor services are mainly consists of preoperative chest physiotherapy, pain relief & rehabilitation. All patients undergoing for major operation are referred to this department. Electrotherapy has various pain relief modalities. Rehabilitation of paraplegics, quadriplegics, amputees, orthopedic condition like total knee replacement, hip replacement, rotationplasty and peripheral nerve injury. The department also treat pediatric group of patients having above problems by giving them quality of treatment which helps them to live near normal life. The patients of trismus, radiation mucositis undergoing for BMT & lymph edema are treated over here.

Details of Work Done	Number
Indoor patients	24071
Outdoor patients	8436

Academic Activities: Clinical teaching to B. Physiotherapy students of different self-finance colleges. Dissertation for students of Master in physiotherapy in cancer rehabilitation under the guidance of Dr. Manali Shah. **Major Achievement: Dr. Manali Shah** has become certified lymphedema therapist from ACOLS, USA.

**Public Service Offered: Dr. Manali Shah** delivered lectures to students who are doing cancer caregiver course.

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## **K8** - Prosthesis and Rehabilitation

Head of the Department: Dr. Hemen Jaju Assistant Medical Sculpture: Dipan Soni

**Clinical Services:** The department prepares artificial limbs and organs, part of face and other prosthesis. The prosthesis are made from silicone and Acrylic. A

total of 2024 patients attended for prosthesis and of them 999 were new patients and 1025 were follow-up patients.

Details of work done	Number
Eye Prosthesis	07
Lip Prosthesis	03
Cheek Prosthesis	14
Finger Prosthesis	04
V mould	23
Breast Prosthesis	1885
Total	1935

Academic Activities: Total 25 MDS students attended the department for one month training for external prosthesis of maxillo facial. Total 1904 MSc, BSc, and GNM nursing students, and tutors also come to learn about External Prosthesis as it is one of the subject of their curriculum. Patients are also given training of how to use the Prosthesis and are rehabilitated.



# L. Cancer Biology

Department of Cancer Biology was established in 1980 with primary research focus area on Translational Cancer Research. The department has now metamorphosed into 6 state of the art research laboratories involved in basic and applied research in cancer biology and caters advanced diagnostic services for cancer patients.



**Research Activities:** Since its inception, the department is actively engaged in clinically oriented research projects and has contributed significant data having clinical implications for cancer patients. The major areas of research are Cancer aetiology, Signal transudation, Genomics, Cytogenetics, Pharmacogenomics, Proteomics, Stem cell biology etc. Based on our previous findings and our internationally published data, major ongoing research projects of the department are aimed to explore cancer biology (molecular signatures) with following major objectives:

- Identification of novel mutations/polymorphisms in Indian patient population
- Geographic variation in aetiologic factors, genetic profile and proteomics/glycoproteomics profile between patients within India
- Identification of newer drug targets and drug discovery

- To develop Salivaomics approach as Non-Invasive tool for early detection of oral cancer
- Role of cancer biology to help cancer screening programmes at molecular level which is the need of the day in India

**Clinical Services:** More than 200 clinical investigations are done using advanced diagnostics and molecular techniques such as: Immuno-chemiluminescence enzyme assay, Conventional cytogenetics, FISH, Multi-color FISH, PCR, Real Time PCR, ELISA, Immunohistochemistry, Flow Cytometry etc.

**Educational Activities:** The department runs Post-Graduate Degree Courses such as M.Sc. (Cancer Biology), M.Phil. and Ph. D. (Life Science) in affiliation with Gujarat University.



# L1 - Immunohaematology Lab

Associate Professor: Dr. Hemangini Vora Junior Scientific Officer: Dr. Kruti Rajvik Research Assistants: Dr. Birva Raiya, Dr. Nupur Patel



**Clinical Activities:** The laboratory is well equipped with three Ventana Benchmark XT automated stainer for immunohistochemistry work and FACS Canto 10 colour flow cytometer for leukemia/lymphoma immunophenotyping. Immunohistochemical markers for differential histopathological diagnosis and predictive markers such as ER, PR and Her-2-neu are being evaluated. Immunophenotyping of leukemia / lymphoma, have been testing performed on flow cytometer PNH and CD34 evaluation.

Details of Work Done	Number of Tests	Number of Patients
Clinical Work		
Immunohistochemistry Markers	29360	4450
Estrogen and Progesterone receptors	2745	1307
Her-2-neu	1529	1288
Total	33634	7045
Flowcytometry		
Immunophenotyping	12610	1025
CD 34 percentage	84	42
PNH	385	65
Total	13079	1132
Research work		
Immunohistochemical markers	520	240
Markers by Flowcytometry	70	44
DNA extraction and CGH array	32	32



Academic Activities: The division is involved in teaching of MSc Cancer Biology, MPhil and PhD students. The division enrolls MSc dissertation students, MPharm, MDS and MD students as observers.

**Research Activities:** The main areas of research include development of cost effective protein panel by CGH array and transcriptome sequencing of triple negative breast cancer. Evaluation of

immunohistochemical markers in glioblastoma and lung cancer. A study of inflammation induced lymphangiogenesis in Head and Neck Cancer. In B-ALL, MRD evaluation is carried out by flow cytometry.

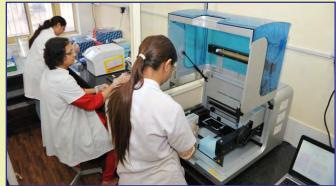
**Major Achievement:** The lab received **'Vibha Mehta Rotating Trophy'** for maximum research publications during Hospital Week Celebration on February 9, 2019.





#### **Cancer Biology - Common Facilities**







## L2 - Tumor Biology Lab

Assistant Professor (In-charge): Dr. Nandita Ghosh Research Assistants: Dr. Toral Kobawala, Dr. Kinjal Gajjar



**Clinical Services:** HLA Typing Tests for determination of Class I and II HLA typing antigen A-B-DR in patients who are recommended for bone marrow transplantation such as thalassemia and blood cancer. It is being performed by PCR SSP analysis, in 96 well plate format, comprising different allele- or sequencespecific primer sets in each well along with the primers for amplification of sample's internal control. Evaluation of the results is done by agarose gel electrophoresis and subsequently interpreted using online software.

Details of Work Done	Number
Clinical Work	
HLA Typing Tests	215
Research Work	
DNA and RNA extractions from blood of colorectal and ovarian cancer patients	156
Immunohistochemistry staining for dissertation	175

Academic Activities: The division participates in various academic activities of the institute. They comprise of weekly seminars of the department, enrollment of PhD students and MSc Dissertation students. Moreover, the division is actively involved in MSc Cancer Biology course. Lectures and practicals for students of MSc Cancer Biology are being organized by the division.

Research Activities: At present, the research activities of this division are carried out in various malignancies such as breast, colorectal, ovarian and thyroid malignancies with the focus in studying the clinical relevance of multiple biologic markers by fully exploiting the genetic and epigenetic machinery involved in the initiation and progression of cancer using recent technologies. It also aims in exploring drug resistance and toxicity biomarkers at molecular level. In breast cancer, research revolves around the vital role of Wnt signaling pathway molecules and antagonists. Further, the interaction of microRNAs 21 and 221in Colorectal Cancer have been evaluated to identify their subsequent relevance in patient management. Moreover, the role of different molecular markers like-KRAS, BRAF, B-catenin, PIK3CA, ERCC1, IGF-1R, PTEN, p53, as well as miR-200 family will be explored in epithelial ovarian cancer. The information gained will be valuable for a more reliable estimate of tumor behaviour to predict patients' prognosis, identify individual patients who are at a low risk or high risk of relapse, detection of micrometastasis and monitoring the course of the disease. Subsequent to statistical analysis, the data is presented in national level conferences and published in national/international journals.



# L3 - Clinical Carcinogenesis Lab

Senior Scientific Officer & In-charge : Dr. Trupti Trivedi Junior Research Fellow and Ph D Student : Ms. Vinal Upadhyay



**Clinical Activities:** IDH1/2 mutations by Real-Time PCR for molecular classification and prediction of

Details of Work Done	Number of Tests	Number of Patients	
Clinical work			
IDH1/2 mutations by Qpcr	29	101	
Research work			
DNA and RNA extraction from tissue	342	320	
DNA and RNA extraction from Liquid Biopsy (Plasma)	75	75	
IDH1 mutation detection by dd-PCR	20	20	

Academic Activities: The laboratory is involved in various academic activities including presentation and participation in weekly seminars conducted by the department, theoretical and practical demonstration of molecular biology techniques for M.Sc. Cancer Biology students, dissertation students and observers from various universities. The laboratory actively participates in Conferences and CME organized by the Cancer Biology Department.

**Research Activities:** The main research area of this laboratory is to elucidate genomic landscaping of the tumor samples and standardizing liquid biopsy

treatment response of patients with brain tumors.

Details of Work Done	Number of Tests	Number of Patients
Amplification of GAPDH and N-myc	35	42
Gene expression by RT-PCR	637	100
Protein expression CD133 & BMI1 by IHC	64	32
MGMT Methylation Assay by qPCR	40	40

technique for diagnostics and treatment monitoring in adult and paediatric brain tumor patients. Study of IDH1/2 mutations and MGMT methylation activity using real-time PCR for low and high grade glioma patients. Exploring panel of markers for molecular classification and appropriate tailored treatment of medulloblastoma/brain stem glioma patients by studying WNT signalling and Hedgehog signalling molecules. Study of copy number variations by droplet digital PCR of MYCN and ALK from tissue and cell-free DNA specimens of neuroblastoma patients. BRAF mutations and H3k27M mutations for molecular classification of brain stem glioma patients.



# L4. Molecular Oncology Lab

Professor & Head, Cancer Biology Department: Dr. Prabhudas Patel In-charge & Senior Scientific Officer: Dr. Jayendra Patel Junior Research Assistants: Dr. Kinjal Patel, Dr. Shruti Patel



**Clinical Services:** Quantitative/Qualitative analysis of BCR-ABL fusion gene, PML-RAR fusion gene, JAK-2 V617 mutation and C-Kit mutation are performed by Real-Time Polymerase Chain Reaction. FLT-3 ITD and D835 mutation are carried out by restriction fragment length polymorphism method. Moreover, HPV 16 and 18 genotypes are performed by type specific Polymerase Chain Reaction.

Details of Work Done	Number
BCR-ABL fusion gene	1302
PML-RAR fusion gene	121
FLT3-ITD & D835 Mutation	224
JAK-2 V617F Mutation	72
C-KIT Mutation	17
HPV-16 and HPV-18 Genotyping	01

Academic Activities: The Lab staff is involved in M.Sc. Cancer Biology course for teaching and practical work. Theoretical and practical demonstration of various molecular biology and biomedical techniques were carried out for the students who came as observers from various universities. **Research Activities:** The laboratory is actively involved in studying tobacco carcinogenesis and other molecular mechanisms involved in oral cancer. Research focus also includes study of glycosylation changes and associated molecular markers as the hallmark of cancer. The prevalence of high risk human papilloma virus infection in cervical cancers in population from Gujarat state is being evaluated. Further, evaluation of BCR-ABL independent and dependent (T315I mutation) molecular mechanisms in Imatinib resistance CML patients are also carried out. Our research interest also includes development and validation of biomarker panel for oral cancer (buccal mucosa) using high throughput technology. Moreover, our research lab is also working on telomere length analysis, hTERT, antioxidants and interleukins on cancer patients and healthy individuals.

**Major Achievement: Ms. Kruti Mehta**, ICMR SRF, received Gold Medal for T. B. Patel Young Scientist Award competition during Hospital week celebrations on February 9, 2019.



# L5 - Stem Cell Biology Lab

Senior Scientific Officer & In-charge: Dr. Franky Shah Research Assistant: Dr. Apexa Raval Junior Research Assistants: Dr. Urja Desai, Dr. Jigna Joshi



**Clinical Services:** Lab is actively involved in Molecular diagnostic testing of EGFR exon mutation analysis from clinical samples.

Details of Work Done	Number
EGFR Exon study	228

**Academic Activities:** The staff members are involved in teaching of M.Sc. in Cancer Biology by conducting lectures and practicals.

Theoretical and practical demonstration of various molecular biology and tissue culture based



techniques to the observers coming from various universities.

**Major Achievement: Ms. Khushbu Patel** MSc Cancer Biology student, received third prize in poster competition at National symposium on Innovation in cancer research: Translating 'OMICS' to Therapeutics at Nirma University, Ahmedabad, during September 14-15, 2018.

**Hitarth Patel,** Junior Research Fellow received Silver Medal for Dr. T. B. Patel Young Scientist Award competition during Hospital week celebrations on February 9, 2019.





## L6. Cytogenetic Lab

Professor & Head, Department of Cancer Biology: Dr. Prabhudas Patel Senior Scientific Officer & In Charge Cytogenetic Laboratory: Dr. Pina Trivedi Research Assistant: Dr. Dharmesh Patel Junior Research Assistants: Ms. Darshita Patel, Ms. Mahnaz Kazi



**Clinical Services:** Cytogenetics Lab is equipped with the state of art set up for research in the area of clinical cytogenetics. The division is actively engaged in research on various aspects of chromosomal abnormalities. Major clinical services provided by the division are for diagnosis and prognostication of patients with various hematological malignancies. The services are provided to GCRI patients as well as other cases referred from various other places.

The department is equipped with Metafer, Automatic Metaphase and Interphase Scanning and Capturing System for Karyotyping and FISH (Fluorescence In Situ Hybridization) assays. It has a fully motorized epi-fluorescence microscope (Imager.Z2) from Zeiss, Germany with special filter sets for FISH and multicolor FISH. It has IKAROS software for Karyotyping and ISIS software for FISH from Metasystems, Germany. The system also has facility of automatic spot counting for FISH analysis for hematological malignancies and solid tumor using Metacyte software. It has 7 review stations. In addition to Karyotyping, FISH (Fluorescence in situ hybridization), M-FISH (multicolor FISH) are being carried out. For FISH automation, hybridization and, denaturation chamber (Thermobrite, Vysis, USA) helps in rapid and consistent FISH assays. Department has also huge number of tests for solid tumor FISH for Her-2 neu as clinical diagnostic work. Recently department has procured Epi Fluorescence Microscope for routine diagnostic work.

Details of Work Done	Number	
Conventional Cytogenetic study of leukemia from bone marrow/peripheral blood	1155	
FISH tests for following genetic rearrangements		
Translocation 9;22	810	
Translocation 8;21	260	
Translocation 15;17	91	
Translocation 16;16/inversion 16	260	
Rearrangements of 5q (two different loci)	32	
Rearrangements of 7q (two different loci)	34	
Copy number of X &/or Y	61	
11q MLL	16	
Translocation 12;21	01	
Solid Tumor FISH		
Her-2 Neu FISH	93	



Academic Activities: The Lab enrolled graduate and post-graduate students from universities across India for observership, project work and dissertation. Staff of the Cytogenetic Laboratory is involved in M.Sc. Cancer Biology course for teaching and practical work. Cytogenetic Laboratory also enrolled PhD students with Gujarat University for dissertation. Weekly seminars are also conducted in the Laboratory by staff members to discuss recent trends in cytogenetic cancer research.

**Major Achievements: Ms. Nehal Patel,** Junior Research Fellow, received first prize for oral presentation in The Cell 3MT Conference, K K Shastri Educational Campus, Ahmedabad on January 12, 2019.

**Ms. Dhara Ladani,** Junior Research Fellow, received third prize for oral presentation in The Cell 3MT

Conference, K K Shastri Educational Campus, Ahmedabad on January 12, 2019.

**Ms. Mahnaz Kazi,** Junior Research Assistant, received first prize for oral presentation in National Conference on Translational Cancer Biology at Charusat University on February 1-2, 2019.

**Dr. Dharmesh Patel,** Research Assistant, received Shri Ramnath Hiralal Jaju Award for oral presentation in 38<sup>th</sup> Annual Convention of Indian Association for Cancer Research held at PGIMR, Chandigarh, on March 1–3, 2019.

**Ms. Darshita Patel,** Junior Research Assistant, received Dr. Virendra Balkrishna Kamat Award for oral presentation in 38<sup>th</sup> Annual Convention of Indian Association for Cancer Research held at PGIMR, Chandigarh, on March 1–3, 2019.





# **M. Educational Activities**

The Institute is engaged in various types of educational and training programmes, like (M1) Activities of the Scientific Research Committee, (M2) Clinical Research Meetings, (M3) Complementary Training Programme to Formal Education, (M4) Formal Educational Courses, (M5) GCS Research Journal, (M6) Hospital Day Celebration, (M7) Professional Training to Doctors and Scientists, (M8) Professional Training to Paramedics, and (M9) Staff Training-Intramural and Extramural.

#### (M1) Activities of the Scientific Research Committee



The Scientific Research Committee (SRC) functions throughout the year to promote, facilitate and maintain the basic and applied research in the field of cancer under the chairmanship of **Dr. Shashank Pandya**, Director and Member-Secretary **Dr. Asha Anand** of the Scientific Research Committee. All the research activities were scrutinised, approved and monitored by the Scientific Research Committee and also by the Ethics Committee, both of which met regularly every three months or earlier, if needed. At the SRC meeting, scientific details and other routine issues are discussed. The office bearers of Scientific Research Committee also met in the year several times as and when required.

At the annual meeting, in the presence of invited experts, all the new proposals as well as the ongoing projects were discussed and were approved with



budgetary recommendations. Annual Meeting of the Scientific Research Committee was held once. However, there were as a part of the scientific review committee, 5 scientific meetings (April 9, July 5 and 18, October 27, 2018, and February 2, 2019) were held. The Ethics Committee Meetings (April 14, July 28, and September 23, 2017, and January 13, 2018) were held under the chairmanship of Hon'ble Justice Shri Bankim Mehta, Shri Narayanbhai Patel, and Member-Secretary Dr. Shilin Shukla. Invited members were Dr. Shashank Pandya, Shri Kshitish Madanmohan, Dr. R. K. Dikshit, Dr. Amar Vyas, Dr. Vishal Mishra, Sureshbhai Shah, Ilaben Vora, Jayeshkumar Solanki, Nuri Kalita, Dr. Pariseema Dave, Dr. Asha Anand, Dr. Prabhudas Patel, Dr. Hemangini Vora, Dr. Sonia Parikh and Dr. Franky Shah.



### (M2) Clinical Research Meetings

Regular bimonthly academic and scientific clinical meetings are arranged at Cama Hall, GCRI, on 2<sup>nd</sup> and 4<sup>th</sup> Saturdays. **Dr. Franky Shah**, Senior Scientific Officer, and **Dr. Sonal Patel**, Associate Professor, is the coordinator of this activity and during the year, a large number of clinical and research subjects are discussed. Total 7 Clinical presentations, 18 Journal presentations, and 7 Panel Discussion were discussed

at the Clinical Meetings from April 2018 to March 2019. **Dr. Dipika Patel**, Associate Professor of Anaethesiology and **Dr. Bijal Patel**, Associate Professor of Gynaecological Oncology are the coordinators of Mortality Morbidity Case Meeting, and 15 Mortality Morbidity Case Meeting were discussed at the Clinical Meetings from April 2018 to March 2019.

### (M3) Complementary Training Programme to Formal Education

GCRI allows its infrastructural facilities and educative talent to be used by other educational Institutions to give professional training to their students, who come for observership, fellowship, project work, dissertation work, PhD work, apprenticeship, etc. Total 253 students from 43 institutions had taken benefit of learning and training facility and opportunity provided by us.

#### (M4) Formal Educational Courses

The institute is affiliated to the BJ Medical College and Gujarat University, Ahmedabad, for subspecialty teaching in the subjects of Medical, Oncopathology, Gynecological Oncology and Surgical Oncology (DM and MCh courses) as well as postgraduate teaching in subjects like Microbiology, Radiodiagnosis, Anaesthesiology and Radiotherapy (MD, DCP, DMRE, DA courses). The Institute is also recognized for MSc in Cancer Biology, MPhil in Life Sciences and PhD degree from Gujarat University (Life Sciences and Medical Microbiology).

#### (M5) GCS Research Journal

GCS Research Journal, a compilation of academic and research work of Research Divisions and Clinical Departments of the Gujarat Cancer and Research Institute, regularly published by GCS. **Dr Asha Anand**, **Dr Pariseema Dave** and **Dr Nandita Ghosh** were the editors of the bulletin.



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#### (M6) Hospital Day Celebration

The Hospital Week celebrated from February 4-9, 2019 with a festive and jubilant mood. **Shri Pankajbhai R. Patel,** Executive Chairman of GCRI was the Chief Guest at Hospital Day Function on February 9, 2019. The main events included scientific awards, orations and felicitations in the field of Cancer Research, GCRI Luminary Oration and cultural programme by the staff members.

**Dr. T. B. Patel Oration Award** conferred to **Dr. Sanjay Gambhir,** Professor & Head of Nuclear Medicine Department, SGPGI, Lucknow. He delivered a lecture on 'Nuclear Medicine Cancer Theranostics: Exploring the new Horizons'.

Shri Ramniklal J. Kinarivala Cancer Research Award Conferred to Dr. Subhash Chauhan, Professor, Department of Pharmaceutical Sciences, College of Pharmacy and Cancer Research Center, University of Tennessee Health Science Center, USA. He delivered a lecture on 'Targeting pancreatic tumor microenvironment for effective pancreatic cancer treatment'.

**Shri MadanmohanRamanlal GCRI Luminary Oration Award** conferred to **Dr. Shreedevi Patel**, Former Chief of Radiodiagnosis Department, GC&RI. She deliverd a lecture on 'More than two decades of carrier at GCRI and GCS: My strength as a Radiologist'.

Vimala Agrawal Trophy for Maximum Publications of Clinical Department was shared between Gynaecological Oncology and Anesthesiology.

Vibha Mehta Trophy for Maximum Publications of Research Wing awarded to Immunohematology Lab.



Shri Pankajbhai R. Patel, Executive Chairman inaugurated Hospital Day Function.







Dr T. B. Patel Oration awarded to Dr Sanjay Gambhir, SGPGI, Lucknow.





Shri Ramniklal J. Kinarivala Cancer Research Award conferred to Dr. Subhash Chauhan, USA.





Shri Madanmohan Ramanlal GCRI Luminary Award conferred to Dr. Shridevi Patel, Former Head, Radiodiagnosis.



Vimla Agrawal Trophy - Gynaecological Oncology and Anaesthesiology



Vibha Mehta Trophy - Immunohaematology Lab



## Dr T. B. Patel Research Medals awarded to Junior Scientists

	Clinical Wing	Research Wing
Gold Medal	Dr. Vinodkumar Dalal Gynaecological Oncology	Ms. Kruti Mehta Molecular Biology Lab
Silver Medal	Dr.Rekha Solanki Anaesthesiology	Ms. Hitarth Patel Stem Cell Biology Lab
Bronze Medal	Dr. Sonal Garg Gynaecological Oncology	Ms. Darshita Patel Cytogenetics Lab















### **Cultural Programme**

event.

February 7, 2019. GCRI Medical, Paramedical,

Nursing and Admin staff actively participated in the

**Dr. Pranay Shah**, Dean BJ Medical College was the Chief Guest at the Cultural Programme on Hospital Day Celebration at B. J. Medical College Hall on



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No.	Workshop/Conference	Organizers	Date
1	Oncoorthocon 2018	Dr. Jaymin Shah Dr. Abhijit Salunke Dr. Vikas Warikoo Dr. Rahul Parmar Musculoskeletal Onco Surgery	4-5 August, 2018
2	State Conference of Hospital Infection Society of India, Gujarat Chapter	Dr. Parijath Goswami Microbiology	17 February, 2019

### (M7) Professional Training to Doctors and Scientists (Conferences, Workshops)

### (M8) Professional Training to Paramedics (Technological Courses)

Medical laboratory technology is one of the largest and most important professions that provide allied healthcare. The Technicians are skilled scientist who perform test that aid in the diagnosis and treatment of diseases. As vital member of the healthcare team, they assist physician during diagnosis and treatment of patients.

The main objective of the course is to train technologists and help them to get ample opportunities in a variety of laboratory setting. As there is a healthy demand of well qualified medical laboratory technologist, they can get placements in hospitals and laboratory settings, public health facilities, industrial laboratory and in colleges. Incharge Director **Dr. Shashank Pandya** is the Chairperson, and **Dr. Priti Trivedi**, Professor of Pathology is the Coordinator of the course. All the doctors of the Pathology, Microbiology and Blood Bank are involved in the teaching activities. All junior and senior technologists are involved in the practical training of the students.

It is one year full time course. BSc Microbiology and Biochemistry students are eligible for the course. Total fifty students are selected on the basis of BSc results and entrance test results. MLT course of training is divided in to two parts: Theory and Practicals. Total 80 lectures are taken by the teaching staff doctors to cover the subject. So far practicals are concerned, each students has two months rotation in each subspecialty like Blood bank, Haematology, Biochemistry, Microbiology (clinical microbiology and immunology), Cytology and Histology. Each student has to work with a technologist on each table in the course of each single rotation where they are given adequate technical knowledge. Students are also expected to complete all the practical's and prepare a journal which at the end of the rotation must be signed by a senior doctor. They have to submit feedback form which includes their work efficiency, sincerity and regularity. This form is filled up by technologist and incharge doctor at end of each rotation. There are two types of assessment of the students, day to day assessment and regular assessment at the end of the year in form of theory and practical examination.

All the teaching activities, MLT course exam schedules and MLT course related activites are monitor by Coordinator. Coordinator reports all the activities of MLT course to the Chairperson and Co-chairpersons regularly.



No	Name	Designation	Division/ Department	Subject of Training and Place	Date
1	Dr. Hemangini Vora	Associate Professor	Cancer Biology	Workshop on NGS data analysis, Ahmedabad	10-11 April, 2018
2	Dr. Nita Gosai	Associate Professor	Anesthesiology	Fibreoptic and Video Scopic Airway	13-14 July,
3	Dr. Rekha Solanki	Assistant Professor		Management Course, Vadodara	2018
4	Dr. Dhaval Jetly	Associate Professor	Pathology	Head & Neck Onco-Pathology Master	7 July,
5	Dr. Priti Trivedi	Associate Professor		Course 2018, Ahmedabad	2018
6	Dr. Majal Shah	Assistant Professor			
7	Dr. Vibha Vyas	Junior Lecturer			
8	Dr. Nainesh Menat	Junior Lecturer			
9	Dr. Manali Rane	Fellow			
10	Dr. Ruchir Patel	Fellow			
11	Dr. Brinda Chandibhamar	Fellow			
12	Dr. Jaymala Solanki	Fellow			
13	Dr. Shailee Mehta	Fellow			
14	Dr. Hemant Shukla	Associate Professor	Surgical Oncology	Head & Neck Onco-Pathology Master	7 July,
15	Dr. Umank Tripathi	Associate Professor		Course 2018, Ahmedabad	2018
16	Dr. Nikhilkumar Modi	Full Time Neurosurgeon	Neuro Oncology	Bombay Operative Spine Course 2018, Mumbai	6-7 July, 2018
17	Dr. Abhijit Salunke	Full Time Orthopedic Surgeon	Musculoskeletal Onco Surgery	Instructional Course in Hand Surgery, Pune	21 July, 2018
18	Dr. Sonia Parikh	Associate Professor	Medical Oncology	10 <sup>th</sup> Revised basic course and AETCOM workshop, Ahmedabad	1-4 August, 2018
19	Dr. Janmesh Shah	Assistant Professor	Community Oncology	Training workshop of Cancer Registry, Bangalore	27-30 August, 2018
20	Dr. Trupti Trivedi	Senior Scientific Officer	Cancer Biology	4 <sup>th</sup> Basic Course in Molecular Diagnostics, Christian Medical College, Vellore	20 August-1 September, 2018
21	Dr. Hemangini Vora	Associate Professor	Cancer Biology	Global clinical educational platform - AIM Tour, Mumbai	5 September, 2018
22	Dr. Swetha Jamphani		Gynaecological Oncology	Certificate Course in Essentials of Palliative Care, Ahmedabad	16 November, 2018
23	Dr. Abhijit Salunke	Full time Orthopedic		6 <sup>th</sup> International and 23rd B.	17-20
		Surgeon	Onco Surgery	Mukhopadhaya Post Graduate Instructional Course 2019, Indore	January, 2019

## (M9) Staff Training – Intramural and Extramural



## N. Lion Bharat Kshatriya Community Oncology Centre

Chief Executive Officer: Dr. Geeta Joshi Junior Lecturer in Radiology: Dr. Tejal Shah PRO, Education & Awareness: Mrs. Darshana Butala



**Clinical Services:** (A) At Community Oncology Center, we provide health checkup services to health aware people. These health checkup plans are mainly focused on cancer related screening tests to diagnose different types of cancers in early stage. PAP test and mammography are the key features of health checkup plans to diagnose cervical cancers and breast cancers in women. Consultation by physician, cancer surgeon and gynecologist are part of heath checkup plans.

(B) Hospice services: 20 Beds, in 5 cottages in campus, are allotted to the cancer patients in advanced stage of disease. They are given palliative care by doctor and

nursing staff. Counseling of patients and caregiver is done to address their psychosocial and spiritual issues. Many activities are planned to rehabilitate them. The aim is to improve Quality of Life of patients and family.

(C) Home Care Services: The Home Care services are provided by a Nursing Staff, Social Worker and Doctor. Patients and caregivers feel confident and supported, when they are looked after by "Community Oncology Center" team at home. 96 patients were visited at home.

#### **Health Checkup**

Health Checkup (male)	1081
Health Checkup (female)	3115
Patients from Urban Health Center	796
Total	4992



Test	Total No. of Patients	Benign lesions	Suspicious malignancy	Confirmed Malignancy (FNAC/Biopsy)
Mammography	3419	1498	58	37
X – Rays Chest	3825	1661	12	09
USG Abdomen	3646	-	49	04
PAP Test	3015	-	01	00
FNAC at COC	17	-	-	07

Hospice Centre		
Hospice Admission	383	
Hospice Discharge/DAMA	298	
Hospice Death	57	
Transfer to GCRI	02	

#### **Academic Activities**

- A. 18 B.Sc. Nursing students from 'Sharda College of Nursing' took 10 days training on cancer screening, Palliative & Hospice Care from September 11-20, 2018.
- B. 'Hands On' training in Pain & Palliative Care as part of course IACA, Pallium India, conducted for 4 nurses at Hospice from September 17-28, 2018.
- C. 38 B.Sc. III year students from 'Sharda College of Nursing' took 13 days training on Palliative & Hospice Care from October 22 - November 03, 2018.
- D. 30 doctors and nurses attended training on 'Communication Skill 'as part of basic course in Palliative Care, held at Community Oncology Center. Dr. Geeta Joshi, Dr. Aneri Shah, Psycho Oncologist, HCG Hospital, delivered lectures on effective communication.
- E. 49 B.Sc. Nursing students from AMC Met Nursing College took 20 days, training on Pain & Palliative Care at Hospice from January 01-20, 2019.
- F. 'Hands On' training was taken up at Hospice for 15 M.Sc. nursing students IKDRC College of Nursing from February 25 - March 9, 2019.
- G. 30 doctors and nurses from district hospitals, attended one day 'Hands On' training on Psycho social aspect, nursing issues in hospice patients & 'Communication Skill', held at COC under NPPC, on February20, 2019. Dr. Geeta Joshi, Dr. Seema Rao,

Psychiatrist & Palliative Physician, from Mumbai and John Haberecht from Australia delivered lecturers on relevant topics.

H. Four nurses from Australia visited Hospice. Australia Palliative Link International (APLI) supports the posting of these Nurses in India under Project **"Hamrahi"**. They trained our nurses at COC for nursing care of hospice patients from February 13-27 and March 10-21, 2018.

#### **Public Services:**

#### A. Cancer Exhibition:

Community Oncology Centre is having `PRAYAS` - a permanent cancer exhibition located on 1<sup>st</sup> floor of main building. Every year number of students from school, nursing colleges and medical colleges take educational visit of this exhibition. Exhibition provides basic information regarding common cancer in men and women, its signs and symptoms, diagnosis, prevention and treatment. It also conveys message to the community people on importance of healthy life style, healthy food habits, Quit tobacco and alcohol consumption, avoid junk food and smoking etc. These massages are conveyed to the visitors by attractive poster, audio-visual presentation and awareness talk.



Exhibition Visitor	Total : 7911
• Medical – Para Medical	2896
School & Colleges	1415
Others NGO Staff & Society	3600

#### B. Breast Cancer Awareness Month:

Gujarat Cancer Society has received donation for free Mammography and Pap test of 300 Women from BPL families. The Philanthropists are Vimala Mehta Foundation, USA and Late Rukshmaniben & Maganlal Sheth family, UK. Dr. Sudha Yadav, Former Professor in PSM & Social worker, was Chief Guest of the opening ceremony of these services. She educated 20 females about Self-Breast Examination and importance of personal hygiene and Pap test.

# C. World Hospice & Palliative Care Day & Colostomy Care Workshop:

On October 13, 2018, 2<sup>nd</sup> Saturday of October month, which is celebrated as World Hospice & Palliative Care Day, a 'Colostomy Care Workshop' was organized at COC. 45 patients with colostomy were invited. Dr. Rajen Tankashali, Prof. in Surgical Oncology, GCRI, Dr. Janki Patel, Nutritionist and Dipika Parmar, Counselor, responded to their questions and gave them guidance about diet, Life style and psychological issues.

## D. October 2, 2018 - VyasanMukti Autorikshaw Rally:

On occasion of 'Gandhi Jayanti' a rally was organized by Sadvichar Parivar, Gujarat Cancer Society & Ahmedabad Autorikshaw driver Ekta Union. The rally was flagged off from Sadvichar Parivar campus, and reached at COC. About 400 rickshaw driver visited the "Prayas- Cancer Exhibition" at COC, and took oath of 'Vyasan Mukti'.

# E. 7-13 January 2019 - Bhagwat Saptah Gyan Yagna:

As a part of cancer awareness, the week was celebrated at COC and Mrs. Mandakiniben Vyas was 'Kathakar'. Donation received during this week, will be used for treatment of cancer patients. Free mammography and PAP test were done for women who registered during this 'Gyan Saptah'.

#### F. 12 January 2019 - Patang Mahotsav:

Approximately 100 cancer survivor children took part in 'Kite Festival' held at COC. GCS trustees and well wishers remained present. Kites and other accessories for children were sponsored by 'Heart Foundation'.

# G. 11 February 2019 - World Cancer Day Celebration:

On occasion of 'World Cancer Day,' 80 school students took part in Drawing Competition arranged at COC on the topic of 'I can & I will'. Dr. Dinesh Shah – Physician, Shri Amitbhai Shah – Drawing Artist and Roopaben Shah – Director, Childhood Cancer, Lions Club International, were judges of the event.

**Staff Training:** '5S' training and 'Art of Happy Working' was given to staff of COC by Dr. Yashavant Joshi, Chairman, Unnat Gramsamaj Nirman Kendra, Vadodara. The training was regarding office arrangements, etiquette and clean and tidy work place.





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# **O. Out - Reach Activities**

#### **Cancer Detection Camps and Cancer Awareness Exhibition**

The GCRI along with the Gujarat Cancer Society organises regular cancer detection camps and cancer

awareness exhibition as well as blood donation camps in various parts of the State.

#### **Cancer Awareness Camps: 13 Camps 12 Places**

Shree VadivalaKachhiya Patel Panch, Bharuch (22/04/2018); 653 Gayatri Hospital, Gandhinagar (29/04/2018); Kaka-BA Hospital, Block No. 33, Utraj Village, Hansot, Bharuch (20/05/2018); Ahmedabad Central Prison and Jail Staff Training School, "VidhyaBhavan" Nr. Subhash Bridge Circle, Ahmedabad (06/09/2018, 19/09/2018); Gujarat Vidhyapith, Ahmedabad (14/09/2018); GirdharnagarAsarwa, Ahmedabad (19/09/2018); Bapunagar, Ahmedabad (26/09/2018); Viratnagar, Ahmedabad (26/10/2018); IIT, Gandhinagar (04/02/2019); AOGIN (28/02/2019); Aadharshila School, Valad, Gandhinagar (08/2/2019); Holy Family Church, Rajpur, Gomatipur, Ahmedabad (10/03/2019)

#### **Cancer Detection Camps: 10 Camps 10 Places**

653 Gayatri Hospital, Gandhinagar (29/04/2018); Shree VishvkarmaSanskrutiBhavan, GeetaMandir, Ahmedabad (19/08/2018); GirdharnagarAsarwa, Ahmedabad (19/09/2018); Bapunagar, Ahmedabad (26/09/2018); Primary School Mokar, Porbandar (09/12/2018); AOGIN (10/01/2019); Aadharshila School, Valad, Gandhinagar (08/02/2019); JunaWadaj, Ahmedabad (28/02/2019); AFS Gandhinagar (01/03/2019); Civil Hospital, Mehsana (03/03/2019)

#### Cancer Detection Camps with SanjeevaniRath: 45 Camps 39 Places

Modhwada PHC, Porbandar (10/06/2018); Saurashtra Cancer Care Centre, Rajkot (28/06/2018); Essar Oil Ltd, Refinery Site, Vadinar, Jamnagar (14/07/2018, 15/07/2018); National Security Guard, Meghaninagar (18/07/2018); Rotary Club, Dehgam (29/07/2018); Shree Sardar Patel Social Group, GIDC Estate, Ankleshwar (05/08/2018); Shree SamastDashaShrimaliSoniSamajMahamandal, Godhara (19/08/2018); Chandreshwar Party Plot, Chandkheda (09/09/2018); Municipal School Number 7/8, Navrangpura, Ahmedabad (17/09/2018); Shri Kutch KadvaPatidarSanatanSamajWadi,Dahegam (23/09/2018); Paldi, Ahmedabad (29/09/2018); UmiyaSamajWadi, Dhansura (30/09/2018); Trinity School, Talod (14/10/2018); Akhil Hind MahilaParisad, Paldi, Ahmedabad (20/10/2018); Chinaibaug, Elisbridge, Ahmedabad (21/10/2018);

PanchasheelVidhyalaya, Bayad (28/10/2018); Viratnagar, Ahmedabad (30/10/2018); Shri H.L. Patel SaraswatiVidhyalaya, Modasa (25/11/2018); Swastik High Secondary School, Iqbalgadh, Amirgadh, Banaskantha (02/12/2018); KasipuraKanpa, Himmatnagar (16/12/2018); Sheth C.J. High School, Vadali, Sabarkantha (23/12/2018); SaraswatiKanyaVidhyalaya, Kalikund, Dholka(25/12/2018); Shree DashanimaVanikSamaj, Dahod (06/01/2019); Station Medicare Centre, HQ SWAC (U), Air Force, Gandhinagar (12/01/2019); ManavKalyanMandal, Rajkot (20/01/2019); Indian Red Cross Society, Devgadhbaria (27/01/2019); Dr.VirambhaiGodhania College, Porbandar (03/02/2019); Shri AxarGyanMandirSchool, Rajkot (06/02/2019); Ambaliyasan PHC, Mehsana (14/02/2019); Rotary Club of Porbandar (17/02/2019); GMERS Medical Collage & Hospital,



D h a r p u r, P a t a n (19/02/2019); SamajratnaChinubhaiManjulaBhaginiMitraMandal, Palitana (24/02/2019); Ramkatha at GMDC, Ahmedabad (24/02/2019, 25/02/2019, 26/02/2019, 27/02/2019, 28/02/2019); Civil H o s p i t a l, M e h s a n a (02/03/2019); KadavaPatidarSanatanSamaj, Nadiad (03/03/2019); CHC Compound, Behind MamlatdarOffice, Kalol, Gandhinagar (08/03/2019); SamuhikAarogya Kendra, Prantij, Sabarkantha (10/03/2019);SEWA Dhanghadhra (Surendranagar) SEWA Sanstha, Dhanghadhra (17/03/2019, 24/03/2019);Shree KutchhKadavaPatidarSamajWadi, Odhav, Ahmedabad (31/03/2019)

#### Cancer Detection Camps Siddhpur with SanjeevaniRath: 16 camps 14 places

JaideepSinghji S. Chauhan Government Hospital, DevgadhBaria (01/04/2018); 311, Field Hospital, Cantonment, Shahibaug (04/04/2018, 05/04/2018, 06/04/2018); KKP SamajYuvasangh, Naroda, A h m e d a b a d (14/04/2018); K K P SamajYuvasangh,Kunjad, Odhav, Ahmedabad (15/04/2018); Shree VadivalaKachhiya Patel Panch, B h a r u c h (22/04/2018); K K P SamajYuvasangh,GeetaMandir, Ahmedabad (29/04/2018); Dr.Godhania College, Porbandar (06/05/2018); Central MI Room, 3/1 GR Gandhinagar Cantonment (13/05/2018); Kaka/BA Hospital, Block No. 33, Utraj Village, Hansot, Bharuch (20/05/2018); KKP SamajYuvasanghWadi, Navsari (10/06/2018); Siddhpur Cancer Care Center, Patan (21/06/2018); PoojaHospital, Visnagar, Mehsana (16/09/2018); UnzhaAayurvedic Hospital, Unzha (18/11/2018); K.S.T. Patel SaraswatiVidhyalaya, Mehsana (15/12/2018)

#### Blood Donation Camps: 83 camps and 81 places

Gokulnagar Society, Odhav, Ahmedabad (15/4/2018), Sabarmati River Front, Ahmedabad (14/4/2018), Mandhata Temple, Tarnetar, Surendranagar (19/4/2018), Shree Umiya Mataji Sanstha, Sector-12, Ghandhinagar (29/4/2018), Ganesh Temple, Meghaninagar, Ahmedabad (29/4/2018), 653 Gayatri Parivar, Gandhinagar (29/4/2018), Shree Rang Avdhut Parisar, Rangpura Gam (3/5/2018), Jimi 5 Foundation Mangaleshvar Mahadev, Ghodasar, Ahmedabad (6/5/2018), Rinkal Impact, Katar gam, Surat (8/5/2018), Swami Atmanand Sarswati Sankul, Varachha, Surat (28/4/2018), Municipal Plot, Isanpur Ahmedabad (6/5/2018), Rincal Imex, Katargam, Surat (8/5/2018), Skoda Show Room, Rajkot (18/5/2018), At: Aroda, Idar, Sabarkantha (19/5/2018), Niky Hospital Gandhinagar (3/6/2018), Chiloda Police Station, Chiloda (10/6/2018), Room No-63, Blood Bank, GCRI, Ahmedabad (14/6/2018), J.K.Laxmi Cement, Khatraj Kalol, Ahmedabad (20/6/2018), G.I.D.C Conference Hall, Sector-28, Gandhinagar (21/6/2018), Commerce House-1 Traica Pharmaceutical Limited, Bodakdev, Ahmedabad (22/6/2018), Umiya Mandir, Sector-12, Gandhinagar (22/6/2018), Adani Group Mundra Port, Kutch-Bhuj (23/6/2018), Payal Party Plot, Ghatlodiya, Ahmedabad (24/6/2018), Cap Jemini Tecnology Services, Koba, Gandhinagar (25/6/2018), Apollo Mediscils, Changodar (26/6/2018), Plot-35 Panchratna Industrial Estate, Changodar (30/6/2018), Venus Atlantis, Prahladnagar, Ahmedabad (4/7/2018), Reliance Township, Jamnagar (6/7/2018), Dindayal Hall, Bodakdev Ahmedabad (8/7/2018), Rajpath Club, S.G. Highway Ahmedabad (15/7/2018), Parin Group Parin Motors, Gondal (17/7/2018), Kripal Ashram, Maninagar, Ahmedabad (29/7/2018), Waterman Ind. Pvt Ltd, Changodar, Ahmedabad (5/8/2018), Sanketbhai and Group, Kanya Shala, Dholera (15/8/2018), Gulmahor Green Golf and Country Club, Sanand, Ahmedabad (15/8/2018), Daliya Institute, Gam Kanera, Kheda Road (28/8/2018), H.K. Arts College, Ashram Road, Ahmedabad (5/9/2018), Chandreshwar Party Plot, Chandkheda, Ahmedabad (9/9/2018), Vadinath Mahadev, Piplaj (9/92018), Chandreshwar Party Plot, Nikol, Ahmedabad (9/9/2018), Sharan Residency,



Gandhinagar (19/92018), QX Ltd Global Service, S.G. Highway, Ahmedabad (20/9/2018), Ganesh Mitra Mandal, Asarwa, Ahmedabad (22/9/2018), M.B. Rashtra Bhasha Hindi College, Ellisbridge, Ahmedabad (12/9/2018), CEPT, Navrangpura, Ahmedabad (4/10/2018), Aircon Infrastructure Ltd, Saraspur, Ahmedabad (31/10/2018), Gam Borvav, Talala, Gir Somnath (11/11/2018), IIT, Gandhinagar (16/11/2018), Gam Bhiyal, Junagadh, Junagadh (18/11/2018), Mukhini Vadi Isanpur, Ahmedabad (25/11/2018), Mangaleshwar Mahadev, Ahmedabad (2/12/2018), HDFC Building, Ahmedabad (5/12/2018), Ramji Mandir Shatabdi Mahotsav, Dhava, Gir (12/12/2018), St.Xaviers College, Navrangpura, Ahmedabad (15/12/2018), Shreeji Party Plot, Gandhinagar (16/12/2018), Gate-1, Kakariya Carnival, Ahmedabad, (27/12/2018, 28/12/2018), Shiv Shakti Party Plot, Vasna, Ahmedabad (30/12/2018), Ashwamegh Rajatjayanti Mohatsav, Vadodara (01/01/2019), Kailashdham Society, Katargam, Surat (06/01/2019), L.M.Pharmacy College, Gujarat University, Ahmedabad (31/01/2019), K.B.Patel Institute of Pharmaceutical, Ghandhinagar (01/02/2019), Shree

Somnath Mahadev, Meghaninagar, Ahmedabad(03/02/2019), Gajera School Campus, Mota Varachha, Surat (03/02/2019), Afcons Infra. Ltd, Khokhra, Ahmedabad (06/02/2019), Titanium Corporate Road, Prahladnagar, Ahmedabad (08/02/2019), Nexus Link Services India Pvt Ltd, Krishnanagar, Ahmedabad (09/02/2019), Advance Healthcare Solution, Thaltej, Ahmedabad (16/02/2019), Raj Cooling System Pvt Ltd, Rajkot (17/02/2019), Modasa Sankal Samiti, Modasa (18/02/2019), HDFC Bank, Maninagar, Ahmedabad (23/02/2019), Surjit Society, Bapunagar, Ahmedabad (24/02/2019), SP Boys Hostel, Gulbai Tekra, Ahmedabad (24/02/2019), Goverment Polytechnic, Ambavadi, Ahmedabad (26/02/2019), Ganpat University, S.G.Highway, Ahmedabad (28/02/2019), S.K.F. Factory and Showroom, Bavla, Ahmedabad (06/03/2019), NID, Paldi, Ahmedabad (07/03/2019), Ganpat University, Mahesana (08/03/2019), Lakhiani, Botad, Bhavnagar (10/03/2019), Sintex Ind. Ltd, Kalol (15/03/2019), Sant Hiradas Swami Basantram Seva Trust, Kubernagar, Ahmedabad (17/03/2019), Miyani, Halvad, Morbi (31/03/2019)









# **P. Functioning of Committees**

	Internal Management Committee
Dr. Shashank Pandya	Chairman, Director
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Bhavna Shah	Member, Professor & Head Anaesthesiology
Dr. Priti Trivedi	Member, Associate Professor of Pathology
Dr. Priti Sanghvi	Member, Professor, Palliative Medicine

	Purchase Committee
Mr. Prashant Kinarivala	Chairman
Dr. Shashank Pandya	Member Secretary, Director
Mr. Kshitish Madanmohan	Member
Mr. Divyesh Radia	Special Invitee
Mr. Kaushik D. Patel	Special Invitee
Mr. Narendrasinh Chavda	Special Invitee

	GCRI Website Committee
Dr. Shashank Pandya	Chairman, Director
Mr. Raju Parikh	Member Secretary, Head IT Section
Ms. Meena Bhatia	Coordinator, Officer on Special Duty, Administration
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Dhruti Desai	Member, RMO
Dr. Pariseema Dave	Member, Professor, Gynaecological Oncology
Dr. Hemangini Vora	Member, Associate Professor, Cancer Biology
Dr. Pooja Nandvani Patel	Member, Associate Professor, Radiotherapy
Dr. Foram Patel	Member, Assistant Professor, Microbiology
Mr. Ratnakar Shrotriya	Member, Medical Record Keeper, IT Section
Mr. Rushi Patel	Member, Chief Photo & Publicity Section
Mr. Jagdish Gohel	Member, Assistant Librarian, Library Section

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	Library Committee
Dr. Shashank Pandya	Chairman, Incharge Director
Dr. Asha Anand	Professor In-charge, Professor & Head, Medical Oncology
Ms. Nuri Kalita	Member Secretary, Librarian
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Bhavna Shah	Member, Professor & Head, Anaesthesiology
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis
Dr. U. Suryanarayan	Member, Prof. & Head of Radiotherapy
Dr. Prabhabhai Patel	Member, Professor & Head, Cancer Biology
Dr. Dhruti Desai	Member, RMO
Dr. Trupti Trivedi	Member, Senior Scientific Officer, Cancer Biology

	GCS Research Journal Committee
Dr. Shashank Pandya	Chairman, Director
Dr. Asha Anand	Editor, Professor & Head, Medical Oncology
Dr. Pariseema Dave	Editor, Professor, Gynaecological Oncology
Dr. Nandita Ghosh	Editor, Assistant Professor, Cancer Biology
Dr. Prabhabhai Patel	Associate Editor, Professor & Head, Cancer Biology
Dr. Nayan Jain	Associate Editor, Dean, Life Sciences, Gujarat University
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology
Dr. Bhavna Shah	Member, Professor & Head , Anaesthesiology
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Hemangini Vora	Member, Associate Professor, Cancer Biology
Dr. Harsha Panchal	Member, Professor of Medical Oncology

### Govt. Scheme Implementation Committee

Dr. Shashank Pandya	Chairman, Director
Dr. Janmesh Shah	Member Secretary, Assistant Professor, Community Oncology
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Dipak Rathod	Member, RMO Class - I
Dr. Dhruti Desai	Member, RMO
Ms. Shivani Rajput	Member, Financial Assistant, Account Section
Mr. Himanshu Patel	Member, Medical Record Officer



ICS Cancer Cure Fund	
Dr. Shashank Pandya	Chairman, Director
Mr. Bhadresh Shah	Member Secretary, Accounts Officer
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Apurva Patel	Member, Professor, Medical Oncology
Dr. Dhruti Desai	Member, RMO
Dr. Janmesh Shah	Member, Assistant Professor, Community Oncology
Mr. Himanshu Patel	Member, Medical Record Officer

Patient Care Evaluation Committee	
Dr. Shashank Pandya	Chairman, Director
Dr. Dhruti Desai	Member Secretary, RMO
Mr. Divyesh Radia	Member
Ms. Mona Darji	Member, Matron Grade - I
Ms. Manisha Katara	Member, Matron Grade - II

	Fire Safety Committee
Dr. Shashank Pandya	Chairman, Director
Mr. Divyaraj Jadeja	Member Secretary, Electrical Engineer(Maintenance), Engineering Section
Dr. Dipak Rathod	Member, RMO Class - I
Dr. Dhruti Desai	Member, RMO
Dr. Jayendra Patel	Member, Senior Scientific Officer, Cancer Biology
Mr. Jayapal Nair	Member, PS to Director
Mr. Mahesh Ahir	Member, Civil Engineer, Engineering Section
Mr. Sanjay Patel	Member, Electrical Engineer, Engineering Section
Mr. Arpit B. Christian	Member, Assistant Staff Brother, Nursing Section

	Disaster Management Committee
Dr. Shashank Pandya	Chairman, Director
Ms. Mona Darji	Member Secretary, Matron Grade - I
Dr. Dipak Rathod	Member, RMO Class - I
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Mr. Mahesh Ahir	Member, Civil Engineer, Engineering Section
Dr. Bhavna Shah	Member, Professor & Head, Anaesthesiology
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Mr. Sanjay Patel	Member, Electrical Engineer, Engineering Section
Mr. Om Prakash	Member, Nuclear Health Physicist, Nuclear Medicine
Mr. Divyaraj Jadeja	Member, Electrical Engineer (Maintenance), Engineering Section
Mr. Jayapal Nair	Member, PS to Director



	Women's Development Cell
Dr. Meeta Mankad	Chairperson, Professor, Gynaec Oncology
Ms. Meena Bhatia	Member Secretary, Officer on Special Duty, HR Section
Dr. Foram Patel	Joint Secretary, Assistant Professor, Microbiology
Dr. Pooja Nandwani Patel	Member, Associate Professor, Radiotherapy
Dr. Kinna Shah	Member, Assistant Professor, Anesthesiology
Dr. Rima Kusumgar	Member, Assistant Professor, Blood Bank
Dr. Franky Shah	Member, Senior Scientific Officer, Cancer Biology
Ms. Mona Darji	Member, Matron Grade - I
Ms. Shivani Rajput	Member, Financial Assistant, Account Department
Ms. Ketki Kathiyara	Member, Biochemist, Blood Bank

SC / ST Cell	
Mr. Narendrasinh Chavda	Chairman, Hospital Administrator
Ms. Mona Darji	Member Secretary, Matron Grade - I
Dr. Dhruti Desai	Member, RMO
Dr. Rekha Solanki	Member, Assistant Professor, Anesthesiology
Ms. Manisha Katara	Member, Matron Grade – II
Mr. Vijaykumar S. Ninama	Member, Biochemist, Blood Bank

Internal Complaints Committee	
Dr. Pariseema Dave	Chairperson, Professor, Gynaec Oncology
Dr. Hemangini Vora	Co-chairperson, Associate Professor, Cancer Biology
Ms. Meena Bhatia	Member Secretary, Officer on Special Duty, HR Section
Dr. Geeta Joshi	C.E.O., COC Vasna
Mr. Narendrasinh Chavda	Member (Legal), Hospital Administrator
Dr. Himanshu Soni	Member, Associate Professor, Radiology
Ms. Mona Darji	Member, Matron Grade - I
Ms. Pratima Desai	Member, NGO, Social Worker (External)

Information Technology Committee	
Dr. Shashank Pandya	Chairman, Director
Mr. Narendrasinh Chavda	Member Secretary, Hospital Administrator
Mr. Raju Parikh	Assistant Member Secretary, Head IT Section
Mr. Haren Shah	Hon. External IT Advisor (Invitee)
Ms. Shivani Rajput	Member, Financial Assistant, Account Section
Mr. Jayapal Nair	Member, PS to Director
Mr. Ratnakar Shrotriya	Member, Medical Record Keeper, IT Section



Hospital Infection Control Committee	
Dr. Shashank Pandya	Chairman, Director
Dr. Parijath Goswami	Member Secretary, Professor & Head, Microbiology
Dr. Bhavna Shah	Member, Professor & Head, Anaesthesiology
Dr. Apurva Patel	Member, Professor, Medical Oncology
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology
Dr. Jayshree Thakker	Member, Associate Professor, Anaesthesiology

Committee to Review - Out Source Services	
Mr. Narendrasinh Chavda	Chairman, Hospital Administrator
Mr. Hitesh Bihola	Member Secretary, HR Officer, HR Section
Dr. Dhruti Desai	Member, RMO
Ms. Mona Darji	Member, Matron Grade - I
Ms. Meena Bhatia	Member, Officer on Special Duty, Administration
Ms. Shivani Rajput	Member, Financial Assistant, Account Section
Dr. Sanskar Dave	Member, Assistant Hospital Administrator, Legal Section

Institutional Review Committee Dissertation / Thesis / Publication / Conference Presentation		
Dr. Shashank Pandya	Chairman, Director	
Dr. Harsha Panchal	Member Secretary, ( Clinical-Dissertation & Thesis), Medical Oncology	
Dr. Nandita Ghosh	Member Secretary, (Research-Dissertation & Thesis), Cancer Biology	
Dr. Trupti Trivedi	Member Secretary, (Publications & Presentation), Cancer Biology	
Mr. Narendrasinh Chavda	Member ( Legal), Hospital Administrator	
Mr. Kshitish Madanmohan	Member (NGO representative, Social Worker), Secretary GCS	
Dr. Amar Vyas	Member, Department of PSM, BJMC	
Dr. Bhavna Shah	Member, Professor & Head Anesthesiology	
Dr. Hemant Shukla	Member, Professor, Surgical Oncology	
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy	
Dr. Pariseema Dave	Member, Professor, Gynaecological Oncology	
Dr. Prabhabhai Patel	Member, Professor & Head, Cancer Biology	
Dr. Priti Sanghvi	Member, Professor, Palliative Medicine	
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology	
Dr. Hemangini Vora	Member, Associate Professor, Cancer Biology	
Dr. Himanshu Soni	Member, Associate Professor, Radiodiagnosis	
Dr. Trupti Patel	Member, Assistant Professor, Pathology	
Dr. Foram Patel	Member, Assistant Professor, Microbiology	
Dr. Franky Shah	Member, Senior Scientific Officer, Cancer Biology	



	Scientific Research Committee
Dr. Shashank Pandya	Chairman, Director
Dr. Asha Anand	Member Secretary, Professor & Head, Medical Oncology
Dr. Hemangini Vora	Assistant Member Secretary, Associate Professor, Cancer Biology
Dr. Sonia Parikh	Assistant Member Secretary, Associate Professor, Medical Oncology
Dr. Devendra Patel	Member, Former Director, Professor Emeritus
Dr. Pankaj Shah	Member, Vice President, GCS
Dr. Kirti Patel	External Member, Dean, GCS Medical College
Dr. Shilin Shukla	Member, Former Director, Professor Emeritus
Dr. Geeta Joshi	Member, C.E.O., COC Vasna
Mr. Narendrasinh Chavda	Member, Hospital Administrator
Dr. Sunil Trivedi	External Member, Professor, Senior Scientific and Academic Coordinator, Ahmedabad
Dr. Rakesh Rawal	External Member, Professor, Life Science, Gujarat University, Ahmedabad
Dr. Sandip Shah	Member, P.T. Associate Professor & Incharge of BMT
Dr. Shilpa Patel	Member, Professor & Head, Gynaec Oncology
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology
Dr. Parijath Goswami	Member, Professor & Head, Microbiology
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis
Dr. Prabhabhai Patel	Member, Professor & Head, Cancer Biology
Dr. Priti Trivedi	Member, Associate Professor, Pathology
Dr. Saumil Desai	Member, Associate Professor, Radiology
Dr. Ava Desai	Member, Professor, Gynaec Oncology
Dr. Bhavna Shah	Member, Professor, Anaesthesiology
Dr. Foram Patel	Member, Assistant Professor, Microbiology
Dr. Nandita Ghosh	Member, Assistant Professor, Cancer Biology
Dr. Trupti Trivedi	Member, Senior Scientific Officer, Cancer Biology
Dr. Jayendra Patel	Member, Senior Scientific Officer, Cancer Biology
Dr. Franky Shah	Member, Senior Scientific Officer, Cancer Biology
Dr. Pina Trivedi	Member, Senior Scientific Officer, Cancer Biology



Ethics Committee				
Hon'ble Justice Shri Bankim N. Mehta (Rtd.)	Chairman			
Mr. Narayanbhai R. Patel	Vice Chairman			
Dr. Shilin N. Shukla	Member Secretary			
Dr. Prabhabhai Patel	Assistant Member Secretary			
Dr. Pariseema Dave	Assistant Member Secretary			
Shri Kshitish Madanmohan	Member			
Dr. R. K. Dikshit	Member			
Dr. Amar Vyas	Member			
Dr. Sonia Parikh	Member			
Dr. Franky Shah	Member			
Dr. Vishal Mishra	Member			
Mr. Suresh R. Shah	Member			
Mrs. Ila U. Vora	Member			
Mr. Jayeshkumar Solanki	Member			
Ms. Nuri Kalita	Member			

Serious Adverse Event Committee (SAE) (A sub-committee of GCRI / GCS Ethics Committee)		
Dr. Shashank Pandya	Chairman, Director	
Dr. Pooja Nandvani Patel	Member Secretary, Radiotherapist	
Dr. Asha Anand	Member, Medical Oncologist	
Dr. Harsha Panchal	Member, Medical Oncologist	
Dr. Sonia Parikh	Member, Medical Oncologist	
Dr. Pariseema Dave	Member, Professor, Gyanec Oncologist	

Ethics Committee For Compensation (A sub-committee of GCRI / GCS Ethics Committee)		
Mr. Narayanbhai R. Patel	Chairman, Senior Advocate	
Dr. Pariseema Dave	Member Secretary, Professor, Gyanecological Oncology	
Mr. Kshitish Madanmohan	Member	



Institutional Committee for Stem Cell Research (IC-SCR)				
Dr. Kirti M. Patel Chairman, Dean, GCSMC				
Dr. Apruva Patel	Member Secretary , Professor, Medical Oncology			
Dr. Franky Shah	Assistant Member Secretary, Senior Scientific Officer, Cancer Biology			
Dr. Sandip Shah	Member			
Dr. Maitrey Gajjar	Member			
Dr. Haresh Doshi	External Member			
Dr. Rakesh Rawal	External Member			
Mr. Kshitish Madanmohan	Member			
Dr. Amar Vyas	Member			
Ms. Ilaben Vora	Member			

Annual Report Preparation Committee			
Dr. Shashank Pandya	Director, GCRI		
Dr. Hemangini Vora	Associate Professor, Cancer Biology		
Dr. Trupti Trivedi	Senior Scientific Officer, Cancer Biology		
Mr. Rushi Patel	Chief Photo & Publicity Section		
Mr. Mahendrasinh Kumpavat	Stenographer, Secretariat Section		

NABL Accreditation Committee			
Dr. Shashank Pandya	Chairman, Director		
Dr. Dhaval Jetly	Member Secretary, Associate Professor & Head, Pathology		
Dr. Biren Parikh	Coordinator, Assistant Professor, Pathology		
Dr. Parijath Goswami	Member, Professor & Head, Microbiology		
Dr. Priti Trivedi	Member, Associate Professor, Pathology		
Dr. Hemangini Vora	Member, Associate Professor, Cancer Biology		
Dr. Nandita Ghosh	Member, Assistant Professor, Cancer Biology		
Dr. Rima Kusumgar	Member, Assistant Professor		
Mr. Mahesh Ahir	Member, Civil Engineer		
Mr. Sanjay Patel	Member, Electrical Engineer		



NABH Accreditation Committee				
Dr. Shashank Pandya	Chairman, Director			
Mr. Narendrasinh Chavda	Co-chairman, Hospital Administrator			
Dr. Parijath Goswami	Co-ordinator, Professor & Head, Microbiology			
Dr. Shilpa Patel	Member, Professor & Head, Gynaecological Oncology			
Dr. Harsha Panchal	Member, Professor of Medical Oncology			
Dr. U. Suryanarayan	Member, Professor & Head, Radiotherapy			
Dr. Hitesh Rajpura	Member, Professor & Head, Radiodiagnosis			
Dr. Prabhabhai Patel	Member, Professor & Head, Cancer Biology			
Dr. Priti Sanghvi	Member, Professor of Palliative Medicine			
Dr. Vikas Warikoo	Member, Associate Professor, Surgical Oncology			
Dr. Dhaval Jetly	Member, Associate Professor & Head, Pathology			
Dr. Jayshree Thakkar	Member, Associate Professor, Anaesthesiology			
Dr. Rasna Tiwari	Member, Associate Professor, Nuclear Medicine			
Dr. Pooja Nandvani Patel	Member, Associate Professor, Radiotherapy			
Dr. Dhruti Desai	Member, R.M.O			
Dr. Rima Kusumgar	Member, Assistant Professor, Blood Bank			
Dr. Janmesh Shah	Member, Assistant Professor, Community Oncology			
Dr. Satish Pelagade	Member, Radio Physicist			
Dr. Sanskar Dave	Member, Assistant Hospital Administrator			
Dr. Manali Shah	Member, Sr. Lecturer in Physiotherapy			
Ms. Meena Bhatia	Member, O.S.D., HR Section			
Mr. Raju Parikh	Member, Head IT			
Mr. Samip Dave	Member, Chartered Accountant, Account Section			
Ms. Princy Christian	Member, Bio Medical Engineer (Electronic Engineer)			
Ms. Mona Darj	Member, Matron Grade - I			
Mr. Dipan Soni	Member, Assistant Medical Sculpture, Prosthesis Section			
Mr. Arpit Christian	Member, Infection Control Nurse			
Ms. Nuri Kalita	Member, Librarian			
Mr. Arvind Kotadia	Member, Chief Pharmacist cum Store Officer			
Mr. Mahesh Ahir	Member, Civil Engineer, Engineering Section			

Hospital Waste Management Committee		
Dr. Shashank Pandya	Chairman, Director	
Dr. Parijath Goswami	Member Secretary	
Dr. Foram Patel	Assistant Member Secretary	
Ms. Mona Darji	Member	
Ms. Leena Bhatt	Member	
Ms. Veena Patel	Member	
Mr. Akshay Dave	Member	



# **Q. Research Activities**

### Q1. Conference Presentation - International April 2018 - March 2019

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Surgical Oncolog	IY	
1	Dr. Manthan Merja	Comparing the outcomes of organ preserving modalities with surgery in locally advanced laryngeal cancer: A retrospective institutional study (Poster)	European Society of Surgical Oncology	9-12 Oct 2018, Budapest, Hugary

#### **Conference Presentation - National April 2018 - March 2019**

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place	
	Blood Bank				
1	Dr. Rima Kusumgar	Paediatric Apheresis (Speaker)	National Conference on Indian Society of Transfusion Medicine	23-25 Nov 2018, Kochi	
		Clinical Carcinogenes	is Lab		
2	Dr. Trupti Trivedi	Shedding lights on "IDH mutations" from glioma patients: A liquid biopsy approach (Poster)	International Conference on Molecular Basis of Diseases & Therapeutics	8-10 March 2019, Ajmer, Rajasthan	
		Community Oncology Cer	ntre, Vasna		
3	Dr. Geeta Joshi	Morphine availability- Indian Perspective (Guest Lecture)	National Conference of Indian Society for Study of Pain	03 Feb 2018, New Delhi	
4		Recent advances in management of Nausea- vomiting (Guest Lecture)	Annual Conference of the Indian Association of Palliative Care	25 Feb 2018, New Delhi	
		Cytogenetic Lab	•		
5	Dr. Dharmesh Patel	Comprehensive cytogenetic studies in acute lymphoblastic leukemia patients for disease management (Poster)	38 <sup>th</sup> Annual Convention of Indian Association for Cancer Research	1-3 March 2019, Chandigarh	
6	Ms. Darshita Patel	Novel, rare and recurrent chromosomal abnormalities and their clinical relevance in acute myeloid leukemia patients (Poster)			
7	Ms. Priya Varma	Clinical implication of cytogenetic study in chronic myeloid leukemia patients (Poster)			



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place		
	Gynaecological Oncology					
8	Dr. Pariseema Dave	Advancement in ovarian cancer-Are we making progress? (Panelist)	26 <sup>th</sup> Annual Conference of Association of Gynecologic Oncologists of India	16-18 Nov 2018, Gwalior		
9	Dr. Garima Pandey	Sarcopenia as a predictor of short term treatment related morbidity in ovarian cancer (Oral)				
10	Dr. Sharayu Mirji	Role of surgery in the management of gestational trophoblastic neoplasia (Oral)				
11	Dr. Pabashi Poddar	Correlation of lymph node ratio with outcome in surgically treated cases of vulvar cancer (Oral)				
12	Dr. Ava Desai	The journey with cervical cancer (Orator)	ADVANCES 2018	11 Aug 2018, Trivandrum		
13		Types and techniques of radical hysterectomy (Speaker)	FOCUS 2018	24 Sep 2018, Thrissur		
		Immunohematology	Lab			
14	Dr. Nupur Patel	Clinical significance of ALDH1A1, CD133 and Oct4 in breast cancer patients and its association with EMT (Poster)	38 <sup>th</sup> Annual Convention of Indian Association for Cancer Research	1-3 March 2019, Chandigarh		
		Medical Oncolog	У			
15	Dr. Akshay Shivchand	Donor lymphocyte infusion in thalassemia: Single center experience (Poster)	BMT Tandem Meetings	7-8 Apr 2018, Delhi		
16	Dr. Rushit Shah	A prospective observational study to assess clinical profile of patients with Burkitt lymphoma in institute from Western India (Oral)	41 <sup>st</sup> Annual Conference of Association of Physicians of Gujarat	15-16 Dec 2018, Daman		
17	Dr. Manan Vaghela	Study of clinical profile of young carcinoma of breast patient (Oral)				
18	Dr. Jay Dadhania	To study the clinical profile and outcome of the patients presented with granulocytic sarcoma at tertiary care cancer institute from Western India (Oral)				
19		To study the comparison of outcome of triplet drug (Paclitaxel, Cisplatin and 5- Fluorouracil) vs. single day	Annual Conference of Indian Society of Medical & Paediatric Oncology	16-18 Nov 2018, Jaipur		



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Medical Oncolog	iy	
19		doublet chemotherapy as neoadjuvant chemotherapy in locally advanced head and neck squamous cell carcinoma (HNSCC) at tertiary care cancer centre from Western India (Poster)	Annual Conference of Indian Society of Medical & Paediatric Oncology	16-18 Nov 2018, Jaipur
20	Dr. Akshay Shivchand	Pediatric germ cell tumor: A single centre experience (Poster)		16-18 Nov 2018, Jaipur
21	Dr. Gaurav Mantri	Clinical profile and study of predictive factors of histological response to neoadjuvant chemotherapy in pediatric and adolescent osteosarcoma patients: A single institute experience (Poster)		
22	Dr. Rushit Shah	A prospective observational study to assess the survival rate of advanced colorectal cancer patients and to study the prognostic factors that influence survival at tertiary cancer center from Western India (Oral)		
23	Dr. Srinath Bhardwaj	Classical Hodgkin's lymphoma with secondary haemophagocytic- lymphohistiocytosis-A rare case report (Poster)	Lymphocon-2019	12-13 Jan 2019, Bengaluru
24	Dr. Sherin Mathew	Primary neuroendocrine carcinoma at an unusual site: A case report (Poster)	18 <sup>th</sup> Annual International Conference of Rajiv Gandhi Research Centre	8-10 Feb 2019, New Delhi
25	Dr. Mohammed Naseer	Immunotherapy experience in metastatic solid cancers: Single centre experience from Western India (Poster)	1 <sup>st</sup> Immuno-Oncology Society of India Congress	15-17 March 2019, Mumbai
		Microbiology		
26	Dr. Parijat Goswami	Catheter associated urinary tract infection (Panelist)	XV National Conference of Hospital Infection Society of India	4-6 Oct 2018, Hyderabad
27		Antimicrobial resistance data monitoring surveillance and antibiotic policies in the multicenter presentation (Invited Speaker)	WHO-IAMM Network for Surveillance of Antimicrobial Resistance	28-29 March 2019, Gurgaon



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Molecular Oncology		
28	Dr. Prabhudas Patel	Nutraceutical targeting aberrant glycosylation: A solid groundwork for better cancer management (Invited Speaker)	3 <sup>rd</sup> International Conference on Nutraceutical and Chronic Diseases	14-16 Sep 2018, Dehradun
29		Clinical relevance of OMICS based biomarkers in cancer (Invited Speaker)	Recent Trends & Advancements in Regenerative Medicine & The Role of OMICS and Biomarkers in Health	28 Feb-2 March 2019, Kerala
30	Ms. Kruti Mehta	Altered glycosylation: Integrating a new hallmark into oral cancer management (Invited Speaker) Clinical implications of	38 <sup>th</sup> Annual Convention of Indian Association for Cancer Research	1-3 March 2019, Chandigarh
51	MS. Kruli Menta	aberrant sialylation and fucosylation in oral cancer (Oral)		
		Palliative Medicir	ne	
32	Dr. Priti Sanghavi	Importance of nursing staff in oncology and symptoms management (Invited Speaker)	Center for Continuing Nursing Excellence CCNE Conference on Nursing Science Practice and Research	27 Nov 2018, Delhi
		Pathology		
33	Dr. Priti Trivedi	Role of immunohistochemistry in malignant round cell tumor (Invited Speaker)	International CME	12-13 Nov 2018, Jaipur
34	Dr. Jyoti Sawhney	Myeloproliferative neoplasms (Panelist)	Hematology Update 2018	14-15 April 2018, New Delhi
35	Dr. Deepak Goel	An epidemiological study of paediatric central nervous system tumors in Gujarat Cancer and Research Institute (Oral)	International CME in Pathology, Histopathology & Cytopathology	3 Feb 2019, Goa
		Radiotherapy		
36	Dr. Jyoti Poddar	Calculation of dose volume parameters and indices in plan evaluation of HDR interstitial brachytherapy by MUPIT in carcinoma cervix (Oral)	Young Radiation Oncologist Conference	19-25 Jan 2019, Siliguri, West Bengal
		Stem Cell Biology		
37	Dr. Nutan Badgujar	A comprehensive in-silico analysis of the structural and functional impact of non- synonymous single nucleotide polymorphisms in human RAD51C gene (Poster)	38 <sup>th</sup> Annual Convention of Indian Association for Cancer Research	1-3 March 2019, Chandigarh



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Stem Cell Biology		
38	Ms. Bhoomi Tarapara	Assessment of miRNA expression in breast cancer (Poster)	38 <sup>th</sup> Annual Convention of Indian Association for Cancer Research	1-3 March 2019, Chandigarh
		Surgical Oncolog	IY	
39 40	Dr. Abhijit Salunke	Recent advances in orthopedic oncology (Invited Speaker) Reconstruction options in GCT	Association for Radiation Oncology North East Zonal Chapter Max Ortho Onco Con 2018	26-27 Oct 2018, Itanagar, Arunachal Pradesh 14-15 Jul
70		(Invited Speaker)	CME	2018, New
41	Dr. Jaymin Shah	DE Radius Tumors (Invited Speaker)		Delhi
		Tumor Biology La	b	
42	Dr. Nandita Ghosh	Deciphering the potential value of drug metabolic enzymes in colorectal cancer (Poster)	The International Conference on Molecular Basis of Diseases & Therapeutics	8-10 March 2019, Ajmer, Rajasthan

### **Conference Presentation - State** April 2018 - March 2019

Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Anaesthesiology	,	
1	Dr. Priti Patel	Incidence of valve incompetence through high versus low approach for internal jugular vein (IJV) cannulation (Oral)	Indian Society of Anaesthesiologists	19-21 Oct 2018, Surat
2	Dr. Kinna Shah	Usefulness of dental protection devise for prevention of tracheal cuff damage during double lumen tube insertion (Oral)		
3	Dr. Mohit Rathod	Comparison of intrathecal morphine and clonidine for intra-operative hemodynamic stability and post-operative analgesia in lower abdominal surgery (Oral)		
4	Dr. Hetal Makwana	A comparative study of dexmedetomidine HCL infusion and fentanyl citrate infusion as an anaesthetic		



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Anaesthesiology	1	
		adjuvant for hemodynamic stability in patients undergoing supratentorial craniotomy (Oral)		
5	Dr. Anupama Kisku	Comparative study of esmolol hydrochloride and dexmedetomidine hydrochloride on attenuation of pressure response to pneumoperitoneum during laparoscopic surgery (Oral)	Adrenaline Medical Conference	15 March 2019, Ahmedabad
6	Dr. Arun Rawat	A randomized prospective comparison of USG versus landmark guided technique for cannulation of IJV (Oral)	APPI Gujarat State Chapter	30 Sep 2018, Ahmedabad
		Blood Bank		
7	Dr. Rima Kusumgar	Current scenario in immunohematology (Invited Speaker)	CME on Immunohematology by ISBTI, Gujarat Chapter	Jul 2018, Ahmedabad
8		Regulatory approach towards blood bank inspection (Invited Speaker)	CME organized by Food & Drug Control Administration Government of Gujarat	16 Feb, 2019 Ahmedabad
		Clinical Carcinogenes	· · · · · · · · · · · · · · · · · · ·	
9	Ms. Vinal Upadhyay	Crosstalk amongst genes involved in glioma signaling (Poster)	National Symposium on Innovations in Cancer Research: Translating	14-15 Sep 2018, Ahmedabad
10	Ms. Nirali Shukla	Detection of IDH1/2 mutations from low and high grade glioma patients-A preliminary study (Poster)	"OMICS" to Therapeutics	
11	Ms. Zeal Rawal	The medulloblastoma treatise: Sensitizing stem cell markers (Poster)		
12	Mr. Jay Gurjar	Role of notch signaling pathway in human cancers and its therapeutic targets (Poster)		
		Cytogenetic Lab	t	
13	Dr. Dharmesh Patel	Assessment of HER2/neu gene expression by fluorescence in situ hybridization in gastric cancer patients (Poster)	National Symposium on Innovation in Cancer Research Translating 'OMICS' to Therapeutics	14-15 Sep 2018, Ahmedabad
14	Ms. Darshita Patel	Prognostic significance of cytogenetics in acute myeloid leukemia patients (Poster)		



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Cytogenetic Lab	,	
15	Ms. Priya Varma	Assessment of cytogenetics and Fish results in chronic myeloid leukemia (Poster)	National Symposium on Innovation in Cancer Research Translating 'OMICS' to Therapeutics	14-15 Sep 2018, Ahmedabad
16	Ms. Nehal Patel	Acute promyelocytic leukemia presenting unusual case with additional cytogenetic abnormality (Oral)	The Cell 3MT	12 Jan 2019, Ahmedabad
17	Ms. Dhara Ladani	Chronic myelomonocytic leukemia with t(12;15) involving dup(1) identified by cytogenetic and molecular cytogenetic approach: A novel favorable-risk translocation (Oral)		
		Gynaecological Once	ology	
18	Dr. Pariseema Dave	Gestational trophoblastic disease (Invited Speaker)	42 <sup>nd</sup> Annual Conference of State Organization of	5-7 Oct 2018, Jamnagar
19	Dr. Bijal Patel	Endometrial cancer: Optimal management (Speaker)	Gynaecologists & Obstetricians of Gujarat- SOGOG	
20	Dr. Ruchi Arora	Pap smear: What's next? (Speaker)		
		Immunohematology	Lab	
21	Dr. Birva Raiya	A study evaluation Ikaros protein expression and IKzF1 mRNA transcripts in B cell acute lymphoblastic leukemia (Poster)	National Symposium on Innovation in Cancer Research: Translating "OMICS" to Therapeutics	14-15 Sep 2018, Ahmedabad
22	Ms. Komal Pawar	Altered metabolism of p53, BCL-2 and serum LDH in lung cancer (Poster)		
23	Ms. Bharati Rathod	Lympho-vascular density in oral squamous cell carcinoma (Poster)		
24	Ms. Nikita Bhatt	Significance of minimal residual disease detection in B- cell acute lympoblastic leukemia (Poster)	4 <sup>th</sup> UGC National Conference on Current Trends in Biological Sciences	11 Feb 2019, Charusat, Anand
		Medical Oncolog	-	
25	Dr. Vaibhava Srivastava	Management of mucormycosis in pediatric ALL during induction chemotherapy: A case report (Poster)	Hospital Infection Society India Conference	17 Feb 2019, Ahmedabad



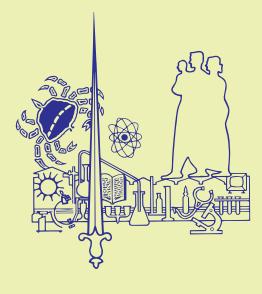
26       Dr. Prabhudas Patel       Transitional oncology-The Bridge between basic research and clinical practice (Keynote Lecture)       National Seminar on Transitional Research in Cancer Biology       1-2 Feb 2019, Charusat, Anand         27       Molecular signatures: clinical relevance of OMICS era in cancer research (Invited Speaker)       National Symposium on Invovations in Cancer Research: Transiting "OMICS" to Therapeutics       14-15 Sep 2018, Ahmedabad         28       Ms. Kruti Mehta       Altered glocosylation: From molecular biology laboratory to cancer clinics (Poster)       National Symposium on Invovations in Cancer Research: Transiting "OMICS" to Therapeutics       17 Feb 2019, Ahmedabad         29       Mrs. Mona Darji       Hand hygiene compliance and monitoring experience of GCRI (Invited Speaker)       State Conference of Hospital Infection Society – India       17 Feb 2019, Ahmedabad         30       Dr. Deepak Goel       Metastic alveolar soft part arcoma (ASPS) maguerading as primary CNS tumor (Poster)       Guigarat Association of Pathologist & Microbiologist- Minedabad       15 Apr 2018, Ahmedabad         31       Dr. Arshi Tandon       Collision presentation of folicular lymphona and metastatic serous adenocarcinoma in pelvic lymphona (Poster)       Futhologist & Microbiologist- masquerading as prillary carcinoma of Hycrid (Poster)       Ahmedabad         33       Dr. Torsha Jana       Thymic carcinoma masquerading as papillary carcinoma of Hycrid (Poster)       Advenaline Medical Conference       15-17 March 2019, Ahmedabad         34<	Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
Provide LectureBridge between basic research and clinical practice (Keynote Lecture)Translational Research in Cancer BiologyCharusat, Anand27Molecular signatures: clinical relevance of OMICS en in cancer research (Invited Speaker))National Symposium on movations in Cancer Research: Translating "OMICS" to Therapeutics14:15 Sep 2018, Ahmedabad28Ms. Kruti MehtaAltered glycosylation: From molecular biology laboratory to cancer clinis (Poster)National Symposium on molecular biology laboratory to cancer clinis (Poster)National Symposium on Mics' to Therapeutics14:15 Sep 2018, Ahmedabad29Ms. Knuti MehtaAltered glycosylation: From molecular biology laboratory to cancer clinis (Poster)State Conference of Hospital In The 2019, IN D. Hospital, Ahmedabad30Dr. Deepak GoelMetastatic alveolar soft part sarcoma (ASPS) marquerading as primary CNS umor (Poster)State Conference of Hospital infoldicular bymphona and metastatic serous a adenocarichoma in pelvic lymphonde (Poster)Gujarat Association of Pathologist & Microbiologists. Ahmedabad31Dr. Torsha JanaThymic carcinoma masquerading as papillary carcinoma of thyroid (Poster)15:16 Dec 2018, Ahmedabad33Dr. Torsha JanaThymic carcinoma masquerading as papillary carcinoma of thyroid (Poster)Alternaline Medical Conference of Gujarat State Conference of Gujarat State			Molecular Oncology	Lab	
relevance of OMICS era in cancer research (Invited Speaker)Innovations in Cancer Research: Translating 'OMICS' to Therapeutics2018, Ahmedabad28Ms. Kruti MehtaAltered glycosylation: From molecular biology laboratory to cancer clinics (Poster)OMICS' to TherapeuticsAhmedabad29Mrs. Mona DarjiHand hygiene compliance and monitoring experience of GCRI (Invited Speaker)State Conference of Hospital, Infection Society – India17 Feb 2019, K.D. Hospital, Ahmedabad30Dr. Deepak GoelMetastatic alveolar soft part sarcoma (ASPS) masquerading as primary CNS tumor (Poster)Gujarat Association of Pathologist & Microbiologists- tumor (Poster)State Conference of Iospital, Ahmedabad15-16 Dec 2018, Ahmedabad31Dr. Arshi TandonCollision presentation of folicular lymphoma and metastatic servous adenocarcinoma in pelvic lymphnode (Poster)Gujarat Association of poster)15-16 Dec 2018, Ahmedabad33Dr. Torsha JanaThymic carcinoma masquerading as papillary carcinoma of thyroid (Poster)Adrenaline Medical Conference Poster)15-17 March 2019, Ahmedabad34Dr. Rahul RankaUndifferentiated embryonal sarcoma of thyroid (Poster)Adrenaline Medical Conference of Gujarat Sarcoma of thyroid (Poster)35Dr. Suchita PatelUndifferentiated embryonal sarcoma of thyroid (Poster)Adrenaline Medical Conference15-17 March 2019, Ahmedabad36Dr. Bhavya ChauhanTransitional oncology-The bridge between basic research and clinical parcice (Keynote Lecture)Annual	26	Dr. Prabhudas Patel	Bridge between basic research and clinical practice	Translational Research in	Charusat,
Image: space of the space of control of the space of the space of control of the space of control of the space of control of the space of th	27		relevance of OMICS era in cancer research (Invited Speaker)	Innovations in Cancer Research: Translating	2018,
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33       Dr. Torsha Jana       Thymic carcinoma masquerading as papillary carcinoma of thyroid (Poster)         34       Dr. Rahul Ranka       Syndronous mantle cell lymphoma and prostate adenocarcinoma (Oral)         35       Dr. Suchita Patel       Undifferentiated embryonal sarcoma of liver: A rare case report (Poster)         36       Histopathological study with clinical correlation and importance of immunohistochemistry in testicular tumors (Oral)         37       Dr. Bhavya Chauhan       Transitional oncology-The bridge between basic research and clinical practice (Keynote Lecture)       Annual Conference of Gujarat State Chapter of Indian Radiological & Imaging Association	32	Dr. Shweta Gondha	Role of IHC in subtyping of non small cell lung cancer		
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bridge between basic research and clinical practice (Keynote Lecture) Association 2019, Ahmedabad					
97	37	Dr. Bhavya Chauhan	bridge between basic research and clinical practice	State Chapter of Indian Radiological & Imaging	2019,
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Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Radiology		
38	Dr. Bhavya Chauhan	Metastatic lesion in breast a known case of carcinoma of oesophagus: A rare phenomena (Poster)	Annual Conference of Gujarat State Chapter of Indian Radiological & Imaging Association	15-16 March 2019, Ahmedabad
39	Dr. Ashish Kharadi	Role of imaging in evaluation of salivary gland tumors (Oral)		
40		Thymic shadow on paediatric chest x rays (Poster)		
41	Dr. Rupal Vadhiya	Role of imaging in evaluation of pediatric abdominal masses (Oral)		
42		Imaging features of primary non-hodgkin's lymphoma-A rare hepatic tumors (Poster)		
43	Dr. Darshan Thummar	Role of radiological imaging in diagnosing metastasis of retinoblastoma-local and distant (Oral)		
44		X-ray imaging of melorheostosis-A rare benign sclerosing bone dysplasia (Poster)		
45	Dr. Dheeman Sarkar	Role of MDCT in carcinoma gall bladder using TNM classification (Oral)		
46		X-ray imaging of chondrosarcoma-A malignant bone tumors (Poster)		
	1	Stem Cell Biology	Lab	
47	Dr. Franky Shah	Clinical significance Vitamin D signalling pathway in breast cancer (Invited Speaker)	National Conference on New Horizons in Cancer Biology	16 Mar 2019, Ahmedabad
48	Dr. Apexa Raval	Correlation of IGF receptors and mTOR expression in breast cancer patients (Poster)	National Symposium on Innovation in Cancer Research: Translating 'OMICS'	14-15 Sep 2018, Ahmedabad
49	Dr. Jigna Joshi	Clinical significance of EGFR mutation detection in lung cancer: A liquid biopsy approach (Poster)	To Therapeutics	
50	Mr. Hitarth Patel	Nanomedicine and cancer stem cells: An emerging approach (Poster)		
51	Ms. Khushbu Patel	Role of miRNA-10b and miRNA-21 in breast cancer (Poster)		



Sr No	Name of Presenter	Title of Presentation	Name of Conference	Date & Place
		Stem Cell Biology	Lab	
52	Ms. Pooja Nayi	Hedgehog signalling: A stem cell maintaining pathway in cancer (Poster)		
53	Dr. Urja Desai	Therapeutic monitoring of cytarabine (Ara-C) in AML: In- silico and in-vitro approach (Poster)	Herbal Medicines: Research and Commerce- Global Perspectives	27-29 Dec 2018, Ahmedabad
		Surgical Oncolog	Įy	
54	Dr Abhijeet Salunke	Expandable megaprosthesis (Invited Speaker)	Gujarat Orthopedic Association Conference	1-3 Feb 2019, Ahmedabad
55		Amputation in bone tumors (Invited Speaker)	Apollo Hospital	3 Feb 2019, Ahemdabad
56	Dr. Jaymin Shah	Metastatic bone tumors (Invited Speaker)		
57		Approach to bone tumors (Invited Speaker)	Gujarat Orthopedic Association Conference	1-3 Feb 2019, Ahemdabad
58		ECRT in bone tumors (Invited Speaker)		
		Tumor Biology La	ıb	
59	Dr. Toral Kobawala	Inflammatory mediators and thyroid carcinogenesis (Poster)	National Symposium on Innovations in Cancer Research: Translating "OMICS" to Therapeutics	14-15 Sep 2018, Ahmedabad
60	Ms. Mahnaz Kazi	Frequent methylation of genes encoding Wnt pathway antagonists- sFRP1 and DKK3 in invasive breast cancer (Oral)	National Seminar on Translational Research on Cancer Biology	1-2 Feb 2019, Charusat, Anand





#### Q2. Publications April 2018 - March 2019

#### Anaesthesiology Surekha Shaboo, Dipika Patel, Bhautik Dav: Comparative study of epidural ropivacaine HCL-fentanyl citrate and 1 ropivacaine HCL-tramadol HCL for postoperative analgesia in abdominal surgeries. Ind J Anaesthesia and Analgesia, 2018, 1487-1492. Nita Gosai, Rekha Solanki, Bhavna Shah, Puja Kumar, Rajdeep Kubavat: Comparsion of ondansetron HCl, 2 granisetron HCl & palanosetron HCl for prevention of postoperative nausea and vomiting following gynecological surgery under general anaesthesia. Ind J Clinical Anaesthesia, 2019, 6. 3 Smita Carolin, Damini Makwana, Bhautik Dav, Bhargav Ram, Bhavana Shah: Comparison between dexmedetomidine HCL & clonidine HCL on attenuation of haemodynamic response following laryngoscopy and intubation. SAS J. Surgery, 2018, 224-230. 4 Leena Patel, Anupama Kumari, Misha Agarwal, Jayshree Thakkar, Chirag Rathva: A comparative study of dexmedetomidine HCL and esmolol HCL for attenuating pressure response to laryngoscopy and oral endotracheal intubation. Ind J Anesthesia Analgesia, 2018, 15: 1511-1516. 5 Leena Patel, Jenish Patel, Keval Patel, Chirag Rathva, Vijeta Tandel, Bhavna Shah: Comparison of effect of labetalol and fentanyl with only fentanyl or attenuating pressure responses to intubation and skull pin insertion in neurosurgery. Ind J Clinical Anaesthesia, 2018, 5. 6 Srishti Meghare, Kinna Shah, Bhavana Shah: Effect of low dose ketamine hydrochloride on tourniquet induced hypertension in lower limb surgeries. Indo American J Pharmaceutical Res, 2018, 1433-1437. 7 Bijal Shah, Rashmi Ranjan Das, Yash Modh, Hetal Makawana, Bhavna Shah: A comparative study of adding intrathecal magnesium sulphate to bupivacaine hydrochloride in spinal anaesthesia. Gujarat Medical Journal, 2018, 13. Sujata Patel, Madhur Bhade, Priti Patel, Jenish Patel, Bhavna Shah: Comparison of epidural bupivacaine 8 hydrochloride and butorphanol tartrate v/s bupivacaine hydrochloride and fentanyl citrate for postoperative analgesia in lower abdominal and lower limb surgery. Ind J Applied Medical Sciences, 2019, 1216-1219. 9 Priti Patel, Jenish Patel, Drishti Dave, Pallavi S, Arun Rohit, Bhavna Shah: A comparative study of efficacy of oral gabapentin and melatonin on post operative pain and analgesic consumption in patients undergoing modified radical mastectomy. Ind J Anaesthesia and Analgesia, 2018. 10 Jenish Patel, Jayshree Thakkar, Damini Makawana, Sanobar Khokhar, Saeed Vora, Bhavna Shah: Comparative evaluation of intravenous granisetron hydrochloride and intravenous lignocaine hydrochloride to alleviate the pain on propofol injection. Ind J Anaesthesia and Analgesia, 2019. **Cancer Biology - Joint Publication** Prabhudas Patel, Hemangini Vora, Birva Shah, Jayendra Patel, Kruti Rajvik, Shashank Pandya, Shilin Shukla, 11 Wang Y, Zhang G, Kawakami Y, Marincola FM, Ascierto PA, Sargent DJ, Fox BA, Galon J: International validation of the consensus Immunoscore for the classification of colon cancer: a prognostic and accuracy study. Lancet. 2018, 26; 391(10135): 2128-2139. **Clinical Carcinogenesis Lab** Trupti Trivedi, Rajan Tankshali, Dhaval Jetly, Nandita Ghosh, Prabhudas Patel: SCCAg mRNA expression predicts 12 early relapse in histopathologically negative lymphnodes of oral squamous cell carcinoma patients. J Mol Oncol Res. 2018; 2: 48-58. 13 Jigna Joshi, Hemangini Vora, Nandita Ghosh, Jignesh Goswami, Trupti Trivedi: Protein expression of DNA

damage signalling molecules in patients with oral squamous cell carcinoma. Madridge J Oncogen. 2018; 2: 41-46.

14 Vinal Upadhyay, Trupti Trivedi, and Rakesh Rawal: Liquid biopsy of intracranial neoplasms: Reaching the unreachable. Res J Life Sci Bioinfomatics, Pharmaceutical and Chemical Sci, 2018, 208-216.

#### **Community Oncology Centre, Vasna**

15 Geeta Joshi: Hospice care is not only for Maggoted wound care! - Brain Wave. GCS Research Journal, 2018; 20; 1: 58-59.



#### **Cytogenetics Lab**

- 16 Pina Trivedi, Dharmesh Patel, Darshita Patel, Mahnaz Kazi, Priya Varma, Dhara Ladani, Nehal Patel, Prabhudas Patel: Chronic myelomono cyticleukemia with t (12;15) involving dup(1) identified by cytogenetic and molecular cytogenetic approach: A novel favourable-risk translocation. J Blood Disord Treat, 2018, 2: 17-20.
- 17 Pina Trivedi, Dharmesh Patel, Mahnaz Kazi, Hemangini Vora, Nandita Ghosh, Trupti Trivedi, Jayendra Patel, Franky Shah, Prabhudas Patel: Institutional conference report: empowering cancer biology to strengthen fight against cancer: National conference on new horizons in cancer biology. GCS Research Journal 2018, 20.
- 18 Pina Trivedi, Dharmesh Patel, Darshita Patel, Mahnaz Kazi, Priya Varma, Dhara Ladani, Nehal Patel, Prabhudas Patel: Identification of der(6)t(3;6)(q26; p21) in RUNX1/RUNX1T1 negative AML-M2 paediatric patient by fluorescence in situ hybridization technique. Acta Scientific Cancer Biology, 2018, 31-35.
- 19 Pina Trivedi, Dharmesh Patel, Darshita Patel, Mahnaz Kazi, Priya Varma, Dhara Ladani, Nehal Patel, Prabhudas Patel: Assessment of prognostic significance of monosomy 7 in myeloid malignancies sole or with recurrent chromosomal abnormalities: an Indian experience. Archives of Hematology and Blood Diseases, 2018, 8-14.
- 20 Dharmesh Patel, Pina Trivedi, Manisha Brahmbhatt, Prabhudas Patel: A sole cytogenetic abnormality R(2) in acute lymphocytic leukemia patient: An Indian experience. Clin Oncol Case Rep, 2018, 1:1-3.
- 21 Dharmesh Patel, Ranjan Parmar, Priya Varma, Dhara Ladani, Prabhudas Patel, Pina Trivedi: Assessment of HER2/neu level using molecular cytogenetic in breast cancer: A study at a regional cancer center. J Genet Mutat, 2018, 2: 21-24.
- 22 Dharmesh Patel, Darshita Patel, Pina Trivedi, Priya Varma, Dhara Ladani, Mahnaz Kazi, Nehal Patel, Prabhudas Patel: Acute promyelocytic leukemia presenting unusual case with additional cytogenetic abnormality. Clinical Research in Hematology, 2018, 1.
- 23 Darshita Patel, Pina Trivedi, Dharmesh Patel, Mahnaz Kazi, Priya Varma, Dhara Ladani, Prabhudas Patel: Significance of WNT signaling pathway in the pathogenesis of acute myeloid leukemia. Int J Science and Research Methodology, 2019, 11.

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- 24 Amrita Makhija, Chetana Parekh, Meeta Mankad. Ava Desai, Pariseema Dave, Shilpa Patel: Rational of laparoscopic surgery in gynecologic oncology: Time to address the issue! Ind Journal of Gynecology Oncology, 2018, 47-58.
- 25 Renu Ranga, Chetana Parekh, Meeta Mankad: Unusual presentation of gestational trophoblastic disease with isolated liver metastases, skipping lungs: cases report and review of literature. Indian J Gynecol Oncolog, 2018, 16: 38-41.
- 26 Pabashi Poddar, Shilpa Patel, Ruchi Arora, Priti Trivedi, VikasWarikoo: Giant tumor of vulva: vulvar myxoid leiomyoma- A rare entity. Indian J Gynecol Oncolog, 2019, 17: 3-6.
- 27 Shilpa Patel, RajnishTiwari, Ruchi Arora, Pabashi Poddar, Ava Desai, Meeta Mankad: Uterine sarcomas Surgical management, adjuvant therapy and survival outcome. Experience at G.C. & R.I. Indian J Gynecol Oncolog, 2019, 17: 13-19.
- 28 Chetana Parekh, Ruchi Arora, Shilpa Patel, Pabashi Poddar, Ava Desai, Meeta Mankad: Study of epidemiology, clinicopathological correlation, prognostic factors and management in squamous cell carcinoma of vulva. Int J Reproductive Contracept Obstet Gynecol, 2019, 8: 223-228.
- 29 Sharayu Mirji, Bijal Patel, Ava Desai, Shilpa Patel, Meeta Mankad, Pariseema Dave: Role of surgery in the management of gestational trophoblastic neoplasia. Indian J Gynecol Oncolog, 2019, 17: 1-7.
- 30 Renu Ranga, Pariseema Dave, Anusha Kamant, Garima Pandey. A recurrent granulosa cell tumor of the ovary after 20 years. Indian J Gynecol Oncolog, 2018, 16: 67-69.
- 31 Garima Pandey, Pariseema Dave: Growing teratoma syndrome with port site metastasis. Indian J Gynecol Oncology, 2019, 17: 7-9.
- 32 Priyanka Goel, Pariseema Dave, Bijal Patel, Garima Pandey: Benign brenner tumor and borderline mucinous cyst adenocarcinoma coexisting together: A rare case report, Indian J Gynecol Oncolog, 2019, 17: 19-21.
- 33 Sharayu Mirji, Ava Desai, Bijal Patel, Shilpa Patel, Priti Rajpurohit. A rare case of meigs syndrome in pregnancy. Indian J Gynecol Oncolog, 2019, 17: 37.



34	Nupur Patel, Prabhudas Patel, Hemangini Vora: Epithelial mesenchymal transition in breast cancer. GCS Res J, 2018, 20: 31-44.
35	Devisha Mavani, Kruti Rajvik, Priti Trivedi, Nupur Patel, Hemangini Vora: Evaluation of sensitivity and specificity of Napsin A and P40 in non small cell lung cancer patients. GCSMC J Medical Sciences, 2018, 7: 7-15.
36	Priyashi Roa, Birva Raiya, Hemangini Vora: Influence of NK cells during epithelial to mesenchymal transition in oral cancer. J Medical Science and Clinical Res, 2018, 6: 974-980.
37	Grusha Joshi, Nupur Patel, HemanginiVora: Clinical significance of ALDH1a1, CD133, Oct4 in breast cancer and its association with epithelial mesenchymal transition. Journal of genetics and Mutation, 2018, 1: 15-20.
38	Bansi Ladani, Birva Raiya, Nupur Patel, Hemangini Vora: ALK fusion protein expression in lung adenocarcinoma and its correlation with EGFR protein expression. Madrige Journal of Oncogenesis, 2018, 1: 52-56.
	Medical Oncology
39	Sonia Parikh, Parijat Goswami, Asha Anand, Harsha Panchal, Apurva Patel, Rahul Kulkarni, Bhadresh Shastri: Clinical and microbiological profile of infections during induction phase of acute myeloid leukemia: Gulf J Oncolog, 2018, 27: 18-23.
40	Akash Patel, Asha Anand, Sonia Parikh, Harsha Panchal, Apurva Patel, Gaurav Mantri: Unilateral proptosis: An unusual presentation of prostate cancer. GCS Research Journal 2018, 20: 26-28.
41	Manan Vaghela, Harsha Panchal, Asha Anand, Apurva Patel, Sonia Parikh, Jay Dadhania, Rushit Shah: Rare case report of cerebral ganglioneuroblastoma. GCS Research Journal, 2019, 21: 19-22.
42	Rushit Shah, Harsha Panchal, Asha Anand, Apurva Patel, Sonia Parikh, Jay Dadhania, Manan Vaghela: Classical hodgkin's lymphoma with secondary haemophagocytic-lymphohistiocytosis- A rare case report. GCS Research Journal, 2019, 21: 23-25.
43	Salil Patkar, Harsha Panchal, Asha Anand, Apurva Patel, Sonia Parikh: A very rare case presentation of chronic lymphocytic leukemia occurring during the course of chronic myeloid leukemia. Sci Technol Clin Oncol: Case Rep, 2018, 1:1.
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45	Alok Ranjan, Harsha Panchal, Asha Anand, Apurva Patel, Sonia Parikh, Sandip Shah: All-trans retinoic acid- induced pseudo tumor cerebri during treatment of acute promyelocytic leukemia: A case report. Int J Clinical Case Reports, 2018, 8: 1-4.
46	Jay Dadhania, Harsha Panchal, Asha Anand, Apurva Patel, Sonia Parikh, Rushit Shah, MananVaghela: Synchronous presentation of ovarian adenocarcinoma with follicular lymphoma in pelvic lymph node (Collision tumor) in a postmenopausal female patient: A rare case report. International Journal of Scientific and Research Publication, 2019, 9: 87-90.
47	Gourav Mantri , Sonia Parikh, Asha Anand, Harsha Panchal, Apurva Patel, Sandip Shah, Akash Patel: Rituximab- induced late onset neutropenia: case report and review of literature. GCS Research Journal, 2019, 21: 15-18.
	Microbiology
48	Foram Patel, Parijat Goswami, Hiren Patel: A seven years retrospective study of prevalence of viral infections in diverse cancer patients admitted for treatment in a regional cancer center: GCS Research Journal 2018, 20: 16-19.
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	Molecular Oncology Lab
50	Kruti Mehta, Kinjal Patel, Prabhudas Patel: Aberrant Glycosylation, a New Hallmark of Cancer has a Vital Translational Value. GCS Research Journal, 2018; 20:9-15.
51	Kinjal R Patel, Bhairavi Vajaria, Ragini Singh, Rasheedunnisa Begum, Prabhudas Patel: Clinical implication of p53 alterations in oral cancer progression: A review from India. Experimental Oncology, 2018, 40:10-18.



52	Bhairavi Vajaria, Kinjal A. Patel, Prabhudas Patel: Role of aberrant glycosylation enzymes in oral cancer
52	progression. Journal of Carcinogenesis, 2018, 17.
	Palliative Medicine
53	Bhavna Patel, Shrenik Ostwal, Priti Sanghavi, Geeta Joshi, Richa Singh: Management of malignant wound myiasis with ivermectin, albendazole, and clindamycin (triple therapy) in advanced head and neck cancer patients: A prospective observational study. Indian J Palliative Care, 2018, 24: 459-464.
54	Queenjal Anandi, Shrenik Ostwal, Himanshu Patel, Priti Sanghavi: Magic vaginal douche for severe vaginal mucositis: a case-based approach. Nurs Palliative Care Int, 2018,1: 17-18.
	Pathology
55	Deepak Goel, Priti Trivedi, Shailee Mehta, Paresh Mody, Dipak Patel: Metastatic alveolar soft part sarcoma (ASPS) masquerding as primary CNS tumor. IP Indian Journal of Neuroscience, 2018, 4: 150-152.
56	Deepak Goel, Priti Trivedi, Shailee Mehta, Dhaval Jetly: An epidermiological study of paediatric central nervous system tumors. Gujarat Cancer & Research Institute, Ahmedabad. Indian Journal of Pathology & Oncology, 2019, 62.
57	Priti Trivedi, Deepak Goel, Silky Patel, Dhaval Jetly: ER, PR, MIB-1 index and HER2/new status in 100 cases of breast. Carcinoma Tropical Journal of Pathology & Microbiology, 2019, 5.
58	Dhaval Jetly, Siddhrth Tummar, Ritwika Dabra, Abhishek Kumar, Nisha Khanna, Satarupa Samanta: Marginal zone B cell lymphoma of eyelid: A rare case report-Indian Journal of Applied Research, 2018, 8: 94-95.
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60	Dhaval Jetly, Siddharth Thummar, Neha Nagrani: Study of histopathological diagnosis, clinic radiological findings and importance of immunohistochemistry in surface epithelial ovarian tumors: A study of 100 cases, Indian Journal of Applied Research, 2019, 9: 65-67.
61	Dhaval Jetly, Vishal Modi: Histopathological examination and clinico pathological correlation of primary osteosarcoma of bone: A study of 50 Cases. International Journal of Scientific Research, 2019, 8: 30-32.
62	Annapoorani Varadarajan, Dhaval Jetly: Histopathological study of metastatic bone tumours. Sch J App Med Sci. ISSN 2347-954X  ISSN 2320-6691.
63	Brajesh Goyal, Biren Parikh, Suchita Patel, Birva Raiya, Mauli Joshi, Trupti Patel, Dhaval Jetly: Importance of immunophenotyping in acute lymphoblastic leukemia- A GCRI study. GCS Research Journal, 2018, 20: 12-15.
64	Shailee Mehta, Trupti Patel, Dhaval Jetly, Manoj Shah: Clinicopathological and immunophenotypic study of spindle cell sarcomas. International Journal of Scientific Research, 2019, 8: 23-24.
65	Manjal Shah, Nisha Khanna, Trupti Patel, Dhaval Jetly, Biren Parikh, Brinda Chandibhamar: Mass lesions: Evaluation of ultrasound guided fine needle aspiration cytology with histopathological correlation. Ovarian Tropical Journal of Pathology & Microbiology. 2018, 8: 566-571.
	Radiology
66	Hitesh Rajpura, Kushal Makwana: Primary chondroblastic osteosarcoma of rib – unusual presentation of usual bone tumour in adult. Int J Sci & Res, 2019, 8: 43-44.
67	Hitesh Rajpura, Bhavya Chauhan, Rupal Vadhiya, Ravindra Megha: Role of USG elastography in evaluation of benign and malignant thyroid lesions with FNAC correlation. Int J Sci & Res, 2019, 8: 74-76.
68	Hitesh Rajpura, Rupal Vadhiya, Ashish Kharadi, Komal Panchal: Primary adrenal mature teratoma- A rare pediatric tumour. Int J Sci & Res, 2019, 8: 77-78.
69	Saumil Desai, Vipul Bhatia: Primary adenocarcinoma of lacrimal gland-A rare case report. GCS Research Journal, 2018, 20: 22-23.
70	Himanshu Soni, Jitendra Rathwa, Rupal Vadhiya, Bhavya Chauhan: Role of ultrasound elastography in evaluation of focal liver lesions. Int J Sci & Res, 2019, 8: 45-49.
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	Stem Cell Biology Lab
71	Disha Jethva, Urja Desai, Jigna Joshi, Apexa Raval, Franky Shah: Expression of multidrug resistance (MDR) genes in lung cancer. GCSMC J Med Sci: 2018, 7: 28-36.
72	Vinal Upadhyay, Apexa Raval, Kanisha Shah, Franky Shah, Rakesh Rawal: A prognostic and predictive study of BCR-ABL expression based on characterization of fusion transcripts. Indian Journal of Clinical Biochemistry, 2018, 1-7.
73	Vinal Upadhyay, Kanisha Shah, Dimple Makwana, Apexa Raval, Franky Shah, Rakesh Rawal: Putative stemness markers octamer-binding transcription factor 4, sex-determining region Y-box 2, and nanog in non-small cell lung carcinoma: A clinicopathological association. (Accepted Manuscript, Journal of Cancer Research and Therapeutics).
74	Hitarth Patel, Jigna Joshi, Urja Desai, Apexa Raval, Franky Shah: Hedgehog signaling: An emerging targeting therapy in cancer. Asian Journal of Pharmacy and Pharmacology. 2018, 4: 535-545.
	Tumor Biology Lab
75	Kinjal Gajjar, Hemangini Vora, Toral Kobawala, Trupti Trivedi, Dhaval Jetly, Harsha Panchal, Nandita Ghosh: Prognostic significance of TP expression in tumor cells and associated stromal cells in patients with colorectal cancer. GCS Research Journal, 2018, 20: 23-30.
76	Priti Kanik, Kinjal Gajjar, Nandita Ghosh: Immunohistochemical localization of KRAS and BRAF and its clinical utility in patients with colorectal cancer. Colorectal Cancer, 2018, 4: DOI: 10.21767/2471-9943.100051.
77	Chaitra Nair, Kinjal Gajjar, Hemangini Vora, Nandita Ghosh: Prognostic Significance of HER2 and MLH1 protein expression in colorectal cancer. Journal of Neoplasm, 2018, 3: DOI: 10.21767/2576-3903.100034
78	Mahnaz Kazi, Hemangini Vora, Toral Kobawala, Kinjal Gajjar, Trupti Trivedi, Nandita Ghosh: The Wnt pathway components are upregulated in different molecular subtypes of invasive ductal carcinoma patients of breast. Journal of Cancer & Oncology, 2018, 2: 000129.





### Q3. Ongoing Extramural Research Projects April 2018-March 2019

No.	Name of PI	Project Title	Funded by
Clinical Carcinogenesis Lab			
1	Dr. Trupti Trivedi	Detection of MYCN and ALK amplification using dd-PCR from plasma samples of neuroblastoma patients	GCRI
2	Dr. Trupti Trivedi	Detection of MGMT methylation in patients with glioblastoma	GCS/GCRI
3	Dr. Trupti Trivedi	Exploring significance of molecular markers for classification of medulloblastoma tumors	GCS/GCRI
4	Dr. Trupti Trivedi	Establishment of potential biomarkers for the management of brainstem glioma tumors	GCS/GCRI
5	Dr. Trupti Trivedi	Elucidating prognostic markers in glioma: a correlative and a pilot study to differentiate glioma subtypes using liquid biopsy-Completed	GCS/GCRI
Community Oncology Centre, Vasna			
6	Dr. Geeta Joshi	Prevalence of Human Papilloma Virus' in urban women.	Indian Institute of Public Health - IIPH
Community Oncology & Medical Records			
7	Dr. Shashank Pandya	Rural cancer registry Ahmedabad district	National Centre for Disease Informatics and Research, National Cancer Registry Programme, ICMR, Bangalore
8	Dr. Shashank Pandya	Population based cancer registry - Ahmedabad urban agglomeration area	National Centre for Disease Informatics and Research, National Cancer Registry Programme, ICMR, Bangalore
9	Dr. Shashank Pandya	Hospital based cancer registry (HBCRs) and patterns of care and survival studies on cancer breast, cancer cervix and head and neck cancers	National Centre for Disease Informatics and Research, National Cancer Registry Programme, ICMR, Bangalore
10	Dr. Janmesh Shah	Implementation plan for extended follow-up of the participants of IARC-India HPV vaccination study to evaluate the effectiveness of one, two and three doses of Quadrivalent HPV vaccine in preventing cervical neoplasias	International Agency for Research on Cancer-IARC
Cytogenetic Lab			
11	Dr. Prabhabhai Patel	Clinical implications of multidrug resistance proteins in CML patients	GCS/GCRI
12	Dr. Pina Trivedi	Clinical relevance of cytogenetics and molecular markers in acute myeloid leukemia patients	GCS/GCRI



No.	Name of PI	Project Title	Funded by				
	Cytogenetic Lab						
13	Dr. Dharmesh Patel	Clinical significance of molecular cytogenetic studies in acute lymphoblastic leukemia patients	GCS/GCRI				
14	Dr. Dharmesh Patel	Study of PTEN alterations in prostate cancer patients as a prognostic marker	GCS/GCRI				
		Gynaecological Oncology					
15	Dr. Ruchi Arora Dr. Shilpal Patel	Risk of ovarian malignancy algorithm (ROMA) utilizing human epididymis protein -4 (HE-4) and CA-125 dual marker combination for prediction of ovarian cancer	GCS/GCRI				
		Immunohematology Lab					
16	Dr. Sonia Parikh Dr. Hemangini Vora	A study of assessment of minimal residual disease (MRD) in childhood ALL with multi-color flow Cytometry and its correlation with survival	GCS/GCRI				
17	Dr. Hemangini Vora Dr. Sonia Parikh Dr. Kruti Rajvik Dr. Asha Anand	A study of predictive biomarkers in TNBC Patients	GCS/GCRI				
18	Dr. Priti Trivedi Dr. Hemangini Vora	Study of hormonal markers and proliferative markers in pitutary adenoma	GCS/GCRI				
19	Dr. Birva Raiya	A study of inflammation induced lymph angiogenesis in head and neck cancer	GCRI				
20	Dr. Hemangini Vora Dr. Prabhudas Patel Dr. Nandita Ghosh Dr. Pina Trivedi	Development and validation of biomarkers and drug targets by molecular profiling of triple negative breast cancer	GSBTM				
21	Dr. Sonia Parikh Dr Shilin Shukla	To study triple negative breast cancer with respect to molecular subtypes assessed on immunohistochemsitry and its correlation with survival-Completed	GCS/GCRI				
22	Dr. Hemangini Vora Dr. Prabhudas Patel	To detect the presence of full length Her-2/neu as well as truncated form through immunohistochemsitry, identification of truncated from of Her-2/neu by western blot followed by isolation/purification by HPLC method-Completed	GCS/GCRI				
23	Dr. Hemangini Vora Dr. Nupur Patel	A study to determine role of miRNA 200 family molecules in breast cancer patients exhibiting EMT-Completed	GCS/GCRI				
24	Dr. Priti Trivedi Dr. Hemangini Vora	Determination of sensitivity of Napsin A and p40 in differential diagnosis of non small cell lung cancer-Completed	GCS/GCRI				
	Medical Oncology						
25	Dr. Asha Anand	Prospective, multi-centric, open label, two arm, parallel group, active control, randomized, comparative clinical study to evaluate efficacy and safety of R-TPR-017 / MabThera® in patients with Non-Hodgkin's lymphoma	Reliance Life Science				
26	Dr. Asha Anand	A prospective, randomized, multi-center study to compare the safety, tolerability and efficacy of Bevacizumab (ZydusCadila) with Bevacizumab (Avastin®) in non small cell lung cancer (NSCLC)	Zydus Cadila				

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No.	Name of PI	Project Title	Funded by				
	Medical Oncology						
27	Dr. Asha Anand	A single arm, multicentric, open label, efficacy and safety study of Docetaxel lipid suspension for injection of Intas Pharmaceuticals Limited, India in patients with metastatic castration resistant prostate cancer	Intas (Lambda)				
28	Dr. Harsha Panchal	Prospective, multi-centre, randomized, open-label, two arm, parallel group, active-control, comparative clinical study to evaluate efficacy, safety and pharmacokinetics of R-TPR-016/ Herceptin® (HerclonTM) when given intravenously in patients with metastatic HER2-overexpressing breast cancer	Reliance Life Sciences				
29	Dr. Harsha Panchal	A phase II/III open label multicentric randomized trial to determine the safety and efficacy of Non-pegylated liposomal doxorubicin (Nudoxa) at two different dose levels as compared to doxorubicin in patients with metastatic breast cancer	Zydus Cadila				
30	Dr. Harsha Panchal	A phase III randomized , open label, multicentric, global study of MED14736 in combination with Tremelimimab therapy versus standard of care platinum based chemotherapy in first line treatment of patients with advanced or metastatic non small cell lung cancer (NSCLC) (NEPTUNE)	Astra Zenecea				
31	Dr. Harsha Panchal	Reditux <sup>™</sup> registry to compare effectiveness, safety, and resource utilization of Reditux <sup>™</sup> vs. the reference medicinal product to treat diffuse large B-cell lymphoma and chronic lymphocytic leukemia in routine clinical practice	Dr. Reddy's Laboratories Ltd.				
32	Dr. Harsha Panchal	A randomized, double-blind, placebo-controlled, phase 3 study to compare NSAI (Anastrozole or Letrozole) plus Abemaciclib, a CDK4 and CDK6 inhibitor, or plus placebo, and to compare fulvestrant plus Abemaciclib or plus placebo in postmenopausal women with hormone receptor-positive, HER2-negative locoregionally recurrent or metastatic breast cancer	Eli Lilly & Company				
33	Dr. Harsha Panchal	A study of palbociclib in combination with Letrozole as treatment of post-menopausal women with hormone receptor- positive, HER2-negative advanced breast cancer for whom letrozole therapy is deemed appropriate	Pfizer Ltd.				
34	Dr. Harsha Panchal	A global, multicenter, three arms, open-label randomized study to evaluate the efficacy and safety of Nanosomal Docetaxel lipid suspension compared to Taxotere® (Docetaxel Injection Concentrate) in triple-negative breast cancer patients with locally advanced or metastatic breast cancer after failure to prior chemotherapy.	Intas (Lambda)				
35	Dr. Apurva Patel	A phase III multicenter, randomized study of oral LDK378 versus standard chemotherapy in previously untreated adult patients with ALK rearranged (ALK-positive), stage IIIB or IV, non-squamous non-small cell lung cancer	Novartis				
36	Dr. Apurva Patel	An open label, single arm, multicentric, phase IV study to evaluate the safety and efficacy of bevacizumab of Intas Pharmaceuticals limited in approved indications	Intas (Lambda)				



No.	Name of PI	Project Title	Funded by				
	Medical Oncology						
37	Dr. Sonia Parikh	ia Parikh ABO8026 A prospective, multicenter, randomized, open-label, active-controlled, two-parallel groups, phase III study to compare the efficacy and safety of masitinib at 7.5 mg/kg/day to dacarbazine in the treatment of patients with non-resectable or metastatic stage III or stage IV melanoma carrying a mutation in the juxta membrane domain of c-kit					
38	Dr. Sonia Parikh	Parikh A phase IV study to investigate the safety and efficacy of regorafenib in Indian patients with metastatic colorectal cancer (mCRC).					
39	Dr. Sonal Patel Shah	Dr. Sonal Patel Shah A two arm, randomized, multicentric, open label, efficacy and safety study of docetaxel lipid suspension for injection of Intas Pharmaceuticals limited, India in non-small cell lung cancer patients					
40	Dr. Sandip Shah	Dr. Sandip Shah 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 and Prednisone Followed by GP2013 or MabThera® Maintenance Therapy in Patients with Previously Untreated, Advanced Stage Follicular Lymphoma					
		Microbiology					
41	Dr. Parijat Goswami	Prevalence of New Delhi Metallo Beta lactamase in Acinetobacter species	GCS/GCRI				
		Molecular Oncology Lab					
42	Dr. Prabhudas Patel	Significance of Galactin-3 in association with glycosylation in oral cancer	ICMR-SRF fellowship				
43	Dr. Prabhudas Patel	Significance of association between Galectin-3 and glycosylation in oral cancer	GCRI				
44	Dr. Prabhudas Patel Dr. Hemangini Vora Dr. Trupti Trivedi Dr. Jayendra Patel	Dr. Hemangini Vora Dr. Trupti Trivedi detection and enhanced management of oral (Buccal Mucosa) cancer					
45	Dr. Chetana Parekh Dr. Kinjal A. Patel Prevalence of HR-HPV infections in cervical cancer patients		GCS/GCRI				
46	Dr. Harsha PanchalClinical significance of T315I mutation and role of glycosylationDr. Shruti Patelin Imatinib resistant CML patients		GCS/GCRI				
47	Dr. Jayendra Patel	Study of tobacco exposure associated biomarkers in oral cancer	GCS/GCRI				
48	Dr. Bijal Patel Dr. Prabhudas Patel	VEGF family expression in cancer cervix and its prognostic signi cance-Completed	GCS/GCRI				
49	Dr. Chetana Parekh Dr. Prabhudas Patel	Prevalence of high risk HPV type 16 and 18 in cervical cancers in population from Gujarat, West India-Completed	GCS/GCRI				
50	Dr. Jayendra Patel	Significance of JAK-2, NPM1, C-KIT and FLT3 ITD and D835 mutations in leukemia patients-Completed	GCS/GCRI				



No.	Name of PI	Project Title	Funded by				
110.	Palliative Medicine						
51	Dr. Priti Sanghavi	A Multi-Centre, Randomized, Double Blind, Parallel-Group, Comparative Clinical Trial to evaluate the Safety and Clinical Equivalence of Generic Clotrimazole Troche/Lozenges USP, 10mg (Unique Pharmaceutical Laboratories, India) to Clotrimazole Troche/Lozenges ® 10mg (Roxane Laboratories Inc., USA) in subjects with Oropharyngeal Candidiasis	ThinQ Pharma				
52	Dr. Priti Sanghavi Dr. Bhavna Patel Dr. Richa Singh	Quality improvement project Setting up a structure to prioritize home based palliative care visits	TATA Trust in Collaboration with Stanford University				
		Radiotherapy					
53	Dr. Pooja Nandwani Patel	Study of sequential volumetric changes of parotid gland in early oropharyngeal carcinoma patients treated by image guided radiation therapy	GCS/GCRI				
54	Dr. Pooja Nandwani Patel	Comparison of induction chemotherapy followed by concurrent chemoradiotherapy versus adjuvant chemotherapy in locally advanced nasopharyngeal cancer	GCS/GCRI				
55	Dr. Maitrik Mehta	Comparison of involved site radiotherapy versus involved field radiotherapy by CT based 3 dimensional conformal treatment planning in Hodgkin's lymphoma	GCS/GCRI				
56	Dr. Sonal Patel Shah	DOCEAQUALIP in non small cell lung cancer	Lambda (CRO)				
57	Dr. Ankita Parik Dr. Preeti Sanghavi	To evaluate generic Clotrimazole/ Roxane with oropharyngeal Candidiasis	Thing Pharma				
		Stem Cell Biology Lab					
58	Dr. Franky Shah	Development and validation of amplicon panel for hereditary breast and ovarian cancer in Indian population	GBRC				
59	Dr. Franky Shah	Assessment of hedgehog signalling pathway in progression of oral cancer	GCS/GCRI				
60	Dr. Apexa Raval	Identification and evaluation of potential micro RNA target genes in breast cancer	GCRI				
61	Dr. Urja Desai	Assessment of PD-1 and PD-L1 as biomarkers in lung cancer	GCRI				
		Tumor Biology Lab					
62	Dr. Nandita Ghosh Dr. RajanTankshali	Exploring the clinical importance of molecular biomarkers involved in EGFR-induced and K-Ras mediated signaling pathways in colorectal cancer patients	GCS/GCRI				
63	Dr. Nandita Ghosh Dr. Pariseema Dave	To explore the clinical value of molecular markers in epithelial ovarian cancer- A preliminary study	GCS/GCRI				
64	Dr. Toral Kobawala	Exploring the role of miR-200 family in ovarian cancer patients	GCRI				
65	Dr. Nandita Ghosh	Molecular markers of Wnt signalling pathway in breast cancer: A preliminary study - Completed	GCS/GCRI				
66	Dr. Nandita Ghosh	Circulating levels of miRNA-21 and miRNA-221 as biomarkers in colorectal cancer - Completed	GCRI				



# R. List of Equipments 2018 - 2019

No.	Name of Instrument	Department / Division	Qty.	Company	Price in Rs.
1	Automated cell sorter/Separator	Blood Bank	1	M/s. Becton Dickinson	8,275,000
2	Platelet Agitator with Incubator		1	M/s. Kensure Health Care Pvt. Ltd.	600,000
3	Blood bank Refrigerator		1		499,000
4	Plasma Extractor or Expresser		5		200,000
5	Plasma Thawing Bath		2		347,200
6	BOD Incubator		1	M/s. Biolinx lab System Pvt. Ltd.	630,673
7	Laminar Air Flow	Cancer Biology	1	M/s. Dyna Filter Pvt. Ltd.	178,770
8	Upright Fluorescence Microscope with camera		1	M/S. DSS Imagetech	1,907,711
9	EPI Fluorescence Microscope		1	M/s. Carl Zeis India Pvt. Ltd.	6,797,112
10	Table top Water bath for FISH & Tissue Culture	Cell Biology	2	Equitron Medica Private Ltd.	112,850
11	High Speed Centrifuge	Central Clinical Lab	1	M/s. Mediosa Solutions	106,155
12	Auto Urine Analyzer		1	M/s. Synbio Tecknova Pvt. Ltd.	3,983,975
13	Bio Saftey Cabinet	Chemotherapy Ward	1	M/s. Kim Microsystems	354,000
14	Digital Serological Water Bath	Clinical Carcinogenesis Lab	1	M/s. Marco Scientific Instruments	24,780
15	Fogger Machine	CSSD & DSU	2	M/s. Ajay Electro Medical	29,500
16	Gauze Cotton Cutter Machine	CSSD & Neuro DSSU	2	M/s. Stitchman	33,040
17	Slide Making Chamber	Cytogenetic Lab	1	M/s. Fusiontek	791,780
18	Portable Electrical Suction Machine	Male Surgical Ward	1	M/s. Harsh Surgical	13,160
19	Syringe Infusion Pump	Medical ICU (Neuro)	1	M/s. Akash Medical	29,848
20	Radiation Survey Meter (Micro)	Medical Physics	1	M/s. Nucleonix System Pvt. Ltd.	35,046
21	Digital Contamination Monitor		1		48,675
22	Geiger Counting System	1	1		146,520
23	Gel Documentation System	Microbiology	1	M/s. Zenith Engineers	358,720
24	Water bath	]	1	M/s. D M Instruments	29,500
25	Centrifuge		1	M/s. Arihant Enterprise	56,640



No.	Name of Instrument	Department / Division	Qty.	Company	Price in Rs.
26	Complete Carniospinal Neuro Navigation Set Image Guidance System(IGS)	Neuro Oncology	1	India Medtronic Pvt. Ltd.	15,575,646
27	Visualisation System for Open surgery with minimal Access (Exoscope)		1	M/s. Karl Storz Endoscope India Pvt. Ltd.	3,499,999
28	MRI Compatible Stereotactic Frame		1	M/s. Inmito Meditech Pvt. Ltd.	8,850,000
29	Complete High Surgical Operating Microscope		1	M/s. Labtek Instruments	25,430,000
30	Intra Operative Neuro Monitoring System		1	M/s. India Medtronic Pvt. Ltd.	4,868,450
31	Ultrasonic Bone Scalpel		1	M/s. Cure Surgicals	3,154,998
32	Surface Contamination Monitor	PET -CT	1	M/s. Electronic Enterprises (India) Pvt. Ltd.	99,002
33	Digital Pocket Dosimeter		2	M/s. Meditronix Corporation	103,840
34	Telepole Detector		1	Ms. Electronic Enterprises (India) Pvt. Ltd.	197,060
35	Image Guided CT Scan Integrated Ring Gantry based Helical Slice By Slice Fan Beam (*External Beam Therapy) System	Radiotherapy	1	M/s. Accuray International SARL	219,905,000
36	Robot Mounted Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT) System		1	M/s. Accuray Europe SAS	275,672,115
37	Centrifuge - From GSBTM Project	Stem Cell Biology	1	M/s. Ultra Scientific Instument	37,217
38	Vertical Electrophoresis	Tumor Biology Lab	1	M/s. Dutt Enterprise	23,520



# S. Balance Sheet



# THE GUJARAT CANCER & RESEARCH INSTITUTE

(M. P. SHAH CANCER HOSPITAL) Affiliated to B J Medical College

# FINANCIAL STATEMENT (BALANCE SHEET) 2018 - 2019

Civil Hospital Campus, Asarwa, Ahmedabad 380 016, Gujarat, INDIA Tel: 079-22688000 (Hunting); Fax: 079-22685490



7th Floor, Heritage Chambers B/h. Bikanerwala, Off S.M. Road, Nr. Azad Society, Nehru Nagar, Ahmedabad-380 015. Phone : (B) 079 - 2647 2000 E mail : contact@mmsco.in Website : www.mmsco.in

# MUKESH M. SHAH & CO.

AHMEDABAD 'MUMBAI' BANGALORE

### INDEPENDENT AUDITOR'S REPORT ON THE FINANCIAL STATEMENTS TO THE TRUSTEES/MEMBERS OF The Gujarat Cancer and Research Institute, Ahmedabad [A Trust registered under the Bombay Public Trust Act, 1950, F/451/Ahmedabad dtd. 29.01.1972]

### Opinion

We have audited the accompanying financial statements of **The Gujarat Cancer and Research Institute**, **Ahmedabad** ("the Trust"), which comprise the Balance Sheet as at 31st March, 2019, the Statement of Income and expenditure Account for the year then ended, and a summary of the significant accounting policies and other explanatory notes.

In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- (a) in the case of the Balance Sheet, of the state of affairs of the Trust as at 31st March, 2019; and
- (b) in the case of the Statement of Income & Expenditure Account, of the Excess of Income over Expenditure for the year ended on 31st March, 2019.

### **Basis for Opinion**

We conducted our audit in accordance with Standards on Auditing (SAs). Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the ethical requirements that are relevant to our audit of the financial statements, and we have fulfilled our other responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of the financial statements in accordance with The Bombay Public Trust Act, 1950 ("the Act") and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the entity's financial reporting process

### Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

Identify and assess the risks of material misstatement of the financial statements, where the risks of material misstatement of the financial statements, where the risk of material misstatement of the financial statements, where the statement of th





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misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that
  are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness
  of the entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based
  on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that
  may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a
  material uncertainty exists, we are required to draw attention in our auditor's report to the related
  disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our
  conclusions are based on the audit evidence obtained up to the date of our auditor's report. However,
  future events or conditions may cause the entity to cease to continue as a going concern.
- We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

### **Report on Other Legal and Regulatory Requirements**

As required under section 33(2) of the Bombay Public Trust Act, 1950, we further report that -

- (a) The accounts are maintained regularly and in accordance with the provisions of the Act and the Rules thereunder.
- (b) The Income and Expenses are properly and correctly shown in the accounts.
- (c) The cash balance and vouchers in the custody of the authorised person on the date of audit were in agreement with the accounts.
- (d) Books, Deed, Accounts vouchers and other documents and records required by us were produced before us.
- (e) A register of movable properties of the trust duly certified by the trustee has been properly maintained.
- (f) There are no defects and inaccuracies mentioned in the previous audit report which need to be complied with.
- (g) The Chief Accountant appeared before us and furnished necessary information required by us.
- (h) No properties of funds were applied for any object or purpose other than the object or purpose of trust.
- (i) There are no amounts outstanding for more than 1 year and amount written off were Rs. NIL.
- (j) Tenders were generally invited for repairs and construction work where the amount exceeded Rs. 5,000/-.
- (k) No money of the Trust have been invested contrary to the provisions of Section 35 of the Act.
- (I) We have not come across any case of alienations of immovable property contrary to the provision of section 36 of the act.

For Mukesh M. Shah & Co. Chartered Accountants Firm Registration No.: 106625W

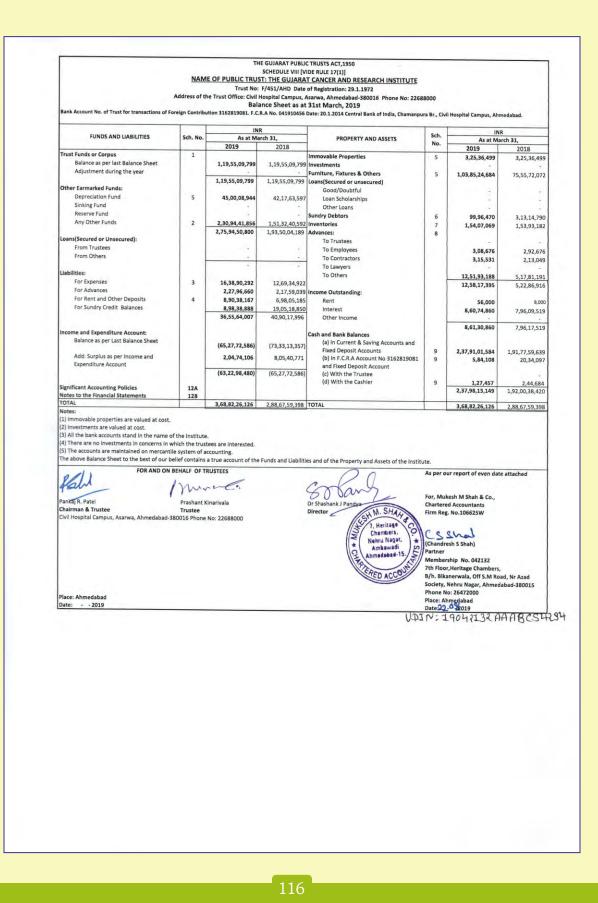
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Chandresh S. Shah Partner Membership No.: 042132 Place: Ahmedabad Date: August 22, 2019. 19042132 AAABCS4234

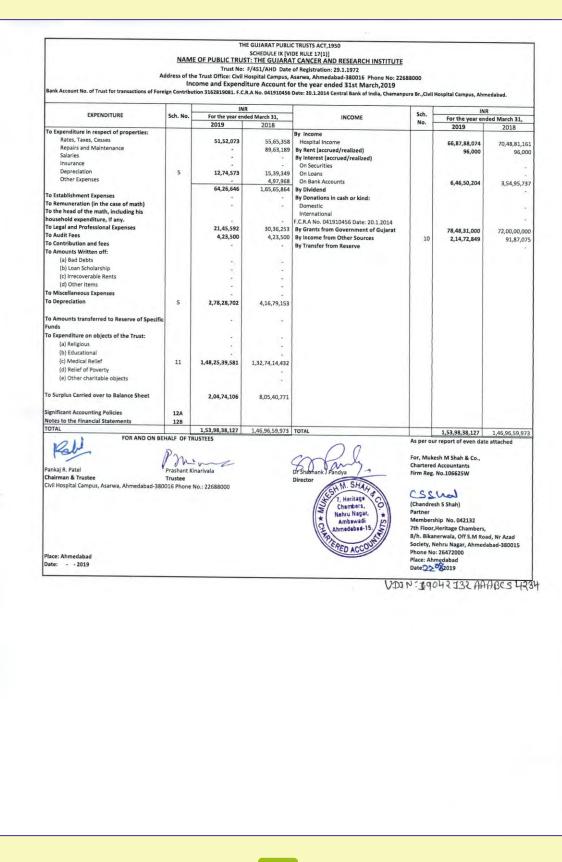


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## Acknowledegment

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