We train better doctors!

Prof. Evangelos Georgiou M.D., Ph.D.
Simulation in Medical Education

Why?
Classic model of medical education
..but just observation can lead to erroneous results...

.. A strong portion of science is needed in order to approach the reality...
Technical dexterities...

There are knots you wish they untie..

..but there are others you want them firmly tied..
Old model: See one, do one, teach one
New model: See one, practice many, do one

Sur mesure...
Location- Infrastructure

- Space: ~200 m² Anatomy Bldg
- Multimedia lab
- Lecture hall
- 5 offices
- Simulation lab
Infrastructure

Lecture hall

Multimedia Lab
daVinci Robotic System
Hands movement analysis: Inclination Trackers
Our OSATS Stations

OSATS: Objective structured assessment of technical skills
MPL-Simulation Center
We train better doctors!

http://mplsc.med.uoa.gr/

An American College of Surgeons (ACS) accredited center

http://www.facs.org/education/accreditationprogram/list.html

One of the 4 ACS accredited Centers in Europe
In fulfillment of the accreditation requirements set forth by the American College of Surgeons Program for Accreditation of Education Institutes

MEDICAL PHYSICS LABORATORY,
MEDICAL SCHOOL, UNIVERSITY OF ATHENS
Athens, Greece

is hereby accredited as a Level I, ACS Level 1-Comprehensive Education Institute from June 24, 2009 through June 29, 2012.

Ajit K. Sachdeva, MD, FACS, FRCSC
Director, Division of Education
MEMORANDUM OF UNDERSTANDING
Between
Medical Physics Laboratory Simulation Center (MPLSC)
Athens University Medical School, Athens, Greece

And
The Centre of Excellence for Simulation Education and Innovation (CESEI)
University of British Columbia, Vancouver, Canada

To promote academic and research cooperation between the Medical Physics Laboratory Simulation Center (MPLSC) and The Centre of Excellence for Simulation Education and Innovation (CESEI)

1. The partnership will focus on simulation-based education, including curriculum development, exchange of curricula, training of technical personnel in simulation, teacher training, and other academic activities related to education based on simulation.

2. In the Memorandum of Understanding CESEI will support the MPLSC with educational technology and improvements of the technology provided.

3. The MPLSC and CESEI will design and conduct research projects related to simulation, education, and technology.

4. The two institutions will extend invitations to attend meetings of experts and academics and help make arrangements to attend national and international conferences.

5. The credits and logos of both institutions are the intellectual property of institutions, and cannot be used without the expressed written permission of the institution.

6. This Memorandum of Understanding may be amended by mutual written consent and will be in effect from the date of signature for a period of one year. The Memorandum of Understanding will be reviewed and may be extended by mutual agreement. The Memorandum of Understanding may be terminated with six weeks written notice.

Dr. Evangelos Georgiou, Director
Medical Physics Laboratory Simulation Center
October, 7th, 2011

Dr. Karim Qayumi, Director
The Centre of Excellence for Simulation Education and Innovation
October, 7th, 2011
Courses offered:

- Vascular Access
- Laparoscopy
- Endoscopy
- Robotic Surgery
- Endovascular (TBA)
- Arthroscopy (TBA)
- e-learning courses

Quality Management System (ISO certification)
Educational programs infrastructure

- 4 educational “ingredients” in common

Step 1: Pre-training
Step 2: System training
Step 3: Competency training
Step 4: Post-training

A combination of cognitive & skill dexterities in order to achieve the goals & the objectives of each program

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<table>
<thead>
<tr>
<th>Name of Course</th>
<th>Date of Course</th>
<th>Number of Hours for the Course</th>
<th>Type of Learners (Physician, Resident, Med Student, Nurse)</th>
<th>Total Number of Learners</th>
<th>Were Outcomes Measured?</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV catheterization (theory &amp; practical training)</td>
<td>Runs recurrently throughout the acad. year</td>
<td>10</td>
<td>M/N/A</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>Phlebotomy (theory &amp; practical training)</td>
<td>Runs recurrently throughout the acad. year</td>
<td>10</td>
<td>M/N/A</td>
<td>200</td>
<td>Yes</td>
</tr>
<tr>
<td>Basic skills training in Laparoscopic Surgery</td>
<td>Runs recurrently throughout the acad. year</td>
<td>10</td>
<td>R</td>
<td>20</td>
<td>Yes</td>
</tr>
<tr>
<td>PG course in minimally invasive surgery &amp; robotic surgery</td>
<td>Both semesters</td>
<td>144/semester</td>
<td>R</td>
<td>20</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Our vision for the future

Incorporation of simulators into teaching & the development of medical procedures’ curriculum in our Medical School

http://mplsc.med.uoa.gr