“Siriraj Minimally Invasive Surgery workshop: from basic to advance.”

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MIS unit
Department of Surgery,
Faculty of Medicine Siriraj Hospital,
Mahidol University,
Bangkok, Thailand

Ethical and Medico-legal concerns of learning new skills on actual patients
moving learning curve out of the operating room

- Limited operative time
- Long waiting list
- Financial constraint
- Patient safety

Ensuring Surgical Competency via a Systemic Skill Development Program
moving learning curve out of the operating room

• Hands-on Workshop
  • Basic level (Box training, Simulator)
  • Intermediate level (Pig model, Soft Cadaver)
  • Advanced level (Live Demonstration, Teleconference, Hands-on training)

Siriraj Advanced Surgical Skills Training & Education Center
Workshop for basic laparoscopic surgery
lecture, knotting, suturing, clipping

Lab box training
every tuesday morning
Hand eye cooperation, Instrument control
endoscopic workshop
Lecture, Instrument, GI mentor
Annually For 3rd year Surgical Resident

Simulator for Lap. Surgery
GI Mentor

ERCP & EUS training
ROBOTIC SIMULATOR TRAINING

8th workshop for Laparoscopic surgery in Pig Model : 2012

Laparoscopic TAPP, splenectomy, cholecystectomy, Open entero-enterostomy anastomosis, Ileocolostomy anastomosis
Hands-on workshops in Soft Cadaver
Laparoscopic colectomy

“New Frontiers in Colorectal cancer treatment: From laboratory bench to Robotic console”
16-18 January 2012, Siriraj Hospital

Endoscopic Hands-on training
EGD, Colonoscopy, ERCP, EUS
Teleconference activities

MIS unit
Department of Surgery
Faculty of Medicine Siriraj Hospital
2012

High Definition transmission of live surgery

Feb 2012

Lap. Adrenalectomy from Korea

APAN 33rd meeting at Chiang Mai
Medical WG Surgery session

Laparoscopic adrenalectomy by Dr. Hwang DW
from Seoul National University Bundang Hospital

1. Chiang Mai APAN sense
2. Kyung U H
3. Mahidol U Siriraj H
4. SNU Bundang H
5. National Taiwan U
6. U Philppipe Manila
7. U HK
8. Viet Duc H
9. Bck Mai H
10. Chu Kay H
11. Nathha CITEC
12. PHS, India
DVTS system
4 sites were connected
<table>
<thead>
<tr>
<th>Title</th>
<th>Hemia Hands-on Workshop Soft Cadaver</th>
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<tbody>
<tr>
<td>Date &amp; Time</td>
<td>10:30-12:00, August 1 (Wed), 2012</td>
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<tr>
<td>Topic</td>
<td>Techniques in groin hernia and complex abdominal wall repair in soft cadaver</td>
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<tr>
<td>Style</td>
<td>Teleconference (Live for Cadaver)</td>
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<td>System</td>
<td>Vidyo</td>
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**Main Personnel**

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<thead>
<tr>
<th>Chair</th>
<th>Vitoon Chinsawangwatanakul</th>
<th>Siriraj</th>
<th>TH</th>
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<tbody>
<tr>
<td>Co-chair</td>
<td>Thawatchai Akravisutth</td>
<td>Siriraj</td>
<td>TH</td>
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<tr>
<td>Chief Engineer*</td>
<td>Veerapol</td>
<td>Siriraj</td>
<td>TH</td>
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<tr>
<td>Cooperator Engineer</td>
<td>Antoku, Hu</td>
<td>Kyushu U</td>
<td>JP</td>
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**Participating Institution**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Moderator's Name</th>
<th>Country</th>
<th>Engineer's Name</th>
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<tbody>
<tr>
<td>1. Siriraj Hospital</td>
<td>Dr. Thawatchai</td>
<td>TH</td>
<td>Veerapol</td>
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<td>2. Pamela Hospital</td>
<td>Dr. Michael Lee</td>
<td>HK</td>
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<td>3. Kyoto U</td>
<td>Dr. Takaori</td>
<td>JP</td>
<td>Kume</td>
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<td>4. Chiang Mai U Hospital</td>
<td>Dr. Sirikarn Yamada</td>
<td>TH</td>
<td>Nung</td>
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<td>5. Cho Ray Hospital</td>
<td>Dr. Giang TB</td>
<td>VN</td>
<td>Bang</td>
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<td>6. Viet Duc</td>
<td>Dr. Hilvan</td>
<td>PH</td>
<td>Randy</td>
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<tr>
<td>7. U Philippine Manila</td>
<td>Dr. Kuo</td>
<td>TW</td>
<td>Yiding Chen</td>
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<td>8. Kaohsiung Medical College</td>
<td>Dr. Han</td>
<td>KR</td>
<td>Junghun Lee</td>
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<td>9. Juntendo U</td>
<td>Dr. Toma</td>
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<td>10. Tohoku U</td>
<td>Dr. Egawa, Dr. Naitoh</td>
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<td>12. NUS</td>
<td>Dr. Lomanto, Dr. So</td>
<td>SG</td>
<td>Jessen</td>
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<td>13. Seoul National U Bundang Hosp</td>
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<td>14. Kyushu U Hospital</td>
<td>Dr. Shimizu</td>
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<td>Antoku</td>
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**Conference rooms**

- Conference room
- Training room

**Soft Cadaver**

**Vidyo system**
Laparoscopic component separation in soft cadaver

Demonstrated by Todd Heniford

Aug 2012

Live Demonstration
8th Annual meeting & teleconference of siriraj GI endoscopy center
“The Master of Upper GI Endoscopy”
Evaluation

Miller’s Pyramid


Miller’s pyramid for assessing clinical competence (adapted from Norcini, 2007, p2)
Conclusion

Technical skills are essential to the practice of minimally invasive surgery.