

The future of robotics from a clinical standpoint



A. Mottrie

***G. Denaeyer, P. Schatteman,
P. Carpentier, V. Ficarra***

***Department of Urology
O.L.V. Clinic Aalst
Aalst
Belgium***

Who am I ??



Education

- 1988 – 1992 : **General** Surgery at Roeselare, Belgium
- 1992 – 1994 : **Urology** : Joh. Gutenberguniversität,
Mainz, Germany
- 1994 – 1996 : **Staff member** at Joh. Gutenberguniversität,
Mainz, Germany
- 1996 : **Fellowship** in Washington University, St.-Louis,
Missouri, U.S.A.
- 1996 - : **Urologist** in Urological Department, OLV Hospital Aalst
- 2008 - : **Associate Professor** in Urological Department,
Universität des Saarland, Germany & UZ Ghent, Belgium
- 2011 : **Degree of PhD**
in University of Saarland, Homburg-Saar, Germany

Robotic experience



- since 2001
- > 3000 urological cases
- first European consecutive series of successfully performed robotic radical prostatectomies
- First videoprize @ EAU 2006 with 1st robotic psoashitch
- pioneer in several robotic procedures (cystectomy, intracorporeal ileal conduit, ureteral reimplantation, partial nephrectomy)

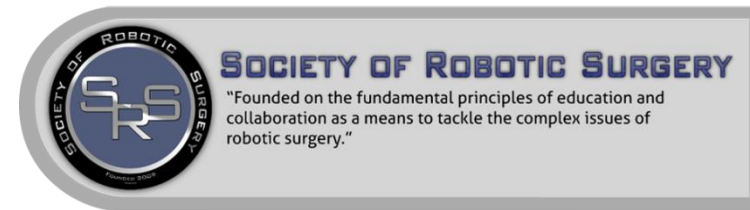
OLV has the following equipments dedicated to da Vinci:

- **3 x Si systems with dual console facility**
- **Tile Pro + Ultrasound BK-Medical Flex Focus 800 with flexible probe**
- **Scanlan Reliance Bulldog clamps**
- **Fluorescence Imaging Kit Upgrade**
- **Endowrist Suction-Irrigation instruments**
- **Vessel Sealer**
- **...**

Dr. Alex Mottrie

Scientific Involvements :

- Founding Past-president of
“**Belgian Lap. Urology Group**” (B.L.U.G.)
- Chairman of the “**EAU Robotic Urology Section**” (E.R.U.S.)
- President of the “**Society of Robotic Surgeons**” (S.R.S.)
- CEO of the „**O.L.V. Vattikuti Robotic Surgery Institute**“ (ORSI)
- Editor of „**Surgery-in-Motion**“ (videosection of European Urology : I.F. > 10 !!)

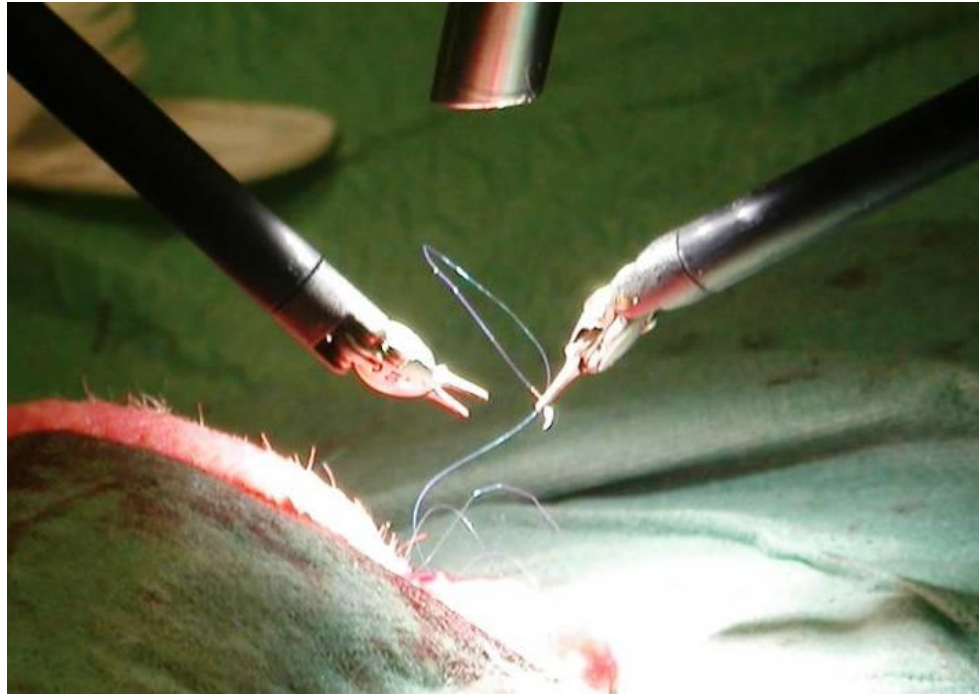


OLV Vattikuti Robotic Surgery Institute (ORSI)

- **Non for profit Society**
- **Main goals :**
 - **Training**
 - **Science**
 - **Platform for R & D**



Robotic surgery : A (r-)evolution?



*Robotic surgery from a
clinical standpoint*



“The only thing that is permanent, is change”

1930, Dr. Mayo



History of Urological Surgery

Open surgery



History of Surgery

3. Robotic surgery



“Modern Times”, Charlie Chaplin, 1932

Robot-assisted Surgery

Definition

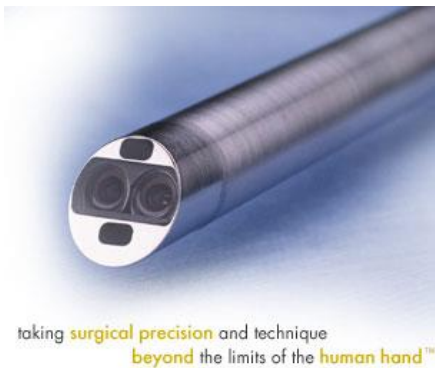
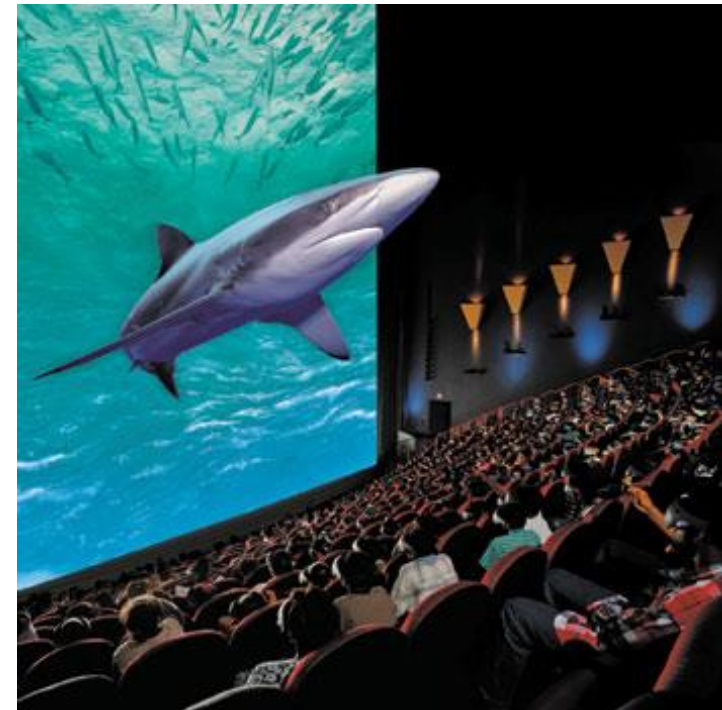


*= Computer-steered
Master-Slave Telem manipulator, that can perform one
single task under direct control of the operator.
It allows manipulation of the instruments
in the operation field.*

Advantages of the da Vinci® Robot ?

→ Better Vision

- Superior 3 D - Visualisation
- Larger magnification
(scaling up to 10-15 times)
- Steadiness of the camera
(no camera-assistant/ ergonomic)

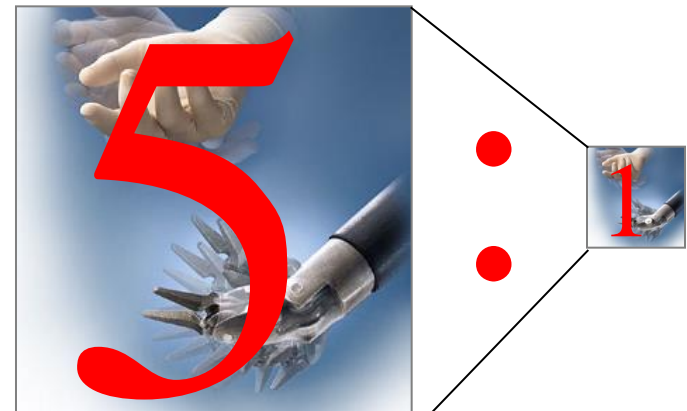


Advantages of the da Vinci® Robot ?

→ enhanced dexterity and precision

- 7 DOF
- better hand-eye coordination
- no counter-intuitive movements
- instruments very stable
- tremor elimination

(miniaturisation 5:1)



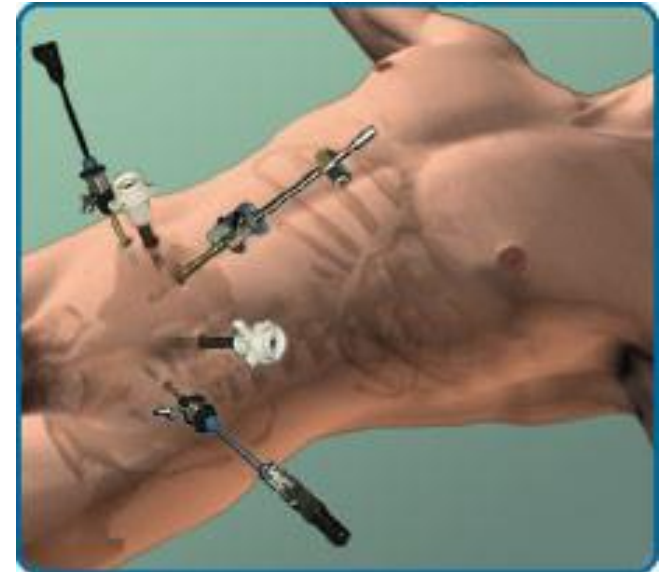
Answer:

This device offers us the possibility of doing laparoscopy in a natural “intuitive” way, with 3D vision & with instruments that are movable at their tips, allowing very precise handling.



Classical advantages of laparoscopy

- Postop analgesia
- Hospitalisation time
- Reconvalescence
- Bloodloss
- Esthetical



Robot-assisted Surgery

Advantages for the patient

- **Improved vision**
- **Mobility of the instruments**



- Ultraprecise dissection possible
- Eases meticulous exeresis, f.e. in nervesparing technique

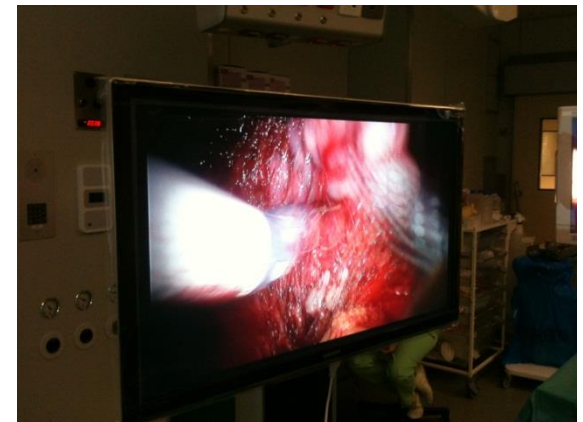




erus

3-D HD for everybody

ORSI
Olv Vattikuti Robotic
Surgery Institute



1910-1999



Traditional
Laparoscopy

1999



da Vinci®

- Eliminates lap compromises
- Introduction of 4th arm (2003)
- Simple instruments

2006



da Vinci® S™

- 3D HD Vision (720p)
- Visual Inputs – TilePro
- Multi-quadrant access
- Streamlined set-up
- Procedure-specific and energy instruments

2009



da Vinci® Si™

- Dual Console option
- Enhanced HD Vision (1080i)
- Scalable architecture
- Advanced instruments
- OR Integration

1997 : da Vinci standard system

3 arms



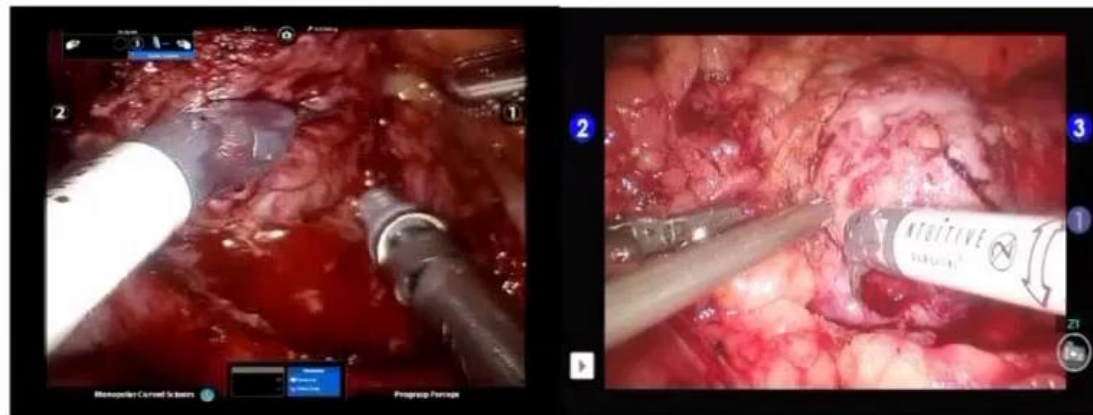
Robotic Surgery

2009 : da Vinci Si system

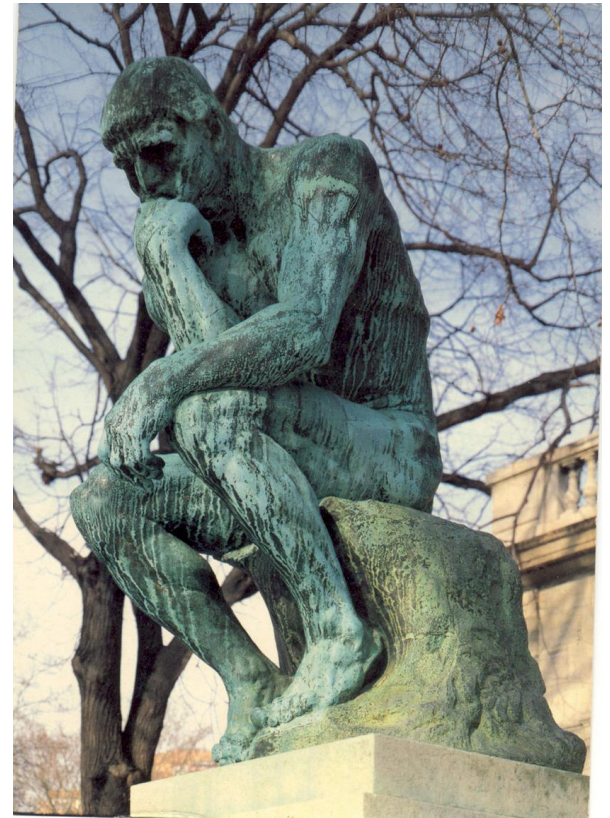
4 arms



Suction/Irrigator with Dual Console



*Indications for
robot-assisted surgery
in Urology*



- all procedures
- especially in reconstructive surgery & meticulous
exeresis :

- radical prostatectomy:
 - nerve-sparing
 - anastomosis
- partial nephrectomy
- nephroureterectomy
- Pyeloplasty
- ureterreimplantation
- Colpopromontofixation
- cystectomy & urinary diversion
- vaso-vasostomy
- ...



Major indication :

radical prostatectomy

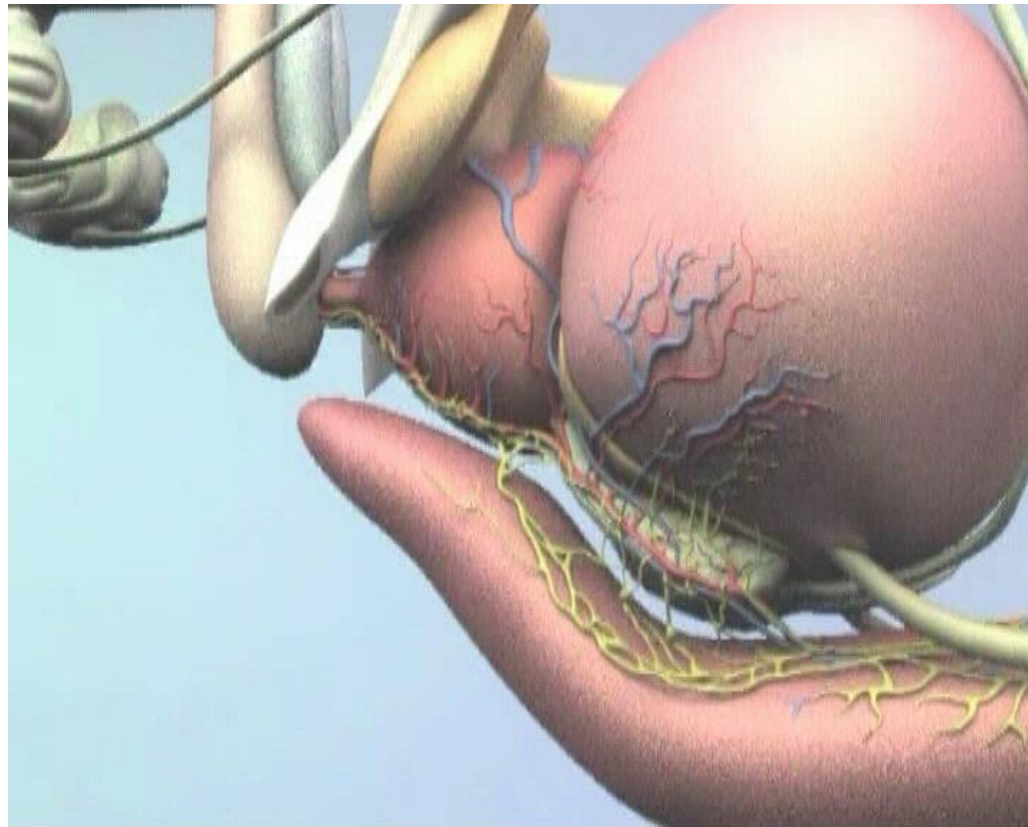
Surgery is in constant motion

Looking for perfection to reach the **“TRIFECTA”**

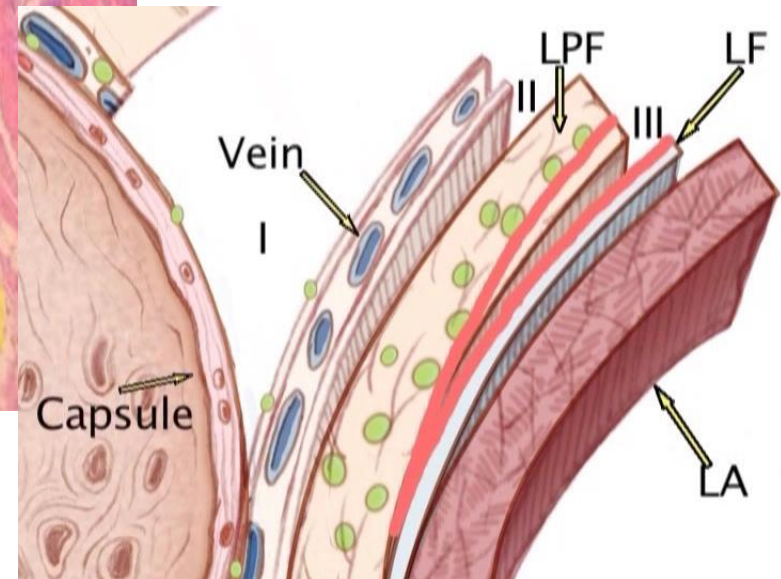
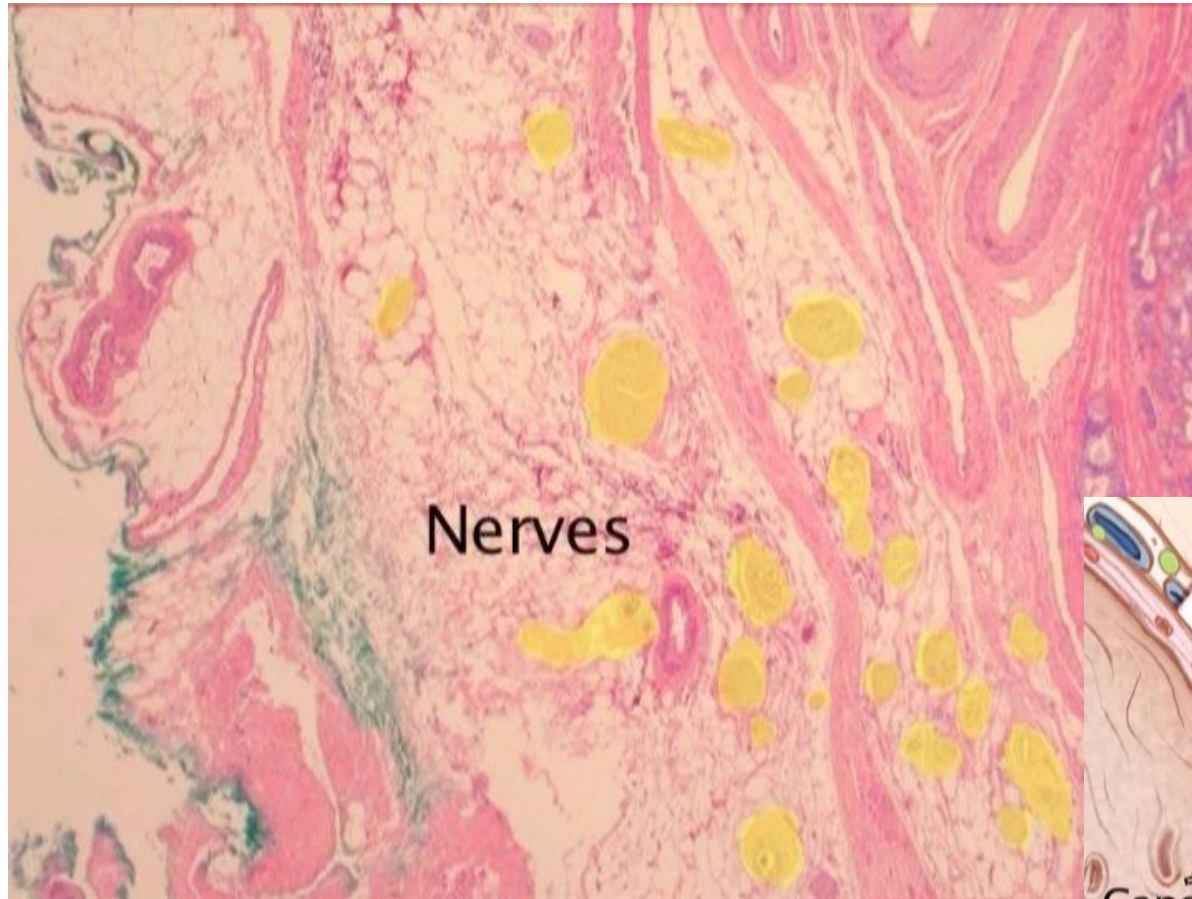
1. **Cure** the patient from his cancer
2. Obtaining early **continence**
3. Preserving **erectile function**

Robot-assisted Prostatectomy

Thanks to robotic surgery, more insights in microanatomy

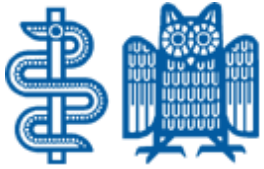


Surgical anatomy of the prostate



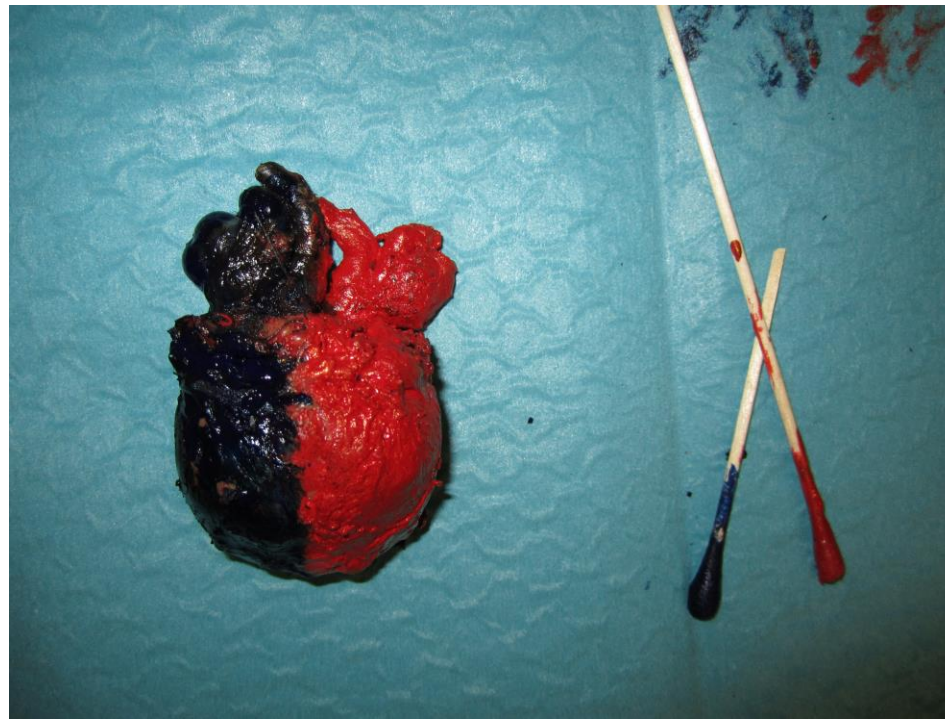
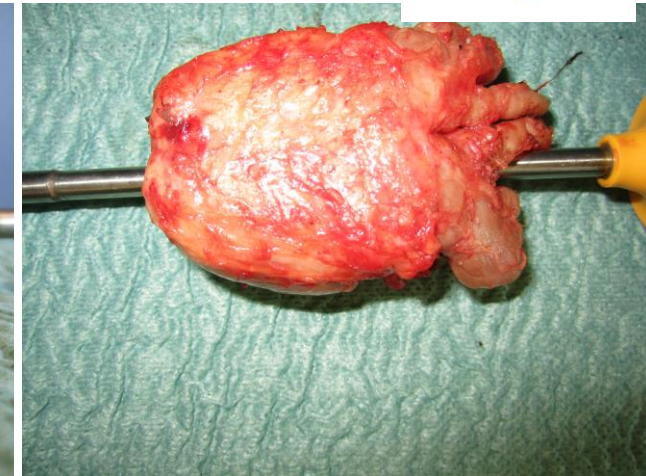
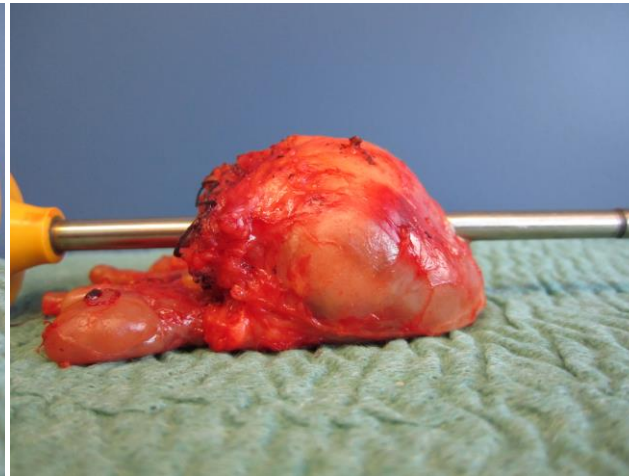
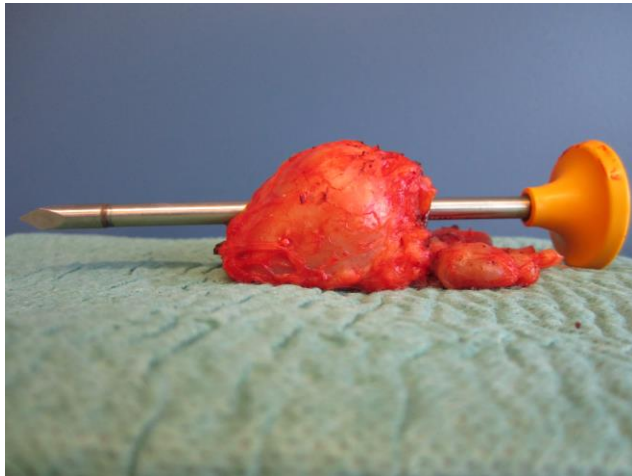
Nerve sparing RARP





R-A Radikale Prostatektomie

Technik : nervenerhaltend



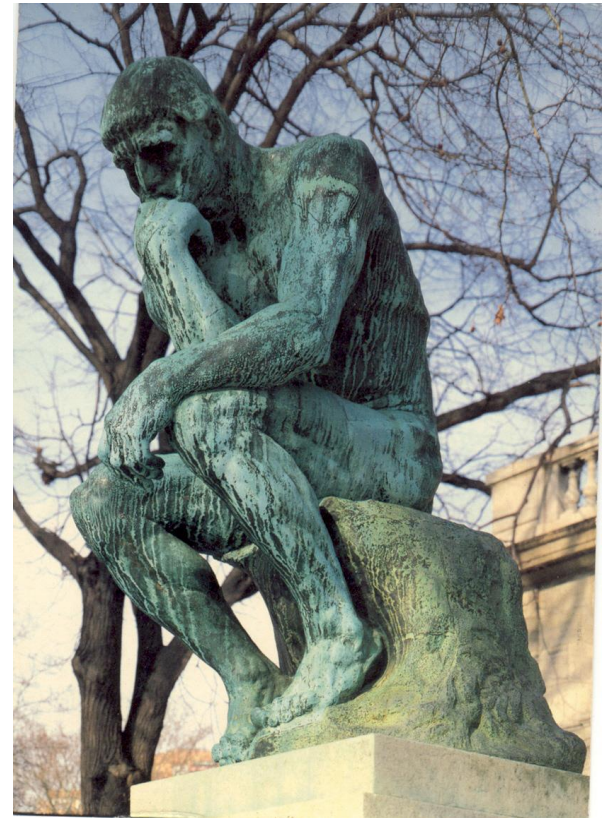
Robotic radical Cystectomy



For full impact of the advantages of robot-assisted or other minimal-invasive surgery, I believe that we should end the operation as we started it : closed



*New Developments
in
Robotic Surgery*

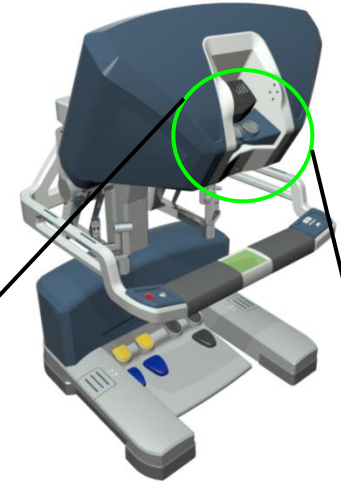


Fluorescence Imaging on da Vinci

New camera head can
pass fluorescence signal



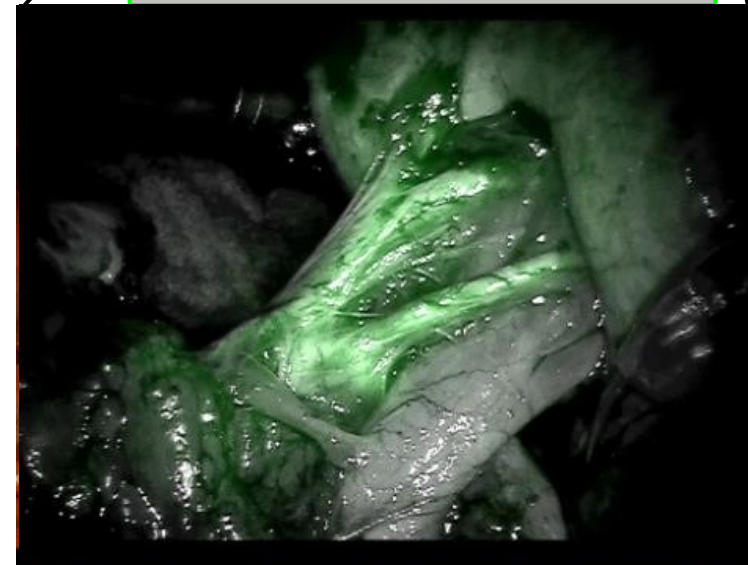
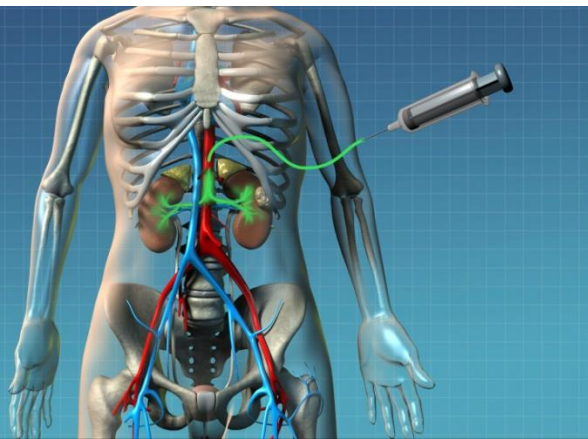
Fluorescing signal overlaid
with green hue in surgeon
console

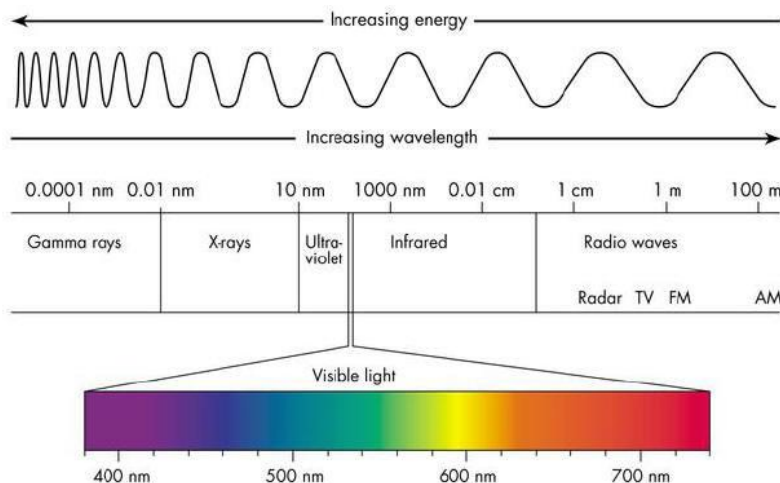


Renal arteries - fluorescence mode
(NIR)

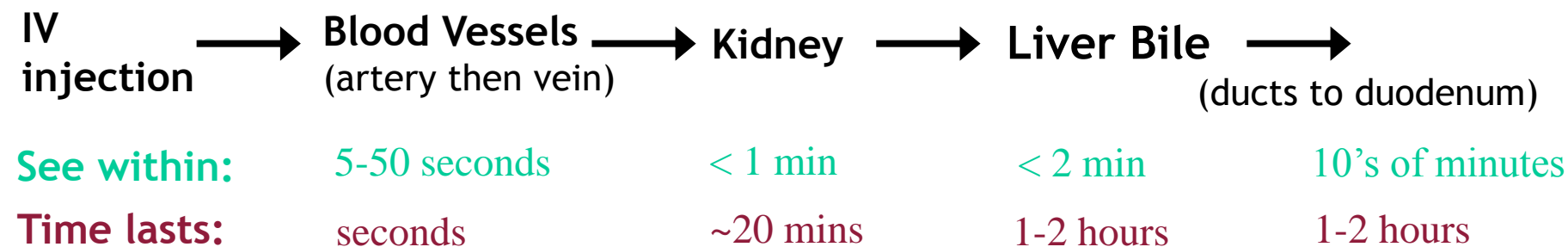


Laser Excites IC-Green and Fluoresces

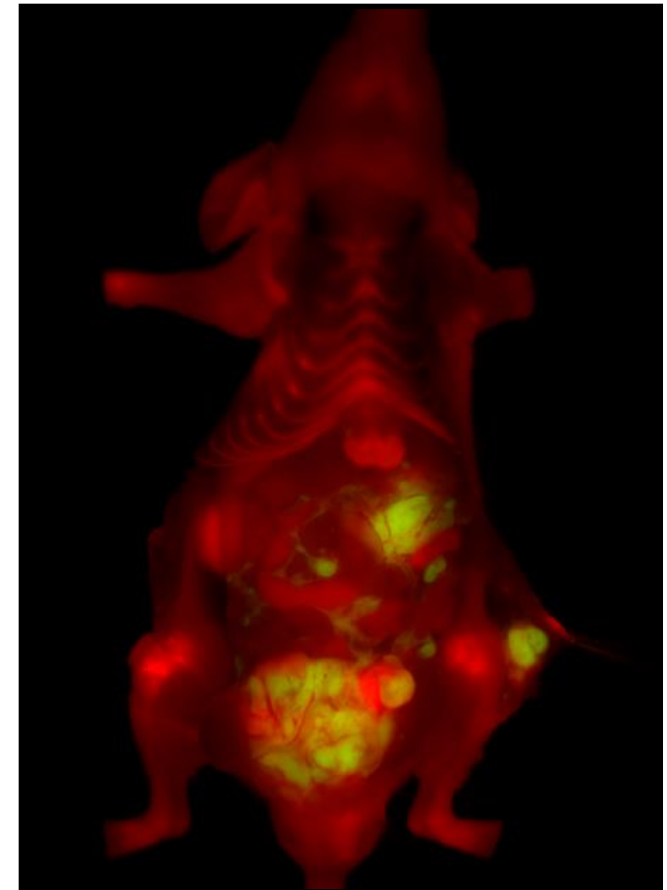




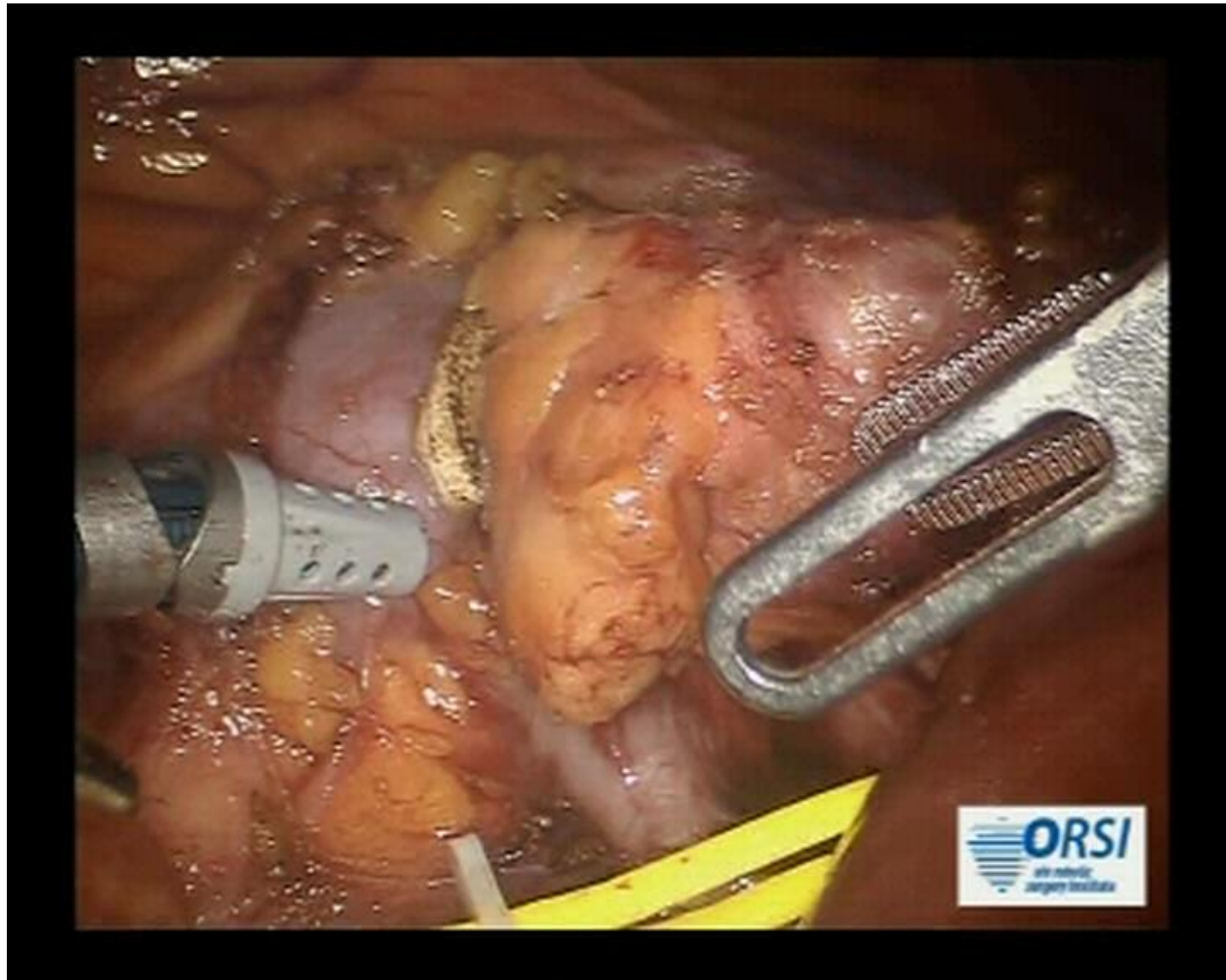
- **ICG binds to plasma proteins in blood after iv injection**
- **ICG is excited at ~806 nm and emits light at 830 nm**
 - **ideally suited for penetrating tissue, blood, and fat**
- **Fast uptake allows for multiple injections (2-5 min half life)**



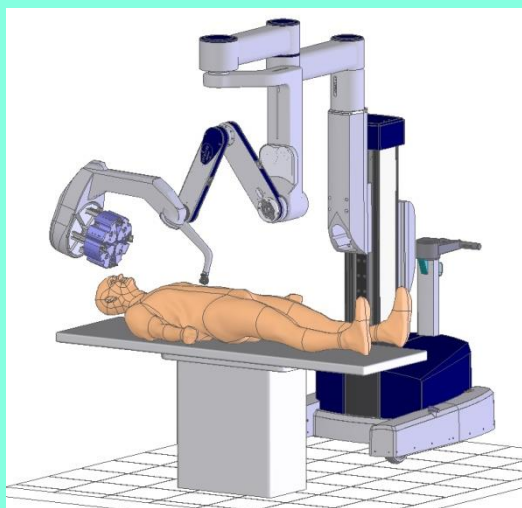
- **Kidney:**
 - Selective clamping
 - Visualisation of the tumor
 - Check vascularisation after partial
- **Bowel:**
 - proper vascularisation
 - Lymphnodes
- **Gallbladder:**
 - Choledochography.



Robotic Surgery Fluorescence

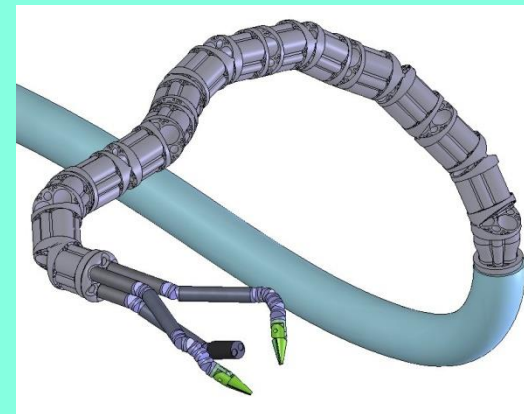


Single Port

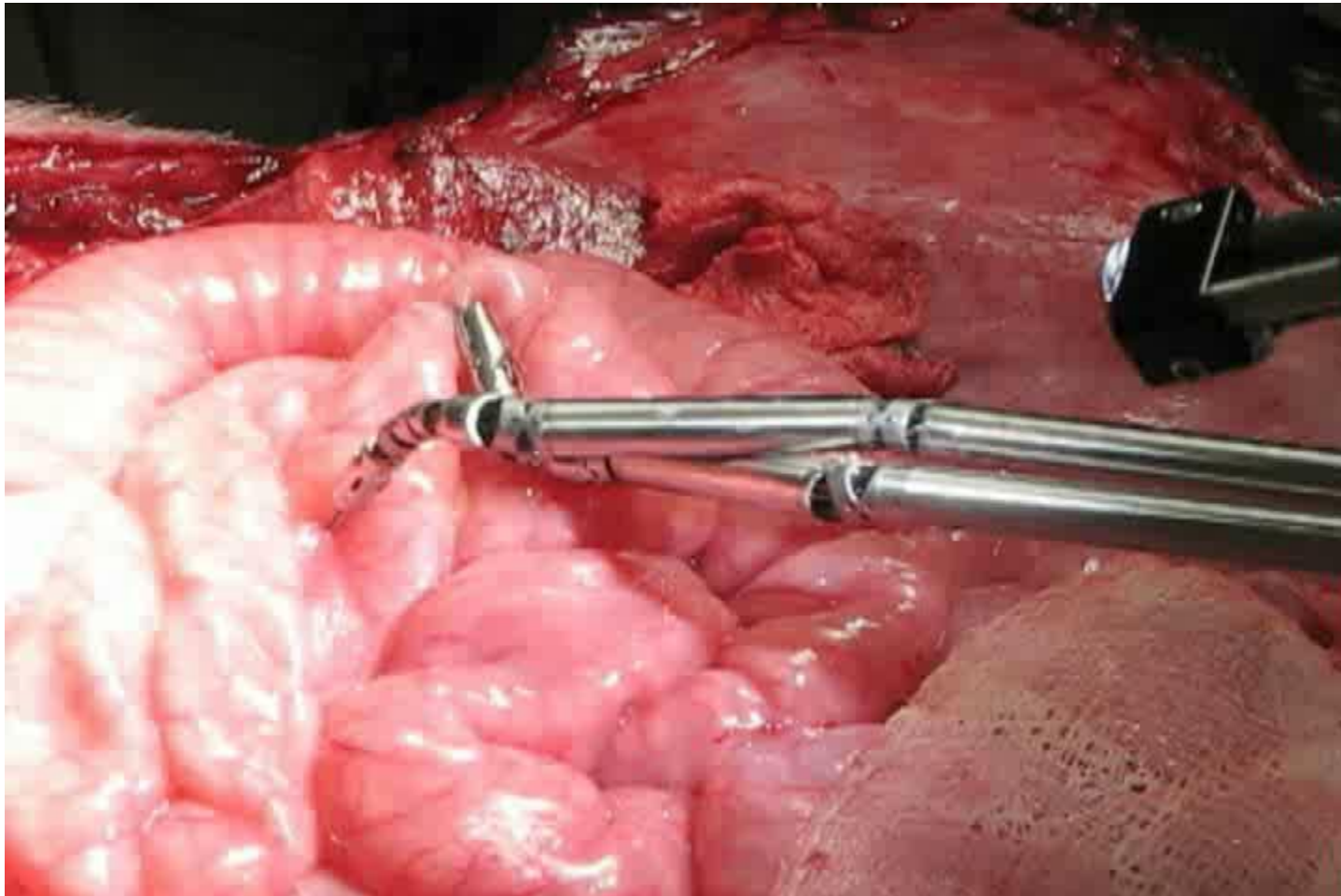


- Natural orifice / trans-umbilical
- *da Vinci*-like capability
- Large range of motion (multi-quadrant capability)

Flexible Systems



Robotic Surgery “Single port”



Alternatives to Da Vinci

- Standard laparoscopy



3D monitor with glasses

Motorized 7-DOF-instruments



Kymerax, Japan



Dexterité, France

Upper tract Endoscopy

Console based robotic device

- Avicenna Robot (ELMED, Turkey)

→ Especially developed for endoscopic treatments



Upper tract Endoscopy

Console based robotic device

- Avicenna Robot (ELMED, Turkey)
 - for every endoscope (Storz Flex XC1)
 - for every laser lithotripter (Auriga XL)

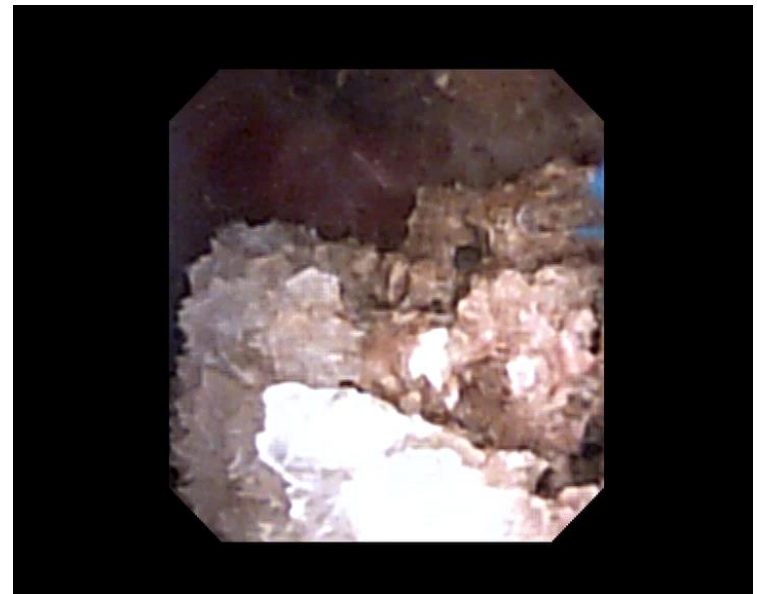


Upper tract Endoscopy

Console based robotic device

- Avicenna Robot (ELMED, Turkey)

→ Console with fine movements (joy-stick, wheel) and footpedal for laser (N=28 cases)



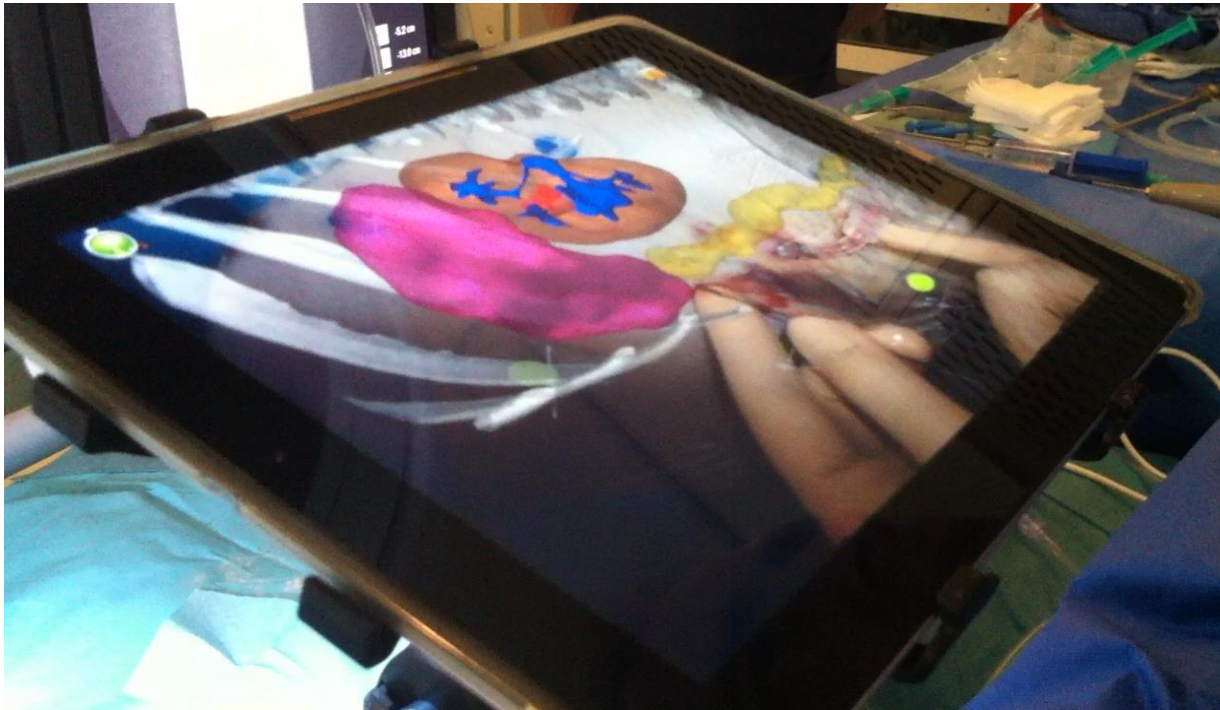
Dusting the stone

Percutaneous renal access

Robotic device

- Navigated surgery based on iPad

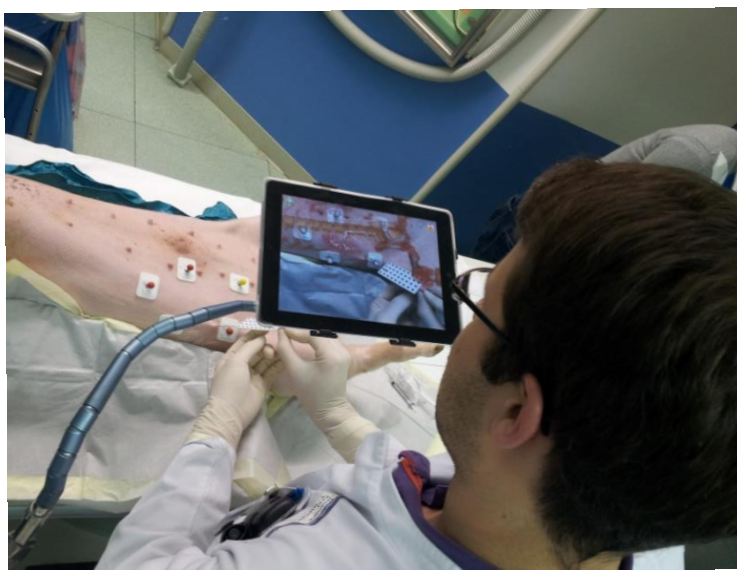
→ IPAD shows virtual anatomy via WiFi



iPAD-assisted percutaneous access to the kidney - Future developments

Marker-based tracking of the puncture needle

- Demonstration of virtual puncture canal
 - preoperative CT
 - iPad-arm
 - Optical marker at the base of needle

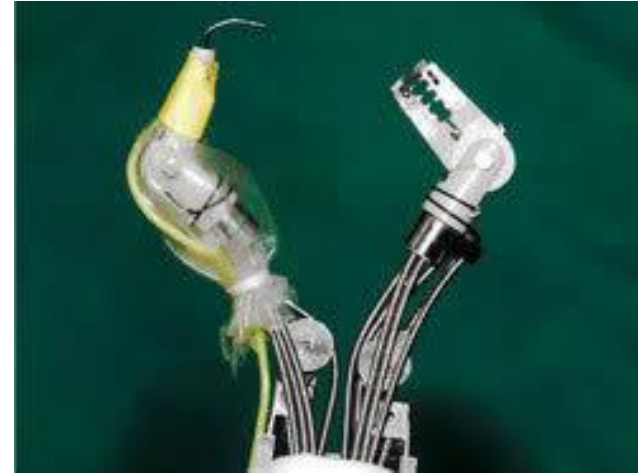


Mini Crab-Like Robot Removes Stomach Cancer

by [Stanley Dharma](#) on Feb 2, 2012 • 12:47 pm



Researchers from Singapore have developed a **small robot designed to remove stomach cancer in its early stages**. The mini robot resembles a crab, because it incorporates a pincer and a hook to do the job. The robot is **mounted on an endoscope** which reaches the stomach via the patient's mouth. Next to its size, another advantage of the robot is that it doesn't leave an external scar. The crab-like robot has a **pincer to grab** the tissue to be removed, and the **hook can cut the tissue and cauterize** it to stop the bleeding. The operating surgeon can see what's happening through the little camera in the endoscope and control the robot's movements. These movements are very precise and accurate compared to movements made directly with human hands. The robot has already been used to remove early-stage stomach cancer in as many as five patients in India and Hong Kong.



Japan's Ritsumeikan University researchers unveil a prototype model of the micro medical robot, measuring **1cm in diameter, 2cm in length and weighing only 5-grammes**, which enables it to stay and move inside a human body to remove or treat the affected part of disease, especially cancer.



The tiny robot incorporates various medical devices including a **small camera, sensors and a drug delivery injector**, which could reduce the need for surgery.

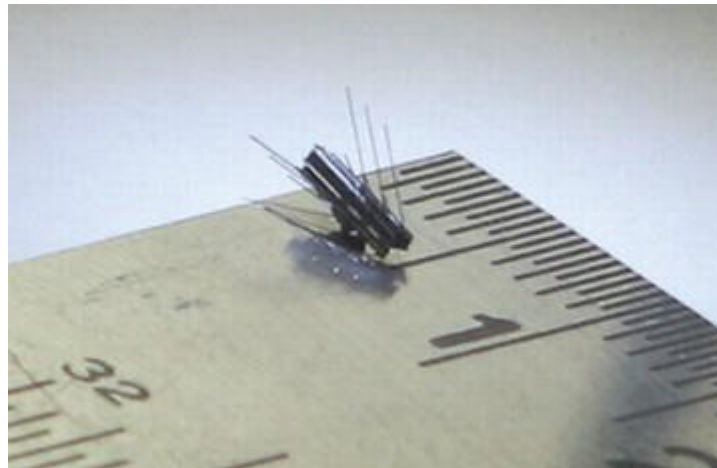
Data is sent to a computer through a slim cable although researchers hope to develop a transmitter.

Previously miniature robots for inside the body have been designed to be swallowed and can only take pictures, although US researchers are also working on a small robot that enters through an incision to treat heart problems.

Mini-robot swims through bloodstream

By [Joshua Topolsky](#) posted Jun 27th, 2007 at 9:57 AM

Two Israeli scientists may have created the catalyst for a medical revolution with their new project: **a tiny, 1-millimeter-diameter robot** which is capable of crawling through human veins and arteries. The bot can cling to vessel walls using small, powerful arms which protrude from a hub in its center. Manned control is accomplished by using a magnetic field outside of the body, and the robot is able to swim against the flow of blood, as well as squeeze through a variety of arterial openings. Right now the doctors don't know what the medical applications might be, though they speculate that a large number of the bots could be used to fight certain types of cancer.



Training

*Training very important :
Human body IS NOT the
ideal training module !!!!!*



OLV Vattikuti Robotic Surgery Institute (ORSI) Aalst, Belgium



Introduction

- **Non for profit Society**
- **3 pillars:**
 - 1. Training in robotic Surgery**
 - 2. Scientific research**
 - 3. Facility for R&D**

“To pass on our Experience & Expertise in the field of Robotic Surgery to Physicians and their teams via Results oriented Training”



“Honey”

Alpaca first in the world to
successfully undergoing
surgery robot

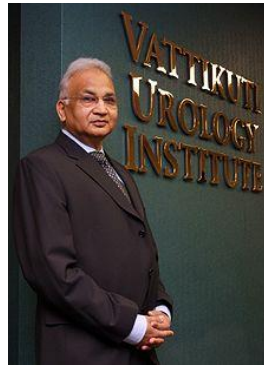
O.L.V. Vattikuti Robotic Surgery Institute

partners

Vattikuti Foundation Network :



- *Mr. Raj Vattikuti*
President



- *Dr. Mahendra Bhandari*
CEO

O.L.V. Vattikuti Robotic Surgery Institute

partners

Vattikuti Foundation Network :

- *Mission: offering top medicine to people who can not afford it*
- *Penetration of robotic surgery in eg India and Egypt*
- *ORSI's European pillar of VFN*
- *ORSI responsible for scientific part*
- *Training of surgeons VFN*
- *Multicenter prospective studies*
- *data processing*

O.L.V. Vattikuti Robotic Surgery *Institute* : goals

1. Training & education

2. scientific research

3. Research & Development

O.L.V. Vattikuti Robotic Surgery Institute

Goal 1: training in robotic surgery

to succeed, mission training need:

- *Modern equipped training center*
- *Structuring training*
- *Attract top experts to give training*



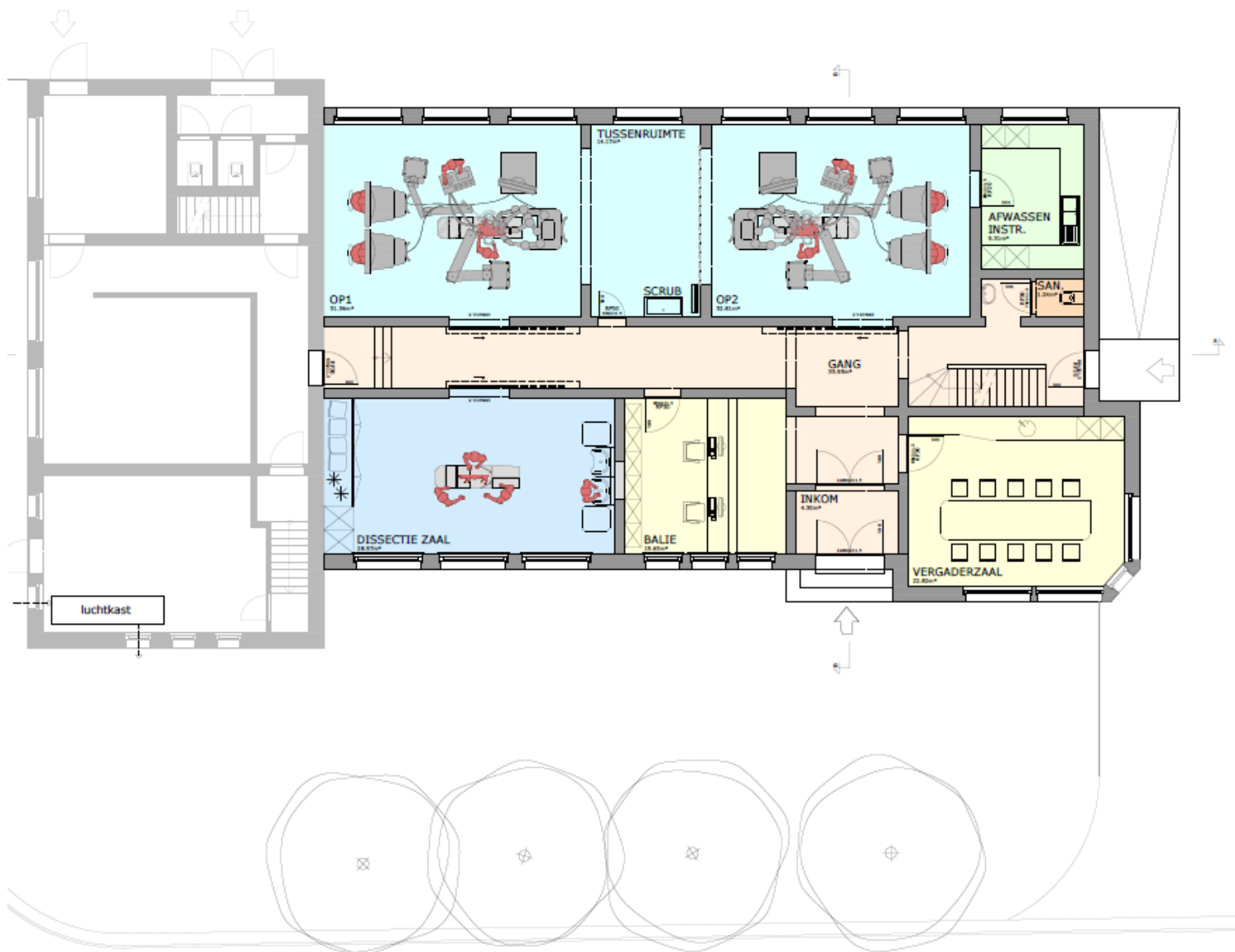
Training facilities

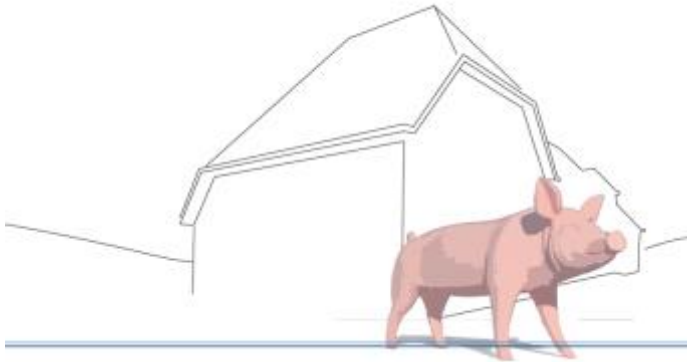
ORSI vzw

Proefhoevestraat

9090 Melle







ORSI Training Center

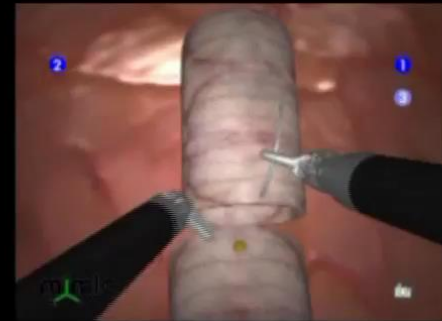
■ Facilities :

- Audio-visual facilities
- 2 *da Vinci* Si training systems
 - Dual console
 - Firefly
 - Possibility for single site surgery
- 2 *da Vinci* Skills Simulators
- Dry lab
- Wet lab (pig, sheep,...)
- Cadaver training
- Live Surgery
 - at OLV with dual console
 - Live transmission



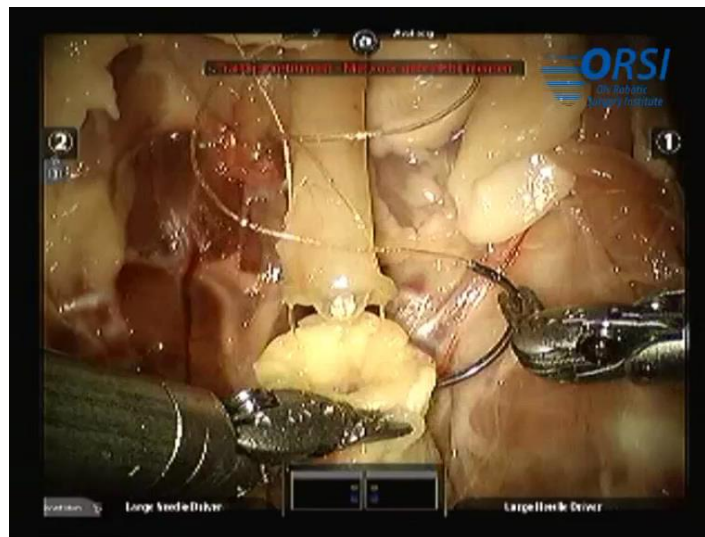
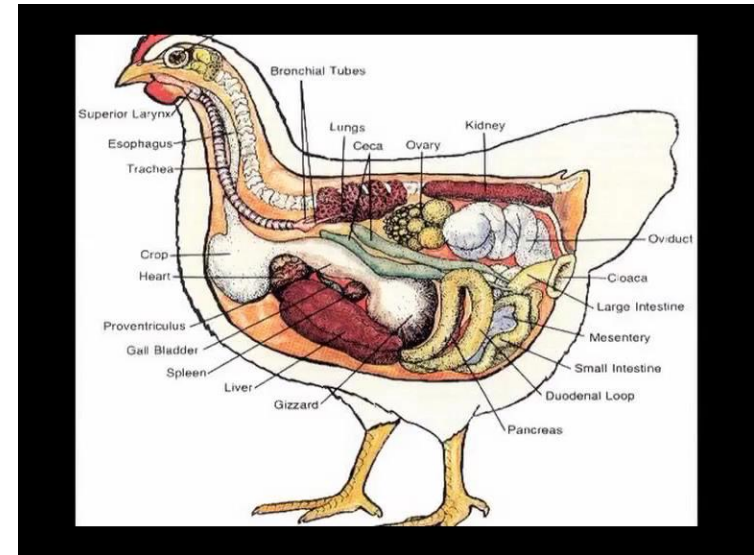
Practical Training

- Simulator



Practical training

- **Dry Lab Training**
 - **Venezuelan Chicken**
 - **Hands-on practical training**
 - **Cadaver training**









ERUS pilot study

European Robotic Curriculum

Alessandro Volpe

O.L.V. Vattikuti Robotic Surgery Institute, Aalst, Belgium

Università del Piemonte Orientale, Novara, Italy

The logo for the European Robotic Urology Section Congress (erUS'13) is displayed in white text on a magenta rectangular background.

EAU Robotic Urology Section Congress
Latest Developments in Robotic Surgery

10th edition – 3-5 September 2013
Stockholm, Sweden



O.L.V. Vattikuti Robotic Surgery Institute

Doel 2 : Science

- *Scientific Director : - Prof. Dr. Ficarra
- Prof. Dr. Novara*
- *clinical studies*
- *centralize multicenter databases*
- *objectify benefits of innovative technologies*

O.L.V. Vattikuti Robotic Surgery Institute

Doel 2 : Science

• organiseren congressen en workshops

King Fahad Specialist Hospital and Research Centre
Department of Urology
Riyadh, Saudi Arabia

The department of urology is considered the referral centre for the Kingdom of Saudi Arabia and the Middle East. All forms of complicated and advanced genito-urinary disorders are managed by the department, adult and pediatric sections.

North American board certified urologists with subspecialties running in the areas that cover uro-oncology, minimally invasive laparoscopic and robotic surgery, neuro-urology, female and reconstructive surgery along with pediatric urology.

This subspecialization enables our staff to deliver high quality patient care matching world-renowned centres in North America and Europe. The department is actively involved in resident and post graduate fellowship training and is well-sought after by the trainees for its world-class teaching and educational programs. The department was the first in the region to introduce laparoscopy, robotic-assisted surgery and neuromodulation and is also active in both basic and clinical research.

OLV Hospital
Belgium

The Urology Department was founded in 1965 by Dr Vincent Morelle; he was later joined by Dr Etienne Fonteyne (current Head of Department), Dr Paul Carpentier, Dr Alex Mottrie and Dr Peter Schattman.

In 1996, our Department was one of the first in Europe to perform urological laparoscopy. We now routinely use this minimally invasive technique for nephrectomy, coloproctostomy and lymphadenectomy among others.

We were also one of the first departments in Europe to introduce the Da Vinci robotic system in 2002 and the latter is currently used for several laparoscopic urologic procedures, primarily laparoscopic radical prostatectomy, partial nephrectomy and cystoprostatectomy. We have considerable experience in robotic surgery and are therefore recognised as a pioneer in robotic urology. Two robotic systems are currently available.

Our Department plays a central role in education and training for residents and established urologists alike. As well as providing general training for Belgian residents, we offer clinical fellows from across the world special training in laparoscopy and robotic surgery. We also train urology teams planning to launch a robotic-surgery programme.

1st SAUDI - BELGIAN UROLOGICAL ROBOTIC SURGERY SYMPOSIUM

24 October 2009
08:00 am - 5:00 pm

King Fahad Specialist Hospital and Research Centre
3rd Floor, Post Graduate Auditorium

Program

State-of-the-art Lectures
Live Moderated Surgery
Video Sessions

FOR MORE INFORMATION
Department of Urology, KFSA-HRC
P.O. Box 3354, Riyadh 11211
Saudi Arabia
Tel: +966 1 4424302 / 966 1 4424307
Fax: +966 1 4424303
Email: urology@kfshrc.edu.sa



The Global Congress on Prostate Cancer aims to bring together top experts and delegates for an in-depth discussion of the different aspects of prostate cancer, with a focus on difficulties and dilemmas of clinical decision making.

GLOBAL ORGANISING COMMITTEE

ALEX MOTTRIE
Urologist, University of Leuven, Belgium

ASH TEWARI

The New York Presbyterian Hospital, Weill Cornell Medical Center, Urology, New York, United States

TONY COSTELLO

Royal Melbourne Hospital, Urology, Melbourne, Victoria, Australia

LOCAL ORGANISING COMMITTEE

NICOLAS MOTTE

Centre Hospitalier Universitaire de Saint Etienne, Urology, Saint Etienne, France

ALBERTO BOSSI

Hospice Gustave Roussy, Radiotherapy, Villejuif, France

KARIM FIZAZI

Hospice Gustave Roussy, Medical Oncology, Villejuif, France

ARNAUD VILLERS

Centre Hospitalier Regional Universitaire de Lille, Biology, Lille, France



CONGRESS ORGANISER

ehms India

6/20/2012 17

2003, Les Belges

Proble Amato (general contact)

9-10-10 10:00 AM

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

hema.amsat.org/hema.com

www.prosca.org

erus'13

10th edition - 4-6 September 2013
Stockholm, Sweden

EAU Robotic Urology Section Congress
Latest Developments in Robotic Surgery

Save the date



Courses in robotic surgery

Live case transmissions

In Full High Definition

All day training on the

da Vinci, 5th Surgical System

Update lectures &

video presentations

Meet the Expert sessions

Poster and Video contest

Congress exhibition

SCIENTIFIC COMMITTEE

Alex Mottrie (Belgium)

Claude Abbou (France)

Magnus Andersson (Sweden)

Walter Arbibani (Italy)

Prakash Dasgupta (IN)

Markus Graefen (Germany)

Ali Riza Gund (Turkey)

Thierry Picchaud (France)

Jeff Rasmussen (Canada)

Charles-Henry Roehrich (Netherlands)

Henk Van Der Poel (The Netherlands)

Peter Wiklund (Sweden)

HIST FACULTY

Magnus Andersson (Sweden)

Stefan Carlsson (Sweden)

Abolajazi Hassani (Sweden)

Barbara Kallén (Sweden)

Lotta Rehnström (Sweden)

Martin Jonsson (Sweden)

Cristofer Adami (Sweden)

www.erus2013.com

erus

EAU

KAROLINSKA

eh

Congresses & Masterclasses

Master Class in Robotic Prostatectomy

→ Friday 8 May 2009

Hotel Le Méridien | Brussels, Belgium

Save the date!

Find out everything you need to know about robotic prostatectomy.

This interactive course outlines the surgical technique of different experts, step by step, supported by video material.

It will also answer questions like:

- What about correct patient installation and trocar placement?
- How to avoid or solve complications?
- How to prevent positive margins, incontinence & erectile dysfunction?

Surgeons looking for "high impact" information on robotic prostatectomy cannot miss this Master Class.

Faculty:

Alex Mottrie (chair), Walter Aribani, Peter Schattman, Michael Stöckle, Henk van der Poel, Peter Wiklund



Bookmark www.masterclassroboticurology.com for more information and online registration.

Organized by the Urological Department of OLV Clinic Aalst



Please contact Ictera Healthcare, congress organizers, for information and details:
Anouk Verfenden
Dowijkstraat 17
2500 Lier, Belgium
E: info@masterclassroboticurology.com
T: +32 3 491 87 46
F: +32 3 491 82 71

Master Class in Robotic Surgery on the Upper Urinary Tract

→ Friday 5 February 2010

Hotel Le Méridien | Brussels, Belgium

Save the date!

Find out everything you need to know about robotic-assisted surgery on the upper urinary tract.

This interactive course outlines the surgical techniques of different experts, step by step, enhanced by video material on different procedures.

Scientific programme:

- Morning sessions: Pyeloplasty. The technique step by step
- Afternoon sessions: Partial nephrectomy

Surgeons looking for 'high impact' information about robotic-assisted surgery on the upper urinary tract should not miss this Master Class.

International expert faculty

Chair: Alex Mottrie, MD (OVU Clinic, Aalst, Belgium)
Prof. Sam B. Bhayani, MD (Washington University School of Medicine, Saint Louis, MI, USA)
Prof. Giorgio Guazzoni, MD (San Raffaele Hospital, Milan, Italy)
Prof. Ashok K. Hemal, MD (Wake Forest University School of Medicine, NC, USA)
Prof. Jacques Hubert, MD (Centre Hospitalier Universitaire Nancy-Brabois, Nancy, France)
Peter Schattman, MD (co-chair) (OVU Clinic, Aalst, Belgium)
Georg Schön, MD (Häusler-Klinik, Würzburg, Germany)
Bruno Van Vliet, MD (OVU Clinic, Aalst, Belgium)



Visit and bookmark www.masterclassroboticurology.com for more information and to register for the Master Class.

Organized by the Urological Department of OLV Clinic



Contact Ictera Healthcare, congress organizers, for information and details:
Ms. Anouk Verfenden
Dowijkstraat 17
2500 Lier, Belgium
E: info@masterclassroboticurology.com
T: +32 3 491 87 46
F: +32 3 491 82 71

ERUS Master Class on Partial Nephrectomy

Fr-Sa 17-18 June '11



ORSI – OLV Robotic Surgery Institute
OLV Clinic

Aalst - Belgium

Find out everything you need to know about robotic-assisted partial nephrectomy.

Surgeons looking for "high impact" information about robotic-assisted partial nephrectomy should not miss this ERUS Master Class. Not only the newest techniques are demonstrated during two live surgeries, they are also outlined in detail by internationally renowned experts.

SCIENTIFIC PROGRAMME:

Friday Afternoon

- Two live surgeries in parallel: Alex Mottrie – Jim Porter
- Ethics in Robotic Urology Session

Saturday

Interactive course on the surgical techniques of robotic-assisted partial nephrectomy, discussed step by step, supported by video-material. The course will also cover trouble-shooting and the treatment of complex cases.

Chair:

Alex Mottrie – Belgium

Invited faculty:

Giorgio Guazzoni – Milan, Italy
Steven Iselin – Leuven, Belgium
Ali Riza Karal – Istanbul, Turkey
Jim Porter – Seattle, USA
Bernardo Rossi – Milan, Italy
Tobias Seiler – Zurich, Switzerland

Information and registration:
aalst.erusmasterclass.com

Contact Ictera Healthcare, congress organizers, for information and details:
Ms. Liesbeth Beets
Dowijkstraat 17
2500 Lier, Belgium
E: info@erusmasterclass.com
T: +32 3 491 87 46
F: +32 3 491 82 71

ictera healthcare
www.ictera.be

Organized by



In collaboration with

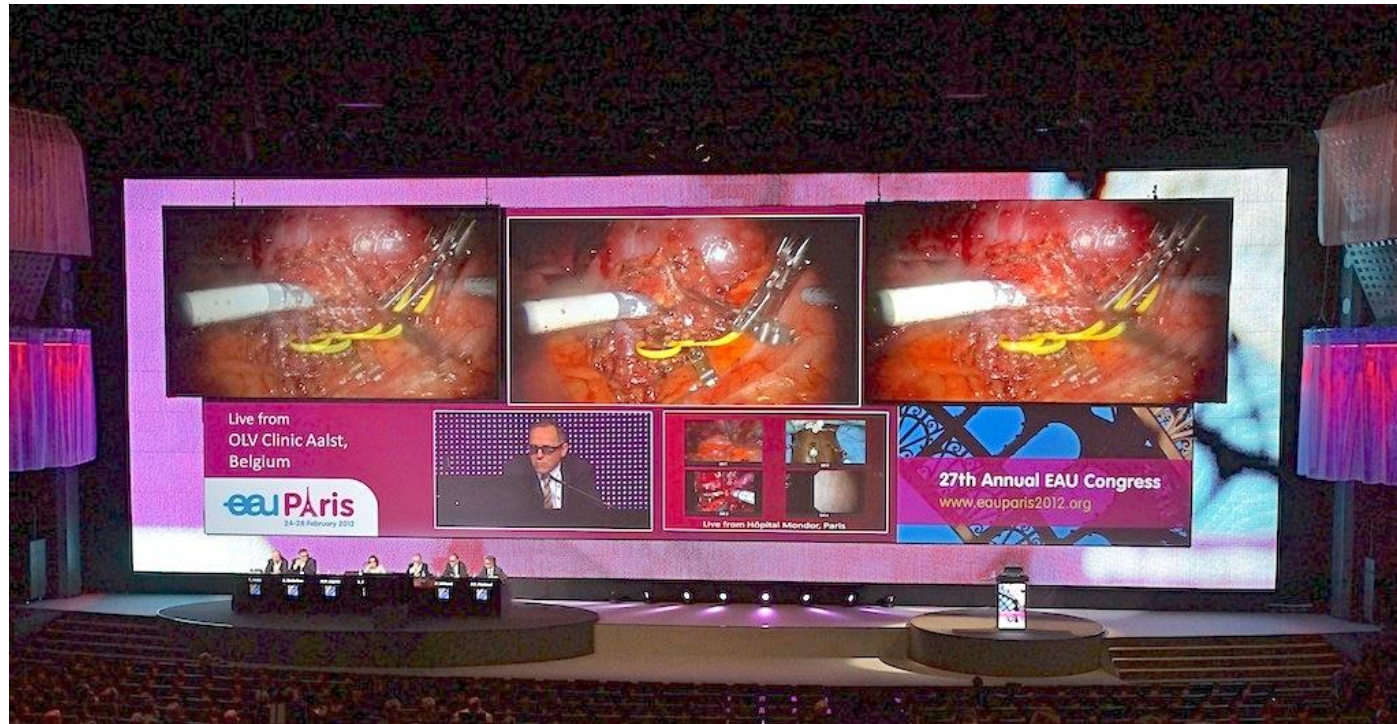


In association with



O.L.V. Vattikuti Robotic Surgery Institute

Goal 2 : Science



O.L.V. Vattikuti Robotic Surgery Institute

Goal 2 : Science

Accredited training :

Seeking for Perfection in Robotic Surgery?

erus^{EAU}

ORSI
Olivier Vattikuti Robotic
Surgery Institute



Sign Up For The
SPECIALISED
Urology Trainings!

Sign up for our
**"ERUS-ESU advanced
HOT courses"**

Exclusive content:

Sign up for these high-standard organ specific courses, including:

- Meet the experts
- Theoretical video based courses
- Organ specific Hand-on through wet lab and/or cadaver training.
- Dual console live surgery

Dates:

Partial Nephrectomy
28-30 April 2014
23-25 June 2014

RARC & Neobladder
31 March-2 April 2014
09-11 June 2014

RARP
17-19 March 2014
19-21 May 2014

Participants

Da Vinci surgeons and assistants with some robotic experience

Course fee
4 000 € per participant
(min. 4 participants required)

Included: training fee, lunch, didactical material and transport to and from ORSI.

Training location

ORSI Training Center, Melle, Belgium
Info online: www.orsi-online.com

For more info, please visit: WWW.UROWEB.ORG



erus^{EAU}

INTUITIVE
SURGICAL®

EAU
EUROPEAN
SCHOOL OF
UROLOGY

Seeking for Perfection in Robotic Surgery?

erus^{EAU}



Start Up Your
Robotic Programme
Successfully!

Sign up for our
**"ERUS-ESU Structured
Training Programme"**

Programme

- E-learning
- Two 3-day HOT courses including basic training
- Simulator training
- Dry and wet lab training
- Cadaver training
- Dual console live surgery
- Proctoring by experts (through Intuitive Surgical)

Dates

07-09 April 2014
23-25 April 2014

02-04 June 2014
25-27 June 2014

Other dates TBD

Participants

Established urologists, without robotic skills

Course fee

6 000 € per participant
(min. 4 participants)

Included:

Training fee, lunch, didactical material and transport to and from ORSI.

Possible Training centers:
ORSI Training Center, Melle, Belgium

Si.F.A.R.V., Verona, Italy

EEC, Paris, France

Ircad, Strassbourg, France

For more info, please visit: WWW.UROWEB.ORG



erus^{EAU}

INTUITIVE
SURGICAL®

EAU
EUROPEAN
SCHOOL OF
UROLOGY

O.L.V. Vattikuti Robotic Surgery Institute

Goal 3 : Research & Development

Research and development:

- *Creating platform bubbling with new ideas and youth*
- *attract young innovative companies*
- *collaborate with colleagues*
- *engineers*
- *biomedical Sciences ...*

O.L.V. Vattikuti Robotic Surgery Institute

Conclusion



“In believing in his dreams, man turns it into reality”

*A force de croire en ses rêves,
l'homme en fait une réalité...*

*Aux amis de Dechy,
très cordialement*

Henri!

Robotic surgery

- Fast penetration
 - Takes over most indications for surgery
 - Not only urology, but also other specialties
- Robotic surgery today is quite unwealthy
 - The evolution of robotic platform and instruments will continue to evolve
- Robotics is here and is here to stay!!
- Appropriate training mandatory

