# ReFEEHS Experiential Education Working Group Meeting Belgrade, March 24th, 2018

Students' and preceptors' (students' supervisors)
guidelines for health care professions
experiential education:
University of Pécs experiences

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#### The aim of the presentation

- To give an overview of experiences with experiential education in the clinical practice
- at the Clinical Centre of the University of Pécs

#### MediSkillsLab - Medical Skills Lab

- Established in 2012 at Medical School
- Further development from European Union funding
- Aim of the Lab:
  - Improving the manual skill of medical and health sciences students and physicians
  - At graduate and postgraduate level

#### **Medical Skills Lab tools**

- High fidelity simulators
- 3D medical equipments
- Innovative demonstration tools
- Smart technologies

#### **Target population**

Medical students

Dental students

• Health sciences students (nurses, physiotherapists, paramedics, health visitors, etc.)

Residents

Senior health care professional

# Type of courses

- Graduate programmes for students
- Postgraduate training for residents
- Police Medic Instructor training
- Disaster Medic training
- Chemical, biological, radiological and nuclear (CBRN) defense programme
- Combat Medic / Emergency Medical Technician Basic course

#### Students' expectations

- High quality education
- Strong theoretical background
- Advanced practical environment
- Getting the neccesary practical skills

# Source of students' knowledge

- Books
- Lectures, seminars
- Laboratory
- Practical training
  - Medical skill lab
  - Clinical Centre
  - Teaching hospitals

#### **Medical Skills Lab**

(27 April, 2017, Pécs)



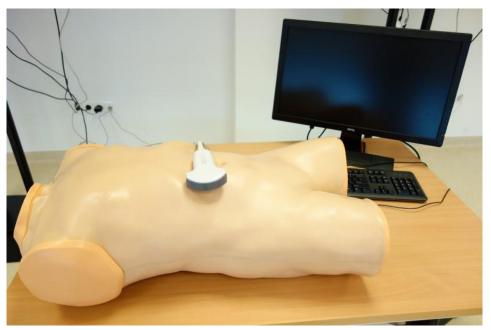
#### 3D LAPAROSCOP SIMULATOR

- Force-feedback system
- Simulated laparoscopic training procedures
- Minimally Invasive Surgery (MIS) skills
- Camera navigation, peg transfer, cutting, clipping and needle driving
- Procedural Skills module (practice adhesiolysis, running the bowel, suturing and knot tying and loop ligation)
- Laparoscopic cholecystectomy and appendectomy
- Ectopic pregnancy and salpingo ophorectomy procedures



#### 3D ULTRASOUND SIMULATOR

- High-fidelity ultrasound simulator
- Realistic simulation of cardiac, lung and abdominal ultrasound that helps learners develop both cognitive and psychomotor skills
- Dynamic 3D augmented reality helps with structure identification and spatial orientation



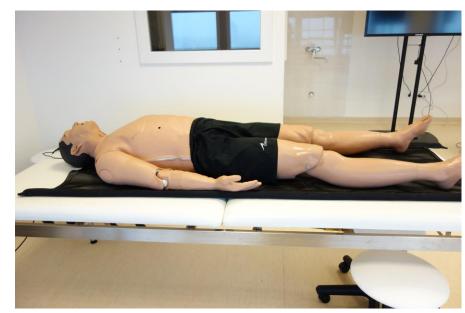
#### **AED** (automated external defibrillator)

- Sudden Cardiac Arrest (SCA)
- Ventricular fibrillation (VF)
   or ventricular tachycardia
   (VT)
- HUNGARIAN / ENGLISH / GERMAN version



# **Ambu® Cardiac Care Trainer System Wireless**

- Designed for training Advanced Life Support in ACLS (Advance Cardiac Life Support) algorithms and teamwork, either indoors or on location in field situations
- To practice the oral intubation using modern airway management devices like ET tubes, laryngeal mask
- Shows effectiveness of the resuscitation, including results achieved for ventilation volume and depth of external chest compression



# Flexible videoscope/fiberoscope system with monitor

- aScope<sup>TM</sup> 3 Family consists of single-use scopes in three sizes, compatible with the reusable monitor
- aScope 3 is suitable for
  - check Intubation
  - check Airway inspection
  - check Tube check
  - check Management of retained secretion
  - check bronchoalveolar lavage(BAL) or bronchial wash (BW)
  - check Percutaneous Dilatational
     Tracheostomy (PDT) procedures
  - check Training of bronchoscopy skills





## Other tools (1)



Arthery puncture (A. Radialis, a. cubiti)



Conocotomy model

Conocotomy model

(intramuscular injection, stoma care, catheter)



## Other tools (2)



**Baby BLS model** 



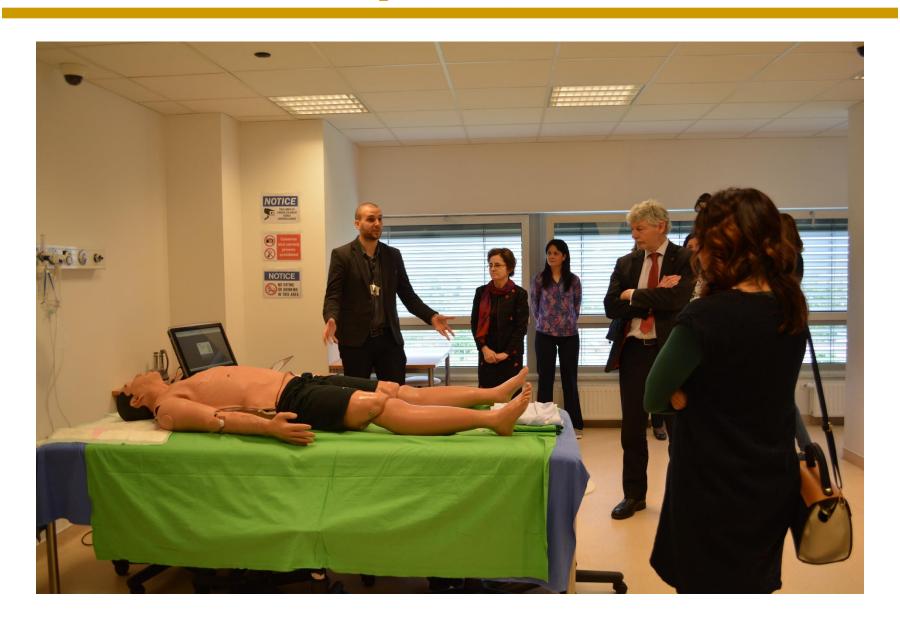
**Knotting model** (surgical knotting)

**Breast examination model** (self examination and medical screening)

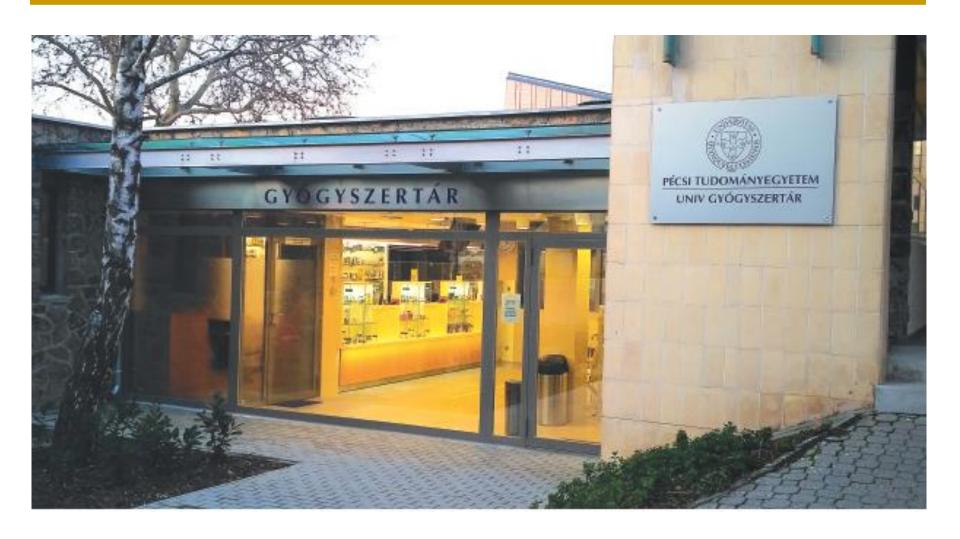


#### **Medical Skills Lab**

(27 April, 2017, Pécs)



# Pharmacy of the Clinical Centre of University of Pécs



#### Summary

• Introduction of Medical Skills Lab concept

In vitro simulation of in vivo skills

Half way between theory and patient care

Improving the safety of care

 Application for graduate, postgraduate education and life long learning

# Thank You for your kind attention!

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