NETWORK OF ACCREDITED CLINICAL SKILLS CENTRES IN EUROPE

Institute for Training and Clinical Innovative Technology

Isabelle Dehaene, MD

2017
Headers for Accreditation

Multi specialty format accreditation obtained October 8th, 2016

2nd Nasce Scientific Meeting, Dublin, Ireland
Governance & Administration

- **Contact details**
  - **Director**
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# Steering board

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean of the Faculty of Medicine and Health Sciences</td>
<td>Piet Hoebek, MD, PhD, <a href="mailto:Decaan.GE@UGent.be">Decaan.GE@UGent.be</a></td>
<td></td>
</tr>
<tr>
<td>CEO of Ghent University Hospital</td>
<td>Eric Mortier, MD, PhD <a href="mailto:gb@uzgent.be">gb@uzgent.be</a></td>
<td></td>
</tr>
<tr>
<td>Centre director</td>
<td>Wouter Willaert, MD, PhD <a href="mailto:Wouter.willaert@ugent.be">Wouter.willaert@ugent.be</a></td>
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</table>
Bimonthly meetings
Think tank

For the development and application of **simulation (in the broad sense of the term)** and other **innovative techniques** to ensure patient safety, education, training, research, and quality management in health care.
Multidisciplinary platform

To facilitate, interchange, and improve innovative technology and simulation within Ghent University Hospital, Ghent University and Ghent University association through inventories, evaluations, and valorizations of skills training.
Network

• That stimulates and extends the **collaboration** between educational programs for undergraduates, postgraduates, and more advanced training programs for medical specialists, nurses, physiotherapists, midwives, and paramedics.

• That involves affiliated domestic, foreign and industrial partners.
Teachers

- Total number: 445
- **FTE:**
  - 10-49%: 23
  - 50-99%: 2
  - 100%: 3
- **Background:**
  - Medicine (any type of specialty): 378
  - Nurses: 27
  - Other: 44
- **Train the trainer**

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Learners</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
<td>6</td>
</tr>
</tbody>
</table>
Learners

- **Number of participants:** 7,496

<table>
<thead>
<tr>
<th>Undergraduates</th>
<th>Postgraduates</th>
<th>Specialised trainings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2171</td>
<td>681</td>
<td>4644</td>
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</tbody>
</table>

- **Areas for training:**
  - cfr annual report 2016
- **Inter-disciplinary/Inter-professional...**
Learners

- Remote monitoring: Medbook (postgraduates)
- Range of modern techniques
  - e-learning: 33 courses (including PROSPECT)
  - serious games: radioprotection in the operation theatre (PhD B.Doyen); in development
  - simulation modules: ...

SimMan 3G  App Touch Surgery  Enhanced VR Environment
Workshops - objectives

<table>
<thead>
<tr>
<th>Level of Experience</th>
<th>Knowledge</th>
<th>Technical</th>
<th>Non-Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduates</td>
<td>33</td>
<td>1,103</td>
<td>895</td>
</tr>
<tr>
<td>Postgraduates</td>
<td>191</td>
<td>7</td>
<td>182</td>
</tr>
<tr>
<td>Specialized training</td>
<td>11</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>1162</td>
<td>1133</td>
</tr>
</tbody>
</table>

Human cadaver training for specialists
- Shoulder course
- Hip course
- TATME course
- Gynaecology course
- Advanced laparoscopy course

Postgraduate training
- Laparoscopic suturing course
- Cardiovascular suturing course
- A PROficiency-based StePwise Endovascular Curricular Training (PROSPECT) Program
- Pig lab technology course
- Transesophageal echocardiographic image course
<table>
<thead>
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<th>Level of experience</th>
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<th>Learners</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Doctors</td>
<td>Undergraduates</td>
<td>Summer School</td>
<td>25</td>
<td>40</td>
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<tr>
<td></td>
<td></td>
<td>Skills Lab</td>
<td>71</td>
<td>2,131</td>
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<tr>
<td></td>
<td>Postgraduates</td>
<td>Master of Medicine</td>
<td>174</td>
<td>681</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human cadavers</td>
<td>66</td>
<td>758</td>
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<tr>
<td>Nurses</td>
<td>Specialised training</td>
<td>Other specialised trainings</td>
<td>42</td>
<td>3,844</td>
</tr>
<tr>
<td>Other</td>
<td></td>
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<td>20</td>
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R&D overview

- Research: past year
  - Publications: 7
  - PhD: 1 (patient-specific virtual reality simulation: a patient-tailored approach of endovascular aneurysm repair - L. Desender)
- Congress activities: 5
- Audit mechanism – feedback: 2
Innovative approaches to learning and education

Validation and implementation in curricula

App Touch Surgery Module

Laparoscopic Hepatobiliary surgery

Reperfused Human cadaver

Cardiac surgery

Central venous catheterization; episiotomy

Testing

Enhanced VR environment in abdominal surgery
Innovative approaches to learning and education

- Objective skill assessments in the surgical selection process (B.Doyen)
- Soft skills evaluation (B.Doyen)
  - Surgeons; surgeons in training; and undergraduates with surgical interests
- Serious games: radioprotection in the OR (PhD B.Doyen); in development
  - Through Massive open online courses (MOOC)
    https://www.youtube.com/watch?time_continue=22&v=eW3gMGqcZQc
- Black box in hybrid angiosuite
Key challenges

- Implementation of validated training curricula
- Implementation and validation of new proficiency based technologies in training curricula
- Invest in multifunctional training room(s)
- Facilitation of the organization of training courses
Financial injection by platform for medical innovation of Ghent University Hospital
SWOT of ITCIT

- **Strengths**
  - Experience with development and implementation of innovative curricula
  - Extensive (non)-technical training offer for various levels of experience
  - Hands-on training for postgraduates is obligatory starting from academy year 2018-2019
  - Networking within Ghent University Association
  - Research on training (publications; PhD)
  - Soft human cadaver training
  - Motivated team with variable background
SWOT of ITCIT

• Weaknesses
  • Complex organization, making structural changes and implementations difficult
SWOT of ITCIT

Opportunities
- Total package professional service to facilitate hands-on training at ITCIT
- Testing, validating and implementing of a wide range of trainings in curricula
- (Inter)national networking to learn from other centres (e.g. curricula, innovations,...)
SWOT of ITCIT

• Threats
  • Changing educational landscape in Belgium
4 year mission plan

- Implementation of validated training curricula
- Implementation and validation of new proficiency based technologies in training curricula
- Invest in multifunctional training room(s)/new training centre
  - Total package professional service to facilitate hands-on training at ITCIT
  - Becoming financially self-sufficient
Questions about

- Human cadaver training, app touch surgery  
  wouter.willaert@ugent.be
- Serious gaming (radioprotection)  
  bartdoyen@gmail.com
- Massive open online courses (MOOC)
- Soft skill evaluation
- Skill assessments in surgical selection process
- Black box in hybrid angiosuite  
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