



List of topics that can be presented to visitors

Selected areas where some types of new methods, technologies and/or simulations are used.

1. Preclinical topics

1.1. Medical Informatics - OK

Theory of evidence based medicine, biostatistics, and informatics in medicine. Tools and simulations in education of medical students at UPJS.

Department of Medical Informatics, Jaroslav Majerník

Learning Outcomes:

1. Academics:
 - a. Explain basic concepts of Evidence-Based Medicine.
 - b. Understand background of online tools and platforms used in medical education at UPJS.
2. Students:
 - a. Understand principles of Evidence-Based Medicine.
 - b. Describe medical data and perform their statistical analysis.
 - c. Use software tools and simulations integrated in education of medical students at UPJS.

1.2. Nursing Care - OK

Tools and simulations in education of nursing care at UPJS Faculty of Medicine. Training of practical skills such as applying bandages, administration of parenteral medication etc. running in the simulation laboratories.

Department of Nursing Care, Lucia Dimunová

Learning Outcomes:

1. Academics:
 - a. Observe main tools and simulations used in education of nursing care at UPJS.
 - b. Design trainings of practical skills in applying bandages, administration of parenteral medication etc.
 - c. Utilise communication skills.
 - d. Identify, recognize and discern selected legal and ethical issues in nursing.
2. Students:
 - a. Use tools and simulation equipment in nursing care.
 - b. Gain practical skills in applying bandages, administration of parenteral medication etc. through trainings running in the simulation laboratories.
 - c. Utilise learned skills to communicate effectively with patient and team members.

1.3. Medical Physiology at UPJS - OK

Research in the field of medical physiology, sleeping apnoea and sleeping laboratory.

Department of Medical Physiology, Viliam Donic

Learning Outcomes:

1. Academics:
 - a. Understand Human physiology and background of Sleep medicine, Sleep apnoea and Sleep laboratory.
 - b. Observe research in the field of ongoing research in sleep medicine, manage Sleep laboratory and prepare a patient for sleep study.
2. Students:



- a. Will learn about sleep medicine, difference between types of respiratory disorders during sleep. Polysomnography as diagnostic method in sleep medicine, how to diagnose obstructive sleep apnoea and how to treat it.
- b. Interpretation of polysomnographic recordings and results of overnight polysomnography. How to prevent obstructive sleep apnoea. What to do recommendation for the patients.

1.4. Forensic Medicine at UPJS - OK

Methods in forensic medicine, medico-legal expertise, examination and autopsy, laboratory investigation and cooperation with external institutions. Death certification. Autopsy protocol. Medico-legal statistics and individual cases.

Department of Forensic Medicine, Nikita Bobrov

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.

1.5. Biophysics in Medicine

Proteomics, research in the field of biophysics and its contribution to the clinical praxis.

Department of Medical and Clinical Biophysics, Ján Sabo

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.

1.6. Experimental Medicine at UPJS - OK

Advances in experimental medicine at UPJS. Role of human gut microbiota in the pathogenesis of chronic diseases and possibilities for their prevention and therapy using targeted modulation of gut microbiota. Cutting-edge laboratory, in vitro experimental model SHIME.

Institute of experimental medicine, Alojz Bomba

Learning Outcomes:

1. Academics:
 - a. Understand gut microbiota and gut barrier in health and disease.
 - b. New findings on the effects of lactobacilli in experimentally induced colorectal carcinoma in rats.
 - c. Realize in vitro study of the human gut microbiota using SHIME® model.
 - d. Observe application of omega-3 PUFAs in prevention of chronic diseases.
2. Students:
 - a.

1.7. Pharmacology

Simulations and research in clinical pharmacology.

Department of Pharmacology, Ján Mojžiš

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.



1.8. Human Anatomy - OK

Cadavers and education movies based on real dissections. Real dissections in dissecting rooms. Our way of teaching human anatomy (lectures and practical lessons).

Department of Anatomy, Ingrid Hodorová

Learning Outcomes:

1. Academics:
 - a. anatomy
2. Students:
 - a. Anatomy

Presentation: Wednesday

Visit: Thursday

2. Clinical topics

2.1. First Aid in Health Care Disciplines - OK

Simulations in anaesthesia and intensive care, first aid, critical decisions. Critical decisions and important steps in patients with loss of consciousness and circulatory arrest. Airway management and ventilatory support during failure of respiration. Defibrillation and cardioversion.

1st Department of Anaesthesiology and Intensive Medicine, Jozef Firment

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.

2.2. Neonatology at UPJS - OK

New technologies in prenatal and neonatal care. Patient's repositories. The unit managing the most complicated cases of the critically ill newborns from the region of 1,5 mil inhabitants, dealing with all treatable congenital malformations except congenital cardiac abnormalities. The NICU admitting yearly approx. 400 neonates, 10 percent of them are with extreme preamaturity. Serving all necessary interventions, noninvasive ventilation, conventional ventilation, HFO and iNO. It has a unique ultrasonic diagnostic possibilities, bedside, but also directly in the transport system. In field of education has created a server based data projection system with unique data collection from the ultrasounds.

Department of Neonatology, Peter Krcho

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.

2.3. Dental medicine

Tools and simulations in education of dental medicine at UPJS Faculty of Medicine.

Departments of Stomatology, Andrej Jenča, Vladimíra Schwartzová

Learning Outcomes:

1. Academics:
 - a. Practical training of preclinical subject of Dental medicine - Propaedeutic of Dental Medicine.
 - b. Practical training of various clinical subject of Dental medicine.
2. Students:



- a. Practical skills of conservative medicine, prosthetics, dentoalveolar surgery on models, on trainers.
- b. Practical skills of various department of Dentistry.

Advances in dental medicine, surgery interventions, simulators.

Department of Stomatology and Maxillofacial Surgery, Andrej Jenča

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.

Presentation: During visit

Visit: Thursday 10:00-12:00

2.4. Simulations in Gynaecology and Obstetrics

Simulations in Gynaecology and Obstetrics.

Department of Gynaecology and Obstetrics, Peter Urdzík

Learning Outcomes:

3. Academics:
 - a.
4. Students:
 - a.

2.5. Simulations in Surgery

Surgery interventions, laparoscopy, simulators.

Department of Surgery, Jozef Radonak

Learning Outcomes:

1. Academics:
 - a. Surgery methods
2. Students:
 - a. Surgery methods

Presentation: Thursday morning

Visit: Thursday afternoon

3. Special workplaces and external cooperation

3.1. East Slovak Institute of Cardiovascular Diseases - OK

Advances in heart diseases management. Interventions and diagnostics in 21st century.

František Sabol

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.

3.2. Biomedical engineering - OK

Advances in implants, materials and technologies.

Department of Biomedical Engineering and Measurement (Technical University in Košice), Jozef

Živčák, Radovan Hudák

Learning Outcomes:

1. Academics:



- a.
2. Students:
 - a.

3.3. Hospital Košice-Šaca

Modern approaches in patient's care, new technologies. Burns, traumatology, sport medicine.
XY

Learning Outcomes:

1. Academics:
 - a.
2. Students:
 - a.

Any others???

- Radiology
- Neurosurgery
- Neurology
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