CONTENTS

INTRODUCTION 6

CONTACT DIRECTORY 8

ACTIVITIES 9

ONCOSURGERY CENTER 10

RADIATION AND MEDICAL ONCOLOGY CENTER 35

CENTER OF RADIOLGY, NUCLEAR MEDICINE AND OUTPATIENT DEPARTMENT 46

CANCER CONTROL 60

SCIENTIFIC RESEARCH CENTER 66

ADDITIONAL CLINICAL AND SUPPORTIVE ACTIVITIES 82

Major Editor: Prof. Narimantas Evaldas Samalavicius
Publication was prepared by: Dr. Ernestas Janulionis Rita Karpiciute Vita Vazneviciute
Editress: Aloyza Luksiene
Photos: Edmundas Paukste UAB “Baltijos fotografijos linija”

Designed: Mindaugas Jonikas
Published: UAB “Dizaino meistrai”
Printed: BALTO print, UAB

ISBN 978-9986-784-95-1
The Institute of Oncology Vilnius University (hereafter – IOVU) is an institution of old traditions, which celebrated its 80th anniversary in 2011.

The mission of the IOVU is to carry out international research in the field of oncology and to achieve results, which could improve cancer treatment efficiency and reduce mortality from cancer, to train scientists and highly qualified specialists, to strengthen the country’s scientific potential and competitiveness in the European Research Area.

The main objectives of the IOVU are:
▶ to carry out scientific research in oncology and related fields, to participate in Lithuanian and international scientific research programs;
▶ to cooperate with Vilnius University in scientific research, to provide scientific base for Vilnius University in order to prepare scientists and specialists, as well as to improve the scientific skills of the lecturers;
▶ to provide health care services.

This institution unites three key activities: clinical activity, science and education. In addition to that, it carries out cancer control and prevention.

Clinical activity. The IOVU clinic performs inpatient and outpatient (primary, secondary, tertiary) health care, provides preventive services, performs diagnostic interventional radiology, therapeutic interventional radiology, computed tomography examinations and procedures, provides nursing, rehabilitation, health education and personal health expertise services.

Today the clinical activity involves a lot of multidisciplinary teamwork, which is especially important for successful cancer treatment results. In addition to that, our activity focuses on individualized patient treatment: various tests are carried out during the treatment process in order to determine, which treatment method is the most appropriate for the patient. With the aim to improve the quality of health care services, modern and innovative diagnostic and treatment methods are implemented in clinics all the time.

Science. The IOVU has four scientific research laboratories (Molecular Oncology, Carcinogenesis and Tumour Pathophysiology, Immunology, Biomedical Physics) and a Biobank, where qualified scientists perform advanced scientific research and educate young specialists. This institution has the greatest scientific potential and the most experience in scientific research in oncology and related fields in Lithuania. The IOVU carries out tumour prevention, molecular oncology, genomics, proteomics, transcriptomics, biomedical and nanomedical research and develops technologies, methods of early diagnosis and combined treatment.

The priorities of the scientific activities at the IOVU are: a multidisciplinary approach to oncological problems, a close link between fundamental and clinical research, orientation of the scientific research towards a patient and personalized treatment.

Education. The IOVU is a base that provides opportunity for the training Lithuanian and foreign colleagues, PhD students, residents and students to get an access to the latest scientific material, treatment methods, as well as to observe scientific achievements, which take place right here, at the clinics.

Cancer control and prevention includes the following activities:
▶ to organize the dissemination of knowledge about oncology among the medical and general public;
▶ to organize collection, processing and communication of the statistical information about cancer and its patients;
▶ to ensure the implementation of the state prevention and early diagnosis programs (cervical, breast, prostate, colon Ca) at the IOVU.

The future vision of the IOVU is a National Cancer Institute, which would coordinate cancer treatment, science and education aspects, help to solve the problem of cancer in the country, coordinate and carry out scientific research, education, as well as preventive and therapeutic activities in the field of oncology in cooperation with other European and global national cancer centres.

In 2010, in order to achieve this vision, the IOVU began the process of accreditation, which was successful and in 2013 the IOVU was accredited by the Organisation of European Cancer Institutes as the centre of scientific and clinical activities. It should be noted that the IOVU is the first accredited Institute in Eastern and Central Europe. This recognition provides the greatest benefit for cancer patients, whose optimal treatment outcomes and the quality of life are the purpose of all the specialists working at IOVU. This means that patients receiving treatment at the IOVU clinic receive services that meet European standards. Having received this recognition, the institution does not intend to stop. In the future we are going to improve our activity and the quality of provided services, as well as to earn greater recognition not only in Lithuania, but in the whole Europe as well.
# CONTACT DIRECTORY

**Director**
prof. Narimantas Evaldas Samalavicus  
Tel. +370 5 278 6700  
Fax. +370 5 272 0164  
E-mail: administracija@vuoi.lt

**Assistant Director**
Simona Virbickiene  
Tel. +37052786806  
E-mail: simona.virbickiene@vuoi.lt

**Clinical Director**
dr. Renatas Tikuisis  
Tel. +370 5 278 6703  
E-mail: renatas.tikuisis@vuoi.lt

**Scientific Director**
dr. Ernestas Janulionis  
Tel. +370 5 278 6781  
E-mail: ernestas.janulionis@vuoi.lt

**Deputy Director for Science and Education**
dr. Vydmantas Atkocius  
Tel. +370 5 219 0901  
E-mail: vydmantas.atkocius@vuoi.lt

**Deputy Director for Nursing**
Aldona Grebliuniene  
Tel. +370 5 278 6704  
E-mail: aldon.grebliuniene@vuoi.lt

---

## MAIN FACILITIES (2013)

### HOSPITALIZATION

| Inpatient Beds | 342 |
| Intensive Care Beds | 12 |
| Outpatient Visits | 118,824 |

### SURGERY

| Operating Theatres | 10 |

### RADIOTherapy

| Linear Accelerators | 4 |
| CT Scanners | 1 |
| Simulator | 1 |

### IMAGING

| CT Scanners | 1 |
| MRI Scanners | 1 |
| Mammographs | 2 |
| Echographs | 7 |
| 3D Echograph | 1 |
| X-ray Machines | 5 |

### NUCLEAR MEDICINE

| SPECT-CT Scanners | 1 |
| Gamma Cameras | 1 |

## STAFF (2013)

| Total | 954 |
| Medical Specialists | 162 |
| Nurses | 330 |
| Psychologists | 1 |
| Physiotherapists | 1 |
| Dieticians | 1 |
| Social Workers | 2 |
| Research Fellows | 44 |

## ACTIVITIES (2013)

### HOSPITALIZATION

| Admittances | 15,401 |
| Days of Hospitalisation | 135,528,8 |
| Average length of stay (days) | 8,8 |
| Outpatient Admittances: Chemotherapy | 1,775 |
| Outpatient Admittances: Others | 1,282 |
| Multidisciplinary Meetings | 320 |

### SURGERY

| Surgical Procedures | 6,000 |
| Treatments | 2,200 |

### RADIOTherapy

| Consultations (screening excluded) | 18,015 |
| Screening | 11,198 |

### IMAGING

| CT Scans | 8,200 |
| MRI Scans | 706 |

### STAFF (2013)

| Faculty Member | 17 |
| Medical Students | 191 |
| Nurses Students | 35 |
| Postdoc | 2 |
| Residents: Chemotherapists and Radiotherapists | 19 |
| Other | 111 |

## FINANCES (2013, €)

| Health Care Expenditures | 24,653,167,50 |
| Research Expenditure | 1,058,056,25 |

### RESEARCH (2013)

| Clinical Trials | 22 |
| Patients Included | 136 |
| Scientific Publications: ISI | 47 |
| Other | 36 |
**KEY FIGURES**
- About 6000 surgeries per year
- 10 operating theatres
- Above 1000 laparoscopic and endovesical surgeries
- Above 5000 endoscopic procedures per year
- Above 7000 anaesthesia per year
- Above 5000 patients in recovery room
- 30 – 35% of all Lithuanian oncologic patients undergo surgical procedures at the center

**MISSION**
- To provide leadership in the prevention, treatment and cure of cancer

**VISION**
- To become a centre of innovations, new technologies, contemporary cancer treatment, science, teaching and nursing

**GOALS**
- To reduce mortality from cancer
- Spread diagnostic and treatment innovations in fields of surgical oncology
- Pursue prevention of oncologic disease
- Improve quality of life and results of combined treatment
- Develop educational activities
- Participate in the international and local scientific research trials

**CENTER ORGANISATION**
It consists of 4 main departments: department of anesthesia and intensive care, 1st, 2nd and 3rd departments of oncologic surgery. This includes thoracic surgery, head and neck surgery, abdominal surgery, urology, gynecology and breast surgery. Human resources include 68 doctors, 159 nurses and 95 others.

**MAIN AREAS**
- Lung, esophagus, mediastinum, thoracic wall, head and neck pathology
- Gastrointestinal and urogenital pathology
- Peritoneal tumors and carcinomatosis (cytoreductive surgery with HIPEC)
- Breast cancer, all gynaecologic cancers, skin cancer, melanoma, laser surgery
- Precancerous lesions, oncoplastic and plastic reconstructive surgery, voice reconstruction
- Surgical or interventional radiology procedures for esophageal strictures, gastric outlet, colonic or biliary tract
- Endoscopic, laparoscopic, videothoracoscopic procedures and surgeries
- National screening programme

**FIELDS, TECHNOLOGIES AND METHODS**
Oncosurgery center is at the forefront of achievement in the field of surgical oncology. Our experienced faculty, state-of-the-art facilities and technology, and translational research are an ideal combination for individualized patient care and treatment.

- Our staff offer innovative modern multimodal techniques for combined treatment of cancer patients
- All modern technologies in diagnostic and treatment of cancer
- Cryotherapy procedures for cancer treatment
- Radiofrequency ablation procedures for cancer treatment
- Oncoplastic and reconstructive surgeries
- Surgeries for non-palpable tumors
- We are the leaders in the development of national guidelines for cancer patients

**RESEARCH AND EDUCATION**
Our staff is taking active part in the scientific work, international collaborations, and clinical trials. The main directions of the scientific work are:

- Investigation, optimization and implementation of new techniques of combined cancer treatment
- International and applied researches of tumor genetic links with treatment
- Research of risk factors inducing cancer
- Quality of cancer patients life

A large number of students, different specialty residents from Vilnius and Kaunas universities, Lithuanian doctors and foreign guests undergo training at our center annually.

**CENTER ORGANISATION**
The ultimate goal of the Center of Oncosurgery is to provide tertiary highest quality surgical services to oncologic patients in Lithuania.

Head of the center Prof. N. E. Samalavicius

**RESEARCH AND EDUCATION**
Our multidisciplinary team (surgeons, radiologists, pathologists, medical oncologists, radiation oncologists and plastic surgeon) work together to individualize the combined treatment for each cancer patient.

- In the intensive care units, a team of professionals provide state-of-the-art life supporting treatments for all critically ill patients from the medical and surgical services
- Our clinicians also provide pain management services to postoperative patients and to cancer patients with a variety of pain conditions related to cancer and its treatment
- Our staff routinely collaborate with radiologists, medical oncologists, palliative care specialists, pathologists, radiotherapists and therapists
ANESTHESIA AND INTENSIVE CARE DEPARTMENT

MISSION
- Excellence in all aspects of Anesthesia, Pain Management, perioperative and Intensive Care
- Teaching and training residents, students and nurses

MAIN AREAS
- Anesthesia for interventions
- Consultation, preoperative and postoperative care for patient undergoing surgery
- Intensive care of patients following major surgery
- Perioperative pain management

DEPARTMENT ORGANISATION
The team consists of 17 specialists in anesthesiology and intensive care, 4 residents, 3 head nurses and 89 nurses.

The hospital has 10 operating theatres, which cater for all major types of adult surgery and perioperative radiotherapy for cancer. Post-surgical recovery and Intensive Care Unit is also available for all patients.

KEY FIGURES
- About 6000 surgeries per year
- Above 7000 anaesthesia per year
- Above 1000 patients in intensive care unit
- Above 5000 patients in recovery room

RESEARCH
Our research activities focus on:
- Heart rate variability
- Hypotensive anesthesia
- Pain management
- Anesthesia for the elderly

HEAD OF THE DEPARTMENT DR. R. TIKUISIS

Our future will have to be among the “brightest and the best” to take up the challenge of ongoing discovery, maintaining and enhancing an already excellent record of safety, further improving efficiency, and effectively providing enhanced leadership in the development of the evolving anaesthesia and intensive care team.

HEAD OF THE DEPARTMENT DR. R. TIKUISIS

FIELD, TECHNOLOGIES AND METHODS
We provide comprehensive patient care starting with an initial evaluation in Anaesthesia. Each year our anesthesiologists provide general anesthetics (often, to the highest risk patients), perform epidural or spinal anesthetics. Patients undergo surgery in the operating room and receive care in the post anesthesia and intensive care units.

In the intensive care units, a team of critical care specialists and nurses provide state-of-the-art life supporting treatments for all critically ill patients from the medical and surgical services. Our clinicians also provide pain management services to postoperative patients and to cancer patients with a variety of pain conditions related to cancer and its treatment.
THE 1st ONCOLOGICAL SURGERY DEPARTMENT

KEY FIGURES
- 55 beds
- Average number of surgeries per year – 1300

MISSION
- To provide a high level service of thoracic surgery, ENT and head and neck surgery and oncology

VISION
- To become a centre of innovations, new technologies, contemporary cancer treatment, science, teaching and nursing; certified European centre of thoracic surgery, ENT, head and neck surgery and oncology

GOALS
- Spread diagnostic and treatment innovations in fields of thoracic, ENT, head and neck surgery and oncology
- Pursue prevention of oncologic disease
- Improve quality of life and treatment of cancer patients
- Develop educational activities
- Participate in scientific research projects

INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY

MAIN AREAS
- Lung, esophagus, mediastinum, thoracic wall, head and neck pathology

FIELDS, TECHNOLOGIES AND METHODS
- This department is dedicated to treating patients with lung, tracheal, bronchial, pleural, mediastinal organs, thoracic wall, esophagus, diaphragm, head and neck cancers and precancerous lesions.

RESEARCH
- Optimization of surgical and combined treatment of malignant tumors of esophagus, lung, mediastinum, pleura, head and neck
- Investigation and implementation to clinic of new combined treatment methods of cancer
- International and applied researches looking for tumor genetic links with treatment, including biologically active substances
- Improvement of minimal invasion in surgery surgeries

DEPARTMENT ORGANISATION
Employees:
- 4 thoracic surgeons (oncologists)
- 5 ENT, head and neck surgeons (oncologists)
- 2 physician assistants
- 1 plastic and reconstructive surgeon (oncologist)
- 1 dentist
- 1 dental orthopedic
- 1 pulmonologist
- 1 senior administrator of nursing
- 2 administrators
- 22 general practice nurses
- 8 nurse assistant
- 1 dental technician
- 1 dental assistant

Physicians of the department continually attend the best world clinics of thoracic surgery, ENT, head and neck surgery, read reports and lectures in various important international congresses, conferences. There are discussions of treatment results in this department, conduction of many international scientific and research works, analysis of new literature, execution of applied researches and accumulating biobank of tissues of lung tumors, prepared PhD. Physicians are elected as members of the Board at various international thoracic surgery and oncology societies.

We can do better!
Head of the department prof. S. Cicenas

Senior administrator of nursing
SUB-DEPARTMENT OF THORACIC SURGERY AND ONCOLOGY

KEY FIGURES
- 30 beds
- Average number of surgeries per year – 500:
  - 200-250 resections of lung, trachea and bronchi
  - 30-40 videothoracoscopic surgeries
  - 90-100 mediastinoscopies
  - 8-10 resections of esophagus
  - More than 60 esophageal stentings
  - About 15 tracheal and bronchial stentings
  - About 50 endoscopic resections of airway tumors

MISSIONS
- To provide a high level of services of thoracic surgery and oncology

VISION
- To become a centre of innovations, new technologies, contemporary cancer treatment, science, teaching and nursing; certified European centre of thoracic surgery and oncology service

MAIN AREAS
- Lung, esophagus, mediastinum, and thoracic wall pathology

RESEARCH
- Optimization of surgical and combined treatment of malignant tumors of esophagus, lung, mediastinum and pleura
- Investigation and implementation to clinical of new combined treatment methods of cancer
- International and applied researches looking for tumor genetic links with treatment, including biologically active substances
- Improvement of minimally invasion surgery surgeries

GOALS
- Spread diagnostic and treatment innovations in fields of thoracic, ENT, head and neck surgery and oncology
- Pursue prevention of oncologic disease
- Improve quality of life and treatment of cancer patients
- Develop educational activities
- Participate in scientific research projects

SUB-DEPARTMENT OF ENT HEAD AND NECK SURGERY AND ONCOLOGY

KEY FIGURES
- Number of beds – 25
- The average number of surgical surgeries per year – 800:
  - malignant and benign larynx, pharynx, oral cavity, salivary glands, nose, sinus tumors removal and reconstructive surgery
  - malignant and benign thyroid tumors surgery
  - microlaryngoscopic surgery
  - surgeries using ultrasonic knife
  - voice reconstruction and rehabilitation surgeries
  - destructive laser surgery
  - laser surgery, surgery with a microscope

MISSION
- To provide a high level of ENT, head and neck surgery and oncology service

VISION
- To provide a high level of ENT, head and neck surgery and oncology service

MAIN AREAS
- ENT, head and neck pathology
- The main direction of the activity - further development of head and neck tumor diagnostic methods, the up-to-date treatment techniques introduction into clinical practice

RESEARCH
- The optimization of the surgical and complex treatment of ENT, head and neck malignancies
- The research and implementation of the new complex methods of treatment of cancer into the clinical practice
- International and applied research in finding genetic links between tumor treatment involving biologically active substances
THE 2nd ONCOLOGICAL SURGERY DEPARTMENT

KEY FIGURES
- Over 1500 open gastrointestinal and urological surgeries, about 1000 laparoscopic and endovesical surgeries, over 5000 endoscopically performed diagnostic procedures per year.

MISSION
- To provide patients, who have gastrointestinal and urogenital system oncological pathology, with high standard surgical treatment.

MAIN AREAS
- Gastrointestinal and urological system of malignant and benign tumors

DEPARTMENT ORGANISATION
The department consist of:
- General and abdominal surgery unit
- Oncology unit
- Endoscopic investigation section
The unit consists of experienced, highly trained staff, who have mastered the art of cancer patients’ treatment and are skilled in performing complex and organ preserving surgeries, which are aimed in reducing mortality and morbidity from cancer. Also, using the latest treatment methods, all efforts are made to improve cancer patients’ quality of life and increase life expectancy.

Our goal – to provide patients, who have gastrointestinal and urogenital system oncological disease, with best possible surgical treatment which corresponds with the world standards.

Head of the department A. Kilius

RESEARCH
- Department research directions:
  - Quality of life studies on patients treated for gastrointestinal and urological system tumors
  - Studies of combined therapy for the treatment of gastrointestinal and urological malignancies
  - Research for new surgical treatment modalities
  - Research in cancer risk factors affect to the gastrointestinal and urological system for tumors to arise/develop

Fields, Technologies and Methods
- Patients, in 2nd Oncological surgery department, are provided with complex or combined treatment. Complex, adjacent to an open surgery, minimally invasive laparoscopic surgery, kidney tumors cryotherapy, percutaneous radiofrequency liver and kidney tumors ablation and other procedures are widely used.

Gastrointestinal and urogenital system of malignant and benign tumors

Our goal – to provide patients, who have gastrointestinal and urogenital system oncological disease, with best possible surgical treatment which corresponds with the world standards.

Head of the department A. Kilius
The average number of surgeries per year about 1000, of which about 280 are minimally invasive.

To treat patients with gastrointestinal tumors, soft tissue sarcoma and skin cancer according to the latest state of the art standards.

The section employs 6 oncologic surgeons and 1-4 residents. Hospital unit has 49 in-patient and 6 day-patient beds.

The sub-department of general and abdominal surgery is one of the widest range of oncological diseases involving section. It includes not only gastrointestinal tumors, but also intra-abdominal, intra-pelvic, extremity sarcomas and skin cancer. Each patient before surgery is discussed in MDT, which takes place twice a week, and the treatment is judged individually according to the patient's condition and treatment standards existing in the Institute. The department works closely with radiologists, radiotherapists, chemotherapists, palliative medicine, pathological medical specialists and therapists. Often we carry out integrated surgeries with gynecologists, urologists, microsurgeons, traumatologists. Not rare sarcomas are applicable to brachytherapy.

Our aspiration – to provide patients with gastrointestinal malignancies best possible surgical treatment which corresponds with the world standards.

Head of the sub-department dr. G. Rudinskaite

Our department is actively cooperating in the research.

At present we carry out three scientific researches:

1. Urinary and sexual dysfunction after surgery for rectal cancer
2. Coffee effect of intestinal function after laparoscopic bowel resection surgery
3. Early (post-operative period) and late (after three months) results of preventive ileostom closures
The Department of Onco-urology is equipped with the latest technology and has performed many innovative procedures:

- In 2012 the first cryotherapy procedures for prostate cancer treatment in Lithuania were performed. Also implemented usage of multi-parametric magnetic resonance imaging data system (PI-RADS).
- In 2012 the first high-dose brachytherapy procedures for prostate cancer local recurrences after previous radiotherapy were performed.
- From 2012 using of fluorescence cystoscopy (also called blue light cystoscopy) and specific urinary markers for early bladder cancer detection were started.
- In last three years 82 radiofrequency ablation procedures for kidney tumors were completed. Cryotherapy for kidney cancer treatment was also implemented.
- Harmonic scalpel is used for kidney-preserving surgery of renal tumors, tumors extending into the surrounding muscle tissues.
- Various microinvasive techniques are easily accessible for difficult cases (e.g. super selective artery embolisation before kidney surgeries and etc).

All these mentioned modern innovations are just a small piece of our available technologies. In the nearest future we are planning to perform ultrasound guided prostate biopsies with 4D histoscanning transducer and magnetic resonance imaging navigation system, to implement selective focal prostate cancer cryoablation and thermoa
teration.

Laparoscopic and other minimally invasive surgery is quickly emerging in our unit. The latest technologies, large experience and expertise in the management of urological malignancies enabled us to reach minimal risk of complications. In addition to this, in the last two years no intraoperative fatalities occurred.

The Department of Onco-urology has a rich tradition of clinical excellence and pioneering research. Our surgeons work closely with colleagues in Radiation Oncology and Medical Oncology to diagnose and treat cancer in a comprehensive and multi-disciplinary approach. In 2011 multidisciplinary team of Prostate Cancer was established where experienced doctors with different specialties analyze and discuss difficult cases and then propose the most efficient available treatment for the patient. Currently, we are participating in 25 international clinical studies.

Scientific research activities:
- optimization of radical prostatectomy techniques in order to improve extremeness of surgeries and save patient’s sexual potency;
- evaluation of new LHRH analogues for hormone-resistant prostate cancer and treatment optimization of bone metastases;
- molecular analysis of bladder tumor: mutation analysis of tumor growth inhibitory gene PS5 allows better determination of prognosis and individualization of treatment tactic;
- search of kidney cancer diagnostic biomarkers and identification of immunological parameters, showing sensitivity to interferon alfa.

Every year doctors working in our department publish many publications and articles in local and world-wide medical journals. This department offers medical students, residents, fellows and faculty unparalleled prospects for research and clinical training in an exciting academic environment committed to excellence, innovation and diversity. At our department we recognize that knowledge is power. It is our goal to educate community members and encourage them to be proactive when it comes to their health. Throughout the year, we invite them to attend various educational events and publish many articles in popular media about onco-urology problems.
**GROUP OF ENDOSCOPIC DIAGNOSTICS**

**Table of Contents**

- **Main Areas**
  - Endoscopy
  - Gastroenterology
  - PEG and enteral nutrition
  - Stenting of upper GI tract
  - Surgeon
  - EMR/ESR
  - GI mobility & anal manometry
  - ERCP & stenting of pancreaticobiliary ducts

- **Key Figures**
  - About 5000 cases per year

- **Mission**
  - Our commitment is to provide delivery of a higher quality, friendly and caring service and ensure the safety of our patients during the most technologically advanced possible settings

- **Main Areas**
  - **Endoscopy**
  - **Gastroenterology**
  - **PEG and enteral nutrition**
  - **Stenting of upper GI tract**
  - **Surgeon**
  - **EMR/ESR**
  - **GI mobility & anal manometry**
  - **ERCP & stenting of pancreaticobiliary ducts**

- **Key Figures**
  - **About 5000 cases per year**

- **Mission**
  - **Our commitment is to provide delivery of a higher quality, friendly and caring service and ensure the safety of our patients during the most technologically advanced possible settings**

- **Main Areas**
  - **Endoscopy**
  - **Gastroenterology**
  - **PEG and enteral nutrition**
  - **Stenting of upper GI tract**
  - **Surgeon**
  - **EMR/ESR**
  - **GI mobility & anal manometry**
  - **ERCP & stenting of pancreaticobiliary ducts**

**Group Organization**

Our physicians are all state board certified and the specialized nursing staff is highly trained:

- Antanas Jablonskas, MD (endoscopy)
- Inga Kirdziune, MD (gastroenterology, endoscopy, PEG and enteral nutrition, stenting of upper GI tract)
- Romualdas Maskelis, MD (surgeon, therapeutic endoscopy, stenting of GI tract, EMR/ESR, GI mobility & anal manometry)
- Tamara Tyrina, MD (endoscopy)
- Gintautas Radziunas, PhD (surgeon, ERCP & stenting of pancreaticobiliary ducts, therapeutic endoscopy)
- Nurse Brute Brasaitė
- Nurse Miroslava Eiso
- Nurse Vida Karaliene

**Fields, Technologies and Methods**

Endoscopy procedures and techniques have evolved into a very important tool applied to oncologic patients both for diagnosis and therapy. Current technology not only allows for the early detection of digestive tract neoplasia. Therapeutic endoscopic procedures have gained a prominent place in the management of these complex patients and have displaced many surgical or interventional radiology procedures with the introduction as a variety of stents, for treating esophageal strictures, gastric outlet, and colonic or biliary tract. Resection of large areas of mucosa for early neoplasia or increasingly performed worldwide such as mucosectomy (EMR/ESR) is being performed by us.

As a busy department with highly qualified team and most advanced endoscopy unit in oncology we offer high quality, advanced technology, and skilled professionals for the safest, most optimal medical care.

**Now & Tomorrow**

Our procedure rooms are equipped with high-definition endoscopes, digital imaging, computer generated reports and flat-screen monitors allowing physicians to detect, sample and remove abnormal tissues, even small and hard to find flat, or slightly raised polyps.

On 2013 we increased in size of the recovery area and provide a patient’s preparation room. With plans to extend the unit in 2014 – 2015 we hope to become as state-of-art equipped endoscopic division with new EU equipment and start to use pan-endoscopy and to have full range of service in modern endoscopy to diagnose, treat and manage digestive tract, including esophageal, gastric, small intestine, colonic, rectal, liver, biliary tract, pancreatic disease.

We hope that in the nearest future our team could be certified on the international level (receiving ESGE certification).
**THE 3rd ONCOLOGICAL SURGERY DEPARTMENT**

**KEY FIGURES**
- Here annually more than 3000 patients with breast (1500), gynaecologic (1000) and skin (500) diseases are surgically treated. Most of patients are suffering from malignant diseases
- Median lengths of hospital stay / hospitalization – 7.2 days

**DEPARTMENT ORGANISATION**
- More than 70 employees, including 16 physicians (of them 5 MD, PhD and 2 habilitated dr), 3 administrators, 2 chief nurses and 52 nurses work in this department.

**FIELDS, TECHNOLOGIES AND METHODS**
- All modern technologies in diagnostic and treatment of breast, gynaecologic and skin cancer

**MISSION**
- To provide leadership in the prevention, treatment and cure of the breast cancer

**MAIN AREAS**
- Breast cancer
- All gynaecologic cancers
- Skin cancer
- Melanoma

**RESEARCH**
- Physicians are participating in local and international clinical trials

---

**SUB-DEPARTMENT OF BREAST DISEASES, SURGERY AND ONCOLOGY**

**KEY FIGURES**
- Here annually about 50 percents of breast cancer in Lithuania (750 patients) and 700 patients with pre-malignant breast diseases are being treated
- Median length of hospital stay / hospitalization – 7.2 days

**DEPARTMENT ORGANISATION**
- The department has more than 30 employees, including 5 physicians (of them 3 MD, PhD and 1 habilitated dr.), 1 administrator, 1 chief nurse and 27 nurses

**MISSION**
- To provide leadership in the prevention, treatment and cure of the breast cancer

**MAIN AREAS**
- Combined treatment of breast cancer
- Breast conservative and radical surgeries
- Sentinel node biopsy
- Oncoplastic surgeries
- Reconstruction of the breast
- Surgeries for non-palpable and pre-malignant diseases

**GOALS**
- To reduce mortality from breast cancer
- Improve quality of life and results of combined treatment

**RESEARCH**
- Our breast surgeons are taking active part in the scientific work, international collaborations, clinical trials and professional education.

**FIELDS, TECHNOLOGIES AND METHODS**
- All modern diagnostic and breast-imaging techniques have been introduced in our Institute. Our breast surgeons have been the first to introduce breast-conserving surgeries, reconstruction of the breast in the Baltic States. We are the leaders in the development of national guidelines for the use of a breast-conserving treatment. Our staff offer innovative modern techniques for women who have undergone a mastectomy so called skin-sparing mastectomy and nipple-sparing mastectomy. Our Institute breast surgeons have been the first in the Baltic States to introduce and routinely perform a sentinel node biopsy.

**SUB-DEPARTMENT ORGANISATION**
- Our multidisciplinary team (breast surgeons, breast-imaging specialists, pathologists, medical oncologists, radiation oncologists and plastic surgeon) twice a week work together to individualize the combined treatment for each breast cancer patient.

---

**Our dream – internationally certified breast centre**

**Head of the sub-department**

---

**Senior administrator of nursing**
SUB-DEPARTMENT OF ONCOLOGICAL GYNECOLOGY

INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY

31 hospital beds
Annual patient count reaches 1150
Number of surgical procedures is 1100
including more than 200 endoscopic surgeries

OBJECTIVE
The objective of Oncogynecology unit is top quality in diagnosing and treating women with gynecological malignancies

MAIN AREAS
- Surgical management of gynecological malignancies
- Professional training (organizing and taking part in doctor professional training courses, lectures for medical students, training of residents)
- Scientific research in cooperation with Scientific Research Center

RESEARCH
Doctors of Oncogynecology section take active part in clinical trials and participate in research performed.

INNOVATION IN ONCOGYNECOLOGY SECTION
Since 2011 hysteroscopies are mastered. Since 2012 endoscopic surgeries: radical removal of organs with cancerous lesions, excision of surrounding tissues and regional lymph nodes.

In cooperation with Radiotherapy and medical therapy center we apply individualised treatment to patients for whom radical surgical treatment is not possible because of advanced disease. Complex, minimal invasive and ultrasound-controlled tests are performed to evaluate inoperable tumors. This allows us accurate staging of the disease, proper planning of further management and follow up after surgical treatment.

KEY FIGURES
- There are 11 employees in sub-department: head of the department, 1 senior administrator of nursing, 5 general practice nurses, 4 other employees
- 6 beds
- Number of surgical procedures is 1100
- Annual patient count reaches 1150
- 31 hospital beds

INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY

SUB-DEPARTMENT OF COMPLEX TREATMENT

GOALS
- To provide preventive services
- To organize care of patients receiving treatment
- To provide surgical, chemotherapeutic, immunotherapeutic, radiotherapy treatment services
- To provide paid services (accommodation, medical and other additional services)

MISSION
- To provide qualitative and the highest level complex specialized (diagnosis, treatment and prevention) health care services of oncology area

MAIN AREAS
- Prediction and personalization of oncological diseases
- Prevention of oncological diseases
- Information, inspection and tests of patients
- Set, confirmation, implementation and evaluation of diagnosis, treatment and care plan

RESEARCH
Doctors of Oncogynecology section take active part in clinical trials and participate in research performed.

INNOVATION IN ONCOLOGY DEPARTMENT
There are one or two resident physicians working in our unit permanently.

KEY FIGURES
- About 200 treated patients
- 6 beds
- Number of surgical procedures is 1100
- Annual patient count reaches 1150
- 31 hospital beds

INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY
INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY

SUB-DEPARTMENT OF LASER AND PHOTODYNAMIC THERAPY

KEY FIGURES
- Annually 400-470 cancer patients undergo inpatient treatment and more than 600 outpatients undergo lasersurgery and/or photodynamic therapy (PDT) and photodynamic diagnostics (PDD)
- Lasersurgery as inpatient treatment under- go more than 300 cancer patients (>500 procedures), as outpatient treatment more than 600 patients
- Undergo more than 350 patients (>600 procedures) PDT and PDD

SUB-DEPARTMENT ORGANISATION
10 staff members: 4 surgeons oncologists, 1 radiologist, 1 biologist, 1 engineer-technician, 1 administrator, 2 general nurses.

MAIN AREAS
- Skin and mucosal cancer
- Basocellulare and planocellulare cancer
- Melanoma
- Photodynamic therapy and photodynamic diagnostics
- Lasersurgery
- Head and neck cancer

MISSION
- To provide patients with high quality services using laser and photodynamic therapy
- To apply new skin cancer treatment methods
- To investigate new possibilities of wave medicine
- To create good conditions for residents to improve their knowledge

New treatment and diagnostic methodology introduced into clinics by sub-department scientists will encourage early diagnosis of precancerous and malignant formations and help to start treatment on time.

Head of the sub-department habilitated dr. L. Plesniene

RESEARCH
The field of scientific investigation is lasersurgery, sensitized tumor therapy and diagnostics, oncodermatology, head and neck oncology.

Applied research:
- Participation in various biomedical and clinical studies in the areas of basocellulare, planocellulare cancer, and melanoma
- Use of various fluorescence diagnostics imaging for skin and mucosal cancer

FIELDS, TECHNOLOGIES AND METHODS

IOVU has collected quite a big experience in photodynamic therapy (PDT). The first experimental researches in PDT were started in 1985. In 1989 we were the first in the former USSR and in the first ranks in Eastern Europe to introduce PDT in a clinic. In 1993 the laboratory of Laser and Photodynamic Therapy was founded in VUOI.

Since 1993 new methods of lasersurgery, sensitized tumor therapy and diagnostics were created and introduced to the clinic in this department. Usually topical photodynamic therapy is applied, rarely systemic, intravenous or peroral, or local intraarterial PDT are provided. Laser treatment is applied for tumors located in problematic areas: ocular adnexa, outer and inner ear. The data are presented in 151 publications and in 3 patents.
INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY

KEY FIGURES
- 101 beds
- About 4000 in-patients per year
- 3200 out-patients per year
- About 4000 in-patients per year
- 3200 out-patients per year
- 1000 out-patients
- 2000 in-patients
- Most often treated localizations:
  - breast Ca 400 patients
  - prostate Ca 300 patients
  - oncogynecologic 200 patients
  - lung cancer 100 patients
  - head-neck cancer 100 patients
- Radical radiotherapy treatment is applied to 70-75 percent of all cancer patients
- 65 beds

MISSION
- To provide the highest quality diagnostic and treatment services for patients with all kind of malignancies using radiotherapy, chemotherapy, target therapy, immunotherapy and hormonotherapy
- To use radiotherapy with the highest possible standard of accuracy and safety, support and comfort our patients
- To apply radiotherapy for children with central nervous system, blood, kidneys and retroperitoneal space malignant tumors

MAIN AREAS
- External beam radiation therapy
- Intracavitary, interstitial, contact brachytherapy
- Medical oncology, hormonotherapy
- Biological therapy
- Combined treatment

FIELDS, TECHNOLOGIES AND METHODS
We perform all kinds of non-surgical treatment modalities, radical external beam radiotherapy, intracavitary, interstitial and contact brachytherapy, chemoradiotherapy, neoadjuvant, adjuvant and palliative chemotherapy, biological therapy, hormonotherapy.

We apply individualised treatment to patients, for whom radical surgical treatment is impossible of advanced disease, in cooperation with Oncosurgery Center.

FUTURE PERSPECTIVES
Radiation and Medical Oncology Center is notable for its scientific and clinical potential and strong clinical basis, so it must stay as a leading Center in Lithuania, providing all kinds of Radiation and Medical oncology treatment and reliable treatment standards.

We are planning to expand out-patients Medical Oncology services, involving more patients into clinical trials.

In order to strengthen link between research and clinics wishing to expand international clinical trials, given priority to pharmaceutical research. Relying on genomics and proteomics achievements biological therapy will be applied, personalised treatment will be optimised.

Coordination of all these methods will guarantee treatment according to international standards, ensure the best oncological help in Lithuania and improve quality of patients’ life.

CONTROL ORGANISATION
The center consists of Medical Oncology department with day stationary, Radiation Oncology department and Medical Physics group and Department of Physical Medicine and Rehabilitation.

Qualified and experienced professionals, with deep knowledge of modern treatment of oncological diseases (radiotherapy, chemotherapy, hormonotherapy, immunotherapy) work here. Our employees raise their practical and theoretical knowledge in world oncological clinics, participate in international research, deliver presentations in international conferences and congresses. Also they participate in Lithuanian medical society education, including students and residents, take part in professional training, perform scientific research. Their works are published in local and international journals.

CONTROLLING NEW TECHNOLOGIES AND APPLYING MODERN DIAGNOSTIC AND TREATMENT METHODS we will be able to improve early tumor diagnosis, apply effective treatment methods, prolong patients’ life expectancy and improve quality of life.

Head of the center dr. E. Aleknavicius

DEPARTMENT ORGANISATION
Department is composed of Brachytherapy group and sub-department of High Energy Radiation Oncology.

There are 85 employees: 19 physicians oncologists radiotherapists, 23 radiology technologists, 21 general practice nurses, 2 engineers, 4 physicians residents and 16 other employees.

Radiation oncologists work closely with medical physicists. Staff teamwork ensures qualitative radiotherapy treatment for oncological patients.

We will achieve better tumor response to treatment, reduce distant complications or radiotherapy treatment, increase life expectancy and improve patients’ quality of life, applying modern radiotherapy treatment or combining radiotherapy with medical oncology.

Head of the department dr. A. Burneckis

Senior administrators of nursing
Intracavitary, interstitial and contact brachytherapy is performed for oncological patients, using radioactive iridium 192Ir and radioactive iodine 125I sources. In clinical practice were introduced:

▶ methodology of early stage prostate cancer brachytherapy using low dose rate (LDR) of radioactive iodine seeds 125I
▶ methodology of high risk prostate cancer treatment using high dose rate (HDR) technique
▶ HDR salvage radiotherapy for treatment of prostate cancer progression after radiotherapy treatment

Department is equipped with modern radiotherapy equipment, which helps to ensure the quality of radiotherapy:

▷ 4 linear accelerators VARIAN (6 or 15 MeV energy), two of them have IMRT
▷ Computer tomography with virtual simulation

We believe that the latest technology and research achievements significantly improve effectiveness of radiotherapy for all our cancer patients.

Head of the department Dr. D. Norius
DEPARTMENT OF MEDICAL ONCOLOGY WITH DAY-CARE UNIT

MISSION
To provide effective, safe and progressive treatment:
▶ prescribe the most effective treatment for the patient by assessing disease biology, stage and current guidelines
▶ evaluate side-effects caused by treatment and to treat them properly
▶ actively follow the oncology news, participate in clinical trials and seek to introduce treatment innovations in to clinic as soon as possible

MAIN AREAS
Complex treatment for solid tumours of all kind is provided in the department. Fields of high interest are:
▶ breast cancer
▶ gastrointestinal cancer
▶ neuroendocrine tumours
▶ lung cancer
▶ gynecological cancer
▶ cancer of genitourinary tract
▶ head and neck cancer
▶ sarcomas

KEY FIGURES
- Department consists of inpatient unit with 36 beds and outpatient clinic
- More than 5000 cancer patient consulted per year
- More than 15 000 cycles of chemotherapy given per year
- Most common tumor types are breast cancer (> 4000 cycles per year), gastrointestinal tumours (about 4000 cycles per year), gynecological tumours (about 1500 cycles per year)

SUB-DIVISION
Organisation
Unit consists of 38 employees, 11 of whom are doctors and 23 nurses.

Doctors of the department are experienced and highly qualified medical oncologists, regularly participating in international and national congresses, clinical trials, continuing their education in worlds leading centers of cancer treatment.

RESEARCH
By actively participating in international phase II-IV clinical trials and conducting investigator initiated clinical and biomarkers studies (mostly for gastrointestinal, gynecological, genitourinary and other cancer) we are actively involved in research.

FIELDS, TECHNOLOGIES AND METHODS
In our department we provide complex modern treatment for solid tumours according to international standards. Conventional chemotherapy, targeted biological therapies, hormonal therapy, immunotherapy is given as monotherapy or in combination with radiotherapy, surgery or regional treatment. New chemotherapy techniques (electroporation, arterial, intraperitoneal chemotherapy, HIPEC, chemoembolisation) are applied.

In order to select the best treatment strategy all the patients are discussed in specialised multidisciplinary meetings made of the experts in chemotherapy, radiotherapy, surgery, radiology and pathology team.

All kinds of chemotherapy induced side effects are treated in the department. Blood component transfusions, special care, sterile conditions are provided if necessary. In order to ensure best care for the patient consultations of psychologist, psychiatrist, palliative care specialist and social worker are provided.

By implementing new medications and treatment methods, working together with the scientists in expanding the spectrum of biomarkers, we seek for maximum treatment individualization and the best results for our patients.
DEPARTMENT OF MEDICAL PHYSICS

KEY FIGURES
- 14 staff members
- Over 2500 treatment plans, about 5000 quality control and dosimetry tests per year
- More than 300 hours of education and scientific activities

MAIN AREAS
- Quality assurance
- Treatment planning
- Education and training

DEPARTMENT ORGANISATION
Medical Physics department is a part of Radiation and Medical Oncology Center. However, medical physicists are responsible for the quality of the procedures also in Radiology and Nuclear medicine departments.

The department is composed of 1 dosimetrist, 4 medical physicists for quality assurance and 8 medical physicists for external and brachytherapy planning.

MISSION
- Quality assurance
- Treatment planning
- Education and training

DEPARTMENT ORGANISATION
Each day, in order to prevent the unnecessary harmful effects and to assure the best results, a strict quality control procedures must be passed.

Quality control is performed in the diagnostics department, radiotherapy department and nuclear medicine department.

Treatment planning
To achieve the best possible radiation treatment effect the sophisticated irradiation patterns are used. Depending upon localization and the tumor type the external or internal radiotherapy could be performed.

RESEARCH
Medical physicists in modern medicine are an inherent part of diagnostic and treatment procedures. Accuracy and radiation protection are carefully supervised by highly qualified specialists.

Head of the department dr. J. Venius

Our department is working towards precise and early diagnosis of the diseases and low damage, personalized treatment.

Non invasive characterization of brain tumors using multiMRI
Imaging biomarkers have the advantage of being non-invasive, spatially resolved and repeatable and can be used for early detection of diseases and stage grading.

The diagnostic procedure performed by multiMRI allows to characterize glial brain tumor in correlation to histopathology grade and type.

In addition, the imaging biomarkers also allow predicting or assessing the response to treatment. This non invasively acquired information will significantly contribute to individualized treatment and allows modification of treatment according to early response.

Dose optimization for children in Computed Tomography
Computed Tomography is related with the certain radiation doses received during the procedure. Radiation is relatively more dangerous for the children because of growing organism and longer living time. Therefore it is especially important to make sure that CT scans in children are performed with appropriate exposure factors, as use of exposure settings designed for adults can result in a larger radiation dose than necessary to produce a useful image for a pediatric patient.

Added value SPECT quantification in RT planning
During conventional radiotherapy there is no distinction between functional and non functional lung tissues. Using quantified lung perfusion SPECT images it is possible to target radiation to cancer and preserve the functional lungs. This in turn helps to avoid complications and to maintain normal breathing function without compromising the treatment outcome.
DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION

MISSION

- To restore patients optimal physiological, psychological, social and occupational status during rehabilitative therapy according to individual patient’s needs and to expand knowledge of patients, professionals, students, and society about qualified rehabilitation treatment services for patients suffering from cancer.

MAIN AREAS

- Rehabilitation of in- and outpatients

KEY FIGURES

- 5355 visits per year
- 23132 procedures performed for inpatient and outpatient patients

DEPARTMENT ORGANISATION

In this section work 25 employees (2 of them have 2 different incumbencies):
- 1 Doctor of physical medicine and rehabilitation,
- 1 speech therapist,
- 1 phythotherapist,
- 1 psychiatrist,
- 2 psychologists of medicine,
- 1 ergotherapist,
- 4 physical therapists,
- 1 social worker,
- 2 nurses of physical medicine and rehabilitation,
- 8 masseurs and 5 other staff.

RESEARCH

- Greater than 10 year experience in the sphere of oncological patients’ rehabilitation provides access to more effective rehabilitation treatment outcomes for patients and lets to prepare qualified professionals in manual lymphatic drainage area.

- Head of the department N. Vaitiekunaite

FIELDS, TECHNOLOGIES AND METHODS

Medical rehabilitation methods applied in the department: medication, phytotherapy, kinezotherapy, phytotherapy, psychiatric and psychological consulting, individual and group psychotherapy, social rehabilitation, treatment with natural climate and environmental factors and others.

Physiotherapy procedures applied in the department: electrostimulation, magnet therapy, ultrasound therapy, vacuum pneumatic massage, laser therapy.

Also herbal mixtures are produced and given to patients in order to improve the body immune system.

PRINCIPLES OF REHABILITATIVE TREATMENT

The main rehabilitative treatment principles for patients who have been diagnosed with oncological disease:

- Rehabilitation therapy is initiated by diagnosis of oncological disease
- Patients receive all information about rehabilitative treatment possibilities and measures
- Rehabilitative treatment is individual
- Patient must be interested and active participant in rehabilitation treatment
- Efficiency of rehabilitative treatment is consistently evaluated by specialists team

Senior administrator of nursing

There are applied a few methods of voice rehabilitation for patients with removed larynx. At the end of rehabilitation functions of smell and taste for patients are returned. Psychologists and psychiatrists of the department help patients to solve the problems influenced by cancer through psychotherapy sessions or medical treatment.

A social worker provides information and helps patients to solve social problems in collaboration with professionals of health care institutions. Also social worker organizes artistic activities which help patients to relax.

Also herbal mixtures are produced and given to patients in order to improve the body immune system.
CENTER OF RADIOLoGY, NUCLEAR MEDICINE AND OUTPATIENT DEPARTMENT
**MISSION**
- Early diagnostics of oncological diseases and high quality, efficient outpatient treatment and monitoring, based on the latest scientific achievements

**TECHNOLOGIES AND METHODS**
In the center modern research methods of radiology, nuclear medicine (conventional radiology, computed tomography, magnetic resonance imaging, angiography, VPEKT (SPECT) imaging, mammography and others) and clinical laboratory are concentrated. Also qualified out-patient services/consulting are provided.

**RESEARCH AND EDUCATION**
Achievements of the centre would not be implemented without the unity of education, training and treatment. Physicians of the center are working in the experimental / clinical science area. The center is a base of training for future physicians. Here all levels of academic studies of medicine and other specialties are performed.

**CENTER ORGANISATION**
The center of Radiology, Nuclear Medicine and Outpatient department provides specialized oncological outpatient and diagnostic assistance to all citizens of the Republic of Lithuania. Patients are investigated and consulted by the highest qualification specialists oncologists. Our qualified staff works using advanced methodology and provides only high quality medical services. Center employees are the leaders in their field, who always improve their skills and adapt most advanced medical technologies in patients' treatment. In outpatient diagnostic area all efforts are concentrated to reduce oncological patients' disability, to ensure quality of life and prolong their life expectancy and/or to heal.

*Head of the center dr. S. R. Letautiene*
DEPARTMENT OF RADIOMETRY

KEY FIGURES
- 120000 exams per year
- 10000 CTs per year
- 20000 diagnostic mammography exams per year
- 7000 screening mammography exams per year
- 60000 US exams per year

DEPARTMENT ORGANISATION
- We have 21 radiologists and 38 staff members with nurses, imaging technologists and administrative staff in our team
- The department is divided into 2 sections: general radiology section, including x-ray, mammography, CT, MRI, Angiography and ultrasonography section
- Our images are stored on PACS system and are visible in all our clinical departments of our Institute

MISSION
- To provide caring and high quality Medical Imaging and image-guided therapy services to cancer patients

VISION
- To be the preferred provider of all imaging services in cancer imaging and to promote, develop and integrate advances in imaging technology and imaging-based therapeutic procedures into the clinical, education, and research missions of the IOVU

MAIN AREAS
- Early cancer diagnostics, screening
- Cancer staging
- Cancer treatment response evaluation, including RECIST criteria
- Long term cancer patients follow up
- Participation in multidisciplinary team
- Research and development in the field of new imaging technologies
- Teaching and training of radiology residents and students

FIELDS, TECHNOLOGIES AND METHODS
The Department provides a wide array of diagnostic imaging tests ranging from conventional X-Ray to multi-detector CT (MDCT), 1.5 T MRI/S. A variety of image-guided treatment choices, such as RF ablation of liver, kidney, lung tumors, cryoablation of kidney tumors, radiembolization, chemoembolization. We have a group of dynamic, dedicated faculty and staff who have made our Department one of the best in the country in cancer imaging, especially in breast imaging.

We have two digital X-Ray units, one with fluoroscopy, one dual energy with digital tomosynthesis. Our department is equipped with two full-field digital mammography systems, one of them with digital tomosynthesis and the third one CR mammography system and CAD system. A prone-position stereotactic breast biopsy system is available. Breast MRI and US are also available.

Senior technologist of radiology

Our Department will learn from, build on and respect the past, be active and aggressive in improving the present, but look to the future, and rather than asking “why,” we will ask “why not.”

Head of the department Dr. R. Grigiene

Multi-detector 32 slices CT system is available in our department. A high-speed helical CT unit provides the capability for helical CT scanning, CT angiography, CT colonoscopy and three-dimensional CT. Biopsies can also be performed in this section, which avoid the need for a patient to have an ‘open’ biopsy in an operating theatre.

Our Institute has a 1.5 Tesla MRI machine with all options needed in oncology imaging, including breast MRI, breast biopsy, whole body MRI. We perform a lot of fMRI exams, such as tractography, spectroscopy, multiparametric prostate imaging, whole body diffusion imaging.

We have five US examination rooms, one of them is dedicated for interventional procedures. All our US examination rooms are equipped with modern machines, some of them have elastography, hystoscanning possibilities and in interventional room we have 3D navigation system.
Sub-Department of Ultrasound

Key Figures
- 25000 patients consultations per year
- 60,000 ultrasound examinations per year

Sub-Department Organisation
Sub-department employs 21 staff, which consists of six radiologists, four ultrasound physicians, one physician assistant, eight nurses and others.

Research and Educational Activity
Sub-department scientific work consists of research in tumor ablation, tumor spread. There are also educational activities: diagnostic ultrasound course (cancer biology, prevention and diagnosis) for medical fourth-year students, ultrasound diagnostics refreshment courses for doctors.

Fields, Technologies and Methods
All consultations are performed using modern ultrasound machines and techniques (Doppler studies, image harmonization, etc). Examinations of the whole body are performed, specifically of the breast, thyroid, lymph nodes, liver, bile ducts, gall bladder, pancreas, kidney, spleen, uterus, prostate, urinary bladder etc. We perform specific transvaginal, transrectal ultrasound examinations.

Ultrasound examination detects primary tumor and tumor spread. Ultrasound guided tumor biopsy in various organs establishes the correct diagnosis. The resulting material is sent to investigate for cytology, histology, immunohistochemical staining. This is a safe and very accurate method of biopsy. Under ultrasound control we can biopsy even very small structures in different organs.

In addition to diagnostic ultrasound studies various minimally invasive procedures are performed under ultrasound guidance. They apply to both diagnostic and therapeutic purposes. A large part of the interventional procedures include drainage of hollow organs. These are nephrostomies (when urinary passage from the kidney is blocked) epicystostomies (from urinary bladder) and cholangiostomies, cholecystostomies (impair flow of bile from the bile duct or gall bladder). If necessary fluid is aspirated from the pleura, peritoneum and other cavities or they are drained.

The latest and currently the world’s most advanced minimally invasive tumor treatment tumor ablation (radiofrequency ablation, cryoablation etc.) is performed in our institute from 2001. We were the first of the Baltic countries to treat liver tumors using radiofrequency ablation. Now we treat mostly liver, kidney and lung tumors. More than 1000 tumor ablations are performed with good results and significant experience is gained.
INSTITUTE OF ONCOLOGY
VILNIUS UNIVERSITY

DEPARTMENT OF NUCLEAR MEDICINE

KEY FIGURES
▶ 4,000 molecular imaging tests
▶ 35,000 in-vitro tests
▶ 1,000 patients underwent Radioiodine Therapy

MAIN AREAS
▶ Bone imaging
▶ Thyroid imaging
▶ Sentinel Lymph Node imaging
▶ Hybrid imaging
▶ Radioiodine treatment
▶ Bone pain palliation
▶ Radioimmunoassay

MISSION
▶ To provide high quality molecular imaging, in vitro & therapeutic services for oncology on local, national & international level.
▶ The Department supports and takes part to provide high quality molecular imaging, in vitro & therapeutic services for cancer patients. We are equipped with Siemens Symbia T6 SPECT/CT hybrid camera and a single-detector conventional gamma camera. Two hand-held gamma probe systems serve the surgeon in intra operative Sentinel-Lymph-Node detection and biopsy. The manufacturing of the radiopharmaceuticals is carried out in the newly installed Radiopharmacy complying with the good clinical practice and European standards. For our in vitro specimen analysis we use automated analyzer system for radioimmunoassay Statelc SR 300 and Cobas e 411 analyzer.

Just this year we were the first ones in the Baltic States to have successfully started providing the selective internal radiation therapy (SIRT) using Yttrium-90-Microspheres for the treatment of unresectable liver tumours. The Therapy section is also equipped with Ytrrium-90-Zevalin and Strontium-89 administration gear.

Due to the fact that Nuclear Medicine facilities are not as widely available throughout the country as the demand, the patients are referred to our Department from other healthcare institutions of Vilnius and also from the other regions in Lithuania.

The Nuclear Medicine department is composed of Diagnostic, Cancer biomarkers and Therapy sections, employing 30 members of staff in total including administrative assistants.

The department is equipped with the state of the art instruments to assure all the nuclear medicine diagnostic and therapeutic services for cancer patients. We are equipped with Siemens Symbia T6 SPECT/CT hybrid camera and a single-detector conventional gamma camera. Two hand-held gamma probe systems serve the surgeon in intra operative Sentinel-Lymph-Node detection and biopsy. The manufacturing of the radiopharmaceuticals is carried out in the newly installed Radiopharmacy complying with the good clinical practice and European standards. For our in vitro specimen analysis we use automated analyzer system for radioimmunoassay Statelc SR 300 and Cobas e 411 analyzer.

Just this year we were the first ones in the Baltic States to have successfully started providing the selective internal radiation therapy (SIRT) using Yttrium-90-Microspheres for the treatment of unresectable liver tumours. The Therapy section is also equipped with Ytrrium-90-Zevalin and Strontium-89 administration gear.

Due to the fact that Nuclear Medicine facilities are not as widely available throughout the country as the demand, the patients are referred to our Department from other healthcare institutions of Vilnius and also from the other regions in Lithuania.

RESEARCH
Sentinel lymph node (SLN) mapping. Scintigraphic and intra-operative sentinel node detection is an accurate and feasible method for finding the SLN. The first lymph node draining the tumor is usually the first one to receive metastasis, and its biopsy is used to define the status of the whole lymphatic basin. The aim of research carried out in our institute is to examine the value of lymphoscintigraphy guided SLN biopsy (in cutaneous melanoma, breast and gynaecologic cancers).

Treatment optimization of the thyroid carcinoma. The aim of the ongoing research is to look at the management of thyroid cancer patients treated with radioactive iodine. Although such therapy is a well established and routine procedure, physiological and radiobiological factors are not completely understood yet, and optimization of the treatment dose and regime requires to be investigated further.

SPECT/CT bone scintigraphy in the diagnosis and management of patients with mandibular unilateral condylar hyperplasia. Unilateral condylar hyperplasia (UCH) patient management, optimal surgical timing and approach are largely dependent on the growth activity of the mandibular condyles. Therefore, an adequate assessment of disease activity is of utmost importance. One of our team’s research topics is the potential clinical utility of SPECT/CT imaging in patients with suspected UCH.

Multimodality imaging. Diagnostics in oncological diseases is important throughout the treatment. And various imaging modalities have been employed for that purpose. However, diagnosis is not always so easy to obtain. Optical imaging techniques are limited by low penetration through the tissue. The idea of combining optical imaging with molecular imaging modalities has brought scientific attention, and it could lead to important advances in cancer imaging and other applications. We are looking at possibilities to develop more sensitive and specific radioactive hybrid imaging probes.

LABORATORY OF CANCER MARKERS

FIELDS, TECHNOLOGIES AND METHODS
In Laboratory of Cancer Markers tests are performed by two methods:
▶ immunot elemental;
▶ radioimmunoassay.

These cancer markers are performed:
▶ CAE (carcinoembryonic antigen) - a marker of many cervical cancer
▶ PSA (prostate specific antigen) - a marker of prostate cancer
▶ CA 125 - a marker of ovarian cancer
▶ CA 15-3 - a marker of breast cancer
▶ CA 19-9 - pancreatic and bowel cancer marker
▶ CA 72-4 - gastric cancer and mucosal type ovarian cancer marker
▶ AFP (alphaphetoprotein) - liver, testicular cancer marker
▶ HCG (beta human chorionic gonadotropin) - embryonic cells tumors (ovarian, testicular) marker
▶ TSH (thyrotropin) and FT -4 (free thyroxine) – to identify thyroid activity
▶ He4 - ovarian cancer marker

Also these hormones are performed:
▶ TSH (thyrotropin) and FT-4 (free thyroxine) – to identify thyroid activity
▶ PRL (prolactin)
▶ Testosterone
OUTPATIENT DEPARTMENT

**KEY FIGURES**
- 120,000 patients' visits
- 190,000 various tests

**MISSION**
- To confirm, verify or deny oncological diagnosis and to direct patient for treatment in IOVU according to confirmed diagnosis.

**DEPARTMENT ORGANISATION**
In department there are 37 different specialties medical physicians, 36 general practitioners, 14 medical receptionists, 3 specialists in laboratory diagnosis and other employees.

**FIELDS, TECHNOLOGIES AND METHODS**
- Consultation of patients with oncological diseases
- Accomplishment of various organs diagnostic research, interventions and treatment procedures
- Scientific research

**RESEARCH**
The department takes part in IOVU scientific activity, accomplishing fundamental and applied science scientific research.

**SUB-DEPARTMENT OF DAY-CARE SURGERY**

**KEY FIGURES**
- 2,200 skin and soft tissues surgeries

**MISSION**
- Smoothly and efficiently provide day-care surgery services for patients, using modern techniques.

**SUB-DEPARTMENT ORGANISATION**
In department two operating nurses, one general practice nurse and one nurse assistant work. Surgeries are performed by physicians surgeons (oncologists), physicians dermatovenerologists (oncologists).

**MAIN AREAS**
- Surgical treatment of skin and soft tissues pathology.

**FIELDS, TECHNOLOGIES AND METHODS**
- There are carried out surgeries of skin and soft tissues, using modern treatment methods and technologies.

**SUB-DEPARTMENT OF ADMISSIONS**

**KEY FIGURES**
- 15,000 hospitalized patients

**MISSION**
- to provide urgent necessary primary assistance
- to hospitalize arrived patients

**SUB-DEPARTMENT ORGANISATION**
Medical consultants of 10 different specializations work in the department: internal medicine, cardiologist, neurologist, medical oncologist, 3 diagnostic laboratory nurses, 5 general practice nurses and others.

**MAIN AREAS**
- Hospitalization of patients
- Provision of necessary and urgent assistance
- Diagnostic tests
- Organization of physicians' consultations

**FIELDS, TECHNOLOGIES AND METHODS**
- To confirm, verify or deny oncological diagnosis and to direct patient for treatment in IOVU according to confirmed diagnosis.

**HEAD OF DEPARTMENT**
D. Kanopiene

**SUPPORT PROFESSIONAL**
Senior administrator of nursing
DEPARTMENT OF LABORATORY INVESTIGATIONS

GOALS
- Meeting the needs of all patients and the clinical staff responsible for patient care
- High standards of clinical laboratory practice and efficiency
- Optimal support of clinical research protocols
- Professional growth of the staff
- A workplace characterized by mutual respect, teamwork, and open communication
- Good control of our environment

MISSION
- Providing our patients with high-quality, timely and accurate services, using innovative technology

RESEARCH
The department actively supports clinical research activities.

DEPARTMENT ORGANISATION
Administrative, technical, and support functions are performed by the staff of 24 employees, including medical biologists, biomedical technologists, clinical technicians and other supportive personnel.

MAIN AREAS
- Clinical chemistry
- Hematology
- Coagulation
- Urinalysis
- Immunohematology
- Point-of-care testing
- Phlebotomy
- Laboratory Information Systems

FIELDS, TECHNOLOGIES AND METHODS

The Department of Laboratory Investigation is a highly automated, middle-volume core laboratory which provides STAT and routine testing for outpatients, inpatients and Clinical Trials clients. Laboratory operates 24 hours per day, 7 days per week.

The quality of work is continuously monitored by internal and external quality control programs and by participation in institute-wide quality improvement programs.

Tests which are not performed on site are referred to another qualified, licensed reference laboratory.

BLOOD BANK

MISSION
- To supply divisions/subdivisions of IOVU with blood and blood components, preparations, to implement the supervision of use of blood and blood components, to execute tests on compatibility of the aforesaid products as well as organize the transfusion activities only for purposes of the clinics of IOVU.

KEY FIGURES
- 4842 orders, stores and distributes blood and blood components per year
- 2300 blood analyses/year
- 4 staff members and 6 medical biologist on duty
- Fully licensed by the State Health Care Accreditation Agency under the Ministry of Health

DEPARTMENT ORGANISATION
There are 10 employees of the department: head of department, 2 general practice nurses, 1 medical biologist and 6 medical biologists on duty.
The Blood Bank is the sub-department of the Department of Laboratory investigations of the IOVU.

FIELDS, TECHNOLOGIES AND METHODS
- Promotes voluntary blood donation
- Orders blood components and blood preparations required for purposes of IOVU in the blood centre, stores, preserves and keeps accounting of the aforesaid products as well as renew the stocks
- Issues blood components and preparations to divisions of IOVU under their orders as well as draws up plans of such orders and keeps the accounting of them
- Under the established procedure informs the Blood Centre from which blood components and blood preparations were received and the Ministry of Health about transfusion complications
- Provides consultations to the doctors of IOVU on matters of transfusiology and immunohaematology
- Develops the quality system according to which organizes the operation of the Blood Bank
- Introduces identification system for each unit of blood and blood components allowing to execute absolute traceability of donor and recipient
- Transforms all data available to the third parties as well as genetic information into anonymous one in order to avoid the identification of a donor
- Cooperates with divisions / subdivisions of IOVU and other health care institutions

KEY FIGURES
- 4842 orders, stores and distributes blood and blood components per year
- 2300 blood analyses/year
- 4 staff members and 6 medical biologist on duty
- Fully licensed by the State Health Care Accreditation Agency under the Ministry of Health

DEPARTMENT ORGANISATION
There are 10 employees of the department: head of department, 2 general practice nurses, 1 medical biologist and 6 medical biologists on duty.
The Blood Bank is the sub-department of the Department of Laboratory investigations of the IOVU.

FIELDS, TECHNOLOGIES AND METHODS
- Promotes voluntary blood donation
- Orders blood components and blood preparations required for purposes of IOVU in the blood centre, stores, preserves and keeps accounting of the aforesaid products as well as renew the stocks
- Issues blood components and preparations to divisions of IOVU under their orders as well as draws up plans of such orders and keeps the accounting of them
- Under the established procedure informs the Blood Centre from which blood components and blood preparations were received and the Ministry of Health about transfusion complications
- Provides consultations to the doctors of IOVU on matters of transfusiology and immunohaematology
- Develops the quality system according to which organizes the operation of the Blood Bank
- Introduces identification system for each unit of blood and blood components allowing to execute absolute traceability of donor and recipient
- Transforms all data available to the third parties as well as genetic information into anonymous one in order to avoid the identification of a donor
- Cooperates with divisions / subdivisions of IOVU and other health care institutions

KEY FIGURES
- 4842 orders, stores and distributes blood and blood components per year
- 2300 blood analyses/year
- 4 staff members and 6 medical biologist on duty
- Fully licensed by the State Health Care Accreditation Agency under the Ministry of Health

DEPARTMENT ORGANISATION
There are 10 employees of the department: head of department, 2 general practice nurses, 1 medical biologist and 6 medical biologists on duty.
The Blood Bank is the sub-department of the Department of Laboratory investigations of the IOVU.

FIELDS, TECHNOLOGIES AND METHODS
- Promotes voluntary blood donation
- Orders blood components and blood preparations required for purposes of IOVU in the blood centre, stores, preserves and keeps accounting of the aforesaid products as well as renew the stocks
- Issues blood components and preparations to divisions of IOVU under their orders as well as draws up plans of such orders and keeps the accounting of them
- Under the established procedure informs the Blood Centre from which blood components and blood preparations were received and the Ministry of Health about transfusion complications
- Provides consultations to the doctors of IOVU on matters of transfusiology and immunohaematology
- Develops the quality system according to which organizes the operation of the Blood Bank
- Introduces identification system for each unit of blood and blood components allowing to execute absolute traceability of donor and recipient
- Transforms all data available to the third parties as well as genetic information into anonymous one in order to avoid the identification of a donor
- Cooperates with divisions / subdivisions of IOVU and other health care institutions

KEY FIGURES
- 4842 orders, stores and distributes blood and blood components per year
- 2300 blood analyses/year
- 4 staff members and 6 medical biologist on duty
- Fully licensed by the State Health Care Accreditation Agency under the Ministry of Health

DEPARTMENT ORGANISATION
There are 10 employees of the department: head of department, 2 general practice nurses, 1 medical biologist and 6 medical biologists on duty.
The Blood Bank is the sub-department of the Department of Laboratory investigations of the IOVU.

FIELDS, TECHNOLOGIES AND METHODS
- Promotes voluntary blood donation
- Orders blood components and blood preparations required for purposes of IOVU in the blood centre, stores, preserves and keeps accounting of the aforesaid products as well as renew the stocks
- Issues blood components and preparations to divisions of IOVU under their orders as well as draws up plans of such orders and keeps the accounting of them
- Under the established procedure informs the Blood Centre from which blood components and blood preparations were received and the Ministry of Health about transfusion complications
- Provides consultations to the doctors of IOVU on matters of transfusiology and immunohaematology
- Develops the quality system according to which organizes the operation of the Blood Bank
- Introduces identification system for each unit of blood and blood components allowing to execute absolute traceability of donor and recipient
- Transforms all data available to the third parties as well as genetic information into anonymous one in order to avoid the identification of a donor
- Cooperates with divisions / subdivisions of IOVU and other health care institutions
CANCER CONTROL AND PREVENTION CENTRE

CENTER ACTIVITIES

Rendering of knowledge about medical oncology for medical and general public, cancer patients and their relatives

The objective is to reduce the incidence of malignant tumors and mortality from them, to improve quality of life of cancer patients and their relatives. Cancer control carried out correctly allows to achieve the desired objectives for society. Current scientific knowledge about cancer and appropriate usage of them can affect cancer causes, course of the disease and its consequences in a positive way. Conscious and active society and accurate statistics of cancer disease can help to fight against cancer for Lithuanian medical professionals and society. We will be able to plan implementation of cancer control measures and to say about their effectiveness just if we know how the main indicators of oncological help are changing.

Head of the center B. Aleknaviciene

Collection, processing and publicity of statistical information about cancer disease and patients with this disease. This function is performed by acting Lithuanian Cancer Registry (currently functioning as the population information system) in IOVU for many years.

Implementation of separate state prevention and early diagnosis programs (cervical, breast, prostate, colon) elements in IOVU

Staff of the centre takes part in activity of state funded screening programs coordination committees.

IOVU actively takes part in screening programs. There are performed preventive mammograms - about 7000 per year, prostate biopsies – about 700 per year, more than 300 colonoscopies, also are performed cervical biopsies. Staff of the centre ensures successful programs implementation in IOVU and approves further examination of patients with detected pathology.

Publication about carried out screening programs in Lithuania is produced and released. This publication is distributed for society. Four videos are created for demonstration in public places by centre initiative to encourage people to participate actively in screening programmes. These videos are broadcasted on television, placed in social network, transferred to country health institutions. Also cycle of photos were implemented according to the foundation of these videos. These photos are broadcasted in various public places in Lithuania.
GROUP OF EPIDEMIOLOGY

GROUP ORGANIZATION

Chief Researcher
Dr. Giedrė Smailytė

Senior research fellow
Dr. Rūta Petrauskaitė Everatt

Research fellow
Dr. Irena Kuzmickienė

GOALS

▶ To carry out high-quality, well-planned analytical epidemiological studies and to contribute to the evaluation of environmental and genetic risk factors of human cancer
▶ To carry out descriptive epidemiological studies. To analyse the distribution of cancer risk factors in the population
▶ To carry out clinical and molecular epidemiology studies and to use specific biomarkers of exposure, susceptibility and disease progression in studying cancer etiology, susceptibility and prognosis
▶ To participate in educational and training programmes

ACTIVITIES

▶ The Group focuses mainly on the epidemiological studies based on Lithuanian Cancer Registry data
▶ Contributes clinical research conducted at the Institute
▶ Provides research-based knowledge on cancer etiology, prognosis and prevention, proposes preventive measures for reducing cancer incidence

MAIN AREAS OF ACTIVITIES

▶ Descriptive epidemiological studies (analysis of cancer incidence, mortality, survival)
▶ Analytical epidemiological studies;
▶ Clinical epidemiology studies, aiming to identify biological and clinical prognostic factors for cancer
▶ Molecular epidemiology studies, using biomarkers of exposure, susceptibility and disease progression

LITHUANIAN CANCER REGISTRY

REGISTRY STRUCTURE

Cancer Registry is headed by Dr. Giedrė Smailytė. The registry staff includes medical doctor, two medical coders, programmer and four registry clerks.

DATA SOURCES AND METHODS

The principal sources of information on cancer cases are primary, secondary and tertiary health care institutions in the country that are responsible to fill in the notification when cancer is diagnosed. All physicians, all hospitals and other institutions in the country must send a notification to Lithuanian Cancer Registry of all cancer cases that come to their attention. Some pathological laboratories send the respective laboratory notification automatically extracted from laboratory data systems, using a standard format. The notifications, supplemented by death certificate information are built into a database suitable for statistical use. This database contains information on all cancer cases diagnosed in Lithuanian residents since 1978.

Lithuanian Cancer Registry is a nationwide and population-based cancer registry which contains personal and demographic information (place of residence, sex, date of birth, vital status), as well as information on diagnosis (cancer site, date of diagnosis, method of cancer verification) and death (date of death, cause of death) of all cancer patients in Lithuania.

The national Cancer Registry was founded in 1984, but collection of the data on cancer incidence has already started in 1957. In 1993, Lithuanian Cancer Registry became a full member of the International Association of Cancer Registries (IACR) in Lyon, France. The Registry data since the period 1988–1992 have been included in ‘Cancer Incidence in Five Continents’.

Areas of Lithuanian Cancer Registry activities:
▶ descriptive information on the magnitude of changes in the cancer situation (incidence, prevalence and mortality) in Lithuania;
▶ countrywide estimates for cancer patient survival for monitoring and comparative purposes;
▶ analytical research into the cancer problem using advanced methods of epidemiology and biostatistics, e.g., on the causes of cancer and effectiveness of cancer control interventions, and provides data to outside researchers and helps them in the design and execution of the studies.

RESEARCH

Lithuanian Cancer Registry is active in cancer research area, with an average of about six international scientific articles published every year.

USE OF THE DATA

Annual registry reports on cancer incidence have been published since 1994. The registry is also involved in cancer epidemiology research, and has participated in several descriptive and analytical epidemiological studies, including international comparison (EU-NICE survival cooperation; EUROCARE-5; CONCORD).
The main goal of the Scientific Research Center is to use new technologies (genomics, proteomics, transcriptomics, entire research, nanoscience, experimental oncology, immunology, epidemiology and other modern methods) to perform patient-oriented research, which would reduce cancer morbidity and mortality.

The staff of Scientific Research center consists of 63 workers, including 6 chief scientists, 12 senior research fellows, 11 research fellows, and 15 junior research fellows.

From bench to bed: quick introduction of the latest developments of nanotechnologies, genomics, metabolomics, proteomics, cell therapies, imaging, tumour biologies and IT technologies as well as mechanisms of tumour – organism interaction into the clinical oncology.

Deputy director for science and education dr. V. Atkocius
Our dreams of yesterday have become today’s reality: better understanding of tumor biology, metabolism, and antitumor immunity as well as mechanism of tumor.

Head of the laboratory: dr. V. Pasukoniene

Our team is leading in the field of tumor immunology and immunotherapy in Lithuania. We have promising researchers, young enthusiastic PhD students, experienced specialists in cell technologies, immunology, flow cytometry, cell imaging and medical biology. We were the first in the Baltic States who started comprehensively investigating therapeutic dendritic cell-based vaccines. Currently we are arranging several clinical trials investigating the next-generation specific active immunotherapy approaches for the treatment of cancer patients.

Our activities are performed in close collaboration with various clinical departments of the Institute of Oncology, Vilnius University (Department of Oncourology, Department of Oncogynecology, Department of Head and Neck Surgery), as well as with other scientific research laboratories, including Laboratory of Molecular Oncology and Laboratory of Biomedical Physics.

Our laboratory also collaborates with recognized international partners, including Advanced Cell Immunotherapy Unit at Masaryk University (Brno, Czech Republic), ICCTI (International Consortium for Cell Therapy and Immunotherapy), and Department of Biological Immunology at Hopital Européen Georges Pompidou (Paris, France).
A better understanding of relation between organism and tumor during carcinogenesis will help to apply personalized treatment and improve disease outcome in future. — Head of the laboratory dr. B. Kazbariene

THE FUTURE

In successful fight against cancer it is actually to look for more effective treatment solution, therefore it is necessary to investigate and identify markers that can help to find decisions for personalized patients treatment and better disease prognosis. Alterations in antioxidative system’s parameters and the level of different cytokines may be the factors related to the organism’s homeostasis and response to the treatment which are associated with improvement in disease outcome, such as patients’ survival. Better understanding of prognostic or predictive role of Notch signalling pathway may help to create new or improve known methods of cancer treatment. Investigations, performed in vivo using experimental animals, gives us important information related to cancerogenesis, anticancerogenesis and new therapeutic treatment effects.
INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY

MISSION
- The Biobank is an infrastructure for collecting, processing and storing of biological material and associated clinical data largely available to the scientific and industrial community for innovative and modern biomedicine and research.

VISION
- Leading high technology infrastructure in Lithuania.
- Biomaterials and associated clinical data used for the national and international scientific needs.
- Integration in international networks and membership.

KEY FIGURES
Tumors localizations collected during 2012-2013 (total number of patients 543).

THE FUTURE
- Contacting and contracting with National and International partners.
- Participation in National and International research projects (HO-RIZON 2020 and others).
- National leader in biobanking activities.

MAIN AREAS
- Sample input and processing – registration, preparation, aliquoting, storage, retrieval.
- Sample data management.
- Technology development.
- Research.
- Biobanking advice – study planning, legal and ethical compliance.

Scientific research activities and collaboration
- Research and development (R&D) activities for the biobanking and oncological demand:
  - Cryopreservation of various cells and tissues, cryobiology research.
  - Genetical research in oncology for cancer prevention, diagnostic and treatment.

TECHNOLOGIES AND METHODS
- Isolation of nucleic acids from tumor and non-tumor tissues, blood, cell cultures, formalin fixed paraffin embedded (FFPE) blocks.
- DNA quantity and quality assessment.
- RNA quantity and quality assessment (RIN identification).
- Cell isolation, cultivation and cryopreservation.
- Tissues cryopreservation.
- PCR and real-time PCR.
- ELISA.

CURRENT RESEARCH ACTIVITIES
- Creation, testing, development and establishment of standardized operating procedures (SOP) in the activities of Biobank governed by national and international quality management systems.
- Incorporation in the international networks of biobanking.
- Harmonization of quality management systems between biobanks and various networks.
- Continued education to improve technologies for biospecimens preservation and data collection processes.
- Progress in information infrastructure to facilitate data sharing, implementation of new technical solutions for data management and protection of participant privacy and data confidentiality.
- Collaboration of multidisciplinary professionals for improving of the bioethical law according international experience and national needs.
- Trust making between researchers, business partners and society.
- Participation in the scientific projects and programs.

LABORATORY ORGANIZATION
- Zivile Gudleviciene, MD, PhD – head of the Biobank.
- Regina Liudkeviciene, Administrator.
- Genoveta Chvatovic, Geneticist.
- Ausra Stumbye, Geneticist, junior research fellow (PhD student).
- Gabrielis Kundrotas, Junior research fellow (PhD student).
- Inga Mateviciute, Medical biotechnologist.
- Laura Neverauskiene, Pathologist.
- Tatjana Rakovskaja, IT specialist.
Biomedical physics laboratory has experience and facilities for synthesis and surface modification of nanoparticles, characterization of nanoparticle size, stability, optical properties, investigation of nanoparticle interaction with biomolecules, accumulation of particles in cells and experimental animals, development and application of optical methods for cancer diagnostics and therapy.

**MISSION**
- Research, development and implementation of cutting-edge biophysical, optical and nano technologies for cancer diagnostics and therapy

**RESEARCH AREA**
- Development and improvement of optical methods and nanotechnologies for early diagnostics and combined treatment of cancer

**CURRENT RESEARCH ACTIVITIES**
- Steady state and ultrafast spectroscopy of bioactive molecules, nanoparticles and photosensitizers
- Synthesis modification and characterization of nanoparticles
- Optical biopsy and imaging of cancerous and damaged tissues and cells
- Investigation of nanoparticle accumulation, distribution and toxicity in cells and experimental animals
- Investigation of light interaction with biological objects, cells and tissue
- Application of early cancer diagnostics and therapy in vivo

**TECHNOLOGIES AND METHODS**
- Facilities for nanoparticle synthesis and modification
- Optical steady state absorption and fluorescence spectroscopy
- Time resolved fluorescence spectroscopy
- Ultra short pulse duration (fs) laser systems for two photon absorption, excitation and imaging experiments
- Particle size and stability (zeta-potential) measurements using dynamic light scattering;
- Scanning probe microscopy (AFM, STM, FMM, F-d curves, etc.)
- Laser scanning confocal fluorescence microscopy with spectral and fluorescence lifetime imaging (FLIM)
- In vivo confocal reflection microscopy of skin for detection of skin cancer
- Small animal fluorescence imaging system;
- 2D Cell cultures
- Facilities for experimental animals (mice, rats) care
- Experimental mouse tumor models (mice, rats)

**LABORATORY ORGANIZATION**

**Head of Laboratory**
Prof. habil. Dr. Ricardas Rotomskis
PhD. Vitalijus Karabanovas
PhD. Vytautas Kulvietis
PhD. Jonas Venius
PhD. Vytautas Kaseta

**PhD. student / Junior research fellow**
Simona Steponkiene
Marija Matulionyte
Romualdas Rudys
Vilius Pozdernys
Danute Bulotiene

**Postdoc**
PhD. Vytautas Kaseta

**Head of OAC, senior research fellow**
PhD. Vytautas Kulvietis

**Research fellow**
PhD. Jonas Venius
PhD. Vytautas Kaseta

**Junior research fellow**
PhD. Vytautas Kaseta

**PhD student / junior research fellow**
Simona Steponkiene
Marija Matulionyte
Romualdas Rudys
Vilius Pozdernys
Danute Bulotiene

**Senior specialist**
Gediminas Dauderis
Deividas Sabonis
Ignas Astrauskas
Gediminas Dauderis

**Nurse**
Rita Karpiciute

**Engineer**
Gediminas Dauderis
Deividas Sabonis
Ignas Astrauskas

**Biophysicist**
Urte Statkute
MISSION
- OAC of Biomedical Physics Laboratory as an open access infrastructure for research, new technology development in oncology offers a wide range of nano-analytical bioimaging services, facilities and training of scientists from academic institutions and industry.

VISION
- The vision of OAC is to become an internationally recognized scientific research centre pursuing long-term competitive fundamental and experimental development research into tumour diagnostic and therapy by applying nanotechnologies.

Biomedical physics laboratory equipped with cutting edge instrumentation, the OAC of Biomedical physics laboratory is open to all national and international researchers and industry.

Open access services today:
- Colloidal nanoparticles synthesis
- Surface modification of nanoparticles
- Surface functionalization of nanoparticles with bioactive molecules
- Optical characterization and evaluation of biomolecules, organic dyes and nanoparticles (UV-VIS/NIR spectral region)
- Biomolecules and nanoparticles size and zeta potential detection and analysis
- Imaging of fluorescent proteins, nanoparticles, fluorophores intracellular localization by using three-dimensional living cells visualization system with fluorescence lifetime imaging
- Distribution, pharmacokinetics and monitoring of photosensitizers and nanoparticles in experimental animals
- Analysis and imaging of nanoparticles and fluorescent dyes distribution in biological tissues
- Care, monitoring and manipulation of experimental animal

TECHNOLOGIES AND METHODS
- Synthesis set-up for colloidal nanoparticle fabrication and surface modification
- Biomolecules and nanoparticles size analyzer/characterization system
- Spectroscopy equipment for characterization of optical properties of biomolecules and nanoparticles
- Three-dimensional living cells visualization system with fluorescence lifetime imaging
- Optical biopsy system for experimental animal care and monitoring
LABORATORY OF MOLECULAR ONCOLOGY

MISSION
- Better understanding of cancer biology to find molecular biomarkers for better cancer patients’ diagnosis, prognosis and treatment decisions
- Better understanding of cancer biology to suggest more efficient treatment strategies
- Translation of knowledge of cancer biology into specific personalized medicine models

VISION
- Laboratory of Molecular Oncology is a laboratory of fundamental research. Nevertheless, the research infrastructure of the laboratory should also be used for the development of better (more accurate, informative, specific and less expensive) molecular diagnostic tests and new assays, that would ensure quality of clinical testing and benefits to cancer patients

MAIN AREAS
- External radiotherapy: 2D, 3D, IMRT, IGRT, IM therapy
- Radiation and target therapy
- Brachytherapy: low and high dose rate
- X-ray therapy
- Reactions and late complications of radiation induced treatment
- Treatment planning
- Education and training

TEACHING
Undergraduate and PhD students from State Universities obtain practical experience in basic techniques in molecular biology and genetics and perform their thesis projects under the supervision of the personnel of the laboratory.

TECHNOLOGIES AND METHODS
- DNA, RNA, protein extraction from tumor and non-tumor tissues, blood, serum, bronchial washes, formalin fixed paraffin embedded (FFPE) blocks, lymphocytes, cell cultures
- DNA and RNA quality and quantity analysis using Nanodrop, Bioanalyser (RIN) and capillary electrophoresis (QIAGEN); RNA amplification, evaluation of linearity of amplification;
- gene expression analysis by qPCR, Western blots
- gene mutation analysis using PCR, RFLP-PCR, pyrosequencing
- microsatellite instability analysis
- global transcriptomics using DNA microarrays;
- 2D and 3D cell cultures;
- bioinformatics.

THE FUTURE
Combination of the knowledge obtained obtained from cancer research using novel cell techniques with the next-generation sequencing and advanced gene expression analysis would enable us to provide personal tumor analysis based therapy/treatment for cancer patients.

INNOVATION IN RADIOTHERAPY TREATMENT
- Investigation of cellular response to ionizing radiation using modern cell culture models. Recent studies indicate that cancer stem-like cells are affecting or causing tumor resistance to various therapies. The aim of this project is to apply iPSC and other modern model system in investigation of tumor resistance to anticancer therapy using ionizing radiation
- DNA damage repair system as a source for cancer biomarkers. The aim of this project is to evaluate the importance of mutations and expression levels of different DNA damage repair system genes and miRNA to predict the post-operative treatment of cancer patients
- The role of alternative pre-mRNA splicing for the lytic replication of Kaposi’ Sarcoma Herpesvirus. The aim of the project is to investigate whether the induction of lytic replication of KSHV (lytic reactivation) by a variety of factors that are known to induce lytic replication is affected by the status of RNA splicing
- Secondary tumors among patients treated with the gamma and neutron radiotherapy. The aim of the project is to determine overall and disease free survival rates (OS, DFS) among patients, suffering from cervical cancer, according to various socio-demographic, life-style and other clinical-biological characteristics and to identify potential biomarkers to predict efficacy of cancer treatment
COORDINATION OF NURSING SERVICES

MISSION
- To provide patients’ services based on science and the most advanced technologies, secure, high-quality, consistent in needs and interests of patients.

MISSION
- Involvement of patients and their families, communities in health care and education
- Health promotion and prevention of diseases
- Health care quality assurance and usage of technologies
- Multi-professional teamwork
- Autonomous activity of nurses in health care institutions and communities

GOALS
- To maintain and continuously improve provided services, quality of their management
- To improve and ensure internal control and quality of improvement system, using the most advanced innovations in nursing education
- To promote and support nursing staff professional development
- To increase staff motivation and productivity
- To teach nursing students and new employees, to ensure an open and supportive learning environment
- To perform satisfaction surveys patients treated in Clinics and Outpatient Clinics, analyze the results and provide preventive steps to negative feedback and implementation of recommendations for patients

We seek and will seek that prevention, care and nursing would be ensured and accessible to all our patients.
Deputy director for nursing A. Grebliuniene
Carefully conducted clinical trials are the safest and fastest way to find treatments that work in people, and new ways to improve health.

Head of the group Dr. R. Briudienė

CLINICAL TRIALS

There are different kinds of clinical trials in our institution:
- prevention options
- new treatments or new ways to use existing treatments
- new screening and diagnostic techniques
- improving the quality of life

Clinical trials at Institute of Oncology Vilnius University: At present there are 22 active clinical trials at our institution. 50 clinical trials in total (monitoring patients or trials at initiation process).

Most are Phase II/III clinical trials, but there is a possibility to carry on Phase I or Phase IV trials as well.

We have a considerable experience in clinical trials with prostate, breast and lung cancer patients.

All clinical trials:
- Are approved by Lithuanian Bioethics Committee and the system is enforced by the Law on Ethics of Biomedical Research
- Are approved by State Medicines Control Agency
- All personnel participating in clinical trials work according Good Clinical Practice guidance

PHARMACY

The Pharmacy of IOVU provides the departments of IOVU with medicines, pharmaceutical products, narcotic and psychotropic drugs, antitumor medicine and immunomodulators.

Head of the department M. Karpavičienė

DEPARTMENT ORGANISATION

There are 5 employees in the Pharmacy:
- Head of the Pharmacy (pharmacist);
- Pharmacist;
- A pharmacist’s assistant;
- Administrator;
- Office cleaner.

DEPARTMENT FUNCTIONS

- To perform the functions indicated in the regulations of the Pharmacy competently, to improve qualification of the employees
- Continuously improve the quality of the performance and efficiency of the service
- To analyze the demand of medicaments and pharmaceutical products and to strive to meet the legitimate expectations of the Patients
- To provide detailed information on the range of pharmaceutical products to the Heads of Clinical Divisions of the Institute
- To achieve faster and more cost-effective order of the pharmaceutical products
- To be guided by the principles of publicity, transparency, internal cooperation and other principles of democratic administration

DEPARTMENT VALUES

- Open-minded intellectual development, innovation and scientific thought.
- Respectful and collegiate relationships within all the personnel working in clinical trials
- Responsibility and accountability to ourselves, our patients and the community.

DEPARTMENT MISSION

To develop and conduct clinical trials aimed at improving the diagnosis, treatment and prevention of cancer with the ultimate goal of reducing morbidity and mortality from this disease

INSTITUTE OF ONCOLOGY VILNIUS UNIVERSITY
DEPARTMENT OF INFECTION CONTROL

Daily maintenance of nosocomial infections based on clinical microbiological data, is carried out in order to reduce frequency of nosocomial infections, with this associated hospitalization duration and other consequences. Also there is controlled performance of safe procedures, preventive and pre-epidemic measures, centralized processing of multiple medical instruments and sterilization, rational use of antibiotics.

Head of the department: V. Voldemorienė

MAIN AREAS
- Control of nosocomial infections
- Staff training
- Evaluation of preventive measures
- Analysis sensitivity to antibiotics of nosocomial infections agents
- The spread of resistant organisms and usage of antimicrobial preparations

FUNCTIONS
- To monitor and analyze morbidity trends from nosocomial infections, factors influencing emergency of nosocomial infections, to evaluate effectiveness of control measures
- To register and evaluate outbreaks of nosocomial infections (two or more epidemiologically possibly related cases of nosocomial acquired infections)
- To collect and analyze data about nosocomial infections provocatives of patients treated in outpatient, sensitivity to antibiotics, the spread of resistant microorganisms and usage of antimicrobial preparations
- To prepare procedures of infection management and to control their implementation
- To monitor and evaluate implementation of infection prevention measures, their effectiveness, including compliance of clinics hygiene rules, isolation of patients, control of disinfection and sterilization ensuring safe diagnosis, patients treatment and non-hazardous health conditions
- To participate in planning and implementation of new technologies that may have an impact on the spread of infections (eg. considering projects of renovation projects, using new instruments, medical products and others)
- To teach and consult employees about nosocomial infection control and hygiene issues
- To participate in projects proposed by European Centre for Disease Prevention and Control (ECDC) and to submit the data to the Institute of Hygiene about: surgical wound infections, epidemiological maintenance after colon and gall-bladder removal surgeries; spread of infections and their risk factors in Day-care research: nosocomial infections (pneumonia, blood and urine) maintenance in patients with treatment duration of intensive care unit for more than 48 hours.
- To take part in Lithuania Hospital Infection Control Association work.
- To provide sterile instruments, surgical material (only for one patient, for one procedure)

VISION
- Monitoring the morbidity of nosocomial infections and investigating outbreaks of them rely on contemporary epidemiological markers of molecular microorganisms

KEY FIGURES
- The introduction of strict pre-operative antibiotic prophylaxis reduced 4 times the frequency of surgical wounds infections after colon surgery

DEPARTMENT ORGANISATION
- The department of infection control has sub-department called Centralyzed Sterilization.
- There are 14 employees in the department: head of the department – physician epidemiologist, physician assistant, senior nursing administrator and 14 other employees.

HOSPITAL REGISTER

Our experience allows us to collect and analyze the data collected in treatment process.
Head of the department: L. Dobrovolskis

MAIN AREAS
- Control of nosocomial infections
- Staff training
- Evaluation of preventive measures
- Analysis sensitivity to antibiotics of nosocomial infections agents
- The spread of resistant organisms and usage of antimicrobial preparations

FUNCTIONS
- To develop, install and operate software, which is designed to collect, manage and analyze data about treated patients, research and treatment procedures, as well as to install technical measures, which are necessary for this system activity
- To participate in projects proposed by European Centre for Disease Prevention and Control (ECDC) and to submit the data to the Institute of Hygiene about: surgical wound infections, epidemiological maintenance after colon and gall-bladder removal surgeries; spread of infections and their risk factors in Day-care research: nosocomial infections (pneumonia, blood and urine) maintenance in patients with treatment duration of intensive care unit for more than 48 hours.
- To take part in Lithuania Hospital Infection Control Association work.
- To provide sterile instruments, surgical material (only for one patient, for one procedure)

VISION
- To develop, install and operate software, which would gather all taking place in IOVU. To become the leading institution in development and installation of this type of software in Lithuania

KEY FIGURES
- 45 000 outpatient medical records
- 10 000 inpatient medical records
- 40 000 carried out researches
- 8 000 surgeries descriptions

DEPARTMENT ORGANISATION
There are 5 employees in the department: Head of the department, Senior health statistician, doctor statistician, IS administrator, IS engineer

FUNCTIONS
- To collect, manage and analyze the data about the treated patients, made research and treatment procedures, usage of beds, treatment results
- To control the quality of the data which are in databases of the department. To install, maintain and monitor sub-systems of information systems. To maintain and develop e-health services for doctors and patients
- To provide the institute with professional suggestions and solutions in the field of IS, to analyze and remove the failures related to information systems. To maintain and update information systems in IOVU
- To prepare periodic reports and analytical reviews. To handle archive of medical records.
DEPARTMENT OF PUBLIC PROCUREMENT

OBJECTIVE
- To ensure that all IOVU purchases would be carried out and the winner would be determined in accordance with the Legislation on Public Procurement of Republic of Lithuania and other legal acts and the main procurement principles: equality, non-discrimination, mutual recognition, proportionality and transparency

GOALS
- To organize properly performed goods, services and procurement procedures
- To promote competition between the suppliers and seek the efficient and rational use of public procurement funds
- To reduce the cost of procurement organization
- To carry out the preventive measures in public procurement area, in order to improve procurement effectiveness and to reduce public procurement implementation order, the set of public procurement law, possibility of irregularities
- To prepare public procurement regulating documents, forming an effective public procurement activity basis, in the IOVU

DEPARTMENT OF FINANCE AND ECONOMIC PLANNING

VISION
- To seek that financial responsibility would be detailed, objective, comparable and useful for internal and external users and comply the international level

OBJECTIVES
- To establish and improve the accounting, financial analysis and management skills
- To develop necessary skills for accounting policy formation
- To accept strategic finance management solutions based on analytical assessment
- To communicate and co-operate seeking unified purpose

GOALS
- To form IOVU accounting policy
- To ensure correct accounting administration and finance control in IOVU, seeking rational and economical use of material and financial resources, according to the activity, volume of performed functions, complexity of implemented programs, accuracy of reporting data and preparation and submission of accountability for external users (eg. Ministry of Finance, Ministry of Education, Ministry of Health, State Tax Inspectorate, State Property Fund, State Social Insurance Fund Board of the Republic of Lithuania, National and Territorial Health Insurance Funds and etc.) by their established procedures and deadlines

DEPARTMENT OF STRATEGIC ACTIVITIES PLANNING

OBJECTIVE
- To ensure the implementation of the strategic planning process of the Institute

GOALS
- To develop a strategic activity plan for the Institute
- To perform environmental analysis - PEST and SWOT analysis
- To do monitoring of IOVU strategic activity plan
- To develop evaluation of strategic activity plan
- To find information about the potential funding sources, analyze it and disseminate information for IOVU structural departments

DEPARTMENT OF EU PROJECT CO-ORDINATION AND SUPPORT

OBJECTIVE
- To help to receive funding for the Institute departments and employees in all areas projects and to manage projects, which received funding, with IOVU capacity, seeking the most effective funds absorption

GOALS
- To inform the Institute departments about the possibility to receive funding for projects from the EU and other international and national funds
- To inform the Institute departments about financing conditions of projects, calls for proposals
- To prepare and participate in the preparation of the Institute’s projects and applications
- To co-ordinate and manage the Institute projects
**EMPLOYEES SAFETY AND HEALTH SERVICE**

### MISSION
- To seek safe and complying with current legislation of the Institute activity with ionizing radiation sources
- To organize employee occupational exposure monitoring
- To organize and carry out the monitoring of workplaces
- To collect, process, store and supply information about the staff and the used ionizing radiation sources
- To supervise and organize radioactive waste management of Institute and to buy ionizing radiation sources
- To develop, train in the fields of radiation and physical protection
- To consult IOVU departments about radiation safety

### VISION
- Safe and health harmless work conditions for all employees, high safety and health culture

### OBJECTIVE
- To reduce accidents at work
- To preserve working capacity of all employees
- To reduce costs arising from accidents at work and occupational deceases

### BENEFIT
- This service carries out radiation safety and security maintenance in IOVU, takes care of radiation safety improvement and implementation of radiation and physical safety culture

### DEPARTMENT FUNCTIONS
- Executing Law of employees safety and health, and other employees safety and health legal regulations, requirements
- Executing training and instruction of the new employees according to safety and health
- Improving local legal regulations according to employees safety and health
- Planning and organizing occupational risk estimation in the departments
- Determining and organizing prevention of occupational risk
- Executing investigation and prevention of accidents
- Ensuring qualified training of employees according to safety and health
- Strengthening personal responsibility and competency of all employees in field of safety and health
- Consulting, informing employer’s authorized representatives and employees according to safety and health

**DEPARTMENT OF INTERNAL AUDIT**

### MISSION
- Internal medical audit as a quality management tool increases the efficiency of the Institute activity, contributes to implement quality policy and objectives (goals), reveals reserves to develop activity and to ensure its continuity

### GOALS
- To participate in setting IOVU services quality policy, objectives and goals, to provide recommendations to the director for the implementations of these objectives and goals
- To organize IOVU Medical audit activity, to check and evaluate quality of services, structural department activity, adequacy to laws and legal acts of the Republic of Lithuania and to documentation of quality system

### THE PURPOSE OF DEPARTMENT
- To do an independent, objective research, evaluation and consulting activity in order to ensure IOVU activity improvement

### OBJECTIVES
- To help to increase the Institute’s activity efficiency
- To implement strategic and other activity’s plans, programs, procedures, economic and financial policy
- To reveal reserves to develop activity and to ensure its continuity

### BENEFIT
- To check and evaluate:
  - the sufficiency and effectiveness of internal control system designed and installed by the Institute and its departments;
  - activities of Institute and its departments are implemented responsibly, according to Institute Statute, laws and other normative legal acts;
  - the information about the financial and economic activity is complete and reliable
  - set goals and objectives of Institute and its departments are achieved.

To provide Institute’s director objective information, recommendations and conclusions related with the audited activity, according to the internal control condition, strategic or other activity plans, implementation of programs, possible or set activity risk audited areas.

To assess the Institute finances, received from the European Union and foreign institutions and funds, management and use.

To assess work of internal control in the Institute at least once every three years
DEPARTMENT OF ENGINEERING ECONOMY

MISSIONS
- To ensure continuous, comprehensive and smooth IOVU engineering and economic areas work directly and operative communicating with administration and departments.

GOALS
- To ensure that building and structure condition meets the sanitary, hygiene and the fire safety standards and regulations and to inform administration about their physical condition and to provide suggestions for its improvement.
- To organize and carry out heat, water supply and electricity supply, and equipment maintenance in premises, buildings and structures.
- To organize an annual inspection of buildings and structures.
- To organize and/or make building and structure repairs.
- To perform maintenance of thermo-engineering systems, ventilation and air conditioning systems equipment.
- To ensure reserve maintenance, repairs of automatic electrical power supply system.
- To organize fire safety systems installation and exploitation in buildings and structures.
- To organize medical equipment servicing, inspection, repairs.
- To organize the smooth functioning of the communication systems and work of communication equipment.

DEPARTMENT OF HUMAN RESOURCES AND DOCUMENT CONTROL

MISSIONS
- To take care not only of department activities, but also of all human resources.
- To form organizational culture, strategy, the main activity processes of Institute.
- To form personnel policy in order to achieve the objectives of the institution.

GOALS
- To employ, train and evaluate the staff of Institute and provide them a safe and fair work environment.
- To participate in staff promotion and imposition of penalties, employment and discharge, certification processes.
- To regulate staff involved in the human resource management process work procedures.
- To carry out staff working time and holidays records.
- To organize staff training.
- To ensure the compliance with work rules and working discipline.
- To execute IOVU administrative functions.
- To manage, account and protect documents of Institute.

SOCIAL ACTIVITY

PATIENTS’ ORGANIZATIONS
IOVU collaborates with these patients’ organizations:
- Lithuanian Society for Patients with Prostate Cancer
- National Societies Association of women with Breast diseases
- Association of patients with stoma “Day”
- Lithuanian Society of post-laryngectomy patients “New voice”

GOALS
- To ensure that building and structure condition meets the sanitary, hygiene and the fire safety standards and regulations and to inform administration about their physical condition and to provide suggestions for its improvement.
- To organize and carry out heat, water supply and electricity supply, and equipment maintenance in premises, buildings and structures.
- To organize an annual inspection of buildings and structures.
- To organize and/or make building and structure repairs.
- To perform maintenance of thermo-engineering systems, ventilation and air conditioning systems equipment.
- To ensure reserve maintenance, repairs of automatic electrical power supply system.
- To organize fire safety systems installation and exploitation in buildings and structures.
- To organize medical equipment servicing, inspection, repairs.
- To organize the smooth functioning of the communication systems and work of communication equipment.

MEDICAL ORGANIZATIONS
The Association of Oncology Societies is joint association working in the fields of medicine, public health, science, education and related fields and provides the members of the Association and other individuals with services in these fields.
- Lithuanian Society for Radiotherapy Therapy
- Lithuanian Society of Oncology
- Lithuanian association of medical physics and engineering
- Lithuanian Society of Coloproctologists
- Association of Psychosocial Oncology
- Lithuanian Society of Ultrasound
- Lithuanian Society of Thoracic and Heart Surgeons
- Lithuanian Society of Senology
- Lithuanian Society of Radiology

OBJECTIVES
- To be a mediator between employees and administration aligning their various objectives in order to ensure a successful work of Institute.

Patients’ organizations contribution to the cooperation with IOVU:
- May represent patient helping adjust to the situation optimally.
- Participate in events organized by the IOVU.
- Invite IOVU representatives to participate in the organized events.

IOVU provided services in collaboration with patients’ organizations:
- Information.
- Consulting.
- Intermediation and representation.
- Socio-cultural services.
- Educational events.
- Public relations services.
- Information about patients’ organizations activity for patients who are not members of organizations.